

Dear Valued Customers and Gardening Friends,

Welcome to our 2019 catalog!

This year we welcome 23 new varieties to the catalog, and welcome back other varieties.

Interesting new varieties include many tomatoes. Mountaineer Delight and Mountaineer Pride (pg 50) were bred by West Virginia U's Mannon Gallegly and Mahfuz Rahman. Back in 1963, Gallegly released West Virginia 63 tomato; 50 years later, Gallegly and Rahman used WV 63 tomato to breed these new, larger tomatoes with even more disease resistance!

Purple Bumble Bee is a beautiful cherry tomato, purple with green stripes, while Yellow Centiflor is a pointy-ended cherry (pg 56). Mrihani basil (pg 61) is a New Zealand heirloom,

Mrihani basil (pg 61) is a New Zealand heirloom, with frilly leaves, an unusual scent, and resistance to basil downy mildew.

Cékirdegi Oyali (pg 58) is a fascinating Turkish heirloom watermelon. The brown/white seeds are highly ornamental when dried, looking like runes, or a stained glass window. Green Dixie Blackeye pea (pg 37) is a green-eyed pea that has great flavor and has been bred to resist root-knot nematodes that are often a problem in southern soils.

Back this year are Strawberry watermelon (pg 59), Green Glaze collards (pg 24), and the dubiously named Lazy Wife Greasy bean (pg 6).

Some varieties are unavailable this year from weather-induced crop failures. "Lumpy" weather seems to be a good way of describing what climate change is bringing us – long spells of cold weather, or wet weather, or hot weather, or dry weather, all jumbled up and at unexpected times.

Here in central Virginia, it was mostly a cooler year, with twice as much rain as usual. Cold weather and heavy

rain in April/May delayed a lot of our planting, and especially slowed down our sweet potato slip harvesting. (Next year, we're planting more sweet potato roots in high tunnels, in case of another unseasonably cold spring!) Then downright mild weather in the last half of July (days in the 70s? in July?? really???) slowed down many of our heat-loving crops, and for the fifth year in a row, our trials of heat-resistant eggplant varieties were thwarted. (But, at least it was easy to start lettuce in July.)

August was hot, but it wasn't enough to make up for the cooler spells earlier in the season, and then another cool, wet spell in late summer/early fall – first from Hurricane Florence, and then from Hurricane Michael – reduced many of our crop yields.

Hurricane Florence caused horrible flooding in the Carolinas, and Hurricane Michael did a lot of damage to Florida, then dumped a lot of extra rain on its way north.

Garden Planner

SouthernExposure.com/gardenplanner

Could you use help with garden planning? Our simple, powerful online tool helps manage your garden throughout the season and from year to year.

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³⁷ hot and dry, and growers endured wildfire smoke again. Summer farming is hard enough without having to wear dust masks and worry about the health damage to one's family from a couple months of smoke...

Out on the West Coast, it was

From talking with growers all over, it really seems like no one had a normal summer. On our own farm, next year we'll try to plant seed crops earlier, in case of summer cold spells, and we'll be planting more crops into raised beds in case of heavy rain, so that we won't have to worry about crops drowning.

A late summer highlight here was a 2-day vegetable breeding workshop for -50 folks, sponsored by the Organic Seed Alliance. Vegetable breeders from the West Coast and New York came to talk about trial varieties planted on our farm and at nearby Common Wealth Seeds. The workshop finished up with plans and schemes by folks to work on various breeding projects – it'll be fun to see what comes in the years ahead!

As always, we had a great time at 2018's Heritage Harvest Festival at Monticello. We hope you'll join us at next year's festival, September 20–21, 2019. See page 3 for more!

> We wish you an abundant harvest! - All the Folks at SESE



Our Events Calendar

Virginia Biological Farmers Conference January 11–13 Richmond, VA vabf.org

Future Harvest CASA Cultivate the Chesapeake Foodshed Conference January 17–19 Hyattsville, MD futureharvestcasa.org

Southern Sustainable Agriculture Working Group Conference January 23–26 Little Rock, AR <u>ssawg.org</u>

PASA Farming for the Future Conference February 6–9 Lancaster, PA pasafarming.org

See our full calendar at SouthernExposure.com or like us on Facebook. We donate 10% of winter event sales (through March 21) to benefit the Organic Seed Alliance.

> Georgia Organics Conference February 8-9 Tifton, GA georgiaorganics.org

Mother Earth News Fair February 16–17 Belton,TX motherearthnewsfair.com

Organic Growers School Spring Conference March 8–10 Asheville, NC

organicgrowersschool.org Mother Earth News Fair April 27–28 Asheville, NC

motherearthnewsfair.com

Mother Earth News Fair June 1–2 Frederick, MD motherearthnewsfair.com

4 Easy Ways to Order

Online www.SouthernExposure.com

Enter your member number (located on the back of your catalog) to receive a 5% discount online. Our online store contains everything in our catalog and more! Browse our website or save time with our online **Quick Order** form.

Phone (540) 894-9480

Our phone hours are: **9 am–5 pm, M–F, January 1–May 31**, and **11 am–3 pm, M–F, June 1–December 31** (EST). Please have your order and credit card ready.

Fax (540) 266-1021

Fax your order anytime 24/7. Please use the order form on page 85 or download one at www.SouthernExposure.com

Mail P.O. Box 460 Mineral, VA, 23117

Please use the order form on page 85.

Complete ordering instructions & conditions can be found on page 84.

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Seed Savers Exchange Conference July 19–20 Decorah, Iowa www.seedsavers.org

Mother Earth News Fair September 13–15 Seven Springs, PA motherearthnewsfair.com

Heritage Harvest Festival at Monticello September 20–21 Charlottesville, VA heritageharvestfestival.com

Mother Earth News Fair October 12–13 Topeka, Kansas motherearthnewsfair.com

CFSA Annual Sustainable Agriculture Conference November TBD Durham, NC carolinafarmstewards.org

Our Featured Seed Growers

Pam Dawling

Born in England, Pam Dawling farmed in several spots in its cooler climate, before transplanting herself to the US, and Virginia's warmer summers.

Pam served as manager for Twin Oaks Community's food gardens for more than 20 years,

working year-round to grow food for its 100 residents. She's recently become manager emeritus, but still works many hours in the gardens, and continues to write and give talks at garden and farming conferences. Her website, sustainablemarketfarming.com, is full of excellent articles and interesting blog posts.

Pam always carries a small pocket notebook, for jotting down notes and ideas, whether on her own farm, or visiting other farms, or talking to growers. Her thoroughness shows with her articles for Growing for Market magazine, and her two very useful books, Sustainable Market Farming, and her newest, The

Year-Round Hoophouse (pg 76). Like many farmers, Pam saves some of her own seed crops to be sure to have to the best seed for planting. Since 2001, she's been saving seed for Roma VF Virginia Select tomato (pg 55), and Crimson Sweet Virginia Select watermelon (pg 58), selecting for the most productive and vigorous plants adapted to our central Virginia conditions.

Among her many talents, she's also a deadly Scrabble player, and if you ever find yourself in a game with her, you may see her playing such excellent horticultural words as "fozy," "grex," "azo," and "brix"!

Order online for fastest service & largest selection:

www.SouthernExposure.com

You'll find everything in our catalog, plus:

- updated availability - more growing guides

- our Blog - retail stores that sell our seeds

Steve Todd Steve Todd has been growing seeds for

SESE for six years, growing out big seed crops of corn and beans on the hillsides of Neubert Springs Farm in Knoxville, Tennessee. He and his wife Kate have had their farm for almost 30 years; market farming kept them busy earlier, and in more recent years, as they move into retirement, they've been putting more energy into growing seed crops.



A couple family heirlooms are favorites to grow: Red Stick Bean (pg 6), a South Carolina/ Tennessee variety dating back to the early 1800s, and Donald Todd Half-Runner bean (pg 5). The latter is a bean that Steve's father started saving over 50 years ago, back when the quality of commercial half-runner beans started going downhill, and so the family started selecting their own strain of beans with the tender pods like half-runners should have.

Years ago, Steve traveled in South America, and enjoyed drinking Chicha Morada, a Peruvian drink made from fruit and purple corn. In recent years he and fellow Knoxville farmer Jonathan Buchanan have been experimenting with different purple Peruvian corns to try to find one well-suited to the area; we're looking forward to trying the results!

Wandering Fields

Ben Yohai and Kristina Porter named their farm before they had land of their own! Prior to living in southern Oregon's Little Applegate Valley, they leased and rented farm land in the greater Applegate Valley.

In 2012 they bought 11 acres in Ruch, Oregon. They hired a local excavator to dig a pond above the farm's main fields and planted a diverse fruit orchard of apples, pears, peaches, and more. Over the past 3 years, a couple of neighboring leased fields have been added to the farm's production, which have helped increase isolation for some seed crops and allow for better rotations between crops.

Every year they hire a few apprentices through an educational organization called the Rogue Farm Corps, and grow seed crops that they sell to SESE and several other companies. Southern Oregon's dry summers have good conditions for seeds to mature! They grow many seed crops, including lettuce, cole crops, onions, leeks, tomatoes, peppers, squash, cucumbers, melons, beets, corn, parsnips, and flowers.

They market their fresh produce at two local farmers' markets. Kristina is a basket-maker and has several types of coppiced willows on the farm that she harvests for weaving baskets.



- profiles of 20+ farms that grow seeds for us - our popular Seed Saving handout - Fall & Winter Quick Referenceand more! **Our Guarantee**

Metric Madness!

We indicate weight in grams for most sizes. You may find these conversions helpful.

28 g = 1 oz114 g = 4 oz = $\frac{1}{4}$ lb 227 g = 8 oz = $\frac{1}{2}$ lb 454 g = 16 oz = 1 lb We guarantee that you will be 100% satisfied with our seeds, nursery stock, and accessories, or we will replace the dissatisfactory item or refund the purchase price according to your choice. We do not sell, rent, or exchange any customer names, phone numbers, e-mail addresses or other information from our mailing list. See Ordering Information on page 84 for complete details.

> Especially Well-Suited to the Southeast: These varieties thrive in the conditions particular to the southeastern United States. All our varieties are well-adapted to the mid-Atlantic, but varieties with this

Heirloom: We define heirlooms as varieties introduced before 1940. Our definition is stricter than that used by many others.

> S Seed from Small Farms: Seeds from small farmers in our seed grower network. Most of these farms are family-owned. Some are cooperatives. For farmer profiles, see above, and more on our website.

OG USDA Certified Organic: by Quality Certification Services. Our organic certificate is online at www.SouthernExposure.com.

AAS Winners All-America Selections (AAS) is an independent, non-profit organization that tests new varieties then WINNER introduces only the best garden performers as AAS Winners.

Open Source Seeds

The Open Source Seed Initiative (OSSI) is dedicat-

open source seed initiative

ed to maintaining fair and open access to plant genetic resources worldwide in order to ensure the availability of germplasm to farmers, gardeners, breeders, and communities of this and future generations.

Ark of Taste

The Ark of Taste is a listing of rare traditional foods compiled

by the Slow Food movement to protect these products from extinction and encourage good, clean, fair food for all.

Ark of Taste

USDA

ORGANIC

symbol are particularly well suited to hot, humid summers.

Southern Exposure Seed Exchange

Southern Exposure grew out of Dr. Jeff H. McCormack's love of heirloom vegetables and the tradition of seed saving. What began in a family garden and kitchen in 1982 has expanded into a network of farms and gardens, a modern germination testing facility, and environmentally controlled seed storage. Our first catalog offered 65 varieties; now we feature over 800, with an emphasis on heritage, flavor, disease resistance and other qualities of interest to market and home gardeners. Although we specialize in seeds adapted to the Mid-Atlantic and Southeast, we have loyal customers throughout the U.S. and Canada.

Since 1999, Southern Exposure has been cooperatively owned and operated by Acorn Community Farm, an egalitarian income-sharing community in rural Louisa County, Virginia.

Our Mission

We encourage cooperative self-reliance in agriculture. We promote and participate in seed saving and exchange, ecological agriculture, reducing energy use, providing locally adapted varieties, and regional food production.

To further these aims, Southern Exposure offers: heirloom varieties to conserve and distribute rare and endangered varieties; open-pollinated varieties to encourage seed saving and exchange among gardeners; disease- and insect-tolerant varieties to reduce pesticide use; and varieties for local and small-scale growers to encourage regional food production.

Our Seeds

UNTREATED SEEDS We do not sell chemically treated seeds. To help give your seeds the proper start in life we provide detailed cultural instructions in our catalog. We especially urge you to pay close attention to recommended germination temperatures and moisture requirements.

GERMINATION TESTING Our seed is germination tested to ensure it meets both federal and Southern Exposure standards. (Our standards are higher than federal standards for some crops.) Please note that germination tests are often conducted under optimum conditions and that field results may vary. Test results are printed on the packet to help you determine planting density and quantity needed.

On rare occasions we find it necessary to package seed below federal standard. In those cases we add more seed to compensate and the packet is labeled, "Below Standard: More Seed Added.

REGIONAL VARIETY PERFORMANCE Our detailed variety descriptions help you decide which seed is suited to your region and your needs. Some varieties are best adapted to specific soils, climate, or other cultural conditions. Others are widely adapted and will generally perform well under many conditions. Our region, the Mid-Atlantic, is characterized by

high summer heat, humidity, uneven precipitation and occasional high temperatures in the early spring and late fall. Soils are predominantly clay except in sandy coastal areas

Our varieties perform well in regions sharing similar characteristics to the Mid-Atlantic, including the Pacific Northwest. Many varieties will perform well in warmer and cooler regions if planting dates are adjusted accordingly. We also offer a number of varieties suited for early production and short season northern climates. For specific regional adaptability see our catalog descriptions and cultural notes.

MATURITY DATES Maturity dates provide a guideline for comparing relative maturation times of different varieties. These dates represent the average dates for our location, our grower's location, or the average of several locations. Actual maturity dates depend on climate, soil, season, exposure, and local conditions.

SEED SAVER PACKETS™ Heirloom and rare varieties are sometimes sold in Seed Saver Packets™, our trademark used to indicate varieties in need of preservation and distribution. Seed Saver Packets™ often contain fewer seeds than most commercial-size packets. They are intended for Seed Savers and gardeners who would like to experiment with heirloom and rare varieties.

PVP VARIETIES PVP designates protected varieties regulated by the Plant Variety Protection Act which prohibits unauthorized marketing.

GENETICALLY MODIFIED VARIETIES (GMOS) We will not knowingly offer seed of genetically modified varieties Some studies suggest that avoiding genetically modified pollen may require isolation distances up to four times greater than those required by natural pollen, so we have increased the isolation distances for producing our seed. See our website for more information.

HEIRLOOM AND FAMILY HEIRLOOM VARIETIES Non-hybrid varieties introduced prior to 1940 are defined as heirloom varieties. After 1940 hybrids began to displace these traditional varieties, and many became scarce or lost. We define a special class of heirlooms as "family heirloom varieties." These have been handed down within families for generations. As far as we can tell, family heirlooms are unique and have not previously been in seed catalogs until their recent introduction. Some of these are old commercial varieties that have been modified by environment, cross pollination, selection, and random mutation. Determining the uniqueness of a variety is not easy and we would rather risk duplication than lose a valuable variety forever. To help in identification, synonyms of variety names are indicated in parentheses after the most common name.

Seed Saving: Open-Pollination

CONSERVATION OF GENETIC RESOURCES We are concerned about the erosion of our genetic resources and the trend toward replacement of standard or open-pollinated varieties by F1 hybrids. Unless we have genetic diversity in our food roops, our food supply is vulnerable to epidemics. This has been a repeated lesson of agricultural history. The Irish potato famine of the mid-1840s and the U.S. corn blight epidemic of 1970 both show the dangers of lack of genetic diversity. In 1970, nearly 80% of the U.S. corn crop was planted in hybrids containing a genetic trait that made the crop vulnerable to blight. Our country came close to losing our entire hybrid corn crop, but all the open-pollinated varieties resisted the blight.

We offer a diverse selection of open-pollinated varieties. This helps to ensure a genetic reservoir of disease-resistant varieties, regionally adapted varieties, and varieties which are diverse in flavor, color, and culinary uses. What a shame it would be if we lost varieties such as Country Gentleman corn or Brandywine tomato. We would lose not only unique taste and quality, but also part of our agricultural and cultural heritage.

SEED SAVING Seed saving promotes self-reliance, conserves agricultural resources, saves money and connects us with our agricultural roots. By selecting seed from the plants that do best for you, you are creating your own locally adapted strains. You can learn to look for interesting mutations and begin playing with breeding new varieties (we recommend Carol Deppe's excellent book Breed Your Own Vegetable Varieties). You can select for appearance, flavor, vigor, maturation time, stress resistance, keeping quality, and tolerance to insects and disease.

If you save seed from hybrids, the second and subsequent crops (the F2, F3, F4, etc., generations) will be unlike the parent generation. There will be a tremendous amount of genetic variability. So saving seeds from hybrids can be the first step toward stabilizing new open-pollinated varieties – you simply isolate and save seed from the interesting plants in the F2 generation and over the following years use selection to stabilize the new strain.

This is easier done for some types of plants than others. Out-crossing plants (like corn and broccoli) require large isolation distances and you may need to save seeds from a large number of plants each year in order to prevent inbreeding depression (lack of genetic diversity). However, mostly self-pollinating plants (like tomatoes, peppers, beans and peas) are easy for the home gardener to experiment with.

Hybrids may have an advantage in terms of yield and uniformity, but these may only be advantages to commercial farmers. To have all your tomatoes mature at once may be a disadvantage for a gardener who wants an extended harvest. The "hybrid vigor" effect is strongest in outcrossing varieties and has little impact in our beloved

tomatoes. Many hybrids have been bred primarily for shipping quality - often at the expense of flavor.

Hybrids are often bred for the low-stress conditions, high fertilizer levels, and intensive cultivation of modern conventional agriculture. Open-pollinated heirlooms, on the other hand, are the tried and true survivors. They often perform better under adverse conditions, like drought and heat stress. Hybrids may better tolerate the absence of trace minerals – which can mean a less nutritious food product, with lower trace mineral content.

Open-pollinated seeds offer less of a one-size-fits-all approach than do hybrids. We recommend reading the descriptions carefully to determine what variety best suits your needs. We are available if you need more information. Many of our open-pollinated varieties have endured the test of time, some for several hundred years.

We carry almost all open-pollinated seeds, which means you can save your own seeds and they will stay true to type. We only offer four select hybrid varieties: Granex onion, Tendergreen broccoli, and Bodacious and Silver Queen sweet corns. We think these varieties can be a valuable supplement to the home or market gardener not concerned with saving their own seed.

We began carrying seed saving supplies in order to make them available in the small quantities required for small-scale Seed Savers. We particularly recommend Suzanne Ashworth's book Seed to Seed for detailed seed saving instructions.

The "Growing Guides and Library" section of our website has specific information on how to save seed from a variety of common crops.

Seed Preservation Programs

ORGANIC SEED ALLIANCE The integrity of organic food starts with seed, yet unhealthy trends in the seed industry (consolidation, contamination by genetically modified organisms and the erosion of farmers' rights) threaten this integrity. OSA confronts these threats while building decentralized, regional, farmer-oriented seed production models. Learn more at www. SeedAlliance.org. 10% of our sales at events this winter go to the Organic Seed Alliance. See our event schedule on inside front cover.

SUSTAINABLE MOUNTAIN AGRICULTURE CENTER provides training in identifying, collecting, and maintaining heirloom seeds and plants, and coordinates the activities of growers of heirloom fruits and vegetables. It maintains many heirloom beans and tomatoes and offers some for sale. The center facilitates a Kentucky heirloom seed exchange the first Saturday in October. www.heirlooms.org

UNITED PLANT SAVERS is a non-profit dedicated to replanting endangered medicinal plant species. The wild plant resources of the North American continent currently face serious depletion and possible extinction. UPS works to research, educate, and protect plants and habitats. www. unitedplantsavers.org

SEED SHARES™ is Southern Exposure's program to collect seed of varieties that are not in general circulation, but have a special point of interest or usefulness. Email or call us if you have a variety that you would like to share! As best you can, give the variety name, its county and state of origin, growth habit, hardiness, cultural requirements, how long you've grown it, by whom it was saved, and how it was used. Family stories are of special interest. If the seed is not in our seed bank, we will send mailing instructions and a gift certificate redeemable for items in our catalog.

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We're proud to help sponsor the Charlottesville area Buy Fresh **Buy Local** Guide. The

Piedmont Environmental Council launched Virginia's first BFBL chapter. Their work has inspired us to be more active in support of local food and farms. We hope you will be inspired as well. The website and guides explain why and how to buy from local growers, food artisans, farmers' markets, institutions, and restaurants. To learn more, visit: BuyLocalVirginia.org and pecva.org

We're donating 30% of your purchase of our Welcome-to-the-Garden Pollinator Collection (pg. 81) and Virginia Heritage Seed Sampler (pg. 81) to the Piedmont Environmental Council.

Seeds for Schools

Make your next fundraiser a bountiful experience! We help schools and other worthy organizations to raise money by selling easy-to-grow four packet beginner seed collections. Send email inquiries to: fundraiser@SouthernExposure.com

Plant a Row for the Hungry

Support those in need in our local communities. Learn how to get started in your town: www.gardenwriters.org/Par/



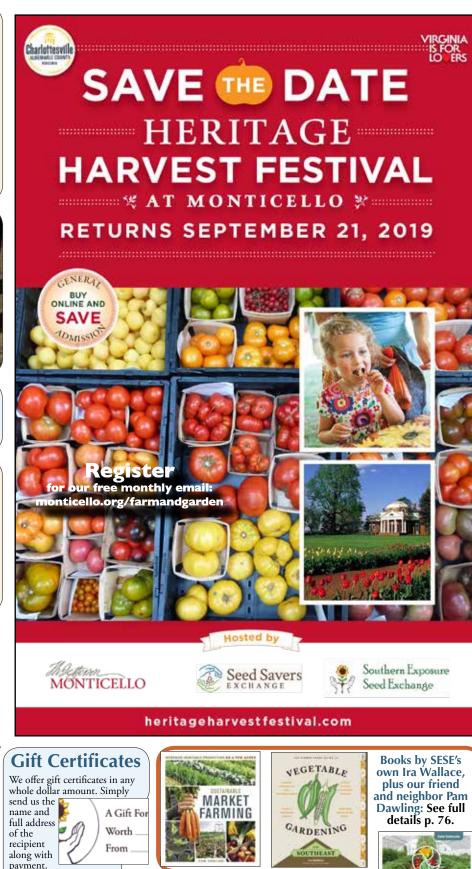
SEED PROGRAMS INTERNATIONAL works to provide quality seed to impoverished communities in developing countries. In addition to seed, SPI provides critical seed expertise and experience operating seed-based self-help programs. Learn more or make a donation: www.seedprograms.org

The Safe Seed Pledge

Agriculture and seeds provide the basis upon which our lives depend. We must protect this foundation as a safe and genetically stable source for future generations. For the benefit of all farmers, gardeners, and consumers who want an alternative, we pledge that we do not knowingly buy or sell genetically engineered seeds or plants. The mechanical transfer of genetic material outside of natural reproductive methods and between genera, families, or kingdoms poses great biological risks, as well as economic, political, and cultural threats. We feel that genetically engineered varieties have been insufficiently tested prior to public release. Further, we wish to support agricultural practice that encourages healthier soils, genetically diverse agricultural ecosystems, and ultimately, people and communities.

Seed Storage

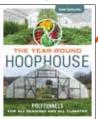
Most seeds can be stored for more than a year if kept clean, cool, dry, and out of light. Some seeds (onions, parsnips, salsify, spinach, supersweet corn) are only good for a year unless stored well. For long-term storage, store packets in a larger container (such as an airtight tupperware or a mason jar with a two-piece lid) and tightly seal for storage in your fridge or freezer. (Be careful to let the container warm to room temperature before opening.)



payment. We will send a catalog with the gift certificate code. You may include a personal message to the recipient.



Read about our program on our website - we donated to more than 200 organizations in 2018.



Artichokes Cynara scolymus

Culture: In the mid-Atlantic region it can be difficult to over-winter artichokes. We only offer annual artichokes that are able to produce in one season. Sow indoors 2 months before last frost, ½ in. apart and ¼ in. deep. Germinate at 70–80°F, then transplant to 2–4 in. pots at 60–70°F day and 50–60°F at night; by two months transplant outdoors, 2–3 ft. apart and protect from frost.

IMPERIAL STAR OG The first artichoke bred to produce in one season. #09101 Pkt (1 g, ~24 seeds) \$3.50



Imperial Sta

Snap Beans (Bush Plants)



BLUE LAKE BUSH (Blue Lake 274) 0G 55 days. A vigorous bush producing round pods with fine flavor. Prolific. Resistant to bean mosaic virus. 15–18 in. plants with mostly stringless 6–8 in. pods. Excellent for freezing or canning. #13104 Pkt (~76 seeds) \$2.75; #13104F (¼ lb) \$4.75

CONTENDER OG (Buff Valentine) 49 days. [1949, SC/AES. Possibly derived from pre-1855 Early Valentine.] The best early green bean for gardeners who desire good flavor, disease resistance, and high yield.



5¹/₂ in. long pods. Fairly hardy under adverse conditions and well suited to greenhouse use. Resistant to common bean mosaic virus (race 1) and tolerant of powdery mildew. #13103 Pkt (~50 seeds) \$2.75; #13103F (¼ lb) \$4.75; #13103G (½ lb) \$6.75; #13103H (1 lb) \$10.25

BACK! FOWLER S 🌞

∑ 53 days. [Heirloom of Don Fowler who obtained it in 1981 from a friend whose relatives settled in Oregon. Introduced 1986 by SESE.] Tender, great flavor. 5 in. slender round



stringless pods, dark-brown seeds. Vigorous and productive, excellent heat and drought resistance. Large leaves suppress weeds. **#13108** Seed Saver Pkt (14 g, ~52 seeds) \$2.75

Beans Phaseolus vulgaris

Culture: Beans grow well in any well-drained garden soil, but do best in soils with pH above 6.0. After the last frost, plant seeds 1 in. deep and 2 in. apart in rows 12–18 in. apart, thinning to 4 in. apart. Beans may benefit from a source of soluble nitrogen (if your soil is low in nitrogen) during the first 3 weeks until nitrogen-fixing nodules develop, but do not apply nitrogen after this period. **Dark- and Light-Seeded Beans:** Dark-seeded beans are more resistant to rotting in cool soil than light-seeded beans. Beans need a minimum soil temperature of 65°F to germinate well, otherwise seeds may rot. **Succession:** Plant every 3 weeks for a steady supply. Hot weather: in deep summer heat, flowers may not set pods; southern peas and asparagus beans are more reliable producers at these times. **Harvest:** Pick when pods are small, before seeds fill the pods. Keep well picked so that plants continue to bear. **Storage:** Keep dry – wet beans will mold in storage. **Diseases:** Rotate on a 3-year cycle if disease is a problem. Don't cultivate or harvest when foliage is wet since anthracnose, bacterial blight, and rust diseases may be spread. Avoid watering plants in the evening. Mulch plants to prevent rain from splashing dirt on beans. **Insect Pests:** Use rotenone, or introduce the Pedio Wasp (*Pediobus foveolatus*) to give excellent biological control of Mexican bean beetles. **Seed Savers:** Isolate bean varieties a minimum of 25 ft. for home use. For pure seed an isolation distance of 100–150 ft. is required. **Packet:** 1 oz (28 g) unless otherwise indicated (about 50–105 seeds depending on variety) sows 10–18 ft.

MAXIBEL OG 55 days. One of the best gourmet French "haricot vert" beans. Sturdy bush plants produce abundant yields of dark green, pencil thin, flavorful 7 in. pods in a concentrated set for



easy picking. The stringless beans hold well on the plants. Folks have been asking us for years for this one, we're happy to finally have a good supply to offer! **#13201 Pkt (14 g, ~60 seeds) \$2.50; #13201F (¼ lb) \$6.25**



PENCIL POD BLACK WAX $\stackrel{\text{def}}{\Rightarrow}$ 52 days. [1900.] Stringless, curved, round pods, 5½–6 in. long. Excellent for fresh eating or canning. Blackseeded. Early with extended harvests. Not as productive as modern wax beans, but dependable in high heat. Widely adapted. #13301 Pkt (~70 seeds) \$2.50; #13301F (½ lb) \$4.50; #13301G (½ lb) \$6.50



PROVIDER 0G 48 days. [Introduced by Dr. Hoffman of South Carolina in 1965.] A favorite of many market growers, this widely adapted snap bean offers heavy early yields. Virus resistant and slow to wilt. 16–18 in. plants with 5–8 in. green beans. #13110 Pkt (~82 seeds) \$2.75; #13110F (¼ lb) \$4.75; #13110G (½ lb) \$6.75

Purple-Podded Bush Beans

ROYALTY PURPLE POD OG 51 days. [1957.] Has a natural blanching indicator: the purple pods blanch to green after 2 minutes of boiling. Easy to pick – purple pods are easily visible against the green foliage.



Plants have short runners and need either wide row spacing or a fence for climbing. 5 in. pods are slightly curved. Very meaty and flavorful, great for soup. Buff-colored seeds germinate well in cool soil. #13351 Pkt (~79 seeds) \$2.75; #13351F (¼ lb) \$4.75; #13351G (½ lb) \$6.75; #13351H (1 lb) \$10.25



ROMANO 14 $\stackrel{\bullet}{\longrightarrow}$ 54 days. Excellent flavor. Good for canning, freezing, and fresh eating. An Arkansas customer tells us he prefers the mature seed to pintos! Stringless thick, flat pods, $\frac{3}{4} \times 6$ in. Low, spreading plants. Excellent resistance to rust makes this variety high yielding for fall crops. #13105 Pkt (~60 seeds) \$2.50; #13105F (¼ *lb*) \$4.50; #13105G (½ *lb*) \$6.50

BACKI TANYA'S PINK POD OG S ♣ ≈ 60 days. Romano-type beans from a sport of 'Sequoia.' Flat pods are a lovely mottled green and phosphorescent pink. (Pink color fades when cooked. #13371 Pkt (-67 seeds) \$3.25



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Drying Beans (Bush Plants)

Harvest dried pods before rains so seeds won't mold inside pods. Continue drying pods for 2–4 weeks indoors or under cover before shelling and storing.

BLACK TURTLE OG S ⇔ ≈ 100 days. Great soup bean. Small, black beans, 4-5 per pod. Seeds have a very delicate skin, and when cooked, make a creamy soup. Good drought tolerance, some bean beetle resistance. #13407 Pkt (~175 seeds) \$2.95; #13407F (¼ lb) \$5.75; #13407G (½ lb) \$9.75

CALYPSO (Orca, Yin-Yang) OG S Second Seco

cooked. #13410 Pkt (~66 seeds) \$2.95



KEBARIKA OG S * * 75 days. [Kenyan heirloom.] Sturdy upright plants produce loads of dark purple mottled beans. 6 in. pods, 5 large seeds/pod. The window for picking as a snap bean is small, but it excels as a dry shell bean that tolerates heat and drought well. Widely adapted. **#13406 Pkt (~50**

seeds) \$2.95; #13406F (¼ lb) \$6.25

PINTO OG S ♣ ≈ 90 days. A wonderful shelling bean. Traditionally used for refried beans, they cook up smooth and creamy with great flavor. 4-6 beans per pod. #13408 Pkt (~101 seeds) \$2.95; #13408F (¼ lb) \$6.25



SMALL RED OG S 75 days. 14 in. tall semi-bush plants tend to sprawl a bit, and produce small, dark-red beans. Very productive. 4-6 beans/pod. #13409 Pkt (~97 seeds) \$2.95; #13409F (¼ lb) \$5.75

Snap Beans (Pole & Cornfield)

Culture: Pole beans usually bear later than bush beans and generally give higher yields, usually bearing for six or more weeks. Poles or other means of support should be at least 8 ft. high. Sow seeds 1 in. deep. Along a trellis, sow seeds 4 in. apart, thinning to 8–12 in. apart. With a bean teepee, sow 6–8 seeds around the base of each pole. Corn plants may be used as bean poles. We recommend using tall, sturdy dent corns like Tennessee Red Cob, Pungo Creek Butcher, and Hickory King. **Note:** Only certain varieties of beans are shade tolerant and adapted to growing in corn, though most grow well along the outside rows. **Packet:** 1 oz (28 g) unless stated (about 75–115 seeds depending on variety) sows 12–18 poles.

Aunt Ada's Italian

Aunt Bea's

AUNT ADA'S ITALIAN S Constraints of the second sec

BACK! AUNT BEA'S S ⇒ ≤ 60 days. [Family heirloom, original seed courtesy of Gil Gillespie via sisters Beatrice and Bernice Heuser who brought the beans from Louisiana to Norfolk, VA - 1960. Introduced 2015 by SESE.] 4-6 in. curved pods, green with purple streaks. Vigorous plants, give this one extra space on the trellis. "Rebranching" habit gives new growth and more beat

trellis. "Rebranching" habit gives new growth and more beans right up to frost. **#13518 Pkt (~92 seeds) \$3.25** BLACK-SEEDED KENTUCKY WONDER S S 75 days. [Central Ohio heirloom. Original seed from Tom Knoche's Aunt Marga sub



Aunt Marge, who kept this variety alive for 60 years.] Germinates well in cool soil. Good flavor and texture. 6–8 in. stringless, fleshy, fiberless pods. #13511 Pkt (~90

seeds) \$3.25 New! Case



#13522 Pkt (~88 seeds) \$3.25

Small Red

SULPHUR (Golden Cranberry, China Yellow) S S 55 days fresh shell bean, 85 days dry bean. [-1839. First known as 'China Yellow.'] Known for its short cooking time, distinctive flavor and its ability to form a thick gravy when baked or boiled. An old favorite, highly respected and much in demand by the mountain folks of North Carolina, Virginia, and Tennessee, though less productive than other bush beans. Well-branched, spreading plants with phlox-pink colored flowers. 5 in. long pods, 5 beans/pod. Yellow-tan seeds. #13451 Pkt (-76 seeds) \$2.95

TIGER EVE OG S [♣] ≈ 55 days fresh shell bean, 80 days dry bean. *[Heirloom from Chile/Argentina.]* Versatile bean can be used three ways. When young it's a snap bean (green to light yellow), when the pods fill it makes a great fresh shelling bean (beans are mostly white at this stage), and when fully mature it's a dried bean with colors like a tiger's eye (orange with maroon stripes). The beans have a wonderful rich flavor and smooth texture. The tender skins disappear in cooking. **#13411 Pkt (~40 seeds) \$2.95; #13411F (¼ lb) \$6.25**

CHEROKEE CORNFIELD S \$\$ days. Heirloom with pretty earthtone shades and markings. Yields well, especially when grown up corn stalks. The story goes that the different color varieties should not be separated out or else they will barely flower – that much like a family, they are stronger when kept together. Traditionally esten as a shelly bear.



Traditionally eaten as a shelly bean – boil the pods like one would with edamame, then pop the small beans out of their pods. #13513 Seed Saver Pkt (14 g, ~42 seeds) \$2.50

Donald Todd Half-Runner S

65 days. [Family heirloom of Tennessee grower Steve Todd, whose father Donald first started saving it. Introduced 2017 by SESE.] For more than 50 years the Todd family has been saving seeds for this bean, selecting for more tender pods like half runners should have. 5-5½ in. plump green pods. #13253 Pkt (~66 seeds) \$3.25



GENUINE CORNFIELD Unavailable for 2019.

GRANDMA NELLIE'S YELLOW MUSH-ROOM OG S S 56 days. [Original seed from Marge Mozelisky, given to her by her grandmother.] Has the unusual characteristic of tasting somewhat like mushrooms when cooked. Tender when picked at 5 in, this bean is a true treasure. Heavy yielder of light yellow pods. #13512 Pkt (~78 seeds) \$3.25

Greasy Beans, Purple-Podded Pole Beans & more Pole & Cornfield Beans continue on the next page.



Pole & Cornfield Beans Continued



KENTUCKY WONDER OG Cold Homestead) 66 days. [Pre-1864, first known as 'Texas Pole.'] Popular since its introduction, though it has undergone some change over the years. Resistant to bean rust. 8 in. pods, stringless and tender when small. Use fresh, for canning and freezing, or as a dry bean. #13503 Pkt (~75 seeds)

\$2.75; #13503F (¼ lb) \$4.75; #13503G (½ lb) \$6.75; #13503H (1 lb) \$10.25

McCaslan 🌞 🕿 70 days. [Introduced 1912, though it was grown well before 1900 by the McCasland family in GA.] Southern favorite with delicious flavor. Good as a stringless snap bean, and as a green or dry shell (white-seeded)

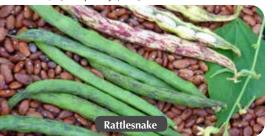


bean. Productive vines bear slightly flattened 7 in. dark-green pods. Pods are finely-grained, fleshy, and brittle. Drought tolerant vines produce all season if closely picked. **#13505 Pkt** (-78 seeds) \$2.50; #13505F (¼ lb) \$4.50; #13505G (½ lb) \$6.50



NT HALF-RUNNER S 73 days. In recent years the commercial strains of white half-runner beans have been contaminated by pods with tough hulls. Bill Best of the Sustainable Mountain Agriculture Center spent years carefully selecting this variety to bring back the tender hulls they should

have! Great production and flavor. 4-6 in. pods, white seeds. #13251 Pkt (~87 seeds) \$3.75; #13251F (¼ lb) \$8.25



RATTLESNAKE 56 days. A heavy producer in the hot, humid areas of the coastal Mid-Atlantic and South where sandy soil prevails. Steamed snaps are sweet, rich, and full flavored. Stringless when pods are small to medium size. Vigorous vines bear 7 in. round purple-streaked pods containing buff-colored seeds splashed with brown. #13508 Pkt (~77 seeds) \$2.50; #13508F (¼ lb) \$4.50; #13508G (½ lb) \$6.50; #13508H (1 lb) \$9.50



RED STICK S [₩]/₂ ≈ (South Carolina Red Stick Bean) 65 days. [SC heirloom, brought to Catoosa, TN, in the early 1800s. Thanks to Steve Todd for sharing his family's heirloom. Introduced 2015 by SESE.] Productive and richly flavored, 5–6 in. pods, can be eaten fresh, as shelly beans, or dried. Cook long and slow for best quality; Steve's family likes eating them as snap beans with a few red shelly beans mixed in. #13521 Pkt (~62 seeds) \$3.25; #13521F (¼ lb) \$6.25

Selma Zesta OG S 🌞 🕿

54 days [Heirloom from the J. C. Metze family of Newberry, SC, offered by Parks Seed in the 1960s.] Rattlesnake type. Lovely olive green pods speckled with purple. Tasty pods at any stage, even when large. The seeds remain small in the pods for a long time; it is the meat of the bean that thickens, giving you a real mouthful. Small beans are excel-

lent eaten raw. Older, thicker beans make a great meat substitute in vegetarian meals. #13515 Pkt (~75 seeds) \$3.25

Zesta



TURKEY CRAW $\stackrel{\bullet}{\longrightarrow}$ $\stackrel{\frown}{\cong}$ 67 days. [Heirloom from VA, NC, and TN. According to folklore, a hunter shot a turkey and removed a bean from its craw; the bean was later planted and saved, hence the name Turkey Craw.] Often used as a cornfield bean. Excellent fresh flavor. Good canned. Similar to other beans for freezing and drying quality ("leather britches on a shuck"). Pods grow 3¹/₂-4 in. long and cling to the vines. Seeds are buff, frosted with brown on one end. #13510 Pkt (~104 seeds) \$3.25

WITHNER WHITE CORNFIELD S S S 63 days. [Indiana heirloom, named for Dr. Carl Withner.] One of Carol Deppe's favorite beans for growing in corn patches. Stringless flat green



Stringless flat green pods with white seeds, great flavor. **#13519 Seed Saver PacketTM (14 g, ~42 seeds) \$2.75**

Greasy Beans (Pole Beans)

Greasy beans are a southern Appalachian specialty, mostly found in SE Kentucky and western North Carolina. The pods have a shiny/hairless look to them, hence "greasy"; the hairless pods keep fresh longer. Old-timers love them for their great texture and flavor, and will tell you that any bean that doesn't have

you that any bean that doesn't have to be stringed isn't worth eating!

CHEROKEE GREASY S ♦ 72 days. [Cherokee heirloom via Sustainable Mountain Agriculture Center.] 4 in. pods, 7–10 seeds/ pod, best as shelly or dried beans. This prolific white-seeded greasy is still grown on the reservation at Cherokee, NC. #13605 Seed Saver Packet[™] (14 g, ~50 seeds) \$2.75

BACK! LAZY WIFE GREASY S 💭

⋜ 71 days. [Madison, NC heirloom] Large, prolific greasy bean. Easy-to-pick clusters are part of the reason for its name. Hairless "greasy" pods are thick, very fleshy, remaining tender until the beans are quite large. Also a great shelly bean. #13603 Seed Saver Packet (14 g, ~46 seeds) \$2.75

RED-STRIPED GREASY S [™] Z 53 days. [Appalachian heirloom. Also known as Striped Greasy Cut Short, although the seed is not squared off like a true cut short bean.] 5 in. green pods with faint striping, mottled brown seed, great fresh or dried. #13606 Seed Saver Pkt (14 g, ~57 seeds) \$2.75



Lazy Wife Greasy



Purple-Podded Pole Beans

Dean's Purple S 🌞 🕿

52 days. [Family heirloom from TN. Supplied to us courtesy Seed Savers Mark Schonbeck, Valerie Lyle, and Dean Turley. Dean received the beans as a gift from a student whose family brought it to Frost Bottom, TN, where they settled 150 years ago.] Plants form a gorgeous purple and green screen loaded with vivid 5–6 in. purple beans. Save both light and dark seeds to replant for more tender pods and a finer taste. Good bean beetle resistance. #13602 Pkt (-92 seeds) \$3.25

LOUISIANA PURPLE POD **OG S**

Solution 2 (1998) Solution (1998) Solution



Dean's Purple



Asparagus Beans (Long Beans) Vigna unguiculata ssp. sesquipedalis

Culture: Asparagus or "yard-long" beans originated in Southern Asia and are now grown extensively in Asia, Europe and more recently the U.S. Although they resemble pole snap beans, they are more closely related to southern peas (cowpeas). Asparagus beans are called "Dow Gauk" in China and "Sasage" in Japan. Asparagus beans are easily grown; produce heavily; harvest easily; thrive in hot weather when snap beans may not produce; are slightly more resistant to drought than snap beans; are much more resistant to bean beetles; and are tolerant of a wide range of soils. Need warm soil to germinate - sow a month after last frost. Grow in the same manner as pole beans or along a trellis, sow seeds ¾ in. deep, 4 in. apart, thinning to 8 in. One planting along a



tall trellis will produce well all season. Harvest: Harvest when pods reach 12-15 in., before the seeds fill the pods. May be cooked like snap beans. Young leaves and stems are also edible. Flavor: Sweet and mild, resembling the combined flavor of asparagus, mushrooms, and beans. Serving suggestion: Braid or tie into knots before cooking. Seed Savers: Isolate from southern peas and asparagus beans by a minimum of 10-20 ft. for home use. For pure seed isolate 50 ft. Packet: (4-7 g) (24-48 seeds, depending on variety) sows 6-10 ft.

Chinese Red Noodle S 🌞 59 days. Beans up to 22 in. long. Similar to Purple Podded, but with superior flavor and texture. Redpurple pods. Red-brown seeds. #11104 Pkt (4 g, ~24 seeds) \$2.95

Green Pod Red Seed 🛛 🗲 🐫 🕿 58 days. *[Pre-1860.]* 24–26 in. green pods are tender to 18 in. Pink red seeds. Always a reliable, trouble-free variety that is excellent for the home garden. #11102 Pkt (7 g, ~48 seeds) \$3.25

Liana OG S 🐫

52 days. One of the earliest bearing asparagus beans. Like most black-seeded varieties it does well in the North and the South. Since it is day-neutral, in the South it can be planted for early market sales, late for



a fall harvest, or year-round in the greenhouse. Green pods up to 23 in. long, but are best picked at 18 in. or smaller (less than pencilwidth). A market favorite. #11105 Pkt (7 g, ~39 seeds) \$3.25; #11105E (28 g) \$7.75

Fava Beans Vicia faba

Culture: Favas have approximately the same cultural requirements as peas. Sow seeds 4-6 in. apart in rows 18-36 in. apart. Use as a frost-tolerant, spring-planted lima bean substitute from Virginia northward. Fava beans thrive in cool, rainy areas. Plant so that plants are flowering when daytime temperatures average less than 70°F. From Virginia northward, favas are planted in the spring, whereas in Gulf Coast states and warm coastal areas they may be planted from October to December for harvest in March. Favas have a flavor that is similar to a blend of limas and peas, but are more nutritious than limas. For use as a snap bean, harvest the pods at 2-3 in. For use as a green shelled bean, harvest when pods are 4-7 in. long. Prepare in the same manner as peas or beans. Caution: A small percentage of people of Mediterranean descent may experience a hereditary reaction to fava beans. Packet: 1-11/2 oz. sows 8-16 ft. Cannot ship to Canada.

PURPLE PODDED YARD Long Bean **OG S** 79 days. Beautiful dark purple pods that retain color when stir-fried. 18 in. long pods, tender up to 12 in. Red-brown seeds. Reliable and prolific, takes heat well. #11103 Pkt (7 g, ~42 seeds) \$3.25

Stickless Wonder S 🐫 54 days. A rare dwarf type - think of it as being like an edible-podded Southern pea! Early harvests of 12 in. light green pods (best harvested at 10 in.

or less). Bushy 30 in. plants don't require any sticks (i.e., trellises) for support, though they don't bear as long as tall varieties. #11106 Pkt (5 g, 44 seeds) \$2.75

WHITE GALAXY **OG** S 🌻 55 days. Pretty green-white pods up to 22 in. long, best harvested at 15 in. or less. Early, productive, and vigorous. #11107 Pkt (7 g, ~32 seeds) \$3.25



White Galaxy

Broad

Windsor

Purple Podded

BROAD WINDSOR OG 🌞 🕿 85 days. 2-3 ft. tall plants produce 1 in. wide, 6–8 in. long pods containing 5-6 large beans. We love to substitute this bean for chickpeas in hummus. #11201 Pkt (42 g, ~30 seeds) \$2.95; #11201F (1/4 lb) \$4.75; #11201G (1/2 lb) \$8.25 Cannot ship to Canada.

SWEET LORANE OG S 95 days. [Bred by Steve Solomon.]

Glossy seeds in pretty earth tone shades are half the size of Broad Windsor and cook faster. Very cold hardy (to 10°F), an excellent nitrogen fixer, works well as a

winter cover crop in mild winter areas. #11203 Pkt (28 g, ~50 seeds) \$2.75; #11203F (1/4 lb) \$5.75; #11203G (½ lb) \$8.75; #11203H (1 lb) \$15.75 Cannot ship to Canada.

Edamame (Soybeans) Glycine max

Culture: Edamame is very easy to grow—as easy as growing any bush bean. It's planted the same way as bush beans, and a mature soybean plant (edamame plant) is 2-5 ft. tall. After the soil has warmed to 65°F, sow seeds 1 in. deep and 2+ in. apart, in rows 15–30 in. apart. Don't rush planting; if the soil isn't warm enough, seeds will not germinate. Do succession plantings for an extended harvest. Harvest: Manually pick the immature green pods when 80–90% filled out. If pods are allowed to turn yellow much of the quality is lost. Beans reach their maximum sweetness about a month after flowering. Quality is best when the pod is plump and bright green, similar to snow peas in color. Cooking: Most often served steamed in the shell - but don't eat the shell. Seed Savers: Isolate varieties a minimum of 25 ft. for home use. Packet: (28 g) (80-92 seeds depending on variety) sows 7-8 ft.

LANCO OG S

 🏾 🖉 90 days. [Grown in Pennsylvania for many years, "Lanco" is thought to stand for Lancaster County. May have come from Asia in the early 1900s.] Large green seeds, mild nutty sweet flavor. Harvest beans



when the tops of the plants start to lose their deep green color, but before the leaves start to turn yellow on top. (There will always be a few yellow leaves at the very bottom of the plants, that's natural.) Don't wait until the beans fill out all the way to the end of the pods, this variety won't do that. Hardy plants may grow 3-4 ft. tall if seeded early. Early group V maturity. #11503 Pkt (~80 seeds) \$3.25; #11503F (1/4 lb) \$6.75; #11503G (½ lb) \$11.75

TANKURO S 🐥 65 days fresh shell bean, 90 days dry bean. For edamame, harvest when pods are filled out but green. Also traditionally harvested fully dry and used as a dry bean, such as in Japanese kuromame. Black-seeded soybeans are quicker to cook than most dry beans, and



deemed to have a richer flavor than green- or tan-seeded soybeans. 30 in. plants. #11505

Pkt (~92 seeds) \$3.25; #11505F (¼ lb) \$5.75

New! Tohya 🛛 S 🕴 68 days. Great flavor and texture. Concentrated pod set means you can harvest whole plants at once. 2 ft. plants. #**11506 Pkt** \$3.25; #11506F (1/4 lb) \$6.75



Lima Beans Phaseolus lunatus

Hyacinth Beans: see p. 68

Aubrey

Deané

Ark of Taste

Christmas

King of the Garden

Culture: Limas need warmer soil than snap beans. Wait to direct sow until at least 2 weeks after last frost. Plant seeds 2-3 in. apart, thinning to 4-6 in. Be sure the soil is well drained. Harvest: Limas can be used fresh when beans fill the pod, or they can be left to dry in the pod to be used as dried beans. Seed Savers: Isolate varieties by at least 160-500 ft. Packet: Seed size varies considerably: 1 oz (28 g) unless stated (20-85 seeds depending on variety), sows 6-20 ft.

Bush Limas



Fordhook 242 *****65 days. [1945, USDA Beltsville, IN. AAS winner.] The standard lima for middle and northern latitudes where it bears well in warm years. Plants have dense foliage and are heat- and droughtresistant. Thick 4 in. pods have 3–5 large, flat greenish-white

Henderson

Bush

Jackson Wonder 🌞

farmer Thomas Jackson.]

vields well under hot,

seeds/pod. Fresh seeds

dry conditions. 3-5

are red; dried seeds

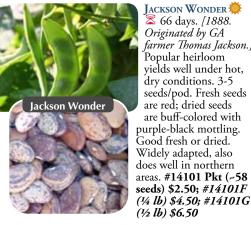
are buff-colored with

S 66 days. [1888. Originated by GA

Popular heirloom

seeds with a nut-like flavor. #14102 Pkt (42 g, ~33 seeds) \$2.50; #14102F (1/4 lb) \$4.50; #14102G (½ lb) \$6.50

HENDERSON BUSH OG S 🏅 61 days. [1885, originally found growing along a Virginia road-side.] Bushy 2 ft. plants bear loads of pods, 3-4 small creamy white seeds per pod. Early maturity. Widely adapted. An old favorite, good fresh, canned, or frozen. #14104 Pkt (~65 seeds) \$3.25



THOROGREEN OG S 🔀 60 days [1941. Selected from Henderson Bush. / Ŏld time favorite with concentrated pod set for canning and freezing. Easy to grow, good flavor and texture. Šimilar to Henderson Bush, with 3–4 medium seeds/pod, but earlier, shorter (18 in.) plants, and light green seeds.



Pkt (~71 seeds) \$3.25; #14105F (1/4 lb) \$6.25; #14105G (1/2 lb) \$9.75

Pole Limas

AUBREY DEANE OG S 🌞 🕿 87 days. [Pre-1890 family heirloom from Greene County, VA. Introduced 1993 by SESE. | Medium-size limas, maroon with splashes of white. Tall plants tolerate poor soil and are very productive in hot, dry conditions. Some dried pods may release their seeds if left too long on the plants. #14515 Pkt (28 g, ~49 seeds) \$3.50

Christmas 🏶 🛣

(Large Speckled Calico) 84 days. Dependable and flavorful. A high yielder in hot, humid condi-\$2.50; #14502F (1/4 lb) \$4.50; #14502G (1/2 lb) \$6.75

HOPI YELLOW Unavailable for 2019.

🕿 88 days. [Introduced 1883 by Frank Platt af-Large White pole lima.] 4–7 in. pods, contain 4-6 large creamy-white

ft. and bear heavily over an extended season. An old favorite of excellent quality. #14506 Pkt (42 g, ~34 seeds) \$2.50; #14506F (1/4 lb) \$4.50; #14506G (1/2 lb) \$6.50



SIEVA OG S 🌞 🕿 (Carolina) 82 days. [Pre-1750. Seedstock from Monticello.] Lima beans were a summertime favorite of Thomas Jefferson. This small, plump white lima has great flavor. 3-4 seeds/pod. Vigorous, drought tolerant vines can grow 9-10 ft. tall, need a sturdy trellis. #14518 Pkt (~59 seeds) \$3.50; #14518F (¼ lb) \$6.75

VIOLET'S MULTI-COLORED Unavailable for 2019.

Runner Beans

Phaseolus coccineus

Runner Beans are perennial beans. They are tolerant of heat, drought, and cool nights. History: Many runner varieties can be traced back to the Hopi Indians before the arrival of the Spanish, and may have been previously cultivated by the Aztecs. Now widely grown in England. Culture: High temperatures over 90°F may prevent pod set; if grown for food, expect pod production only during late summer/early fall in the Mid-Atlantic and southward. A bulbous root is produced which in mild climates can be dug up in the fall and replanted in the spring. Harvest: Runner beans are eaten as snap beans when pods are small, and can be used as green shelly or dried beans. Dried beans have a nut-like flavor. Seed Savers: For home use isolate from other runner beans by at least 75-150 ft. For pure seed, isolate by 1/8-1/4 mile. Packet: 28 g (1 oz, ~28 seeds) sows approximately 5 poles.

SCARLET RUNNER OG S 🗏 68 days to snap stage, 115 days to dry shell stage. [Pre-1750. Grown by the early colonists who obtained seed from the Native Americans. | Grown mostly in the U.S. for its brilliant scarlet flowers, which are highly attractive to hummingbirds. 8-12 in. pods contain lovely, mottled reddish-purple beans. #11301 Pkt \$3.75

WILLOW LEAF COLORED **S 🜞** 80 days. *[From* Dr. James Wolf, via David Bradshaw.] Rainbow mix of colors in different shades of white, beige, tan, red, and purple - some plain, some speckled. Narrower leaves than most limas, more like a willow tree. #14513 Seed Saver PktTM (14 g, ~26 seeds) \$2.50







Worchester Indian Red Pole 0 S 🌞 🕿 85 days. [Reported to be of Native American origin, pre-1868. Introduced 1990 by SESE.] Our hardiest lima. Produces medium-sized limas on heat- and drought-resistant plants. Seeds are a beautiful dark maroon-red. This variety still exhibits a wild trait: a few pods spring open (shatter) when the pods are completely dry. 2-4 beans per pod. #14507 Pkt (~50 seeds) \$3.50; #14507F (1/4 lb) \$6.25

www.SouthernExposure.com



King of the Garden 🐛 ter selecting bigger pods of

seeds with honey-like flavor. Vines grow to 91/2

Beets Beta vulgaris

History: Until the 1800s, beets were referred to as blood turnips because of their red turnip-like roots. The round and flat-bottomed beets of today are an improved form. Culture: Beets should be grown in a light loam of pH 6.5-7.0. If soil pH is below 6, sprinkle limestone or wood ashes in the row as you plant; otherwise, yield will be seriously impaired. An even supply of moisture and absence of extended periods of hot weather is necessary for development of finequality roots. In dry, hot weather beets can become tough and stringy and must be harvested at an earlier stage. Sow seeds 1/2 in. deep directly in the garden from March through early June and again in early September. Late spring and early fall sowings should be 34 in. deep. Sowing beets in deep summer heat is difficult - young seedlings wilt and disappear, and even thick sowings may have only spotty survival. Thin to 6 plants per foot for fresh beets, 3 plants per foot for beets used for winter storage, in rows 12 in. apart. Seed Savers: Plants are biennial. Isolate by ¹/₄ mile. For pure seed isolate by a minimum of 1/2-1 mile. Crosses with chard. Packet: Seed size varies considerably: 5 g (unless noted, average 385 seeds) sows 31 ft.

BULL'S BLOOD OG S 35 days for baby leaves, 60 days for roots. [1840, French variety.] Famous for its mild, dark leaves - usually harvested young for salad mix before the roots have even matured. Flattened round roots, but

the leaves are the real attraction - their reddish-purple color comes out most strongly in cool weather. #31106 Pkt \$2.50; #31106E (28 g) \$6.25



Broccoli Sprouting: Brassica oleracea var. italica; Heading: B. oleracea var. botrytis

Chioggia **0G** 🐡 🖾 (Dolce Di Chioggia) 52 days. [Pre-1840, Italian variety.] Beautiful scarlet-red garden beet with interior rings of reddish-pink and white. Green leaves. Notable for its earliness, attractive color, relative absence of bleeding,

and vigor. Has a small % of all-white beets. Good storage variety. #31101 Pkt (3 g) \$2.50; #31101E (Ž8 g) \$6.25

Crosby Egyptian OG 🌞 🕿 (Early Crosby Egyptian) 60

days. [1880. The parent strain of the Egyptian beet was introduced from Germany in 1865.] This variety has been selected and refined over the years. 3-5 in. roots are very flattened in

shape, and grow virtually on the surface of the soil. Roots have a dull red skin and dark red interior. #31102 Pkt \$2.50

Cylindra 🛛 👯 🕿 55 days. [Danish heirloom.] Rich red beets are tender sweets. 6 × 2 in. carrot-shaped beets are easier to peel and slice than regular beets. #31107 Pkt \$2.50

Detroit Dark Red 🛛 🖉 💆 60 days. [1892. Developed from the popular variety Early Blood Turnip.] Widely adapted, very popular dark

red coloration. Use fresh or canned. Resistant to Downy Mildew. Excellent flavor. #31103 Pkt \$2.50; #31103E (28 g) \$5.50

Culture: Culture of broccoli is similar to cabbage, but broccoli is more sensitive to hot weather. (See Cabbage section for detailed cultural notes.) Start seeds indoors 4-5

weeks before transplanting out. Transplants should have at least 4 leaves. Transplant starting 1 month before last spring frost. (If seedlings experience 20°F or lower they may "button up" and only make tiny heads, because the plants will think that they've gone through a winter and that it's time to flower.) Broccoli does best in cooler weather – avoid maturing heads in deep summer heat. For fall crops start seed 10-12 weeks before the first hard freeze date, and transplant to garden after seedlings are well developed. Broccoli requires a steady supply of moisture in a well-drained fertile soil. Any temporary arrest of growth will adversely affect production and taste. Keep a deep layer of mulch on the soil during hot weather. Side-sprouting varieties have smaller central heads with many side sprouts, a feature that is useful for extended harvest. Plant in raised beds or rows 12-16 in. apart. Maturity Dates: Days to maturity are from transplanting. Add 25 days if from seed. Seed Savers: Broccoli will cross with Brussels sprouts, cabbage, cauliflower, kale, collards, and kohlrabi. Isolate by 1/8 mile for home use. For pure seed of small plantings isolate by 1/4 to 1/2 mile. Packet: Open-pollinated varieties, 2 g (about 625 seeds) sows 50 ft. direct seeded or 350 ft. as transplants. Hybrids, 0.3 g (about 58 seeds).

CALABRESE OG 🔀 (Italian Green Sprouting) 58 days. [Brought to U.S. by Italian gardeners, introduced to seed trade 1914-'18.] Produces central head (3-6 in. diameter) plus many side shoots. #21101 Pkt \$2.50



De Cicco **OG** 🌞 🕿 49–78 days. [~1890.] Produces a 3–6 in. diameter central head and side sprouts which extend the harvest period. Use the young leaves like collard greens once the head is a quarter developed. Plants are light green and of medium height. May be planted in the early spring, late summer, or early fall. #21102 Pkt \$2.50; #21102E (28 g) \$5.50





Crosby

Egyptian

EARLY WONDER TALL TOP OG 🔀 50 days. [1911.] Used for early spring sowings, this versatile beet has choice tall tops for greens and small- to medium-size dark red roots for salads, pickles, borscht, or sliced for cooking. Plant spring or fall. #31104 Pkt \$2.50; #3Ĭ104E (28 g) \$5.50

Lutz Green Leaf **OG** 🜞 🕿 76 days. One of the sweeter varieties available. An excellent keeper, a beet developed before the days of refrigerators. Retains its sweetness and texture even when large (unlike most beets, which become woody when large), just peel off the thin skin. Fall leaves are tender enough to use in salads. We've had problems finding good "true" seed for Lutz Green Leaf, but finally, this is the good stuff – thanks to the fine folks at Uprising Seeds for sharing theirs! #31105 Pkt \$3.25

Lutz Green

Three Root Grex **OG**

S 🌞 54 days. *[Alan* Kapuler] Open-pollinated variety from a mix of beets with two shades of red and a really bright orange. Red roots are 3-4



Detroit Dark Red

GOLIATH OG S 55 days. Produces a large central head plus numerous side shoots after the first harvest. Developed for home gardens, harvesting spread over a 3-week period. The blue-green central head has tight buds. Plant for spring or fall use. Good fresh or frozen. One of our favorites! #21106 Pkt \$2.75; #21106E (28 g) \$9.50

NUTRI-BUD Unavailable for 2019.

Tendergreen Hybrid 🐺 54 days. Uniform 6-7 in., semi-domed, blue-green heads. Good for early broccoli crops and for summer seeding for fall harvests. #21904 Pkt (0.3 g) \$2.75

UMPQUA OG S 95 days. [Tim Peters, 1990.] Great fall variety. Dark green heads average 5-6 in. with good side shoot production. **#21110 Pkt \$2.75: #21110D** (14 g) **\$6.50**

Goliath

Umpqua

WALTHAM 29 OG 🌞 74 days. [1954.] Widely adapted, drought-tolerant variety for fall crops. 4-8 in. diameter head holds for a long time. Also produces sideshoots for 6-8 weeks after harvest of the main head. Low, compact plant has a distinctive slate-green color. Good freezing variety. #21105 Pkt \$2.50

Broccoli Raab, see next page.



roots are larger and more elongated. In our trials we saw 61% dark red, 32% medium red, and 7% orange. All produce abundant, sweet, delicious greens. #31111 Pkt \$2.75; #31111E (28 g) \$7.50

De Cicco

9





red beet. Dark green foliage has some

Broccoli Raab Brassica rapa

Culture: A spicier relative of broccoli, used in Italian cooking, quicker to mature. Best planted in spring and for fall. Space closer than regular broccoli, 4–6 in. apart. Harvesting: For multiple harvests, just as the flower buds are starting to open, use knife or hand pruners to harvest the buds and several leaves below them. Seed Savers: Will cross with Chinese cabbage,

turnips, and some rapeseed (canola). Packet: 2 g (about 625 seeds) unless otherwise noted.

SORRENTO BROCCOLI RAAB **OG S** 45 days. One of the earliest broccoli raab to mature. Its uniform 3-4 in. florets, leaves, and stems can be harvested well into winter. #21501 Pkt \$2.75; #21501E (28 g) \$7.50



Cabbage Brassica oleracea var. capitata

Culture: All members of the cabbage family grow best on a rich, moist, well-drained loam of high fertility. Early varieties require a higher soil fertility than mid- or lateseason varieties. Since members of the cabbage family are shallow-rooted, irrigation may be necessary to provide adequate moisture. Cabbage needs a steady supply of water and full sun throughout the growing season. Heads may split if a heavy rain follows a long dry spell without irrigation. A thick layer of organic mulch conserves moisture and reduces the tendency to bolt in hot weather, as root temperature is more important than air temperature. Early Crops: Use early varieties that will mature before heavy summer heat settles in, and start seed 4-6 weeks before transplanting to the garden. Sow seed 1/4 in. deep. Seedlings need a soil temperature of 75°F, and strong, direct light. Soil temperature can be reduced to 60°F once the seeds have germinated. Maintain good air circulation around plants during all growth stages. Harden plants before transplanting starting a month before last frost. When plants have become properly hardened they can stand a temperature as low as 20°F without buttoning up. Space small head varieties 10-12 in. apart, large head varieties 16-18 in. apart. Late Crops: For fall crops, either transplant to desired spacing when plants have 3 true leaves or direct sow 6-12 seeds/ft at a depth of 1/4-1/2 in. and thin as needed. Maintain adequate soil moisture during germination. Note: The tendency to bolt is decreased by applying a thick layer of mulch, and by twisting the head slightly to check the plant's growth when the head is fully grown. Harvest: After harvest, select the strongest side sprout and allow it to develop into a second, smaller head. Solar Greenhouse Notes: Use early and midseason varieties. Avoid varieties with savoyed leaves. Diseases: Where Fusarium yellows may be a problem in the Mid-Atlantic region, use resistant varieties. A number of other diseases may affect cabbage. To reduce disease problems, maintain good air circulation, practice good sanitation, and follow a 3-year crop rotation. Insect Pests: Control cabbage worms and loopers with bT, flea beetles with spinosad, cutworms with paper cylinders around seedlings, and aphids with insecticidal soap. Introducing ladybugs helps control aphids in greenhouses, but they may "fly away home" when introduced into gardens. Note: Days to maturity are from transplanting. Seed Savers: See Broccoli section. Packet: 2 g (about 625 seeds) sows 70 ft. direct seeded or 350 ft. as transplants.

Brussels Sprouts

Brassica oleracea var. gemnifera

Culture: Culture of Brussels sprouts is similar to cabbage. (See Cabbage section.) Sow seed 1/4-1/2 in. deep in flats or pots in early June. Then transplant to the garden as soon as several sets of leaves have developed. Northern gardeners can sow seeds indoors in mid-May for transplanting in mid June. Harvest: As soon as the lower sprouts are harvested, break off the leaf below each sprout. Upper sprouts will continue to form. To produce a uniform harvest and to hasten maturity, top the plants when the lower sprouts are 34 in. in diameter. For a non-uniform extended harvest, remove the leaf at the base of each sprout as soon it reaches 3/8-1/2 in. in diameter. Brussels sprouts are cold-hardy to 0°F and their flavor is enhanced by frost. Do not top plants to be overwintered. Storage: May be stored about a month in the root cellar if the plants are pulled out by the roots and most of the leaves removed. Note: Days to maturity are from transplanting. Seed Savers: See Broccoli section. Packet: 2 g (about 625 seeds) sows 50 ft. direct seeded or 290 ft. as transplants.

average 5 in. in

diameter and weigh

2-3 lbs. Has a small

to frost and cabbage

market. **#22102 Pkt**

\$2.50; #22102E (28

Golden Acre **OG** 🗏 62 days. Small, 5–7

in. heads can be spaced

closer than larger, later

varieties. 3-4 lb green

heads don't store for

long, but it's one of

the fastest to mature.

Resistant to cabbage

yellows. #22106 Pkt

\$2.50; #22106E (28

Red Cabbage

RED ACRE OG 76 days.

Round, 5-7 in. reddish-

purple heads weigh about

3 lbs. Adds a festive color

to coleslaw. An excellent

storage variety with resis-

tance to cabbage yellows.

yellows. For home,

storage, or fresh-

g) \$5.50

g) \$5.75



Early Jersey Wakefield



Golden Acre

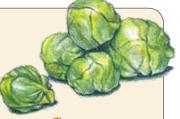


Heads may sunburn in hot weather, so best for early spring and fall crops. #22104 Pkt \$2.50; #22104E (28 g) \$5.75

Celery & Celeriac

Celery: Apium graveolens var. dulce Celeriac: A. graveolens var. rapaceum

Culture: Celery and celeriac are moistureloving, cool-season crops that have similar cultural requirements. They do well in muck soils and well-drained soils high in organic matter. Both crops do best in areas free of temperature extremes. Virginia temperatures



CATSKILL 🌞 (Long Island Improved)

90 days. [1941.] Still the best garden variety for sustained production. Compact plants, about 20 in. tall. Produces large sprouts $1\frac{1}{4}-1\frac{1}{2}$ in. diameter, closely packed on the stem. Widely adapted variety. #20101 Pkt \$2.50

MEZZO NANO Unavailable for 2019.

Late & Winter Cabbage

EARLY FLAT DUTCH F 🔀 85 days. [Pre-1875, possibly pre-1855.] Does well in southern and coastal areas thanks to its heat resistance. Excellent sauerkraut variety and the best variety for storage.



Large, flat heads, 6–10 lbs, average 11 in. with medium core and few outside leaves. #22101 Pkt \$2.50

PREMIUM LATE FLAT DUTCH 🔀 100 days. [Introduced by German immigrants - 1840.] In the early 1900s, Virginia gardeners used to sow seeds of this variety and use it as a source of cut greens while the heads were forming. Large, flat heads weigh 10-15 lbs and measure 7 × 14 in. Low-growing heads have a short core and excellent wrapper leaves. May grow poorly in hot weather, but revives quickly in cool, wet weather. Very good keeper. #22103 Pkt \$2.50

Savoy Cabbage

SAVOY PERFECTION 89 days. Flattened, round 6-8 lb heads are white inside, wrapped on the outside with well-savoyed, bluegreen leaves. Good heat tolerance, makes especially beautiful heads in the fall. #22107 Pkt \$2.50



are sometimes too hot to grow celery and celeriac well. Roots of celery rarely extend more than 8 in. in any direction and so must be kept well watered and fertilized during the growing season. Use a thick mulch to retain moisture. During the summer, partial shade at mid-day may be helpful. In the fall, dig up and transplant mature plants to a greenhouse; protected plants can keep producing stalks all winter that are milder than summer harvests. Sowing Instructions: Sow seed no more than

Carrots Daucus carota

Culture: For best results, carrots need a loose sandy loam, free of rocks. Clay soils require loosening and lightening to a depth of 9 in. with organic matter such as leaf mold or peat moss to provide good drainage, loose structure, and adequate moisture-holding capacity. Do not add fresh manure before planting - too much nitrogen favors top growth and causes roots to become rough and highly branched. Maintain high levels of phosphorus and potassium. Plant seed 1/4 in. deep, 3 seeds/in., and thin to 1-2 in. apart in rows 12 in. apart. Cover seeds with a fine light soil, and keep soil moist. For planting in blocks, mix seed with dry sand or fine soil, and add some radish seeds to prevent soil crusting and broadcast seeds over a prepared bed. Seeds take 5 days to germinate - longer in cool weather. After foliage is several inches high, add mulch to conserve moisture. Extreme fluctuations of soil moisture between dry and wet conditions may cause cracking of the roots. Carrots maturing in cool weather have the sweetest roots. Diseases: Follow a 2- to 3-year rotation to help prevent disease. Pests: Avoid planting in previously sodded ground and sprinkle wood ash along the row to prevent wireworm damage. Carrot rust flies can be controlled by skipping the spring planting for a year to break the life cycle by starving the spring generation of rust fly. Interplanting carrots with onions in a ratio of 1:2 reduces carrot fly damage by 70%. Sow seed 2-3 times as thick in late summer plantings to help carrots survive grasshoppers. Harvest: Best quality roots are no larger than 1 in. in diameter. Storage: Cut off the tops, leaving 1/4 in. Store in the refrigerator or overwinter the roots in the garden by covering with a thick, loose mulch such as straw. History: Carrots have historically been used to make jelly, syrup, wine, liquor, and dye. Seed Savers: Isolate from other carrot varieties and Queen Anne's lace by a distance of 330 ft. for home use. For pure seed, isolate by 1/8 to 1/4 mile. Packet: 3 g unless stated (about 1500-1950 seeds, depending on variety) sows 84-110 ft. Oxheart 🌞 🕿 90

Chantenay Red Core **OG**

🕿 65 days. [Introduced from France in the late 1800s.] Blocky, broad-shouldered variety with blunt tip, $5\frac{1}{2}$ in. long and $2\frac{1}{2}$ in. at the shoulder. Deeporange interior. Adaptable to clay and a wide range of soils. #35101 Pkt \$2.50; #35101E (28 g) \$5.50

COSMIC PURPLE Unavailable for 2019.

DANVERS 126 0G 75 days. [1947.] Widely adapted, productive, and heat-tolerant. Dark-orange roots 6–7 in. long, 2 in. at the shoulder, tapering to a blunt point. Especially suited to growing in clay soil, and the strong tops aid harvesting. Good storage variety. #35103 Pkt \$2.50; #35103E (28 g) \$5.50



Danvers 126

IMPERATOR OG (Tendersweet) 74 days. [AAS winner.] Sweet, crisp, and tender. 7-9 in. orange-red roots are coreless, have semi-blunt ends and narrow shoulders. Requires loose, deep soil to achieve its full potential. #35108 Pkt \$2.50; #35108E (28 g) \$5.50

1/8 in. deep in sterile seed starting mix. Keep temperature between 70–75°F. Transplant when plants are 21/2-3 in. tall. Germination is slow, typically 14–21 days at 65–75°F. Planting Times: In Virginia, sow seed in late January or early February for transplanting into a cold frame in March. Then transplant to the garden from May 1st to June 1st. Premature Bolting: If plants are exposed to night temperatures below 55°F for more than 8-10 days the plants will go to seed. Spacing: Space 8 in. apart in rows 21/2 ft. apart. Packet: Celery, 0.5 g (about 1230 seeds); Celeriac, 0.25 g (about 660 seeds).



PURPLE DRAGON OG S 🌞 80 days. Beautiful regular-size purple carrot bred by John Navazio. Bright orange or yellow interior, sweet almost "wild" spicy flavor, can be used just like any regular carrot, good storage. Our favorite purple carrot, with better flavor and more consistent color than "Cosmic Purple." #35109 Pkt (1 g) \$2.75

> SCARLET NANTES OG (Coreless, Nantes Half Long) 70 days. [1870.] A garden favorite appreciated for its fine texture, mild flavor, and very small core. Cylindrical roots 61/2 in. long, $1-1\frac{1}{2}$ in. at the shoulder. Can be grown for winter storage, but best flavor is from spring-grown carrots. #35106 Pkt \$2.50; #35106E (28 g) \$5.50

Oxheart

GOLDEN SELF-BLANCHING CELERY 🔀 85 days from transplant. [1886.] Compact celery with thick,

tender, stringless stalks blanching to yellow. Thick hearts of good quality. **#36101 Pkt** (0.5 g) \$2.25

Imperator

TALL UTAH CELERY **OG** 110 days from transplant. [1953.] 30 in. plants are medium dark green, with 12 in. crisp, tender and tasty stalks. #36102 Pkt (0.5 g) \$2.50



[Pre-1870.] Also called "turnip-Harvest roots when 2-4 in. in dior grated into salads. Culture is the same as for celery. Stores well. #36501 Pkt

(0.25 g) \$2.35

Culture: Culture of cauliflower is similar to broccoli and cabbage. (See Cabbage section.) Blanching the Curd: When the white head or curd begins to form, tie the top leaves together over it to protect the curd from sunlight that causes the curd to yellow. Har-

Cauliflower

Brassica oleracea var. botrytis

vest: Harvest while the curd is in the tight bud stage. Don't harvest for storage when heads are wet – the curds will mold in storage. Maturity Dates: Days to maturity are from transplant date. Add 25 days if direct seeded. Seed Savers: See Broccoli section. Packet: 2 g (about 600 seeds) sows 72 ft. direct-seeded or 360 ft. as transplants.

Spring Cauliflower

EARLY SNOWBALL 50 days. Highly recom-mended for the Mid-Atlantic. The best in our trials of spring-planted cauliflower. Good coverage of the curd by wrapper leaves. Head denser than other early snowball varieties. Compact plants. Can also be used for fall crops. #23101 Pkt \$2.50

Fall Cauliflower

Fall varieties are larger than spring varieties. However, fall varieties are daylength-sensitive, and should not be planted for spring harvest.

SNOWBALL Y OG * 80 days. *[1947.]* Large, smooth, white heads are uniform, solid, and smooth. Widely adapted, well suited for fall crops. #23103 Pkt \$2.50

SNOWBALL SELF-BLANCHING OG 468 days. [Developed by Dr. Homna at MSU.] Self-wrapping leaves protect the white curds from heat and sunlight during late summer or early fall. No tying of the leaves is necessary unless heads grow larger than 6 in. in diameter. During hot weather growth slows until cooler weather, thus preventing formation of undersized heads. #23102 Pkt \$2.50



LARGE SMOOTH PRAGUE CELERIAC 🕿 110 days from transplant. rooted celery," celeriac is grown for its sweet, starchy globe-shaped roots. ameter and use in soups and stews, boiled and pureed, fried in butter,

Carrots, Cauliflower, Celery & Celeriac 11

Sweet Corn

Zea mays

Culture: Sweet corn seed requires a soil temperature of 65°F to germinate well, otherwise seed may rot easily due to its high sugar content. Don't rush your first planting, wait until after the first average frost-free date. An old saying is to plant corn when oak leaves are the size of squirrel ears. Succession plantings can then be made 2–3 weeks apart. Sow seed 1 in. deep in rows 36 in. apart and thin to 6-12 in. apart within rows. Later, taller varieties need wider spacing than early, shorter varieties. For good pollination and well-filled ears, plant in blocks at least 5 rows wide. Harvest: After silk has dried and turned brown, puncture the skin of a kernel with your thumbnail. If a sweet, milky juice is released (milk stage) the corn is ready for harvest. Prepare corn for eating quickly after harvest. At room temperature, harvested ears lose 50% of their sugar in 24 hours. Pests: Corn earworm can be suffocated by inserting a medicine dropper half filled with mineral oil into the silk after it has wilted and browned at the tip (4–5 days after silk appears). Corn borers can be prevented by composting corn refuse and stubble as soon as possible. Disease: Corn smut forms large puffy, gray, irregular masses of fungus during dry hot weather. Corn smut is a delicacy in Mexico, but if you want corn rather than corn smut, remove and destroy the fungus; otherwise the black spores will reinfest your corn for several years. Medicinal: Cornsilk is used as a diuretic. Seed Savers: Corn is wind pollinated. Separate varieties by 600 ft. for home use, or $\frac{1}{2}$ to 1 mile for absolute purity. Save at least 500 seeds from at least 10% of the plants to maintain vigor and genetic diversity of the variety. Packet: 1 oz (28 g) (about 115-210 seeds, depending on variety) sows 30-45 ft.

Open-pollinated or hybrid sweet corn?

Which to grow depends on what is important to you. Old-fashioned, open-pollinated corn is not as uniform in size and maturity as hybrid corn. For the home gardener, this means the convenience of an extended harvest from one planting. Hybrid corn tends to mature all at once, an advantage to some farmers. The new supersweet and extrasweet hybrid corns are sugary sweet and hold their sweetness in storage, but they may have weak seedling vigor, are more susceptible to ear damage by insects, and the seeds rot readily in cool soil. Standard, open-pollinated sweet corn is still preferred by many gardeners because of its old fashioned corn flavor. When pigs, chickens, horses, and cows are given a choice between open-pollinated and hybrid corn the animals invariably prefer the old

open-pollinated varieties, possibly because of the higher protein content. For good pollination and ear development, open-pollinated corn should be planted in blocks at least 5–6 rows wide, whereas hybrid corn should be planted in blocks at least 4 rows wide. Note: If open-pollinated corn is new to you we suggest planting less than 1/4 lb. until you are familiar with its characteristics.



Open-Pollinated Sweet Corn

ASHWORTH OG S 🌞 (yellow) 69 days. An early maturing, widely adapted sweet corn with good flavor and dependability. Stalks average 5 ft. with 1-2 ears (6-7 in. long), 12 rows of yellow kernels per ear. #41101 Pkt \$3.50; #41101F (1/4 lb) \$7.25

AUNT MARY'S OG 🌞 🕿 S (white) 69 days. [Ohio heirloom, Our stock is from the original 1800s native strain. Later selected for canning and com-



mercial seed sales.] Aunt Mary's has attracted a loyal following among gardeners and Seed Savers. 6-8 ft. sturdy stalks, 1-2 ears/stalk, 6-8 in. ears, most with 12-14 rows of white kernels. Great flavor. #41102 Pkt \$3.50



BLACK MEXICAN **OG S** \geq (Mexican Sweet, Black Iroquois) (white in early milk stage, maturing to blackish-blue) 76 days. [1864. Despite its name, it appears to have originated in upper NY, and was probably derived from Iroquois Black Puckers. The name may have been given by a seed company trying to give novelty to its seed offerings, a practice not uncommon in the late 1800s.] The kernels, white at milk stage, change to blackish-blue in the late milk stage. Exceptional flavor. 5½ ft. plants. 7½ × $1\frac{1}{2}$ in. ears, typically with 8 rows of kernels. Harvest several days before kernels show color to several days afterwards. Though adapted to New England, it does well as an early-to-midseason crop further South. #41103 Pkt \$3.25; #41103F (1/4 lb) \$6.25

COUNTRY GENTLEMAN OG 🔀 (Shoe-

peg) (white) 93 days. [1891.] The

dense, round kernels are irregularly

arranged instead of in rows, giving

sweet 8 in. ears remain in the milk

stage longer than many varieties. 2

and creamed corn. Well known

earlier, smaller varieties. #41104 Pkt \$3.50

ears per stalk. A favorite for freezing

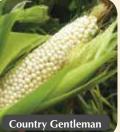
throughout the Hudson Valley, well

adapted to the northern Mid-Atlan-

tic. More resistant to corn smut than

these ears a striking appearance. The

BUHL Unavailable for 2019.



TEXAS HONEY JUNE

TOP HAT - "Sugary Enhanced" OG S 🜞 (yellow) 77 days. [Carefully selected from "Tuxedo" by Jonathan Spero.] Sweet and tender kernels, great flavor. 6-7½ in. ears, 2 ears/plant. Good cold soil emergence, and good husk coverage helps deter bugs. #41113 Pkt \$3.75

This beautiful, widely adapted, with some other colors, before (6-7 ft.) and with much better cold soil tolerance than Luther Paintec



corns, tracing back to Native American stock. Developed by Nathan Stowell of *NJ.]* Ears are large, 8–9 in., with deep, wide kernels in 16–18 rows. Remains in the milk stage a long time, hence the name "evergreen." Dependable variety in the Mid-Atlantic. 8 ft. stalks. #41107 Pkt \$3.75

Luther Hill

[Developed 1902 in Andover Township, NJ, by

horticulturist Luther Hill.] Produces two 6 in.

ears on each 51/2 ft. tall stalk. A home garden

variety adapted to the Appalachian foothills.

Can be grown as far north as southern Ontario.

Flavor is unsurpassed compared to other open-

pollinated corns. One of the parental lines of

corn. Still used by breeders to impart excep-

tional flavor to hybrid sweet corn. Does best

We recommend pre-sprouting the kernels and

sowing in warm soil at 12 in. in-row spacing.

Once established provide plenty of water and

climate it must be watched carefully to produce

quality seed. #41109 Pkt \$3.50; #41109F (1/4

nitrogen. When grown for seed in a humid

lb) \$6.75; #41109G (½ lb) \$12.50

PAINTED HILL OG S

(rainbow) 75-80 days. [Alan

Kapuler, from a stabilized cross

of Painted Mountain flour corn

mostly white in its fresh stage,

colors. Short milk stage, and

old- timey corn flavor. Taller

Hill. 2+ ears per stalk, 7–8 in.

ears with tight husks. #41112

STOWELL'S EVERGREEN OG

🔀 (white) 98 days. *[1848.*

One of the oldest white sweet

Pkt \$3.50

and Luther Hill sweet corn.]

super hardy sweet corn is

drying to its full range of

not very sweet, but lots of

on a well-drained ridge, not soggy bottom.

the very successful 'Silver Queen' hybrid sweet

LUTHER HILL **OG S S** (white) 82 Days.

Unavailable for 2019.



12 Corn



BODACIOUS RM - "Sugary Enhanced" Hybrid **#** (yellow) 74 days. Sweet, tender, golden kernels. 18 rows/ear. Ears are 8 in. long on sturdy 7 ft. stalks. Good disease resistance. For best germination, avoid planting during early cold spells. #41904 Pkt (~138 seeds) \$3.50; #41904F (1/4 lb) \$6.50

Bodacious RM

Dent, Flint & Flour Corn Zea mays

Culture: Plant these grain (field) type corns when the soil is at least 55°F, or when the dogwood leaves are the size of squirrel's ears. Space plants 12-24 in. apart, leaving more room for taller varieties, in 36 in. rows. Harvest for roasting when ears have just reached full size, or for dry corn when the husks have fully yellowed. In other respects, grow like sweet corn. Two maturity dates may be given: the first is for use as roasting ears, the second is for drying and grinding. Dent, Flint, and Flour Types: The three broad categories of grain corn differ in climactic adaptation, kernel structure, kernel shape, and best culinary use. Flint corns tend to do well in cold, wet climates; they are commonly grown in the Northeast. Their pointy kernels are primarily hard-type endosperm and they are especially good when boiled, as in polenta, grits and johnnycakes. Flour corns are most common in the Southwest, but have traditionally been grown in many areas. The rounded kernels of flour corns are primarily soft-type endosperm. They can be ground into flour fine enough to use like wheat flour for baking. Dent corns result from crosses between flour and flint corns. Most heirloom corns from the Southeast and Midwest are dent corns, as are most modern hybrid field corns, although these hybrids have much less flavor. A dent corn kernel typically has a hard-type ring around a soft-type center. As the kernel dries the center contracts more than the outside, creating a dent at the top. Heirloom dent corns make great cornbread, hominy, and roasting ears. All our field corns are dents unless otherwise stated. Some old timers eat starchy field corns in the same manner as sweet corns. Disease Resistance: The tight husks of many dent corns gives them improved insect resistance. Cooking: To roast corn preheat oven to 375-400°F, or prepare a good bed of coals. Husk young ears, remove silk, replace husk, fill husk with water, drain, twist husk closed, and bake about 25 minutes. Alternately: husk completely, rub with butter, salt and pepper, foil wrap, and roast. Packet: 11/2 oz (42 g) unless otherwise stated (78-150 seeds, depending on variety) sows 30-45 ft.

SILVER QUEEN - "Normal Sugary" Hybrid 🔅 (white) 90 days. One of the most popular and dependable hybrid sweet corns. Ears are 81/2 in. long, filled with 14–16 rows of sweet white kernels. Stalks average 71/2 ft. Tolerant of the major-

ity of leaf blights and of Stewart's wilt. Has some drought tolerance and better insect-resistance than other hybrids. Seeds germinate poorly in cold soil, so don't rush the season! Early plantings can be started by setting out transplants or by pre-sprouting seeds. Wide adaptability and well suited for the Mid-Atlantic. #41901 Pkt (~135 seeds) \$3.25; #41901F (1/4 lb) \$6.25

BLOODY BUTCHER OG S 🌞 🕿 (red) 120 days. [1845. Originally from Virginia.] Stalks grow 10–12 ft. tall producing 2 ears per stalk. Kernels are blood-red with darker red stripes, and occasional white or blue kernels. For flour, cereal, or roasting ears. #41302 Pkt (~170 seeds) \$2.95; #41302G (1/2 lb) \$9.50; #41302H (1 lb) \$13.75; #41302K (4 lbs) \$48.50



Bloody Butcher





CHIRES BABY SWEET CORN S 75 days. The tiny corn seen in Asian restaurants! 3-5 stalks per plant, 8-12 ears per stalk. 2-3 in. long ears. Harvest soon after the silks emerge (within 5 days) to stimulate the formation of more



ears. Planting: same spacing as other corn. Easy to grow, as corn earworms don't have time to do damage and corn smut is rarely a problem. If dried on the plants, ears can be used for popcorn. #41701 Pkt (4 g, ~100 seeds) \$2.95

> CHEROKEE WHITE FLOUR, ORIGINAL S 🌞 🕿 (white) 120 days. [Seed collected by grower Tony West from an elderly Cherokee woman in the Tuckasegee area of North Carolina. Longer ears and taller stalks than the Brown and Robinson reselection of the 1980s. Introduced 2011 by SESE.] 11–12 in. ears on sturdy 15-ft. tall stalks. White kernels, 8-10 rows/ ear, 50 seeds/row, white cobs. Makes great flour. Important historical variety. Seed grown and stewarded by Appalachian Heirloom Plant Farm in Winchester, Ohio. #41320 Pkt (~127 seeds) \$2.95

Cherokee White Flour, Original



BLUE CLARAGE OG S 🌞 🕿 (Ohio Blue Clarage) (blue) 100 days. [-1920, Ohio heirloom, selected from "Rotten Clarage."] A highly uniform, semi-dent corn. Solid blue, 8-10 in. ears on 10 ft. stalks, 2 ears/stalk. Originally developed as a meal and feed corn, it has a higher sugar content than most dent corns, and may be used fresh in the milk stage. As cornmeal it has a sweet flavor. It mills easily and makes speckled blue and white flour, but if the bran is sifted out, a white flour is obtained. Older farmers who use this corn to feed chickens claim that the chickens will eat more, lay more eggs, and put on more meat. Sturdy stalks, excellent Corn Rootworm resistance, and tolerates crowding and smut better than many other openpollinated corns. #41303 Pkt (~136 seeds) \$2.75; #41303G (1/2 lb) \$9.25; #41303H (1 lb) \$13.50; #41303K (4 lbs) \$48.50

CHEROKEE WHITE EAGLE **OG S** rightarrow (blue and white) 110 days. A beautiful blue and white corn with a red cob. Occasionally there will be an allblue ear. Some people can see the image of a white eagle in the kernels! 8-10 ft. tall stalks, mostly 2 ears/stalk, 6-7 in. stocky ears. #41314 Pkt (~127 seeds) \$2.75; #41314G (1/2 lb) \$9.50; #41314H (1 lb) \$13.75



FLORIANI RED FLINT OG S 🖾 (red) 100 days. [Family heirloom from the Valsugana valley of Italy near Trento, via William Rubel. Originally brought to Italy from America, it evolved over hundreds of years to become the staple polenta corn of the valley. Introduced by SESE and Fedco Seeds 2009.] Beautiful medium- to deep-red kernels are slightly pointed. Cornmeal has a pink cast, and makes a polenta with a remark-ably rich, complex flavor. Plants grow 7–10 ft. tall – slightly smaller and faster maturing than other varieties we offer. Some tendency to lodge. #41318 Pkt (~150 seeds) \$2.95; #41318G (½ lb) \$9.50; #41318H (1 lb) \$13.75; #41318K (4 lbs) \$48.50



Dent, Flint & Flour Corn Continue on Next Page.



JELLICORSE TWIN OG S 🌞 🕿 (white) 120 days. [Pre-1920.] Tennessee variety, similar to Neal's Paymaster but with a white cob. Extremely heat tolerant, has set seed even during 107°F temperatures! Pkt #41315 Pkt (~97 seeds) \$2.75; . #41315G (½ lb) \$9.50; #41315H (1 lb) \$13.75

Kentucky Rainbow

Morgan's Kentucky Butcher) (rainbow) 110

2001 by Susana Lein of Salamander Springs

days. [Grown by generations of Daymon Morgan's family in Leslie Co., eastern KY; selected since

Farm in Berea, KY. Introduced 2009 by SESE.]

Beautiful, multicolored, huge ears (up to 14

in. long!) on sturdy 12-18 ft. stalks, 1-2 ears

all-blue ears along with an array of purple,

including Bloody Butcher, crossed over the

drought tolerant, hardy dent corn good for

per stalk, 10-14 rows per ear. Some all-red and

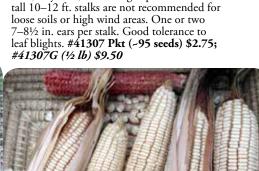
white, and painted orange kernels. Many corns,

decades to produce an immensely productive,





on the cob). Especially suited to the eastern U.S., clay soils, and drought-prone areas. The tall 10-12 ft. stalks are not recommended for loose soils or high wind areas. One or two 7-81/2 in. ears per stalk. Good tolerance to leaf blights. #41307 Pkt (~95 seeds) \$2.75; #41307G (½ lb) \$9.50





NEAL'S PAYMASTER OG S 🌞 🕿 (white) 100/120 days. [Pre-1915. The first reliable twoeared dent corn. Bred from Tennessee Red Cob by William H. Neal. In 1935, a third of Tennessee's corn crop came from this variety. Said to be a favorite of moonshiners. Thanks to Jim Culpepper for seedstock!] White seed with red cobs, tolerant of sub-optimum soil and heat. Yields better than most open pollinated single-ear dent corns on moderately fertile Southern soils. #41316 Pkt (~110 seeds) \$2.95; #41316G (1/2 lb) \$9.50; #41316H (1 lb) \$13.75; #41316K (4 lbs) \$48.50



PAINTED MOUNTAIN OG S 🌞 (rainbow) 85–90 days. [Dave Christensen has been breeding this variety in Montana for 30+ years, working with 70+ early, cold hardy Native American varieties.] Widely adapted, this amazingly super hardy corn is early maturing with great cold soil tolerance. Slim, 6-8 in. ears, 1-2 ears per 4-5 ft. stalk. Beautiful multicolor ears, "Husking each ear is like opening presents," says grower Richard Moyer. Fresh ears can be roasted; dried, the corn works great for flour or parching. Critters share our love for this corn, so be vigilant, or plan to harvest early for fresh eating if you want to get any! Our seed grown and stewarded by the Moyer Family Farm in Castlewood, VA. #41322 Pkt (~165 seeds) \$3.75

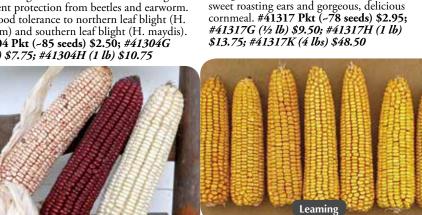
www.SouthernExposure.com

HICKORY CANE S 🌞 🕿 (white) 85/110 days. [pre-1875.] Heirloom dent corn originally selected by Native Americans in n. Florida and s. Georgia. It came to be prized across the mountain South for roasting ears, creamed corn, grits, and hominy, and particularly for white corn meal, as well as fodder for animals. Plants up to 15 ft. tall. 1-2 ears/stalk. Tight ears keep out ear worms. Large ears stay in the green milk "roasting ear" stage longer than most heirlooms. #41325 Pkt (~80 seeds) \$2.75; #41325G (1/2 lb) \$9.50; #41325H (1 lb) \$13.50



HICKORY KING 🔀 (white) 85/110 days. [Pre-1875.] In the hills and hollows of Virginia this corn is still appreciated as a roasting and hominy corn. Considered the best variety for hominy because the skin of the

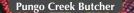
kernel is easily removed by soaking. Also good for grits, corn meal, and flour. Makes a nice roasting corn. Extremely tall 12 ft. stalks provide good support for pole beans. 2 ears per stalk. Ears have very large flat white kernels. Husks are tighter than most varieties and give excellent protection from beetles and earworm. Has good tolerance to northern leaf blight (H. turicum) and southern leaf blight (H. maydis). #41304 Pkt (~85 seeds) \$2.50; #41304G (1/2 lb) \$7.75; #41304H (1 lb) \$10.75



New! HOP MCCONNELL SPECKLED OG S (red/white/speckled) 100 days. [Named for Wade Hopkins "Hop" McConnell of Scott County, VA. Hop ran a general store, and shared this corn with local farmers.] Ears are all-red, all-white, or all red/white speckled (interesting genetics!), about 8 in. long on 12-ft. stalks. #41328 Pkt (~132 seeds) \$2.95; #41328G (1/2 lb) \$9.50

Hop McConnell Speckled

LEAMING **OG S S** (yellow) 95 days. [1850s, bred by Jacob Learning of Clinton County, Ohio. Rare now, this famous variety won a prize at the World's Fair in Paris, and has been used in breeding much of the US's corn. | 81/2-10 in. ears with deep yellow kernels, 14-22 rows/ear, red cobs. 7-8 ft. stalks. Widely adapted, though not recommended for Deep South. #41321 Pkt (~170 seeds) \$2.95; #41321G (1/2 lb) \$9.50; #41321H (1 lb) \$13.75; #41321K (4 lbs) \$48.50



PUNGO CREEK BUTCHER OG S $\stackrel{\leftarrow}{\longrightarrow}$ $\stackrel{\scriptstyle \sim}{\boxtimes}$ (rainbow) [Eastern Shore heirloom from Bill Savage, grown for 165 years by Pungo Creek, VA farmers.

Genetic analysis shows it to be descended from Bloody Butcher. Introduced 2010 by SESE.] A tall, hardy corn with sturdy stalks up to 11 ft. Ears are a mixed rainbow of red, brown, yellow, and sometimes purple. 9–12 in. ears in tightly wrapped husks. Rough milled this is a nutritious feed for your flock, or the corn can be ground into a meal with rich flavor and unusual color. Pretty enough to grow just for looks, this corn is delicious baked into muffins or cornbread. #41319 Pkt (~146 seeds) \$2.95; #41319G (½ lb) \$9.50; #41319H (1 lb) \$13.75

REID'S YELLOW DENT 🜞 🖾 (yellow) 85/110 days. [1840s. A prize winner at the 1893 World's Fair and progenitor of a number of yellow dent lines.] One of the most productive, hardy corns ever developed. This old-timer is well known in the Mid-Atlantic region, where it is revered for its adaptability and dependability in Southern heat and soils. 7 ft. stalks with 9 in. double ears well-filled with 16 rows of deep, close-set, moderately flat seed. #41308 Pkt (~130 seeds) \$2.50; #41308G (½ lb) \$7.75

Reid's Yellow Dent

> ROTTEN CLARAGE S 🌞 🔀 (blue and yellow) 100-110 days. [Early 1900s Ohio heirloom, very rare now. A cross of (yellow) Clarage and a blue corn. Why "Rotten Clarage"? Because the blue kernels reminded someone of bruises... Introduced by SESE 1994.] 8-9 in. ears with red cobs, 14-18 rows. Sturdy 9 ft. stalks, mostly 2 ears/ stalk. Mostly blue and yellow kernels, with some white kernels and other colors. #41324 Pkt (~140 seeds) \$2.95; #41324G (1/2 lb) \$9.50 Seed grown and stewarded by Appalachian Heirloom Plant Farm in Winchester, Ohio.

Rotten Clarage

Popcorn

We tend to think of popcorns for popping only, but some Native Americans also grind popcorn to make bread. Grown and dried in the same manner as dent corn or flint corn. Popcorns are resistant to ear damage by birds. **Packet:** 1 oz (28 g) (about 178–378 seeds, depending on variety) sows 35–75 ft. See Sweet Corn for cultural info.



CHEROKEE LONG EAR SMALL OG S (rainbow) 100 days. [Seedstock from Merlyn Niedens, combining several strains of long ear Cherokee popcorn sent by Carl Barnes of Turpin, OK. Carl has helped save many of the Cherokee corns that came west over the Trail of Tears.] Small kernelled variety makes surprisingly large pops, yielding for a low hull/corn ratio. Great flavor. Highly ornamental, 5–7 in. ears have many shiny colors including red, blue, orange, white, and yellow. 6–8 ft. plants. #41609 Pkt (~220 seeds) \$2.95; #41609F (¼ lb) \$6.25



DAKOTA BLACK OG S (maroon-black) 90 days. Beautiful 4½ in. ears, great flavor. 15 rows per ear. 6 ft. stalks, 1 ear per stalk, aboveaverage pest resistance. #41605 Pkt (~178 seeds) \$2.95; #41605F (¼ lb) \$5.75

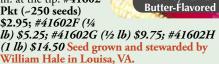


DYNAMITE OG S ♣ ☎ (South American Yellow) (yellow) 110 days. High yields and great buttery flavor makes this a farmer's market best seller for grower William Hale. Sturdy 5 ft. stalks produce 2–3 ears with 12–14 rows of big kernels for easy popping. #41610 Pkt (~203 seeds) \$2.95; #41610F (¼ lb) \$4.95; #41610G (½ lb) \$8.50; #41610H (1 lb) \$12.75; #41610K (4 lbs) \$44.00 Seed grown and stewarded by William Hale in Louisa, VA.

Теплеssee Red Cob OG S 🌞 🖾 (white) 120 days. [Pre-1900. Original seedstock supplied by Harold Jerrell. For the last several years maintained and selected by Debbie Piesen and Edmund Frost at Living Énergy Farm and Twin Oaks Seeds Farm.] High yielding, up to 150 bushels/acre here in Virginia. 10–13 ft. sturdy stalks are often used to support pole beans. 6-9 in. ears, 12–18 rows/ear, 1–2 ears/stalk. Mr. Jerrell reported that in 1995 this variety produced a good crop on only 2 in. of rain from mid-June until the first of September. It was one of the driest years on record in his growing area in Virginia, and was the only variety that produced. Makes great corn bread and polenta as well as attractive corn cob pipes. #41311 Pkt (~135 seeds) \$2.95; #41311G (1/2 lb) \$9.50; #41311H (1 lb) \$13.75; #41311K (4 lbs) \$48.50 Seed grown and stewarded by Twin Oaks Seed Farm in Louisa, VA.

Tennessee Red Cob

PENNSYLVANIA BUTTER-FLAVORED heirloom popcorn maintained by the Pennsylvania Dutch. Introduced 1988 by SESE. / Flavor is superior to commercial popcorn. Produces white-kerneled ears, averaging 2 per 8 ft. stalk. 4-6 in. ears with 26-28 rows of kernels, 1¹/₂-1³/₄ in. at the butt, tapering to 1 in. at the tip. **#41602** Pkt (~250 seeds) \$2.95; #41602F (1/4



STRAWBERRY OG

S (Two Inch Strawberry) (red) 98 days. One of the best ornamental poppers. Popular variety with ears shaped like big, dark red strawberries. Mahogany-red kernels. Ears are 2 in. long by 1½ in. wide, averaging 3 per stalk on 4–5 ft.

plants. Has high resistance to corn earworm due to "maysin," a naturally occurring antifeedant. #41603 Pkt (~378 seeds) \$2.95



Pennsylvania

Gourdseed Corn Zea mays

Gourdseed corns are one of our oldest corns, and were commonly grown in southern Virginia. The plants of gourdseed corn are heavily stalked and bear ears having a large number of rows of thin, deep kernels. These valuable corns originated from Indian gourdseed corn dating back to at least 1700. They were used for roasting ears, and for feed and flour. At maturity the kernels of some varieties are easily shelled by a light touch to the ear. Gourdseed corns were grown until about 1940, before hybrids became popular. In 1889, gourdseed corn won the Great Corn Contest sponsored by the American Agriculturist, yielding 255 bushels per acre. Because of interest in hybrid corn, gourdseed corns were virtually extinct by the 1960s, but recently they have been found to be valuable because of their resistance to some diseases, notably southern leaf blight. Dr. Brown, former president of Pioneer Hi-Bred, rediscovered gourdseed corn on a Texas farm, after a year-long search. Packet: 11/2 oz. (42 g) (about 150-165 seeds) sows 35 ft.



CHEROKEE GOURDSEED **OG S** rightarrow (white) [From the Qualls family in Virginia via Sand Hill Preservation Center.] Similar to Virginia White Gourdseed but with more uniform cobs. Vigorous 10-12 ft. stalks bear 1-2 big, fat ears with long, white kernels that shell easily. 21/2 in. wide ears average 6–8 in. long, 22 rows/ear. #41505 Pkt (~150 seeds) \$2.75; #41505G (1/2 lb) \$9.25; #41505H (1 lb) \$13.50

TEXAS GOURDSEED Unavailable for 2019.



VIRGINIA WHITE GOURD-SEED OG S 😍 🔀 (white) 125 days. [1700s, originating from Native American genuine gourdseed corn. Reselected by Dr. Ralph Singleton and reintroduced 1986 by SESE. Recent seedstock thanks to the Accokeek Foundation.] Large, long, white kernels on fat, short, 3 × 8 in. ears. Kernels shell easily. White cobs, 1–2 ears/stalk, 10-12 ft. plants. Excellent resistance to Southern Leaf Blight, well-adapted to the Mid-Atlantic from Virginia southward. Some variation in seed appearance; we're selecting for more consistency. #41503 Pkt \$2.95; #41503G (1/2 lb) \$9.25

Cotton, Natural Colors Gossypium hirsutum

Cannot ship to TX. Some other southeastern states require a waiver or permit: contact your extension agency for more information.

History: Naturally colored cottons were grown by slaves prior to the Civil War. In many instances, slaves on plantations were not permitted to grow the white cotton of their masters. Brown cotton was the most commonly grown, but there are other naturally colored cottons such as green, blue, yellow, and pink, and they all have their own subtle beauty. These heirloom cottons are now difficult to find. They have fallen out of favor because the fibers are shorter and not as suitable for spinning and dyeing as modern white cotton. With naturally colored cottons now quite rare, we are attempting to locate and preserve other authentic heirloom varieties. Note: Everyone should grow and harvest a long row of cotton at least once in their lifetime so as to understand what slaves had to endure while harvesting cotton. The bolls are borne on the plant at a back-bending level, and they are sharp. Plucking cotton from numerous bolls hurts the hands. Imagine doing this all day. Culture: Cotton is an annual plant that requires a long, warm growing season to mature

properly. Needs full sun. In zones 8-10 it can be sown directly after the last frost. In zones 5–7, treat like tomatoes, start seed indoors and transplant out 4-8 week-old seedlings after last frost. Seed germinates in 7–21 days at 70°F. Plant 18-30 in. apart in rows 5 ft. apart. Plants start flowering in mid-summer. Bolls take a few more months to mature; warm late summer weather is necessary for a good crop. Plants grow to 3-7 ft. tall. Maturity Dates: Days to maturity (mature bolls) are from transplanting. Harvest: Wait for bolls to split open before harvesting. (Note: bolls that split open after a frost are damaged and immature.) Seed Savers: Isolate varieties by 1/8 mile for home use, or 1/4 to 1/2 mile or greater for pure seed. Virginia gardeners must acquire a permit to grow cotton. For more information, contact your nearest extension agent.

ARKANSAS GREEN LINT 0G S 🌞 135 days. Soft light green cotton with short fibers and dark green seeds. The yellow-pink flowers are lovely, excellent in floral arangements. 5-7 ft. tall plants. #72203 Pkt (~16-20 seeds) \$4.80

ERLENE'S GREEN OG

S 🌞 130 days. [Family heirloom from Erlene Melancon in east Texas. Erlene said that she has been spinning green cotton for years and that her grandmother loved using colored cotton in her quilts.] The fibers are

light olive green and can be spun off the seed. Harvest the bolls shortly after they open so that the fiber does not fade in the sunlight. Once it is spun and washed it turns yellowish-green. 5 ft. tall plants. #72202 Pkt (~16-20 seeds) \$4.80

Mississippi Brown S 🌞

🔀 130 days. [Pre-1860. Once grown by slaves, this seed came from a plantation near Natchez, Mississippi via Seed Saver John Coykendall.] Drought-tolerant 5 ft. tall plants produce an abundance of light tan to golden brown cotton. Some plants have deeply lobed leaves like Nankeen. #72204 Pkt (~16-20 seeds) \$4.80





Mississippi Brown



ton grown since the Civil War. The lint is a non-fading attractive dark copper color that becomes brighter as it is washed. Branches of the plant are longer and thinner and leaves more lobed than other cotton. Unlike modern hybrids, its blooming cycle is longer, it grows well in poor dry soil, it's hardier and appears to have slightly better insect-resistance. Nankeen is planted as an ornamental in some parts of Louisiana. We include additional interesting history of the Nankeen shirt with each seed packet.#72201 Pkt (~16-20 seeds) \$4.80

RED FOLIATED White OG S 📛

Nankeen S 🜞 🕱

III of the Mansfield

120 days /From SSE member Alice Gamewel via Charles Hoehnle. Introduced 2008 by SESE.] A beautiful plant with dark red stems and leaves. 3-5 ft. tall, grows well in a container or in a flower bed. Green when it first emerges but soon develops its red coloring. The cotton is a short staple white. #72205 Pkt (~16-20 seeds) \$4.80

Red-Foliated White



Limited supply – order early!

SEA ISLAND BROWN OG S 🌞 🕿 135 days. [Likely cross of Sea Island White and an unknown brown cotton. Introduced 2010 by SESE.] "Naked seeds" are easily removed from the lint, has a longer fiber than other browns. The tall (5-6 ft.) plants and some shine to the spun cotton both point to a Sea Island heritage. #72206 Pkt (16-20 seeds) \$4.80

SEA ISLAND WHITE Unavailable for 2019.

www.SouthernExposure.com

Cucumbers Cucumis sativus

Culture: Cucumbers require a rich, well-drained soil in pH range 6-7. Avoid too much nitrogen or fruits may be bitter. Water plants regularly to get the mildest fruits. Seeds require a temperature of at least 68°F to germinate. Plant out starting 1–2 weeks after last frost. Seed Watering Notes: Be careful not to overwater germinating seeds or they may rot. It's best to soak the ground or the potting soil heavily when first planting, then avoid watering again if possible until seedlings emerge. (For seeds in potting soil, keep them warm but out of direct sunlight so that they don't dry out so fast.) Cucumber seeds emerge in 5+ days; very lightly water ground or potting soil around day 3 or 4 to keep soil from crusting so that seeds can emerge more easily. Direct Seeding: Sow seeds 1/2-3/4 in. deep. Final spacing should be 6–12 in. apart in rows 3–5 ft. apart. Transplants: Sow seeds ½ in. deep, 2-3 seeds per pot. Cut off weak seedlings at the base to avoid disturbing roots. Seeds germinate best at 85–90°F. Maintain seedlings at 75°F or higher. Harden plants before setting out, and take care not to disturb fragile roots when transplanting. Since cucumber transplants are fussy, hold back a few seedlings for filling in any gaps in the row as they appear. Harvest: To maintain good production, harvest fruit every 1-3 days. Greenhouse Notes: Grow cucumbers on a trellis to make use of vertical space. Use mildew-resistant varieties, and hand-pollinate. Diseases: Although scab is not usually a problem in the Mid-Atlantic region, two fungus diseases, powdery mildew and downy mildew, are common. Powdery mildew occurs during hot, dry spells, whereas downy mildew occurs during wet, cool spells near the end of the growing season. Mosaic virus causes a yellow and green mottling of the leaves and reduces plant vigor. Anthracnose, a fungus disease, is most common during mid- and late- season and during dry weather. Dark brown spots on the leaves and round sunken spots on the fruit are evidence of Anthracnose. Another fungus, angular leaf spot, is common during cool, wet weather. Symptoms of angular leaf spot include interveinal browning and small circular spots on the fruit. Bacterial wilt causes sudden dramatic wilting and death of the vines. Use resistant or tolerant varieties, practice good sanitation and crop rotation, and pay attention to proper growth requirements. Insect Pests: Early season cucumber beetles can kill young seedlings. For about a month starting ~2-3 weeks after last spring frost, cucumber beetles are much hungrier than usual, and will kill young seedlings. Dust young seedlings with pyrethrins or rotenone, or cover with row cover until the feeding frenzy has passed. Cucumber beetles can also spread bacterial wilt. Control cucumber beetles with chickens and an Amaranth trap crop. Seed Savers: Isolate varieties by 1/8 mile for home use. Isolate a minimum of 1/4 to 1 mile for pure seed. Packet: 2 g unless stated (about 59-78 seeds, depending on variety) sows 20 ft.

Key to Disease & Pest Tolerance

Known disease or pest tolerance is indicated in brackets after the variety name. Since many factors affect disease and pest tolerance, results may vary from region to region. Resistance is only partial.

als Angular Leaf Spot **an** Anthracnose **bw** Bacterial Wilt cmv Cucumber Mosaic Virus

cub Cucumber beetles dm Downy Mildew **pm** Powdery Mildew

Ashley OG S 🜞 58 days.

{als, dm, pm} [1956, Clem-son/AES.] Recommended

for hot, humid areas where

disease resistance is impor-

tant. Good Downy Mildew

resistance. Productive vines

produce 7-8 in. dark-green

fruits, tapered on the stem

end. A popular variety in the Southeast. #51101 Pkt

Slicing Cucumbers

\$2.75



DMR 401 SLICING CUCUMBER OG S 59 days. The next generation Downy Mildew resistant cucumber from Michael Mazourek's breeding program at Cornell U. The best in 2015 trials at Cornell and at



Common Wealth Seed Growers, DMR 401 has foliage that will resist Downy Mildew pressure at levels that kill any other standard slicing cucumber plant! Early and productive, 8 in. long cukes. #51113 Pkt (1.5 g) \$3.50 spm Spider mites tls Target Leaf Spot

scab Cucumber Scab

EMPEREUR ALEXANDRE S 60 days. [Named for the Russian Emperor.] Dark green fruit best picked at 6 in. long. Quite uniform, very mild flavor.

Good for pickles when harvested small. Vines are amazingly productive. #51110 Pkt \$2.50; #51110E (28 g) \$5.50

LEMON 0G ⇒ [≈] 67 days. {an, cub} 7 ft. vines are covered with crunchy round yellow fruits. Harvest at 11/2 in. for pickling, 2 in. for salads. Excellent, never-bitter, old-fashioned cucumber flavor with a hint of nuttiness. #51505 Pkt \$2.50

MARKETMORE 76 OG 57 days. {cmv, pm, dm, als, an} A great high-yielding 8 in. bitterresistant cucumber. Grows well in the Mid-Atlantic region as well as the North. A good dependable market variety. Dark green fruits are whitespined. #51108 Pkt \$2.50; #51108E (28 g) \$5.50



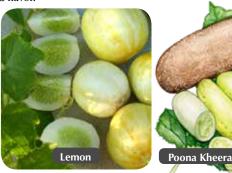
Mexican Sour Gherkin 🌞 🕿 (Mouse Melon, Sandita) (Melothria scabra) 73 days. Thin but tenacious vines bear many 5/8 in. × 7/8 in. fruits with skin like tiny watermelons. Immature, they taste like cucumbers; when fully mature, they taste like pickled cucumbers. Always popular at tastings! Plant them along your garden path for convenient snacking. Bears until frost. Trellising recommended. #51301 Pkt (0.2 g, ~70 seeds) \$2.75

MARKETMORE 80 OG S 56 days. {cmv, dm, pm, scab, cub} [Developed by Dr. Munger of Cor*nell.*] Rare variety. Fruits are bitter-free, dark green, and average 8–9 in. long and 2¼ in. in diameter. Less resistance to spider mites in our trials, but increased resistance to cucumber beetles. Recommended as a cool season main crop variety for the North and for fall planting in the South. Has multiple disease-resistance. #51102 Pkt \$2.75

POINSETT 76 **0G** # 56 days. {als, an, dm, pm, spm} [Developed by Clemson and Cornell.] An improved version of Poinsett having multiple



disease-tolerance. Produces dark green cukes 7-8 in. long and 21/2 in. in diameter. The best open-pollinated slicer for the Southeast and Mid-Átlantic coastal areas as a disease-resistant main crop garden variety. #51103 Pkt \$2.50





Cucumbers continue on next page. 17

Marketmore 76

Cucumbers Continued

RICHMOND GREEN APPLE **OG S 2**63 days. [Australian heirloom.] Lemon-sized fruits are

pale green with crispy white flesh. Light, refreshing flavor is very mild, sweet and juicy. Compact plants are nice for small gardens. Best in cooler climates. #51507 Pkt \$2.75

SPACEMASTER OG 60 days. {cmv, scab} [Developed by Dr. Munger at Cornell.] Bush-type plant with 2-3 ft. vines and 7¹/₂ in. long cukes. Use for salads or pickles. Widely adapted. Plant early to avoid late-season diseases. Ideal for containers and small gardens. #51104 Pkt \$2.50



Richmond Green Apple



Straight Eight

STRAIGHT EIGHT OG 🌞 🕿 57 days. {als, an, pm, spm} [1935, AAS winner.] Highly dependable, high yielding cucumber. Very uniform deep green 8 in. fruits about 21/2 in. in diameter with an exceptional flavor. #51107 Pkt \$2.50; #51107E (28 g) \$5.50



SUYO LONG OG S # 61 days. {pm} Sweet-flavored, "burpless" cucumber from China, hot weather tolerant and widely adapted. Exceptionally hardy, productive, and fine-flavored even under adverse conditions. One of the best varieties in Twin Oaks Seeds' 2013 downy mildew trials. Recommended as an early, main season, and late season variety for the Southeast. 15-18 in. long fruits, use for pickling or slicing. #51701 Pkt \$2.95; #51701D (14 g) \$7.25

WHITE HERON **OG**

S 🌞 60 days. [Given to SSE by Keith Herron, whose family used this cucumber fresh and for pickling. Introduced 2017 by SESE. / Pale vellowgreen fruits are best picked under 5 in., but still have



good flavor at larger sizes. Vigorous vines bore well in our 2015 trial, when most of our other cucumbers were killed early on by Downy Mildew. #51114 Pkt \$2.75

Pickling Cucumbers

Pickling cucumbers can be sliced for eating fresh, and slicing cucumbers can be pickled. Picklers tend to have crunchier texture, but with a hint of soapy taste when used fresh. Pickling cucumbers are usually blocky in shape and tend to have thicker, bumpier skin, sometimes with soft spines.



Arkansas Little Leaf **0G S 🌞** 59 days. {als, an, bw, cmv, pm, scab} [U. of Arkansas, 1991.] Popular and reliable, this white-spined pickler has multiple disease-resistance. Compact vines have multiple branch points and will climb a fence or trellis with ease. Small leaf size makes finding fruit easier, and the parthenocarpic flowers produce fruit under stress and without pollinators. 5 in. long fruits good for slicing and pickling. This variety may have lost downy mildew resistance with the emergence of new strains of the fungus, as it now varies from year to year with how well it resists DM. #51503 Pkt \$2.75

BOSTON PICKLING 0G S 🌞 🖾 58 days. {cmv} [1880.] Mediumgreen, bluntshaped fruits are crisp and mild, and just the right size for pickling. Not as rampant as some, but still very productive. #51506 Pkt \$2.75





White Wonder 🛛 S 🛛 58 days. [Southern heirloom, pre-1925?] For pickles or slicing. The $7 \times 2\frac{1}{2}$ in. fruits are ivory-white even when mature for edible harvest. Productive in hot weather. #51106 Pkt \$2.75

Edmonson OG S 🌞 🕿 70 days. {als, an, cmv, scab} [Family heirloom] from Kansas since 1913. Introduced by SESE 1987.1 One of our hardiest cucumbers. Has good resistance to disease, insects, and drought. Flavor is buttery and texture is crisp and tender even when past prime. 4 in. long whitish-green fruits. Best for pickles, but used for slicing too. #51502 Pkt \$2.75

HOMEMADE PICKLES **0G 🌞** 55 days. Specially developed for home gardeners. Vigorous plants with good disease resistance, including downy mildew resistance. Medium green fruits with small white spines are solid and crisp. Harvest cukes at 11/2 in. or larger, up to 6 in. long. Makes robust bite-sized pickles, slices, or



Edmonson

large spears. #51504 Pkt \$2.50



Roseland Small White OG S 🌞 🕿 55 days. [NC heirloom. In the early '70s, Gordon Shronce's sister Evelyn Allran received seed from a neighbor in the Roseland community near Lincolnton, NC. Introduced by SESE 2016. | Loads of early, blocky white cukes. Gordon likes to pick them at 3 in. or less, but they're still mild and tender to 7 in. long, great sliced or pickled. #51112 Pkt \$2.95



Culture: Culture of eggplant is similar to peppers. (See Pepper section.) Start seeds 8-10 weeks before setting outside, set out 1-2 weeks after last frost. Don't rush the season because cold-shock can stunt the seedlings. Plants

are spaced 24 in. in equidistant spacing, or 20 in. apart in rows 36 in. apart. Fruit-Set: Flowers may not set fruit during exceptionally hot weather. Mature plants have good vigor in fall, so cover plants on frosty nights for 1-2 weeks to extend the harvest season. Harvest: Keep well picked to keep plants producing. Small fruits have the best eating quality. Fruits are ripe when the skin appears glossy and fruit is resilient to thumb pressure. Cooking: Steamed and pureed eggplant is a great tomato paste substitute (really!). Pests: Control of flea beetles on young seedlings is essential. Pyrethrum and rotenone are effective organic controls, or use the following method: Harden off seedlings on a table at least 3 ft. off the ground. (Very little flea beetle damage occurs at this height.) After the seedlings have been hardened off, transplant seedlings under 1 gallon plastic milk bottles and leave off the lid. Leave the plants under the bottles as long as possible. Young seedlings may also be grown under row cover for a month or until flowering starts. Diseases: Avoid growing on soil that has previously grown tomatoes, potatoes, peppers, or especially eggplants for the past three years. Note: Days to maturity are from transplant date. Seed Savers: Isolate varieties by a minimum of 150 ft. for home use. For pure seed isolate a minimum of 1/8 mile. Packet: 0.25 g unless otherwise stated (about 54-88 seeds, depending on variety) sows 60-100 ft. of transplants.

Purple & Bi-Color

Black Beauty OG 🌞 🕿 74 days. [1902.] Fruits are dark purple, high-quality, and of fine flavor. Dependable, well adapted to the Mid-Atlantic and the South. Produces up to 15 fruits per plant. Fruits are $6\frac{1}{2} \times 5$ in. and may weigh up to 3 lbs, but best harvested when smaller. #45101 Pkt \$2.50

Early Black Egg **0G S** 65 days. An early Japanese variety of good flavor with small, tender, egg-shaped fruits about 5 in. long. Sets well in the Mid-Atlantic, including cool, short-season areas. Vigorous plants, more tolerant of flea beetles than other varieties. #45102 Pkt \$2.75



Listada De Gandia 🛛 S 🌞 🕿 75 days. [Heirloom from France about 1850.] This egg-shaped Italian beauty has 5-7 in. fruits, purple with irregular white stripes. A unique eggplant pleasing to both the eye and the palate. Drought-tolerant, sets fruit well under high heat, though not as well in cold summers. Thin skin does not need to be peeled for cooking. #45401 Pkt \$2.75; #45401B (3 g) \$7.50

Black Beauty



sliced like a cucumber. #45103 Pkt \$2.50 Morden Midget S (Morden Mini) 65 days. [1958, Morden Experimental Farm, Manitoba, Canada.] Good short-season variety; in our rare cool summers in Virginia, this one has outperformed our other

eggplants! Short plants

Long Purple **OG** 🌞

75 days. Long, slender

fruits $(2 \times 10 \text{ in.})$ are

the blossom end. Best

harvested when 1 in. in

slightly bulbous on

diameter. The dark-

purple fruits can be

for containers. 3-4 in. purple oval fruits. #45106 Pkt \$2.50

PING TUNG LONG **0G S 🌞** 62 days. [Taiwanese variety.] Shiny deep lavender fruits can grow to 2×11 in. and longer. If plants are kept upright the fruits can be kept straight for over ¾ of the length, making for impressive filets. Disease-resistant variety and high yielding, producing over 20 fruits

per plant in our



garden. Excellent flavor. #45104 Pkt \$2.75; #45104B Pkt (3 g) \$7.50

Rosa Bianca 🛛 S 🌞 🕿 83 days. A beautiful Italian heirloom, somewhat similar to Listada de Gandia with creamy white base color and pinkpurple irregular stripes radiating from the top. One of our best-tasting eggplants. #45402 Pkt \$2.75; #45402B (3 g) \$7.50







in.) of good quality. Short 2 ft. plants are mostly spineless or soft-spined. #45302 Pkt \$2.50

WHITE BEAUTY OG S 70 days. 6 in. long fruits, 2-3 in. diameter, good flavor. Hardy and productive for the South and other hot, humid areas. 3 ft. plants. Some variability in fruit shape. #45201 Pkt \$2.50; #45201B (3 g) \$6.50



fruits. Our favorite eggplant, this is the one we always make sure to plant every year. #45203 Pkt \$2.75; #45203B (3 g) \$7.50

Red, Green & White

Applegreen OG 65 days. [1964.] Early maturing, applegreen fruits with tender skin that doesn't require peeling. Choice variety for cool-season areas. Apple-sized fruits average $3 \times 2^{1/2}$ in. #45303 Pkt \$2.50; #45303B (3 g) \$5.50

Rosita OG S 🌞 🕿

from Puerto Rico.] 4

ft. tall plants produce

excellent yields of lav-

ender-pink, teardrop-

white shoulders. The

a trace of bitterness,

mild and sweet, be-

and the white flesh is

cause the seeds are so

late to develop in the

skin is tender without

shaped fruits with





LOUISIANA LONG GREEN (Green Banana) 0G S 🌞 75 days. Attractive 6–12 in. light green, banana-shaped fruits. Spineless plants average 4 ft. tall. #45301 Pkt \$2.50; #45301B (3 g)

Thai Long Green



Rosa Bianca

Seasonal Items: Shipping Surcharges Apply

Garlic

Shipping Surcharge for Garlic: \$2 for one item, \$4 total for any two or more items. Includes all fall-shipped items: garlic, woodland medicinals (pg. 64), and onion bulbs (pg. 35).

Garlic ships in the fall (September – November, northern-most areas first), but may be pre-ordered at any time. U.S. shipping addresses only.

If a garlic variety you order is unavailable, we may substitute a similar variety; if you would prefer a refund, please note no substitutions on your order.

Hardneck (Rocambole, Topsetting)

Allium sativum var. ophioscorodon

Culture: Cultural instructions are included with your shipment of bulbs. Culinary Notes: Rocambole garlics are enjoying a renaissance: gardeners and gourmet restaurants are discovering the merits of many varieties previously unavailable. We especially enjoy using the fresh green tops as an ingredient in salads. The cloves of rocambole are large and easy to peel, and as a rule they are more diverse in flavor than those of softneck garlics. Characteristics: Rocambole garlics do not yield as heavily as softneck garlics and they require better soil and slightly more care to maximize yields. They do best from Virginia northward (north of latitude 37°), but some widely adapted varieties can be successfully grown in southern areas. Rocambole garlic produces bulbs that divide underground to produce cloves in the same manner as softneck garlic, but unlike softneck garlic, rocam-bole sends up a scape (flower stalk) which coils into a 360° turn, then straightens out to produce a cluster of bulblets (topsets) at the top of the stalk. Coiled stalks can be removed and dried for use in flower arrangements. The bulblets emerge under the cover of a paper-thin "night cap." Though the bulblets can be planted it can take 2 years to produce mature bulbs. Best results are obtained by planting large cloves. Harvest and Yield Notes: Yields (by weight) may range from a low of 3:1 to a high of 8:1 depending on growing conditions. For highest yields, remove the scape (or "seed stalk") at the junction of the highest leaf as soon as the scape has uncoiled from its 360° turn. Each week the scape remains after this stage causes a yield reduction of approximately 5%. Bulbs are harvested about 4 weeks after the 360° turn stage, when leaves begin to yellow but while 6-8 green leaves remain. Most varieties store well for 3-6 months. Hardiness Zones: Widely adapted varieties are recommended for zones 3-8, otherwise zones 3-6. Starter Package: Rocambole garlic is sold by weight rather than clove count. Bulb size varies according to conditions. Your starter Package includes a free 4-page growing guide that covers perennial onions and garlic. Check our website in July & August, as we usually add a few varieties after completing harvests.

CHESNOK RED OG S (Purple-striped)

[Republic of Georgia, near Shvelisi.] Nicely-colored, large bulbs. Cloves are more numerous and elongated than most hardneck types. Chesnok Red is the best baking garlic, very aromatic with



an abiding flavor. #65306 Starter Package (cloves, 8 oz, see shipping info above) \$14.95

GERMAN EXTRA-HARDY OG ≥ (Porcelain) Very winter-hardy. Large cloves with a purplish blush, 6–8 per bulb, having when raw a very strong flavor, which mellows when cooked. Easy to prepare and stores well. #65307 Starter Package

(cloves, 8 oz, see shipping info above) \$14.95

KILLARNEY RED OG S (Purple striped) [Originally from Idaho.] Better adapted to wet conditions than most rocamboles – one of the best producing, year after year. Bulbs up to 2½ in., average 8–9 easily peeled



German

Extra-Hardy

cloves. Thin pink wrapper with lots of purple and brown. **#65334 Starter Package (cloves, 8 oz, see shipping info above) \$14.95** METECHI OG S (marbled purple striped) Vigorous groawing upright leaves form nicely colored bulbs with 5-8 fat



easy-to-peel cloves. Makes a lovely roasted garlic. **#65348 Starter Package (cloves 8 oz, see shipping info above) \$14.95**

MUSIC OG (Porcelain) Extremely large cloves, about 4–6 per bulb, sized over 2 in. Music is vigorous and productive, with a nice rich, pungent flavor. #65314 Starter Package (cloves, 8 oz, see shipping info above) \$14.95

Romanian Red **OG S**

(Porcelain) Large, plump cloves numbering 4 to 5 per bulb. In fertile soil the bulb wrappers are white, otherwise white with splashes



of purple. Bulbs are easy to clean, very attractive and have excellent longevity in storage. Flavor is pungent and long-lasting. #65304 Starter Package (cloves, 8 oz, see shipping info above) \$14.95 **GROWING GREAT GARLIC** [Ron Engeland.] The definitive sourcebook for growing garlic organically. Written for gardeners and small farmers, it covers site preparation through planting, fertilizing, harvesting, storing, and marketing. Also includes chapters on the history and evolution of garlic. Based on the author's experience with over 200 garlic strains. Softcover, 226 pp. **#91111 \$16.95**



Growing Guides

Learn the art of growing great garlic! See our Garlic Growing Guides on p. 78.

Asiatic & Turban Garlic

Culture: Cultural instructions are included with your bulb shipment. Characteristics: Asiatic and Asiatic Turban garlic are tentatively identified as an artichoke subtype. Unlike most artichoke types, the stems are hardneck; however, in warm climates, they may revert to softneck. Very early maturing, they size well even without the removal of scapes (flowers). Asiatic garlic often has a striped skin. It matures suddenly and should be harvested as soon as the first leaves begin to turn brown, otherwise the bulbs may split open before harvest. Long scapes. Stores 4–6 months. The flavor is rich and creamy when lightly baked, and very hot and spicy when raw. Asiatic Turban garlic is the earliest maturing garlic. Doesn't store for long – usually starts to sprout before fall planting. Pretty purple-striped wrappers, turbanshaped bulbs, very short scape. Hardiness: recommended for zones 3–9. Starter Packages: Sold by weight rather than clove count. Bulb size varies according to crop conditions. Your starter Package includes a free 4-page growing guide that covers perennial onions and garlic.

MAISKIJ S (Turban) [Turkmenistan.] Beautiful purple striped bulbs average 6 fat cloves. Large, early and vigorous with a rich garlicky flavor. Our growers at Forever Yong farm say it's consistently the first garlic to emerge in fall, and the first to harvest in May. #65345 Starter Package (cloves, 8 oz, see shipping info above-left) \$14.95

Russian INFERNO OG S (Turban) [Spokane, WA, via Filaree Farm.] Averages 5 cloves per large bulb. Hot when raw, mellow and full-flavored when roasted. #65346 Starter Package (cloves, 8 oz, see shipping info above-left) \$14.95

SHILLA S 🌞 (Turban)

[Korean.] Vigorous, good sized bulbs have mostly white wrappers, unlike most other Asiatic and Turban varieties. Bulbs average 8 fat brownish-purple cloves. Medium-hot flavor with pleasant Dijon mustard overtones. #65347 Starter Package (cloves, 8 oz, see shipping info above-left) \$14.95

Russian Inferno

20 Garlic

Seasonal Items: Shipping Surcharges Apply

Softneck (Braiding) Garlic

Allium sativum var. sativum See Shipping Info on Previous Page.

Culture: Cultural instructions are included with your shipment of bulbs. Characteristics: Softneck garlics are more domesticated and have evolved from hardneck garlics. They have lost the ability to produce topsets, hence the center of the bulb has a soft braidable neck. Softneck garlics are more productive, more widely adapted, have better storage quality, and are easier to grow than hardneck garlics, but they are slightly less cold-hardy in extreme northern areas. Clove count per bulb is much higher but many varieties have small interior cloves. We have had yields (by weight) as high as 16:1, but 5 or 8:1 is more typical. There are two horticultural groups of softneck garlics: The artichoke type and the silverskin type. **Artichoke types** are the largest, most widely adapted, and most productive, typically with 3–5 layers of cloves that give the bulb a lumpy appearance. Silverskin types have smooth, usually white bulb scales. They produce the most uniform and attractive bulbs, and are therefore popular for braiding. Cloves tend to be held tightly in the bulb and do not separate as easily as those of the artichoke type. Silverskin types are popular in western and southern states, but they also perform well in eastern states. Hardiness Zones: Recommended for zones 3–9. Starter Package: Softneck garlic is sold by weight rather than clove count. Bulb size varies according to crop conditions. Bulbs usually weigh an ounce or more. Your starter Package includes a free 4-page growing guide that covers perennial onions and garlic.

CALIFORNIA EARLY OG S

(Artichoke) This large, easy to grow softneck is probably the most widely grown garlic in the U.S. Mild flavor, Excellent storage. 8–10 cloves per bulb. #65120 Starter Package (cloves, 8 oz, see shipping info p. 20) \$14.50





INCHELIUM RED OG S 🌞 🖾 (Artichoke) [Originally from the Colville Indian Reservation, Inchelium, WA. / Higher in soluble solids than other garlic varieties we offer, in 1991 it won first place among 20 varieties evaluated for flavor at the Rodale Food Center. Clove count averages 15 per bulb with a wide variation in clove count. Inchelium Red has out-produced Chet's Italian Purple, formerly our most productive variety. Produces bulbs in excess of 3 in. in diameter under good conditions. #65102 Starter Package (cloves, 8 oz, see shipping info p. 20) \$14.50

ITALIAN SOFTNECK OG 🌞 🛣 (Ar-tichoke) [From grower David Piedmont, who got it from his Italian grandfather. In 1882 it came to Oswego, NY from River Baton.] Produces large flavorful bulbs that store well for up to 10 months under ideal conditions.



Italian Softneck

#65109 Starter Package (cloves, 8 oz, see shipping info p. 20) \$14.50

Lorz Italian OG S 🔀 (Artichoke) [Pre-1900 heirloom from Italy.] Spicy Italian garlic is hotter than most varieties and is a natural for Italian cuisine. Bulbs average 16 squarish cloves with few small interior cloves. Sizes

Nootka Rose 🛛 S 🗧

Silverskin) [Originally from Nootka Rose Farm in WA.] Thick, creamy white wrappers cover red-streaked clove wrappers. Mediumsized bulbs with 15–24 cloves. This is one of our longest storing silverskin

garlics. #65114 Starter Package (cloves, 8 oz, see shipping info p. 20) \$14.50

RED TOCH **OG S** 🜞 🕿 (Artichoke) [Originates from the Republic of Georgia, near Tochliavri.] Produces large bulbs with attractively colored cloves, streaked in shades of pink and red. For those who prefer their garlic raw, Red Toch has a multidimensional quality, a spicy fragrance, and consummate flavor. #65106 Starter Package (cloves, 8 oz, see shipping info p. 20) \$14.50



Ark of Taste

Nootka Rose

Garlic & Perennial Onion Samplers



BEGINNER'S MIXED Starter Package OG This is a garlic starter package appropriate for very small gardens and beginners. It can yield up to 4 lbs in favorable conditions. Included are ¼ lb of an easy softneck type, plus 1/4 lb of a more challenging hardneck, as well as SESE's garlic growing guide. #92501 (cloves, see shipping info p. 20) \$14.50

SMALL GARDEN SAMPLER **OG** This sampler is for the small gardener who wants to try several varieties of garlic. It includes 1/4 lb of an arti-

choke-type softneck, 1/4 lb of a silverskin-type softneck, 1/4 lb of a rocambole-type hardneck, and 1/4 lb of a purple-striped hardneck. Yields up to 8 lbs. Also included is SESE's garlic growing guide. #92502 (cloves, see shipping info p. 20) \$24.50

SILVERWHITE SILVERSKIN OG S (Silverskin) Beautiful large cloves, mild flavor. [Original stock from Harmony Farms in California.] This is the garlic often seen in grocery

stores. Good for braiding, long storage (12 months if well grown and cured). #65103 Starter Package (cloves, 8 oz, see shipping



Silverwhite Silverksin

info p. 20) \$14.50

Elephant Garlic Allium ampeloprasum

Culture: Cultural directions are described in our 4-page growing guide that is enclosed with bulb shipments. Culinary Uses: Elephant garlic is mild and sweet enough to be sliced raw and served in salads or steamed as a vegetable with butter and bread crumbs. Use it to impart garlic flavor to meats, vegetables, and salads without concern about excessive garlic flavor. The large cloves are easy to peel, grate, dry, and prepare. Storage: Withstands temperatures well below freezing and has a shelf life of at least 10 months when properly stored.

Elephant Garlic 🛛 🖉 🖉 🕿 Individual cloves grow to produce large bulbs weighing 1/2 lb or more (as large as a grapefruit). This garlic is more closely related to leeks, and the flavor is mild and sweet. Serve alone as a steamed vegetable with butter and bread crumbs, or bake it in the oven. Yield by weight is 8:1 under good conditions. #65801 Starter Package (cloves, 16 oz, see shipping info p. 20) \$19.50; #65801A (cloves, 40 oz, see shipping info p. 20) \$39.00



Gourds Lagenaria siceraria unless noted

Cultural and Handling Notes: See Cultural Notes for winter squash. Gourd seeds are a few days longer to germinate than squash. Gourds have many fewer insect problems than squash. If not grown on trellis, space plants 18 in. apart, rows 10 ft. apart, to let vigorous vines sprawl! Small gourds are best grown on a trellis to obtain best quality fruits. Harvest when the fruit stem changes from green to yellow or yellow-brown. Leave 4 in. of stem attached. Wash fruits

gently with soapy water, and dry in well-ventilated area. Turn often for 3-4 weeks, scrub off discolored areas. If desired, wax and shine to a luster.



Ornamental Gourds

African Drum Gourd **0G S 🌞** 🕿 140 days. [Original seedstock from Suzanne Ashworth.] Huge 18-22 in. gourds with thick walls (5/8 in. in good conditions). Round to slightly teardrop-shaped. A standout for downy mildew resistance in Common Wealth Seed Growers' 2015 gourd

trial, but in other years it's shown some DM susceptibility. #54110 Pkt (4 g, ~11 seeds) \$3.50

BIRDHOUSE GOURD, BRADSHAW'S OG S 🌞 🕿 95 days. For over 50 years, Dr. David Bradshaw has been selecting the



strongest and best-shaped gourds for Purple Martin (Progne subis subis) birdhouses. This species, the largest American swallow, suffered a population crash in the 20th Century due to the spread of European Starlings, and the birds now rely on humans for nesting houses. It is thought that without our assistance, Purple Martins would be in danger of extinction. Monitor your birdhouses to prevent take-over by aggressive, non-native

birds. Purple Martins eat mosquitoes and many other insect pests. The sprawling plants produce up to 12 gourds each. Packets come with Dr. Bradshaw's instructions for

building birdhouse condominiums. #54109 Pkt (3 g, ~22 seeds) \$2.95

BUSHEL GOURD 🌞 130 days. Largest gourd we offer. It is not unusual for them to grow to over the size of a bushel, especially if you trim them to 1 fruit per plant. Needs a long season to mature – plant as early as possible. Slate gray gourds make excellent baskets when dried, as their shells are stronger than other gourds. #54107 Pkt (3 g, ~8 seeds) \$2.75





22

Corsica Flat **OG S** 🜞 130 days. [Introduced 1992 by SESE.] Used in Peru for carving decorative bowls. Attractive, round-flattened gourds 3¹/₂-5 in. deep and 6–12 in. in diameter. Decorative in themselves, especially when dried with an attached curvilinear stem. #54102 Pkt (2 g, ~15 seeds) \$2.75

ORNAMENTAL GOURDS, LARGE MIXED OG DATA Attractive and useful mixture of large gourds separately grown from seed to maintain purity, then blended to include varieties such as Bottle, Powder Horn, Long-Handled Dipper, Hercules Club, and Italian Edible. #54302 Pkt (3 g, -18 seeds) \$2.50

ORNAMENTAL GOURDS, SMALL MIXED OG (Cucurbita pepo) Attractive mixture of small gourds separately grown from seed to maintain purity, then blended. Includes varieties such as Apple, Pear, Small Orange, Yellow-Warted, Flat-Striped, and Crown of Thorns. #54301 Pkt (3 g, ~57 seeds) \$2.50

Gourds, Greens

Edible Gourds

Cucuzzi 🛛 🗲 S 🌞 🕿 (Zuchetta, Guinea Bean) (Lagenaria siceraria) 60 days. [Italian heirloom, grown by Jefferson at Monticello. J Pale green fruits up to 36 in. long, for best tenderness harvest at 6-12 in. Fruits milder than luffa. Bug-

resistant plants are a great zucchini substitute. Normally very vigorous, but had a shorter season during 2013's cold, wet summer. Big sprawling vines up to 20 feet long, best planted on the edge of the garden; at Monticello they're grown up a sturdy 10-ft. tall wooden arbor. #54503 Pkt (3 g, ~20 seeds) \$2.75

HEALING SQUASH GOURD Unavailable for 2019.

Luffa 🛛 🗲 🖉 🛣 (Vegetable Sponge, Dishcloth Gourd) (Luffa cylindrica) 65 days for edible fruits, 150 days for sponges. The young gourds are edible and make a great zucchini substitute. Best eaten at 1

in. diameter or less. Mature, dark green 14-24 in. fruits may be retted (soaked in water to soften while the soft tissue breaks down). Once retting is complete, they are cleaned and ready to use as sponges or filters. Vines have pretty, bright yellow flowers. #54501 Pkt (3 g, ~20 seeds) \$2.75

LUFFA, RIDGED **OG** S 🏶 🛣 (Chinese Vining Okra, Ridge Gourd) (Luffa *acutangula*) 76 days for edible fruits, 135 days for sponges. Harvest the long, angular fruits for edible fruits when tender and young, at

about 11/4-11/2 in. × 6-14 in, picking every 2-3 days. Use as a substitute for summer squash or okra. Fruits are attractive sliced and do not have the bitterness of smooth luffas. For sponges or dish cloths, allow fruits to mature to full size, 18-30 in., then ret. Vigorous vines are best trellised. #54505 Pkt (3 g, ~18 seeds) \$2.75

S Greens S

Unusual Heat-Tolerant Greens for Summer Salads

Jewels of Opar

JEWELS OF OPAR OG S **Fame flower** (*Talinum panicula-tum*) 35 days. Purslane relative with elegant panicles of 3/8 in. pink flowers. Mild leaves are succulent, light green, and eye-catching. Great in salads, on sandwiches,



New Zealand

Red Malabar

and as a spinach substitute. Also has medicinal uses. The seedstalks are attractive in dried arrangements - seedpods dry down through shades of orange, red, brown, gold, and grey. 2-3 ft. tall plants can reach 3 ft. wide. Grows in sun or part shade; tolerates poor soil. Native to parts of the South and the Caribbean. Perennial in zones 8 and up. Self-sows readily; may naturalize. #34201 Pkt (0.15 g, ~470 seeds) \$2.75

Orach

MAGENTA MAGIC **OG S** (*Atriplex hortensis*) The deepest, darkest red of all the orach varieties available, a lively addition to any salad. Picked young it is tender, and many growers use it in their mesclun mixes. Slightly spicy upright growing plant holds its flavor even as the plants mature in summer heat. (Culture: Direct seed at 2 in. spacing after frost for summer and fall harvest. Thin to 9 in., harvesting thinnings.) #59101 Pkt (0.5 g, ~60 seeds) \$2.50

Summer Spinach

New Zealand 🌞 🕿 (Tetragonia expansa) 62 days. [Introduced from New Zealand in 1772.] A heat- and drought-tolerant spinach substitute with soil requirements similar to spinach. Greens are best cooked. Seed should be soaked 4-24 hours before planting to speed germination. #68601 Pkt (6 g, -66 seeds) \$2.50

RED MALABAR OG S

🌞 초 (Basella alba var. rubra) 70 days. These Asian greens are a great summer substitute for spinach. The fleshy leaves and stems are high in vitamins A and C. Excellent for salads, stir fries, and thickening summer soups. Germination is slow (10+ days at 80°F) so plant extra,

or start indoors 3-6 weeks before transplanting. Grows best with trellising: a good technique is to plant next to pea trellises and let them take over as the peas finish. Thin to 12–18 in. apart. Will re-grow even if severely cut back. Self-sows readily. #68301 Pkt (1 g, ~36 seeds) \$3.25



Cucuzzi



Alternative Greens & Dual Crops

In addition to the greens listed here, the leaves of sweet potatoes, amaranth, hyacinth beans, asparagus beans, southern peas (cowpeas), and squash can be cooked and eaten. We recommend using young leaves and shoot tips of squash and hyacinth bean plants. Amaranths vary in taste: we recommend Callaloo amaranth and Mayo Indian grain amaranth for greens. Buckwheat (cover crop) leaves can be eaten raw in salads. Many herbs work well in salads, including roselle, salad burnet, anise-hyssop, sorrel, chives, cilantro, dill, borage, and basil. Young pea shoots can be eaten as a salad green.

Arugula (Roquette) Eruca sativa

Culture: Arugula is a cool-weather crop that requires loose, rich, moist soil. Sow seeds in the spring as soon as the soil can be worked, with successive sowings 3–4 weeks apart. Sow ¹/₄ in. deep, 1 in. apart, in rows 8–12 in. apart, thinning to 4–6 in. apart. **Packet:** 1.5 g unless stated (about 750 seeds, sows 30 ft.).

ARUGULA OG 40 days. Distinctive, sharp, peppery leaves are best harvested when 2–3 in. long. A nice accent for mixed salads. Greens past their prime may be lightly steamed with other greens such as mustard or turnip greens, or used in creamed soups. #64101 Pkt \$2.50; #64101C (7 g) \$4.50; #64101E (28 g) \$5.50

EVEN' STAR WINTER ARU-GULA OG S Freeze-hardy to about 6°F. Bred at Even' Star Farm for more than 10 years to grow fast and vigorously with little rain, soil fertility, or coddling. Excellent in open fields, greenhouses,



or hoophouses. Dislikes poorly drained or flooded soils. **#64102 Pkt (1 g) \$2.75**

Chicory & Radicchio Cichorium intybus

Culture: See Endive (Escarole) on page 24.

CATALOGNA CHICORY OG 55 days. This well-known Italian chicory has green, deeply cut dandelion-like leaves with light green mid-ribs. More upright than the frillier varieties, it grows up to 16 in. tall, but is best harvested when smaller. #61501 Pkt (1 g, ~750 seeds) \$2.50

WILD GARDEN CHICORY MIX OG S # [Frank Morton] A rainbow mix of different

chicories – add some great color to your fall salads! #61951 Pkt (0.5 g, ~350 seeds) \$2.50

Chinese Cabbage Brassica rapa

Culture: Heading types are grown similarly to cabbage. If grown in spring, plant as early as possible, as mature heads will rot in summer heat. Looseleaf types are grown similarly to collards or kale. Pak Choi is usually harvested as small heads but may be harvested by the leaf. **Seed Savers:** Crosses with mustard greens, broccoli raab, turnips, and some rapeseed (canola). Isolate by a minimum of 600 ft. to ½ mile for home use, or by ¼–½ mile for pure seed. **Packet:** 2 g (-625 seeds)

Heading types

EARLY NOZAKI S *60 days. (*B. rapa pekinensis*) Quick to produce barrelshaped heads, and slower to bolt than other Chinese cabbage in our trials.

Wide, flat, succulent midribs. Tender and pleasant in salads, stir-fries and ferments. **#22506 \$2.75**

Early Nozaki

Tokyo Bekana

Prize Choi

MICHIHILI (*B. rapa pekinensis*) 73 days. [1948.] Popular variety. Large, upright, well-blanched heads (4×18 in.) wrapped with dark-green leaves. Flavor is sweet and mild. Sow in early July for fall harvest. **#22502 Pkt \$2.50**

Looseleaf types

TOKYO BEKANA OG (B. rapa chinensis) 44 days. Great salad green – fastgrowing plants make enormous loose heads of light green, ruffled leaves. Very mild – almost lettucelike in flavor – with good frost tolerance. Now being grown and eaten on the International Space Station! #22505 Pkt \$2.75

Pak Choi (Bok Choi)

heirloom makes excellent baby greens and grows from seed to a hearty 2-lb head in 7 weeks. Dark green leaves and crunchy tasty bright

white stems. Good in kimchi. Also savory steamed, stir fried or braised. Did great in our spring 2017 Asian green trials, and it's even more productive when planted for fall harvest. **#22507 Pkt \$2.75**

WHITE-STEMMED PAK CHOI OG (*B. rapa chinensis*) 45 days. Tender, light green, spoonshaped leaves with thick, white ribs. 14–18 in. tall. Crisp and mild, great for Asian cooking. Stems make a good celery substitute. Cold-resistant, extended harvests. **#22504 Pkt \$2.50**



Culture: Kale and collards are members of the cabbage family, and have similar cultural requirements (See Cabbage section). They are both forms of non-heading cabbage and are among the earliest forms of cultivated cabbage. Both are exceptionally high in iron and in vitamins A and C. Collards are more heat-tolerant than cabbage and are usually winter-hardy from Virginia southward. Kale is best grown as a spring, fall, or winter vegetable. The taste of both kale and collards is sweetened and enhanced by frosts and cool temperatures.

Cooking Notes: Kale and collards are best cooked, but young greens grown in cool weather are good in salads. Onions, garlic, pork fat, and vinegar all complement collards. Harvest: Clip individual leaves before they are 12 in. long. Old leaves become tough and stringy. Diseases and Pests: Seed cabbage section. Cabbage worms can be controlled with bT. Pick harlequin bugs off spring-sown crops or start new crops in late summer. Seed Savers: See Broccoli section. Packet: 2 g unless otherwise stated (about 625 seeds) sows 55 ft. direct seeded or 230 ft. as transplants.

Alabama Blue S 🌞

☎ 75 days. [Alabama heirloom, original seedstock from Jean Mills. Introduced 2015 by SESE.] Landrace with wide variation in beautiful leaf colors. Green, blue-green, and purple leaves with white,



pale green, and plum-colored veins. Smaller leaves than most collards; plants can be more closely spaced. The leaves are more tender and faster to cook, and the plants hold their sweetness longer in hot weather. Blue-leaved collards have become rare, we hope to get more folks growing these again! **#24114 Pkt \$2.75; #24114D (14 g) \$7.50**

CASCADE GLAZE Unavailable for 2019.

CHAMPION OG S 75 days. [VA/AES.] A Vates type collard with increased bolt-resistance, darker blue-green foliage, and enhanced winter hardiness. Non-heading and productive. #24105 Pkt \$2.75; #24105E (28 g) \$8.50

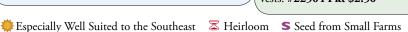
EVEN' STAR LAND RACE COLLARDS S Vigorous, winter-hardy collards selected for tender, mild flavor; small leaves are sweet enough for mesclun. No susceptibility to autumn powdery mildew, and tolerant of a wide range of soils. Hardy

to 6°F. Best for fall planting. **#24110 Pkt \$2.50**; **#24110E** (28 g) **\$8.50**

Collards continue on the next page.



open source seed initiative



s **OG** USDA Certified Organic

White-

Stemmed



s S er-hardy l for ten-; small enough o susttumn tew, and

Collards continued.



New! GEORGIA CABBAGE Collards S 🌞 🕿 70 days [Another Heirloom Collard Project standout, originally from Bobby Prevatte, whose grandparents grew them near Lumberton, NC. Stock seed from the USDA, collected by geography prof. Dr. John *Morgan* Semi-prostrate plants, 15-20 in. tall and 26-38 in. wide with a moderate tendency to head. Sweet and tender yellow-green leaves

have a rich flavor some describe as nutty and cabbage-like. A 2018 taste test favorite! Plants are vigorous and high yielding, hardy to 20°F. #24116 Pkt \$2.75



Georgia Green 🛛 🖉 🎘 🛣 (Georgia Southern, Creole) [Pre-1880.] Especially valuable variety for the sandy soil of the Atlantic coast and in places where it is difficult to grow cabbage successfully. It is resistant to heat and frost, and grows well on poor soil. The open,

after frost when they are sweet

Georgia Green

and tender. 36 in. tall plants. #24101 Pkt \$2.75

BACK! GREEN GLAZE S 🐺 🕿 79 days. [Introduced 1820 by David Landreth.] Old-fashioned and unique variety with smooth, bright green leaves. Heat- and frost-resistant, slow-bolting and non-heading. 30-34 in. tall. Excellent resistance to cabbage worm and cabbage looper. Recommended especially for Southern and warm coastal states. Thin out any dull-leaved off-type plants. #24102 Pkt \$2.95

Cress

Culture: A quick growing coolweather vegetable, cress has many forms. Plant upland cress and curly cress in late summer or early fall in moist but well-drained soil with plenty of organic matter. Broadcast seed (or plant in rows 7 in. apart) and cover very lightly with soil or compost. Seed can take 2 weeks to emerge.

BELLE ISLE OG S $\stackrel{\text{\tiny 12}}{\Rightarrow}$ $\stackrel{\text{\tiny 22}}{\approx}$ (Upland Cress) (Barbarea verna) 50 days. [17th c. Portuguese sailors shipwrecked on Canada's Belle Isle survived the winter thanks to these greens.] A traditional winter green across the Mountain South. Dark green leaves are high in vitamin C. Transplant or sow anytime, but best sown in late summer for winter greens. The yellow blossoms help nourish ladybugs, syrphids, and other beneficial insects. #71307 Pkt (1.5 g, ~930 seeds) \$2.75

CREASY GREENS 🌞 🕿 (Upland Cress, Winter Cress) (Barbarea verna) 50 days. An old favorite. As easy to grow as spinach indoors or out. #71217 Pkt (2 g, ~1250 seeds) \$2.50

HEN PECK S 🌞 🕿 72 days. [NC heirloom, seed stock from Benny and Vickie Cox. Introduced 2015 by SÉSE.] Another great cabbage collard variety from the Collard Shack. Tender, mild greens. The unusual toothed leaf margins appear as if a bird had nibbled on them, hence the name. (Thin out any non-toothed offtype seedlings.) #24112 Pkt (1 g) \$2.95

MORRIS IMPROVED HEADING Unavailable for 2019.

Variegated S 📛

🗏 80 days. [Florida family heirloom since ~1910. Seed originally via SESE grower Walt Childs. Introduced 1999 by SESE.] Tender greens with good cold hardiness; as the plants experience colder and colder



weather, at least half the plants' leaves become a beautiful green-and-white during the winter. In the South where the winter temperatures remain above 20°F, plants can live 5+ years and develop 3-4 in. diameter stems. #24106 (1 g) Pkt \$2.75

VATES # 68 days. [VA/AES.] Slow-bolting collard with large blue-green leaves on 32 in. tall plants. Produces high-quality frost-resistant greens especially suited to the Mid-Atlantic and the South. #24104 Pkt \$2.50

WHITE MOUN-TAIN CABBAGE Collards S 🗏 70 days. [SC family heirloom from Rodger Winn. Introduced 2009 by SESE.] Heading collard with dark-green savoyed leaves, similar to Morris



Heading, but much larger, up to 3 ft. Rodger's great-aunt made excellent sauerkraut with this. #24109 Pkt \$2.50; #24109E (28 g) \$8.50

WILLIAM ALEXANDER Unavailable for 2019.

BACK! YELLOW CABBAGE Collards S 🌞 🕿 75

days. [NC heirloom, seedstock from Benny and Vickie Cox, owners of the famous Collard Shack in Ayden, NC. Introduced 2015 by SESE.] Milder and more tender than most collards, the yellow-tinted leaves form a loose head. Seed for cabbage collards is hard to come by - many thanks to the Coxes for sharing theirs! #24111 Pkt (1 g) \$2.75



Collard Seed Savers Project

We are working with Seed Savers Exchange to learn more of the stories behind landrace collards and to find stewards for these varieties. Contact us to learn how you can get involved.

www.heirloomcollards.org



CURLY CRESS 🌞 🕿 (Garden Cress) (Lepidium sativum) 30 days. Use the young leaves of this mustard family member for adding zing to salads. #71218 Pkt (2 g, ~1330 seeds) \$2.50

WATERCRESS OG 🌞 🕿 (Nasturtium officinale) Best sown spring through mid-summer. Rich in vitamins and used in salads for mustard-like flavor. Transplant to a cool stream of pure clean water

or grow in pots and add fresh water daily. Can also be grown in trays with just enough water to float the crowns. Needs partial shade in hot weather. #71219 Pkt (0.5 g, ~2740 seeds) \$2.75

Endive (Escarole) Cichorium endiva

Culture: Endive is grown like lettuce and is senstive to hot weather. Thin plants to 8–12 in. apart in rows 18 in. apart. May be blanched in 3 weeks by tying up the outer wrapper leaves, but must remain dry inside the wrapper. Blanching increases crispness, tenderness, and removes bitterness caused by hot weather. For prolonged harvest, dig plants in late fall with root ball intact and store at about 50°F in a root cellar.



BROAD-LEAVED BATAVIAN 🛛 🖉 🎏 (Full Heart Escarole) 90 days. [1934. AAS winner.] Large, broad, dark-green outer leaves enclose round, deep 12–16 in. heads which are well-blanched, creamy-white, and buttery. #61101 Pkt (1 g, ~600 seeds) \$2.50



easy Greens

Kale Brassica oleracea & Brassica napus

Culture: A member of the cabbage family with similar cultural requirements to collards and cabbage (see Collards section). Seed Savers: Brassica napus crosses with rutabaga and some rapeseed (canola). For Brassica oleracea, see Broccoli section. Packet: 2 g unless otherwise stated (about 625 seeds) sows 55 ft. direct seeded or 230 ft. as transplants.

EVEN' STAR SMOOTH KALE Unavailable for 2019.

HANOVER SALAD (Spring) **OG S** 🌞 (Brassica napus) 30 days. Extra early, fastgrowing Siberian variety with large, smooth leaves. Used fresh it has a strong but good flavor, mild when steamed. Harvest leaves when small and tender. Best for early



spring before other varieties mature. #25104 Pkt \$2.75

LACINATO OG S 🌞 🕿 60 days. Dark green heirloom kale from Tuscany that dates back to the 1700s. Sometimes called "dinosaur kale," Italians call it "cavolo lacinato," or curly kale. It is sweet and delicious and so hardy it can be harvested under a foot of snow. #25106 Pkt \$2.75; #25106E (28 g) \$9.50

LACINATO RAINBOW MIX OG Seed initiative open source S 🌞 [Bred by Frank Morton of Wild Garden Seed, Lacinato crossed with Redbor *hybrid kale.]* Lacinato's treasured taste, plus many shades of red and purple in the stems and leaves. As with other red-tinted greens, color is most vivid in cool weather. Now extra-cold-hardy -- the 2014 seed crop went through a -6°F freeze, and seed was saved from the plants that survived! #25109 Pkt (1.5 g, ~450 seeds) 2.75; #25109D (14 g) \$7.25

.acinato

Rainbow Mix

LARK'S TONGUE Unavailable for 2019.

acinato

PREMIER 🌞 60 days. When overwintered, the vigorous plants remain compact while developing new growing points on the main stem. This results in higher leaf production for spring harvest. Plants resist bolting 3-4 weeks longer. Smooth, exceptionally tender dark green leaves have scalloped edges. **#25105 Pkt \$2.50**

EARLY MIZUNA OG

(B. rapa japonica)

37 days. Extremely

mild, yet definitely

Tastes great in salads

even for those that

dislike the spiciness

raw mustards. Also

often associated with

a mustard flavor.



Mustard Greens

Brassica juncea & Brassica rapa

Culture: This nutritious cool weather crop shares cultural requirements with members of the cabbage family. (See Cabbage section.) Direct sow 1/4 in. deep in spring, summer, and early fall. Thin to 8–12 in. apart in rows 10–12 in. apart. Keep well watered. **Seed Savers:** *Bras*sica rapa crosses with Chinese cabbage, broccoli raab, turnips, and some rapeseed (canola). Isolate by a minimum of 600 ft. to 1/8 mile for home use. For pure seed isolate varieties by ¹/₄–¹/₂ mile. **Packet:** 2 g unless otherwise stated (1050 seeds) sows 90 ft.

CAROLINA BROADLEAF OG **S** 🜞 42 days. *[2015,* Mark Farnham & Pat Wechter, ARS/USDA. In-troduced 2017 by SESE.] Old favorite "Florida Broadleaf" mustard is now having big problems with a new bacterial blight, so Carolina breed-



ers have come to the rescue and added needed resistance! 16-24 in. tall plants, green leaves, pick 'em small for salads, or larger for cooking. #27112 Pkt \$2.75; #27112E (28 g) \$6.50

CHINESE THICK-STEM OG S 🌞 43 days. Superb winter-hardy mustard from Even' Star Farm. Succulent, mild mustard with an enlarged midrib. Great flavor raw or cooked. Hardy to 6°F. Good tolerance of poor soil drainage. Best for fall planting. #27105 Pkt \$2.75; #27105D (14 g) \$7.50 Chinese Thick-Stem



not recommended for late fall crops. #27104 Pkt \$2.50; #27104E (28 g) \$5.75 OLD FASHIONED RAGGED

EDGE 🌞 🕿 42 days. An old favorite that produces fine quality salad greens. Leaves are long, narrow, deeply cut, and ruffled. A popular mustard in Virginia and the Carolinas. Though it bolts early, it has the best flavor. #27101 Pkt \$2.50

RED GIANT OG 🌞 (B. juncea) 43 days. A beautiful mustard from Japan,

Red Giant has well-savoyed leaves, predominately reddish-purple with an undercoat of deep green. Good cold tolerance and strong



an excellent cooking green. Delicate, frilly greens are frost tender, so

HORNED MUSTARD Unavailable for 2019.

Old Fashioned **Ragged Edge**

Red Giant

mustard flavor. More insect-resistant than other varieties. #27102 Pkt \$2.75



SIBERIAN OG S 🜞 (Bras*sica napus* var. *pabularia*) 55 days. Good basic kale, 24-30 in. tall, tender leaves are light green and ruffled, thick white stems. **#25108** Pkt \$2.50; #25108E (28 g) \$8.50

Red Russian



VATES 🛛 S 🌞 55 days. [Selected from 'Dwarf Blue Curled Scotch' by the VA/AES. / Planted spring or fall. Överwinters well in the Mid-Atlantic. Resistant to yellowing due to frost or heat. Very flavorful, best when steamed, good in salads. #25101 Pkt \$2.75; #25101E (28 g) \$6.50

RUBY STREAKS 🛛 🖉 🐺 40 days. Beautiful, lacy, deeply serrated leaves are purple in cold weather, purple and green in warm weather. They have just the right kind of spiciness and add a great touch to salads. Good in stir-fries as well. #27111 Pkt (2 g) \$2.75

SOUTHERN GIANT CURLED **OG 🌞** (B. juncea) 45 days. [Pre-1880.] An old Southern favorite. Leaves are large, bright green, with attractively curled leaf edges. This variety is used for late sowings, has cold tolerance, and good bolting resistance. #27103 Pkt \$2.50; #27103E (28 g) \$6.25

Tatsoi 🛛 🖉 💭 (B. rapa narinosa) 43 days. Rosettes of thick, dark green, ovalshaped leaves with mild mustard flavor. The most cold-hardy (22°F) com-monly available mustard. Very attractive, good for all seasons, and long-lasting. Excellent for stir-fry or salads. #22601 Pkt \$2.75







Parsley Petroselinum crispum

Culture: Parsley seed germinates very slowly, requiring 3-4 weeks, and so is best started indoors. It can be sown directly outside in early spring before weeds are growing fast: sow seeds ¼ in. deep, and thin to 6–12 in. Keep well watered. Soaking seed in water for 24 hours will speed germination. Mark location with radish seed. (Fast germination procedure: Plant seed in a small flat of soil or planting medium. Place flat in a zip-lock bag, and freeze for 12-24 hours. Remove from freezer and keep moist until seed begins to germinate.) Seed Savers: Isolate by a minimum of 1/4 mile for home

use. For pure seed isolate by 1/2 to 1 mile. Packet: 2 g (appox. 900-1350 seeds, depending on variety) sows 35-70 ft.

DARK GREEN ITALIAN **OG** 🛿 🔀 (Plain Leaf) (var. neapolitanum) 78 days. [Introduced by 1807.] Plain in appearance but fancy in taste this celery-leaf parsley is the best-flavored variety. Excellent for dried parsley. Good greenhouse variety, as aphid control is easier due to its wide straight leaves. Less coldhardy than curly types. #37101 Pkt \$2.50; #37101E (28 g) \$5.50





uniform. Dark green leaves are so thickly curled that this parsley resembles moss. #37103 Pkt \$2.50; #37103E (28 g) \$5.50

FOREST GREEN Unavailable for 2019.

Spinach Spinacea oleracea For "Summer Spinach," see page 22.

Italian

Culture: Spinach does well with a combination of cool weather, short days, high soil fertility, ample water, and neutral pH (6.5-7.5). Sprinkle some limestone in the row as you plant if you think the soil is too acidic. Sow seed ½ in. deep directly into the garden as soon as the ground can be worked, and thin to 4–6 in. apart in rows 8–10 in. apart. Succession plantings can be made every 2 weeks. Temperatures above 60°F for the first 6 weeks of growth may increase the tendency to bolt. Mulch the soil to reduce bolting by keeping the roots cool. As spring heats up plants get smaller and less sweet and bolt faster. Fall Planting: High summer temperatures can kill small seedlings, so wait until a month before first fall frost to sow. Fall plantings give a more sustained harvest than spring plantings. Spinach grown in frosty weather has the largest and sweetest leaves. Some varieties tolerate 0°F and over-winter to produce excellent spring crops. Pests: For fall crops, sow seed 2-3 times as thick to help spinach survive grasshoppers. Seed Savers:



Abundant Bloomsdale OG S 🖑 47 days. Sweet, tender, and boltresistant, this new variety is bred for organic farmers. Savoyed, dark green leaves held on upright stems. Bred by the Organic Seed Alliance (OSA) in partnership with organic farmers. Named after the Abundant Life Farm where this breeding project started in 2002. We give 10% of your purchase price to the Organic Seed Alliance to support their breeding programs. #67107 Pkt \$2.75; ⁻#67107Е (28 g) \$6.95

Greens

26

Grow only one variety or isolate by 1/4 mile for home use. For pure seed isolate by $\frac{1}{2}-1$ mile. Packet: 5 g (about 475 seeds) sows 40 ft.



Long Standing Bloomsdale 0 S 🌞 🕿 42 days. [Pre-1915.] A fully-savoyed or crinkled variety with dark green leaves. Most heattolerant variety we offer, very dependable, and the most full-flavored variety for salad use. Has withstood winter lows to 0°F. #67102 Pkt \$2.75; #67102E (28 g) \$7.25

WINTER BLOOMSDALE s 🌞 🕿 0G

47 days. Adapted for late summer and early fall plantings and overwintering. The slow-bolting plants are resistant to blue mold, blight, and mosaic. Dark green, well-savoyed leaves. #67103 Pkt \$2.50; #67103E (28 g) \$6.25



Winter Bloomsdale

Swiss Chard Beta vulgaris var. cicla

A few plants of Swiss chard will provide a large supply of greens throughout the spring, summer, and fall. Can withstand light frosts; mulching around plants may help plants overwinter in areas with mild winters. Planted from early to late spring, or again in the fall. Culture: Sow seeds 1/2 to 34 in. deep and thin to 12–16 in. apart. Harvest: Clip off leaves near the base of the plant. Cooking: Excellent when stir-fried, or used in creamed soups or quiche. Freezes well. Greenhouse Notes: Swiss chard is an ideal plant for greenhouses, where it may be grown as a perennial. Pests: In the Southeast, blister beetles may attack chard in midsummer. Pick off beetles (wear gloves!), or pull up plants and wait to replant for fall. Seed Savers: Isolate varieties by a minimum of 1/4 mile for home use. For pure seed isolate by 1/2-1 mile. Will cross readily with beets. Packet: 4 g (about 200 seeds) sows 25 ft.

BARESE 🌞 25 days for baby greens/50 days for mature leaves. [Italy] Barese's white stems and glossy green leaves are smaller, sweeter, and more tender than typical Swiss chards. Overwintered well in our 2016 trials. #32103 Pkt \$2.75

LUCULLUS 🌞 🕿 50 days. [-1914. Named after the Roman general Lucius Lucullus (pronounced "lu-kul-us") who was renowned for his splendid banquets.] Large, pale green leaves with thick white stems and heavily crumpled leaves. #32101 Pkt \$2.50; #32101E (28 g) \$5.50

PERPETUAL SPINACH 🌞 🕿 (Leaf Beet Chard) 55 days [European heirloom, 1869.] Smooth dark green leaves with slender stalks, milder than other chards. Produces tasty greens all summer and late into the fall. An excellent no-fuss warm weather substitute for spinach in the Southeast. (It won't be as sweet as spinach grown in cool weather, but still, we're glad to have this one around for summer greens!) #32301 Pkt \$2.75

RAINBOW OG 🌞 (Five Color Silverbeet) 60 days. Originally from Australia, a multicolored rainbow of plants in shades of red, orange, pink, yellow, and creamy white. **#32951** Pkt \$2.75; #32951E (28 g) \$7.50

RUBY RED OG 🌞 (Rhubarb Chard) 55 days. A beautiful addition to any garden, worth growing for the color alone. Foliage is dark green on ruby red stalks. More frost-tolerant than other chards, plants are especially striking in cold weather. #32102 Pkt \$2.50; #32102E (28 g) \$5.50











Kohlrabi

Brassica oleracea var. gongylodes

Kohlrabi is grown for its bulbous stem and its leaves which can be eaten raw in salads or cooked. Kohlrabi stores very well when refrigerated. Culture: Grow kohlrabi in the spring or fall since it does best in cool weather. Sow seed 1/4 in. deep to be thinned to 5 in.

apart in rows 12 in. apart. See Cabbage section for additional cultural notes. Harvest: When roots are 2 in. in diameter or smaller except as noted. Solar Greenhouse Notes: Any variety of kohlrabi does well in the solar greenhouse in the spring, fall, and winter. Purple varieties have more flavor, are less susceptible to cracking of the bulb, and are more insect tolerant, but grow more slowly. In-

sects and Disease: Fairly resistant to insects and disease. Cabbage worms can be controlled with Bt. Seed Savers: See Broccoli section. Packet: 4 g unless stated (about 1275 seeds) sows 135 ft.

EARLY PURPLE VIENNA **0G 🌞** 60 days. [Pre-1860.] More flavorful and slightly larger than White Vienna, and our garden trials have shown it to be slightly more resistant to the cabbage worm. #26101 Pkt \$2.50; #26101E (28 g) \$5.50



GIGANT WINTER 🌞 🖾 130 days. [Czechoslovakian heirloom reselected by E. M. Meader at UNH. Introduced 1989 by SESE.] Excellent for winter storage, and can remain in the garden all winter in warmer areas, especially if protected

open source seed initiative



with mulch. Typically grows 8–10 in. in diameter, yet remains tender. Has grown up to 62 lbs, but 15–20 lbs is more normal. Used fresh or cooked at any size from small to large. Leaves of large plants can be eaten like kale. Resistant to root maggots. #26201 Pkt \$2.95

Wild Garden

lettuce Mix

Lettuce Mix

WILD GARDEN LETTUCE MIX OG S

of lettuce from Wild Garden Seeds

- a huge variety of colors, shapes,

sizes, and textures, all together

in one packet! Instant diversity

for salad mixes or for gardeners

\$2.75; #62951C (7 g) \$6.25

wanting to try it all. **#62951 Pkt**

More than 60 different varieties

Lettuce Lactuca sativa

Culture: Lettuce is a coolweather crop that thrives in the temperature range 60-65°F, and if thoroughly hardened, most varieties survive temperatures as low as 20°F. Cold-adapted varieties survive even lower temperatures. Seed germinates best at about 75°F. Lettuce seed will germinate at temperatures as low as 40°F. Early spring plantings should be made as

hardened transplants from seed started one month before setting outdoors. Later plantings can be direct-seeded. Sow seed 1/4 in. deep and thin to 10-16 in. apart depending on the variety. Loose-leaf varieties may be planted more closely but good air circulation should be maintained around the plants. Soil should be cool and moist during germination. **Germination Notes:** At temperature over 80°F lettuce will often fail to germinate. Lettuce can be planted during hot weather if the seeds are germinated in the refrigerator for 4-6 days. Another method is to soak seed in 10% bleach for 2 hours at 40-60°F followed by 4 water rinses. This enhances germination speed and quality. One more method is to keep soil cool with burlap or boards;

remove cover promptly after germination (3-4 days) to keep grasshoppers and other pests from enjoying the tender sprouts! Bolt Resistance: Resistance to bolting is highest with loose-leaf lettuce, followed in order by romaine, butterhead, bibb, and crisphead. Lettuce bolts more readily if exposed to temperatures below 50°F during the 2- to 3-leaf stage (the first 3 weeks after germination). Thus, early spring lettuce is best started indoors and transplanted out at least 3 weeks after sowing. Before the days become hot, mulch the plants to keep the root temperature cool. In deep summer heat it's difficult to mature quality lettuce - heads become smaller and less sweet - at that time of year, cucumber and tomato salads are the easiest! Harvest and Flavor Notes: The glucose content of lettuce harvested in the morning may be 21/2 times greater than lettuce harvested in the early afternoon. For best quality and maximum sweetness harvest by 7-8 a.m., especially in summer. Greenhouse Note: Use heat-tolerant loose leaf or bibb types. Insect Pests and Diseases: In the greenhouse, control aphids by means of ladybugs, sticky yellow traps or by insecticidal soap. Maintain good air circulation around plants to reduce disease. Maturity Dates: Dates are from direct seeding. Subtract 15-20 days for dates from transplanting. Seed Savers: Isolate varieties by a minimum of 12 ft. for home use. For pure seed isolate varieties a minimum of 25-50 ft. Packet: 0.5 g unless stated (about 400-625 seeds, depending on variety) sows 30 ft. direct-seeded or 175 ft. as transplants.

Leeks Allium ampeloprasum

Leeks are biennial members of the onion family grown for their delicate onion flavor in soups and salads. Cultural Notes: Culture of leeks is similar to that of onions, but leeks are easier to grow. (See Onion cultural notes.) Sow seed indoors in flats 6–12 weeks before setting out transplants 2–6 in. apart in rows 18 in. apart. Leeks require loose, fertile soil kept well watered through the growing season. Blanch stalks by hilling up soil around the stalks as they grow. Packet: 3 g (about 1100 seeds) sows 40 ft. direct-seeded or 120 ft. as transplants.

AMERICAN FLAG (Broad London) **0G** # 130 days. The

standard variety for home gardens. Stems average $1\frac{1}{2} \times 8-10$ in., well-blanched from the base upward. Good variety for overwintering,



KING RICHARD OG S 75 days. Early-maturing leek. Slender and tall $(1 \times 12 \text{ in.})$. Best for summer and early fall harvest before frosts drop below 20°F. #66402 Pkt \$2.95





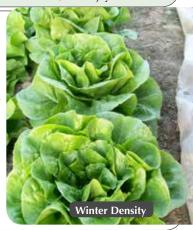
KING SIEG Unavailable for 2019.

Extend Your Lettuce Season: Begin lettuce production early and keep it going later in the season by covering plants with a row cover blanket (p. 79). Extend your harvest into early summer with this technique: plant tall vegetables in east-west rows and plant heat-resistant lettuce in the shade of the north side of the rows. Corn planted in rows 4 ft. apart or pole beans on a fence or trellis is ideal. Interplanting lettuce with bush squash also gives good results. Mulch the lettuce well, keep well watered, and enjoy!

Buttercos Lettuce

Buttercos lettuce has the characteristics of both bibb and romaine.

WINTER DENSITY OG S 🌞 58 days. *[English.]* 8 in. heads are compact, dense, and upright. A high-quality lettuce with excellent cold tolerance. Does well for us in greenhouse or garden. #62802 Pkt \$2.50; #62802C (7 g) \$5.50



Bibb (Butterhead) Lettuce

Bibb lettuce is more tolerant of hot weather than crisphead lettuce. It is best for cooler regions, with some notable exceptions. Intermediate in nutritional value, it has small loose green heads with blanched yellow interiors and thin, soft-textured leaves.

BUTTERCRUNCH OG 55 days. [1963, AAS winner. / A reliable variety for garden, market, and greenhouse use. Dark green leaves and compact heads. Holds well under heat and stress, good bolt resistance. #62302 Pkt \$2.50; #62302C (7 g) \$5.50



CAPITAN OG S 🌞 62 days. This Dutch variety was judged the best Bostontype lettuce in the 1983 Rodale Research Center trials. Excellent heat and cold tolerance plus resistance to lettuce mosaic virus. 5 oz loose, light green heads. Nice buttery flavor. Recommended with consistent high praise from

our customers, one of our personal favorites. #62303 Pkt \$2.50; #62303C (7 g) \$5.50

Соѕмо 🛛 🗲 🌞

55 days. 12 in.

tall heads have

vibrant green,

broad, savoyed

leaves that are

crisp and sweet.

Stays bitter-free

other varieties.

longer than many

One of our favor-

ites. #62701 Pkt

\$2.50; #62701C

(7 g) \$5.50

Forellenschluss OG 🕿 58

days. Translated as "Speckled

Crawford OG S 🌞 🕿 57 days. [TX heirloom, brought from OK by Marshall Crawford's family.] A Texas favorite, famous for fast growth, great flavor, and heat resistance. Green bibb, slightly savoyed, with some red/brown on the leaf edges. In Texas it's planted in the fall and winter. Here in Virginia, spring planted crops hold up well in summer heat. #62710 Pkt \$2.50; #62710C (7 g) \$5.50; #62710E (28 g) \$16.25

SCHWEITZER'S MESCHER BIBB **OG S** 🕿 50 days. [1700s. Introduced 1986 by SESE. Brought to the U.S. from Austria in the early 1900s and since maintained as a Schweitzer family heirloom.] Best grown in cool weather, forms small tight crisp heads

of green leaves ringed with red. Excellent flavor and appearance. **#62305 Pkt \$2.50**

Speckled Bibb OG S 💭 🔀 43 days. A greattasting lettuce for any season. Holds longer in the heat than Slobolt or Buttercrunch, yet still grows quickly in cool weather. Attractive light green leaves are spotted with red dots. Crispy

Speckled Bibb

hweitzer's

Mescher

heads often self-blanch in the center. #62309 Pkt \$2.50; #62309C (7 g) \$5.50

attractive variety in our heirloom lettuce trials. Ruffled, bitter-free red bibb has large tender leaves with rosy-red margins. Color is beautiful in salads. #62306 Pkt \$2.50 Том Тнимв 🛈 🔀 48 days.

SUSAN'S RED BIBB OG

S 🛮 60 days. The most

[Pre-1850.] Space-saving miniature butterhead. Apple-sized head can be used whole in individual salads. Tender leaves are medium-green and crumpled. Popular in some restaurants. #62307 Pkt \$2.50

YUGOSLAVIAN RED BUTTERHEAD OG S 🔀 58 days. *[Heir*loom from a peasant family in Marburg, Yugoslavia (now Slovenia). Introduced 1987 by SESE.]



Susan's Red Bibb

Yugoslavian Red

Red-tinged leaves form heads 10 in. across. The interior leaves are quite pretty: creamy yellow-green dappled with red. Succulent with a buttery flavor. #62308 Pkt \$2.50

OUTREDGEOUS OG S 🌞 64 days. [Bred by Frank Morton of Wild Garden Seed. | Intensely dark red, slightly ruffled leaves form loose heads. Chosen by NASA for space farming – in

Aug. 2015, Outredgeous became the first vegetable to be grown and eaten on the International Space Station! #62709 Pkt \$2.50

Parris Island Cos 🛛 🏶 68 days. [1952, named after Parris Island, SC./ Parris Island Cos has steadily gained in popularity since its introduction. It has resistance to tipburn, tolerance to mosaic, and is medium-to-slow-bolting. 10-12 in. heads of slightly savoyed leaves with a creamy white heart. #62702 Pkt \$2.50; #62702C (7 g) \$5.50

ROUGE D'HIVER (Red Winter) 0G 🇦 🕿 62 days. [French heirloom ca. 1840.] Red and green leaves with deep red tips, forms semi-open romaine heads with good flavor. Does best in cooler weather. We've had excellent quality overwintering it under row cover here in Virginia. #62707 Pkt \$2.50; #62707Č (7 g) \$5.50

Sweet Valentine OG S 🌞 55 days. Sweetest lettuce we offer. Heads hold long into the heat without bolting. The extremely deep-red leaves are slightly smaller than other cos varieties. #62112 Pkt \$2.50; #62112C (7 g) \$5.50; #62112E (28 g) \$15.25 www.SouthernExposure.com









sweetness even when other lettuces have gone bitter. Good tipburn resistance, A favor-

KALURA OG S 🌞 57 days. This tall, heavy, open headed romaine has great flavor. Resists heat and tip burn almost as well as Jericho. Pam Dawling, author of *Sustainable Market* Farming, praises it for its flavor, texture and large heads. #62708 Pkt \$2.50;

Romaine (Cos) Lettuce

Romaine lettuce produces upright, elongated tall heads with thick succulent ribs

and distinctively flavored long thick crinkled leaves. Moderately tolerant of heat and shade,

romaine does best in a loose fertile soil, and is the most nutritious type of lettuce.

Jericho **OG S** 🜞 60

days. [Israeli introduc-

tion.] Bred for desert

heat, Jericho thrives in

our hot summers. The

tall (24 in.), heavy, light-

green heads retain their

MAYAN JAGUAR OG S 61 days. The heaviest yielder in our 2017 lettuce trials. Crunchy, dark green leaves with bold, dark red splotches. Upright heads reduce splashback of soil onto leaves. Attractive pink hearts. Slow to bolt. Bred by Frank Morton. #62711 Pkt \$2.75



ite among market growers. #62706 Pkt \$2.50; #62706Č (7 g) \$5.50; #62706E (28 g) \$15.25

#62708C (7 g) \$5.75







Cosmo



starts to bolt.

#62705 Pkt

\$2.50



Crisphead & Batavian Lettuce

Crisphead lettuce is the most popular type, appreciated for its tightly folded blanched crisp leaves, though it's less nutritious than other types. Because it is harder to grow to perfection, we offer varieties that are more adapted for hot regions. Crisphead lettuce should be set out early in the season since it requires a long cool season. If heads have not formed by late spring, shading with cheesecloth or screening is recommended.

Anuenue 0 S 🖡 50 days. [1987, U. of Hawaii. Anuenue is Hawaiian for "rainbow" (pronounced "ah-nuee-nu-ee"). / Seed is able to germinate at higher soil tem-



peratures (above 80°F). Resembles a crisphead lettuce with bright glossy green leaves. Heattolerant and bolt-resistant. Recommended for all lettuce growing seasons. #62506 Pkt \$2.50;

#62506C (7 g) \$5.50

Loma **OG S 🌞** 49 days. Small, dense heads with good heat resistance. The crisp, crunchy leaves are apple green and frilly. A favorite of many market growers. #62509 Pkt \$2.50; #62509C (7 g) \$5.75

PABLO BATAVIAN OG S 🌞 60 days. Wine-red lettuce with hints of deep green, beautiful as an ornamental. Loose heads, sweet flavor. #62111 Pkt \$2.50

Sierra OG S 🜞 54 days. Open-headed batavian crisphead with excellent resistance to bottom rot and tip-burn. Leaves are glossy green with reddish veins. Grows in open fashion at first, forming a compact head at maturity. Very tasty, crisp, and juicy. Holds well under high heat. #62503 Pkt \$2.50; #62503C (7 g) \$5.50

Tennis Ball OG 🖶 🛣 55 days. [Pre-1804. Grown by Jefferson at Monticello.] Medium-sized Boston-type heads with light green leaves, yellow-green at the base. Black-seeded. Best grown as a spring lettuce. #62505 Pkt \$2.50









Loose-Leaf Lettuce

Loose-leaf lettuce is a non-heading type of lettuce, second to romaine in nutritional value, and generally the easiest type for gardeners to grow. As a group it is the most forgiving of poor soil, is generally more heat-tolerant, and contains the largest diversity of attractive heirlooms.

AUSTRALIAN YELLOW Unavailable for 2019.

BLACK-SEEDED SIMPSON OG 🕿 49 days. [~1850.] An old standard and one of the earliest loose-leaf types. Good for early spring planting for the first lettuce of the season but quality declines in heat or late plantings. Still a popu-Îar variety. **#62102** Pkt \$2.50; #62102C (7 g) \$5.50

BRONZE ARROW OG S

🗏 60 days. [California Heirloom.] Very attractive large oakleaf-shaped leaves with a reddish-brown tips. High yields, cut and come

again, slow to bolt, delicious flavor. #62803 Pkt \$2.50

DEER TONGUE 0G S 🌞 🕿 (Matchless) 54 days. Upright, loose heads with excellent sweet flavor and crisp texture. Has slightly savoyed,

triangular, roundtipped leaves with a succulent mid-rib. Moderate bolt resistance. One of our favorites. #62103 Pkt \$2.50; #62103C (7 g) \$5.50

DRUNKEN WOMAN **OG S** 55 days. Gorgeous bright green leaves with ruffled – almost fringed – edges in deep bronze. Crisp texture, very beautiful with sweet taste. Slow to bolt. **#62801 Pkt** \$2.50; #62801C (7 g) \$5.50; #62801E (28 g) \$15.25



Deer Tongue

OAKLEAF Unavailable for 2019.

RED DEER

Tongue **OG** 58 days. Fine Deer Tongue quality with red-tinged leaves. #62104 Pkt \$2.50



Order online at www.SouthernExposure.com for fastest service and largest selection.





Ark of Taste

days. [1985. AAS winner.] Early producer. Slow to develop bitterness when compared to red varieties, but average compared to green ones. Crinkled leaves;

RED SAILS OG 45



maroon-red color intensifies as leaves mature. #62107 Pkt \$2.50; #62107C (7 g) \$5.50

RED SALAD BOWL OG 🌞 55 days. Big, beautiful, wine-red leaves, like Salad Bowl only red. Excellent fall variety. #62301 Pkt \$2.50; #62301C (7 g) \$5.50

SALAD BOWL OG 40 days. [1952. AAS winner.] Large looseleaf lettuce with long frilly leaves arranged in a rosette. Tolerant to heat and tip-burn. One head makes a salad. #**62502 Pkt \$2.50**



SIMPSON ELITE OG S 🌞 48 days. [1993] Holds up to 30 days longer than 'Black-Seeded Simpson' without bolting and with less tendency to develop bitterness later in the season. An excellent variety that for years was only available through a Monsanto subsidiary, but now back in the public domain! #62108 Pkt \$2.50

SLO-BOLT OG S 🌞 48 days. [1946.] "Grand Rapids" type with good heat tolerance. Excellent choice for Southern gardens or greenhouse use. Leaves are bright green and ruffled. #62109 Pkt \$2.50

SWORD LEAF OG S (Yu Mai Tsai)

53 days. [Taiwanese.] This unusual lettuce has a robust, distinctive flavor with hints of almond and clove. Uniquely long, thin, pointed leaves. Sometimes used in cooking as well as salads. **#62114 Pkt** \$2.50; #62114C (7 g) \$5.50; #62114E (28 g) \$11.50

Thai Oakleaf **OG S 🌞** 39 days. [Introduced 1988 by SESE from a Thai breeding program.] Selected to produce excellent quality lettuce under high heat. A favorite of hydroponics growers. Resembles Oakleaf, but with larger, more tender, and more upright leaves. Moderately slow to bolt. Distinctive, almondlike flavor. #62110 Pkt \$2.50; #62110C (7 g) \$5.50





Mushrooms

Mushroom plug spawn is shipped 1-4 weeks after you place your order, directly from Sharondale Farm, where it is grown. U.S. shipping addresses only. We cannot apply priority shipping and handling to mushrooms.

Culture: Using mushroom plug spawn is easy. It can be hammered into logs for growing many woodland mushrooms. Logs cut from healthy live dormant trees work best. Cut 3 to 8 inch wide logs to manageable lengths. Drill 5/16 in. holes about 1¹/₄ in. deep in a diamond pattern into the log. Space holes about 6-8 in. along the length of the log and about 1.5-2 in. around the diameter.



Hammer mushroom spawn plugs into the holes and cover holes with wax. Select a shady, humid spot. Place oyster, reishi, and lion's mane logs directly on the ground where they will not dry out. You can push mulch against the logs about half the diameter deep to help retain moisture. Place shiitake logs slightly above the ground, so the bark is not damaged or rotted. Maintaining log moisture is the most important job for the next 6-12 months. Water if the weather is dry for extended periods. Seal and store unused plugs for a few weeks in the refrigerator.

LION'S MANE S (Hericium erinaceus) Distinctive flavor and texture reminiscent of seafood. One of the more exotic-looking mushrooms, yet native to Virginia forests. Fruits in the summer on hardwood logs,

including Oak, Maple, Walnut and even that pesky opportunist Âilanthus (Tree of Heaven). Also goes by Pom Pom, Bearded Hedgehog, and Monkey's Face. #75103A (100 plugs) \$17.00; #75103B (500 plugs) \$51.00

JD PEARL OYSTER S 🛟 (Pleurotus ostreatus) Native Pearl Ovster strain named after a farmer who collected it in Virginia. Well-adapted to Central Virginia's climate, and has also been grow successfully throughout the southeastern and northeastern US. This mushroom grows into beauti-



ful creamy colored clusters on Tulip Poplar (Liriodendron tulipifera) and Tree of Heaven (Ailanthus altissima) logs. #75102A (100 plugs) \$17.00; #75102B (500 plugs) \$51.00

Muskmelon (Cantaloupe) Cucumis melo var. reticulatus

Muskmelons include green-fleshed and orange-fleshed melons, and are often confused with cantaloupes. Noir des Carmes is the only true cantaloupe we carry. Culture: Melons require a loose, warm, sandy loam of pH 7 to reach their full potential. They will not thrive on soil below pH 6, nor will they thrive in peat, muck, or heavy clay soil. An even supply of water is necessary through pollination and early fruit-set, and the soil should be well supplied with nutrient-rich compost. Seed Watering Notes: See Cucumbers section. Direct Seeding: Once soil temperature averages 70°F sow seeds ½-¾ in. deep, 1-2 in. apart, in rows 5-6 ft. apart, thinning to 12-18 in. apart. Transplanting: See Cucumbers section. Harvest: When ripe, most varieties of melon slip from the vine in response to thumb pressure at the base of the stem. Ripe melons also develop a sweet aroma. Flavor: Flavor development begins in the last two weeks before peak ripeness; knowledge of proper harvest time is important. Cool, wet, cloudy conditions may cause melons to lose flavor. Diseases: Controlling or preventing disease is not a problem in every area or in every year, but if you have problems with diseases it is best to rely on disease-resistant or -tolerant varieties. Insect Pests: See Cucumbers section. Animal Pests: Raccoons, groundhogs, and other critters love melons. Fence off melons, or buy a supermarket melon and set out a trap in the melon patch before the main crop is ready in order to catch or relocate any critters. Greenhouse Notes: Mildew tolerance is important and pollination is necessary for fruit set. Soap sprays can be used to control mealybugs, whiteflies, and aphids, but foliage of the squash and melon family may be injured by soap. Test the spray on a few leaves before spraying the entire plant. Seed Savers: Isolate melons by a minimum of ¹/₈ mile for home use, or ¹/₂ to 1 mile for pure seed. Packet: 2 g unless otherwise stated (about 50-90 seeds,



Anne Arundel 0 S 🌞 🕿 (Green flesh) 80 days. [Grown in Anne Arundel County, MD, as early as 1731.] The green outer flesh turns pale orange in the center. Large (4-9 lb.) oval, slightly ridged, coarsely netted melons. The skin turns golden yellow when ripe. Very productive. #52120 Pkt \$2.75;

depending on variety) sows 25-50 ft.

#52120D (14 g) \$6.50

Reishi S 📛 Lion's Mane

cidum) Known as the Chinese Mushroom of Immortality because it's an excellent immune modulator and helps



your body adapt to environmental challenges. These powerful medicinal properties are best extracted from Reishi by grinding the fruiting bodies, then decocting in water or tincturing in alcohol. #75104A (100 plugs) \$17.00; #75104B (500 plugs) \$51.00

Shiitake S 🖡

(Lentinula edodes) Known for excellent flavor and medicinal qualities. Earthy, hearty, and rich, they pair well with other vegetables, in soups or sauces, or substituted for meat. Our naturalized strain "Cismont" was collected on the farm and produces excellent mushrooms on oak,



sweetgum, and other hardwoods. #75101A (100 plugs) \$17.00; #75101B (500 plugs) \$51.00

Delicious 51 PMR OG S 🌞 (Or-

ange flesh) 77 days. [Developed by Dr. Munger at Cornell as an early strain of Bender's Surprise.] Creamy orange flesh is sweet and juicy, very flavorful. 2–3 lb. fruits are lightly netted and slightly ribbed. Pick on full slip. Tolerant to Fusarium wilt (race 1). #52101 Pkt \$2.75; #52101D (14 g) \$6.50

EDEN GEM OG 🌞 🕿 (Rocky Ford)

(Green-orange flesh) 89 days. /1881.] Well known for its finegrained texture and sweet flesh. 4–6 in. fruits average 2–3 lbs, are heavily netted and slightly ribbed. Highly resistant to rust, holds well, suited for garden or market. #52109 Pkt \$2.50

EDISTO 47 **OG S** 🜞 (Salmonorange flesh) 88 days. [1965, Clemson/AES.] Exceeds disease resistance of many hybrid cantaloupes. Has resistance to Alternaria leaf

spot, powdery mildew, and downy mildew. Well adapted to the Mid-Atlantic region and hot, humid areas. The most downy mildew resistant and productive of 38 melon varieties trialed by Twin Oaks Seeds in 2013. Rind is netted, fruits are round-oval, about 6-7 in. in diameter. Keeps well. Pick on full slip. Sweet fruits, even in cool, wet years. Melon grower Edmund Frost's favorite! Seed grown and stewarded by Twin Oaks Seed Farm in Louisa, VA. #52102 Pkt \$2.75; #52102D (14 g) \$6.50



Eden Gem



GOLDEN JENNY S (Orange flesh) 85 days. [1997, developed by Merlyn Niedens. | Retains many characteristics of Jenny Lind but is more vigorous, compact, productive, and fruits have better insect resistance. Merlyn's plants produced



Golden Jenny

Hales Best

over 40 fruits from just 2 hills in one of his gardens in Illinois. Fruits weigh up to 34 lb and have a sweet orange flesh. **#52105** Pkt \$2.50

Hales Best OG 🌞 🕿

(Orange flesh) 86 days. [1924.] Sweet, juicy, 3-5 lb. oval fruits, one of the favorites at the Twin Oaks 2012 Melon Trials. Netted and moderately ribbed. Very vigorous, drought-resistant plants; powdery mildew resistant. #52104 Pkt \$2.50

ICE CREAM OG S 💭 (Green Machine) (Green flesh) 79 days. [1998. Bred by Meryln Niedens, cross between 'Jenny Lind' and 'Kansas.] Melons make a perfect bowl for a scoop of ice cream. Sweet 2 lb fruits on compact vines, fruits slip the vine when ripe. Also known as "Green Machine" for the large number of melons it makes!

#52113 Pkt \$2.50 Kansas 🛛 S 🖡

☑ (Orange flesh) 90 days. Outstanding features include sweet flavor, fine texture, high production, and hardiness. Ridged, oval-shaped fruits are moderately netted and average 4 lbs. Has good resistance to sap beetles that destroy fruit of other varieties. #52106 Pkt \$2.75

Kansas

Ice Cream

MISSOURI GOLD OG S 🌞 🕿 (Orange flesh) 85 days [Missouri family heirloom, 1840.] Sweet fruits are slightly ribbed, weigh 3-5 lbs. Harvest before full slip, when rind first turns tan. This is a healthy rugged variety with fruit set spaced over many weeks even in the drought of 2007. Good downy mildew resistance. #52115 Pkt \$2.75



Noir des Carmes 0 S 🌞 🕿 (Orange Flesh) 76 days. [Pre-1787, named for the Carmelite monks in France who grew it.] A wonderfully aromatic true cantaloupe with sweet flavor. The 2–3 lb ribbed fruits have a helpful ripeness indicator: over 24-48 hours the greenishblack rinds suddenly turn yellow and green, signalling their readiness! #52123 Pkt \$2.75; #52123D (14 g) \$6.75

OLD TIME TENNESSEE 0G S 🜞 🗏 (Salmon flesh) 95 days. Large, oval-shaped fruits, 12–16 in. long, average 12 lbs! Must be harvested at peak ripeness (before



full slip) and not a good keeper, but flavor can be outstanding. Some gardeners say there is no better melon if you harvest at the right time. One gardener reports that the melons are so fragrant he can find them in the dark! Good downy mildew resistance. #52107 Pkt \$2.75

PIEL DE SAPO S 🌞 🖾 (Toadskin) (Whitevellow flesh) 100 days. [Spanish hêirloom.] Unique stor-



age melon with mottled dark-green and yellow skin like a toad's (hence "Toadskin"). The 5–7 lb. aromatic, sweet fruits with firm rinds store for several months. Include this variety in late melon plantings, then store in a cool place and enjoy as a winter treat. #52119 Pkt \$2.50

Ріке 🛛 S 🌞 🕿 (Orange flesh) 85 days [1935, Aaron Pike of Pike & Young Seeds: seedstock supplied by Aaron Pike's niece.] Outstanding flavor; a local favorite, for many this is the only muskmelon they'll grow. Bred specially for growing in



unirrigated clay soil. Produces 3 lb fruits on unirrigated clay, 7 lb fruits on good irrigated soil. Heavily netted, oblong fruits. Vigorous, high-yielding, disease-resistant plants. #52108 Pkt \$2.75; #52108D (14 g) \$6.50

PLUM GRANNY 🔀 (Queen Anne Pocket Melon) (White flesh) 75 days. [Appalachian Heirloom.] Small tennis ball sized fruit - so fragrant 2 or 3 can make a whole room smell like melons, however taste is bland. Very prolific, best grown with trellising or support, fruit (0.5 g, ~48 seeds) \$2.50

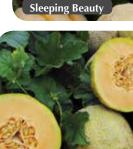


is yellow with maroon stripes. #52103 Pkt

SLEEPING BEAUTY OG S (Orange flesh) 85 days. [1997. Bred by Merlyn Niedens.] Classic melon flavor from sweet orange fruits on compact vines, good for small gardens. Sleeping Beauty' refers to the tendency of the fruits to nestle together in groups. The 11/2 lb. round, ribbed fruits are light green before ripening. #52112 Pkt \$2.75

SWEET PASSION S

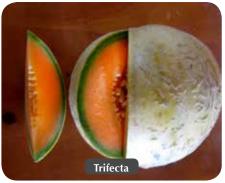
☎(Orange flesh) 85 days. [1920s Ohio heirloom.] Merlyn Niedens passed along a local legend with these seeds: "Eating the ripe melon straight from the garden on a moonlit night produces a state of passion." Drought-resistant with some wilt tolerance, moderately vining. 3-5



Sweet Passion

lb. oval melons, slightly ribbed, with sweet, juicy orange flesh and small seed cavities. #52114 Pkt \$2.75

TOP MARK Unavailable for 2019.



TRIFECTA OG S 🌞 (Orange flesh) 83 days. [Michael Mazourek, Cornell U.] A great new melon. Sweet and productive, good-looking fruits with firm flesh. Good keeper. Bred for downy mildew resistance and striped cucumber beetle resistance. One of the best in Twin Oaks Seeds' 2013 and 2014 downy mildew resistance trials. #52122 Pkt \$2.75; #52122D (14 g) \$6.75

Okra Abelmoschus esculentus

History: Okra originated in NE Africa and reportedly grows wild in the upper watershed of the Nile. It was brought to the U.S. in the late 1660s by way of the slave trade or via Europe. ["Okra" is derived from "nkru" in the Ashanti language of West Africa, while "gumbo" is derived from "ngombo" in the Bantu language of southern Africa.] Folk Uses: The dried pods of okra are used in flower arrangements; the roasted seeds serve as a coffee substitute; the juice has been used to stop bleeding and to clean metal; the stem fibers have been used to make rough cloth or cordage. The raw pods of okra can be applied to the forehead or nose to make a quick Hallowe'en mask. Culture: Okra does best on a fertile, loamy soil with lots of added humus. Excess nitrogen will favor leaf production at the expense of pod production. Start seed in pots 2-3 weeks before transplanting outside, or plant directly in the garden once the soil temperature averages 65°F (3-4 weeks after last frost). Sow seed ³/₄-1 in. deep and thin to 18 in. apart in rows 5–6 ft. apart. Seed may be slow to germinate, especially for older heirloom varieties (Alabama Red, Choppee, Stewart Zeebest, etc). To speed germination, soak seed overnight in water, or abrade the seed lightly with sandpaper to break down the hard seed coat. Pest and Disease Notes: Observe 4-year rotation for okra, cotton, and roselle (hibiscus). Old varieties of okra tend to have deeper root systems and are more tolerant of root-knot nematode. Okra grown in rich, moist soil gives the best and longest resistance to nematodes. In years of high grasshopper numbers, grasshoppers may eat lower leaves of plants. Harvest: Harvest pods when 2-4 in. long except as noted; pod tenderness varies over the course of the season. We recommend snipping off the pods using hand pruners; young pods also can often be snapped off by hand. Wear long-sleeve shirts to harvest – leaves of most varieties irritate the skin of all but a few lucky humans. Seed Savers: Isolate varieties by 1/8 mile for home use, or ¼ to ½ mile or greater for pure seed. Packet: 4 g (about 64-86 seeds, depending on variety) sows 31-52 ft.

ALABAMA RED S * 2 50 days. [Alabama heirloom.] 5–7 ft. tall plants produce abundant fat, 4 in. red-and-green pods. Stems and leaf veins are also red. This okra is delicious fried, and adds color and unique flavor added to salads when young. #69112 Pkt \$2.50; #69112E (28 g) \$6.25

BECK'S BIG BUCK OG S ♥ Solver (Snapping Okra) 57 days. [German heirloom from Malcom Beck of San Antonio, TX.] Vigorous 7–8 ft. plants produce an abundance of large, fat, tender, fluted pods. Young pods (3 in. or less)



Alabama Red

easily snap off the plant when ready to harvest. #69120 Pkt \$2.50; #69120E (28 g) \$6.50

BowLING RED OG S 257 days. [Grown by the Bowling family of Virginia since the 1920s.] Early, productive, and beautiful – one of the best okras in the Kerr Center's trial of 30 heirloom varieties. Long, slim, tender red pods. 7–8 ft. plants



have red stems and red-veined leaves. #69125 Pkt \$2.50; #69125E (28 g) \$6.50 BURGUNDY OG 50 days. [1988, AAS winner.] Stems, leaf veins, and pods are deep redmaroon. 4–6 ft. plants. 5% in. wide spineless pods up to 10 in. long, tenderest at 7 in. or less. Other red okras bear

longer and handle disease better but Burgundy is earlier and fine tasting. **#69101 Pkt \$2.50**

Burgundy

BURMESE OG S

♣ ≥ 53 days. [Burmese heirloom, seedstock courtesy Hap Heilman. Now a favorite in some local restaurants.] Bears when plants are 18 in. tall and continues to bear until frost. Huge leaves, typically 16 in. across. 9–12 in.

slender pods are curved and virtually spineless. Pods mature from light green to creamy yellowgreen. At 10 in. long they are tender, sweet, and spineless enough to be eaten raw or added to salads. Pods are less gooey than other okra. **#69109 Pkt \$2.50; #69109E (28 g) \$6.50**

CAJUN JEWEL OG **S 🌞** 53 days. [Introduced 1989 by SESE. Local favorite in Cajun country since the 1950s. / Dwarftype, 2¹/₂–4 ft. tall spineless plants produce an early crop of tender 1 in. diameter pods up to 8 in. long. Ġood flavor. Widely adapted. #69102 Pkt \$2.50; #69102E (28 g) \$6.50



Burmese

CHOPPEE OG S ♣ ≥ 69 days. [~1850, from the Jacobs family of Georgetown, SC. Named for the Choppee Indians native to the area.] High-yielding, 6 ft. plants. Slim, tender pods, great flavor, almost as spineless as Clemson Spineless. #69116 Pkt \$2.50

CLEMSON SPINE-LESS OG

56 days. [1939, Clemson/SC. AAS winner.] 4–7 ft. plants with few side-branches. Ribbed pods (1¼ × 8 in.), harvest when pods are 3 in. or smaller. Spineless charac-





teristic makes this popular variety easy to pick. #69103 Pkt \$2.50; #69103E (28 g) \$5.50

Cow HORN $0G \stackrel{*}{\Rightarrow} \ge 55$ days. [Pre-1865.] Impressive 7–8 ft. plants with many side branches. Large, curved 8–14 in. pods, best quality when picked at 5–6 in. Dependable producer. #69110 Pkt \$2.50; #69110E (28 g) \$5.50

EVERTENDER OG S 50 days. Spineless variety from India averages 5½ ft. tall. Pods up to 8 in. long, pods remain tender

ft. tall. Pods up to 8 in. long, pods remain tender for a long period. The Kerr Center named it the easiest variety to harvest (thanks to unbranched plants) in their trial of 30 heirloom varieties. #69104 Pkt \$2.50; #69104E (28 g) \$6.50

FIFE CREEK COW HORN OG S 🚔 🖾 50 days [Kentucky heirloom given to

[Kentucky] heritoom given to the Fife family by an elderly Creek woman over 100 years ago.] 8 in. light green pods even more curved than Cow Horn, this okra keeps stays tender longer than most open-pollinatd varieties. High yielding, 5–6 ft. plants. **#69114 Pkt \$2.50**

Gold Coast S 🌞

50 days. [1960, Louisiana AES.] Sweet, mild, spineless light-green pods up to 6 in. long. 5–6 ft. plants are well-branched with an open growth habit. Thanks to its well-developed root system, has good drought and heat tolerance, as well as tolerance of root-knot nematodes. #69105 Pkt \$2.50; #69105E (28 g) \$6.25









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HILL COUNTRY HEIRLOOM RED OG S 🌞 🕿 64 days. [Texas Heirloom.] Very colorful red and green 6 ft. plants. 6 in. long, thick, green pods with reddish tips and ribs and great flavor. Drought tolerant, produces exceptionally well when picked small, perfect for pickled okra. #69111 Pkt \$2.50; #69111E (28 g) \$6.50

JADE S 🜞 50 days. [Developed by U. of Arkansas, introduced by SESE 1991.] Early maturing, tender-podded, high-yielding okra. Compared to Clemson Spineless, Jade has darker green pods, fewer side branches, higher yields,



and better ability to mature in late plantings. 41/2 ft. plants. Dark-green pods remain tender to 5 in. #69106 Pkt \$2.50; #69106E \$6.25

JIMMY T'S OG S 🌞 🗷 50 days. [Kentucky heirloom grown by Jimmy T. Morris since the 1940s.] 5-6 ft. plants produce abundantly when kept well-picked. 7 in. pods best when picked 4 in. or less. This excellent variety comes from the Appalachian Heirloom Seed Conservancy. #69113 Pkt \$2.50





JING ORANGE S 🌞 62 days. [Asian variety.] Strikingly ornamental, bright red stems. Thinly lobed leaves have red veins as well. 6–7 in. smooth, slim, dark red pods have great flavor. 5-6 ft. tall plants. #69126 Pkt \$2.50

Lee **OG S** 👙 54 days. [1978, U. of Arkansas.] Compact, 3–5 ft. plants make this a great okra for container gardens and for gardeners with limited space! Good flavor, harvest the spineless pods at 4–6 in. for best flavor. **#69117** Pkt \$2.50



Sноws OG S 🌞 🕿 58 days. [Mississippi family heirloom, named for the Shows family. Seed sent to us by Texana McFarland, who's 99 and still gardening! Introduced 2017 by SESE.] Great production on 4-5 ft. plants. Fluted light green pods, 1¼ in. wide. Tender up to 4 in., the pods can reach 8 in. long. A 2015 okra trials favorite! #69118 Pkt \$2.50

Silver Queen **OG** 57 days. 7 in. slim, smooth, lovely white-green pods, best harvested at 5 in. or less. Vigorous, productive 7 ft. tall plants. One of our prettiest okras. #69123 Pkt \$2.50

Star Of David 🛛 Star 🏶 (Old Fashioned) 55 days.

[Introduced 1987 by SESE. Seedstock courtesy Caroll D. Gibbs, which he had maintained since 1957.] Pods have a distinctive strong flavor, recommended for okra lovers who would like to try something different. 8–10 ft. plants with few side branches. Easy to harvest 5-7 in. pods, 1¼–2 in. diameter with medium spines. Harvest pods when small. Highly productive; tolerant of root-knot





nematode. #69108 Pkt \$2.50; #69108E (28 g) \$6.50; #69108F (¼ lb) \$18.50



STEWART'S ZEEBEST S 🌞 🕿 57 days [Missouri City, Texas heirloom, from a Mr. Zeigler and George & Mary Stewart.] 7 ft. tall plants produce lots of long, slender, curved green pods without ribs. Stays tender up to 7 in. or longer. #69115 Pkt \$2.75; #69115E (28 g) \$6.25

White Velvet S 🖊 🗏 65 days. [Family heirloom of Cheryl and Garey Hughes, collected by Garey's great-uncle in Warrior, Alabama in the 1930s. Introduced 2011 by SESE.] Smooth pods remain tender up to 8 in. long. Vigorous 10 ft. plants are spineless for easy picking. #69124 Pkt \$2.50



Parsnips Pastinaca sativa

This hardy root vegetable develops a sweet, nut-like flavor after it has been heavily frosted. Parsnips were once a common vegetable at the dinner table and they deserve to come back in style. In the 1800s parsnips were often used to make marmalade and wine. Culture: Sow seed in spring as soon as soil can be worked; sow within a few weeks of last spring frost at latest. Seeds may take 2–3 weeks to germinate and soil must not dry out. Radishes may be used to prevent soil crusting and to mark the location. Parsnips are even slower to germinate in hot soil and will be overwhelmed by weeds before they can germinate, so plant early! Plant 1/2 in. deep in raised beds and thin to 4–6 in. each way, or plant in rows 18 in. apart with plants thinned to 4 in. Soil should be well drained and not too rich in nutrients. Harvest: A heavy frost is necessary for full flavor development. Roots may be harvested or left in place during the winter for use in the spring. For a winter supply place roots horizontally in small boxes filled with garden soil or sand. Bring a box inside to thaw as needed. Cooking: Boil, fry, or roast. Seed Savers: Isolate varieties by 1/4 mile for home use. For pure seed isolate by a minimum of ¹/₂ to 1 mile. Packet: 2 g (about 845 seeds) sows 62 ft.



HARRIS MODEL 🌞 120 days. Sweet, tender, bright white roots, 10-12 in. long, 3¹/₂ in. shoulders. Long a popular favorite. #38102 Pkt \$2.50

Hollow Crown OG S 🌞 🖾 (Sugar) 105 days. [Pre-1850.] Wedge-shaped roots, 8-12 in. long, 23/4 in. at the shoulder. Excellent storage variety. #38101 Pkt \$2.75

TURGA 🛛 S 🌞 🕿 100 days [Hungarian heirloom.] Flavorful, sweet, 5-7 in. stout parsnips with smooth white skin. Short, stout roots are good for heavy clay soils. #38104 Pkt \$2.75

Onions (seed) Allium cepa

Culture: Onions often only have a short window of time to grow before heat and/or lengthening days cause bulbs to stop growing and start drying down. To encourage fast growth, plant large, healthy seedlings into fertile, weed-free soil as early as soil can be worked. Onions require light, fertile, well-drained soil with lots of organic matter. Maintain soil pH 6–7. Soil that is too acid or alkaline will cause slow growth and late maturity. Onions are heavy feeders requiring abundant potassium and phosphorous for good bulb formation. Nitrogen should be abundant during the period of active leaf growth. Onions and weeds do not mix. Experiments have shown yield reductions of 4% per day in the presence of weeds, or 50% reduction of yield in 2 weeks. Cultivation should be shallow since onion roots are near the soil surface. A layer of organic mulch will help suppress weeds and will aid in maintaining moisture and nutrient levels. Transplanting: Sow seeds indoors, ¼ in. deep in flats in January through mid-March and transplant outdoors 3–4 in. apart in rows 12–16 in. apart. Do not prune the seedling tops as the harvest will be significantly decreased. To grow the largest bulbs possible, in areas with cold winters onions may be started -mid-November: in a cold frame or in the greenhouse, sow a thick batch of seeds, then transplant to garden around late February or as soon as soil can be worked. Onion seedlings are hardy to about 20°F. Harvest: When most of the tops have fallen over, pull onions, cure in partial shade for 2-3 weeks until necks have thoroughly dried. Clip tops to within 1 in. of the bulb. Breaking over the tops by hand to accelerate harvest harms the keeping quality of some varieties and helps the keeping quality of other varieties. Pests and Diseases: Practice crop rotation of at least 3 years to control pests and diseases. Compost all onion residues. Long Day (LD) and Short Day (SD) Types: LD types begin to form bulbs when day length is 14–16 hours. Plant LD types in spring from Virginia northward. Not all LD types can bulb up as far South as Virginia, but ours can. SD types begin to form bulbs when day length is 10–12 hours. SD types can be spring or fall-planted in Virginia, and fall-planted in the South. If started in a greenhouse, or started in the fall and kept refrigerated as sets, SD onions can be grown to small bulbs in the North. Seed Savers: Isolate varieties by a minimum of 150 ft. For pure seed, cage plants or isolate by 1/4-1/2 mile. Packet: 3 g (about 700 seeds) sows 50 ft. direct seeded or 245 ft. as transplants.





mild flesh and thick, deep amber-brown skin. Great keeper, one of the best for extended storage. #66107 Pkt \$2.75

GRANEX HYBRID (short day) 80 days. Similar to the Vidalia onion. Bulbs are large, thick, and noted for their exceptionally sweet flavor. Produces high yields and is resistant to pink root. Does



especially well in the Mid-Atlantic and South. Widely adapted variety. #66901 Pkt \$2.95

New York Early **OG** S (intermediate to long day) 98 days. A dependable and productive open-pollinated version of Early Yellow Globe maintained by commercial growers in Orange County, New York. The 2¹/₂–3 in. bulbs are good for early fresh market sales and suitable for medium term storage. #66106 Pkt \$3.25; #66106D (14 g) \$7.50

RED WETHERSFIELD 🔀 (long day) 100 days [Developed by] farmers in Wethersfield, CT; grown by Jefferson at Monticello.] Large, flattened globes with deep purple-red skin. Fairly firm, pink-tinged white flesh with red concentric circles. Fine pungent flavor, a good keeper. #66105 Pkt \$2.75



TEXAS EARLY Grano OG (short day) [1933, Texas heirloom, "The Mother of All Sweet Onions."] This Vidalia-type onion is a good choice for the Mid-Atlantic and



the South. Best started in the fall or winter and transplanted in early spring. Large top-shaped bulbs, thin skin, soft white flesh, with sweet mild flavor. Good resistance to splitting. Short keeper. #66104 Pkt \$2.75

WALLA WALLA Sweet 🔀 (intermediate to long day) 110 days. [1890 Italian heirloom via WA state.] This is the sweet onion for gardeners in the



Mid-Atlantic and Northeast who have trouble growing short day Vidalia types. These onions are more cold hardy and can still produce large onions with sweet white succulent flesh in soil enriched with plenty of compost or other organic matter. Large 4–6 in. bulbs with light brown skin and upright necks that dry down nicely. #66111 Pkt \$2.50

Yellow of Parma 🔀 (Dorata di Parma) (long day) 110 days. Brought to Parma, Italy in 1896 by a seedsman from nearby Pavia.] Large white globes with golden skin, excellent storage variety. One of the best in our 2011 onion trials. #66110 Pkt \$3.25



Yellow of Parma

Bunching Onions (seed) Allium fistulosum & Allium cepa

Bunching onions are perennial onions which divide at ground level in the same manner as multiplier onions. Unlike potato onions they do not form large bulbs. The bases of bunching onions are slightly enlarged, like scallions. Once established, clumps need only be divided periodically. Culture: See Cultural Notes for Dry Bulb Onions. For easiest weeding, space clumps of 10 seedlings 6-12 in. apart. Bunching onions are cold-hardy and may be left in the ground year-round where the ground doesn't freeze. Where the ground does freeze, most varieties should be transplanted into a greenhouse or cold frame and moved out again in the spring. Packet: 1 g (about 450 seeds) sows 25 ft.

DEEP PURPLE **OG** 60 days. A new development in bunching onions. This reddish-purple variety develops and retains its color throughout its growth period and through high and low temperatures. #66503 Pkt \$2.95



Deep Purple

root. This is a



first-class perennial onion which needs only occasional division of clumps once established. #66501 Pkt \$2.75; #66501D (14 g) \$6.50

WHITE SPEAR 🐫 60 days. This is the largest, most attractive variety of bunching onion. Produces thick white, cylindrical stalks 5-6 in. long, topped by 6 in. of blue-green leaves. Less winter-hardy



than Evergreen, though perennial as far north as USDA zones 4-5. #66502 Pkt \$2.50

YELLOW SWEET SPANISH (long day) 110 days. Large, dark yellow, globeshaped bulbs. Flesh is creamy-white and mildflavored. Thick necks should dry well before harvest. Úse for bunching when young. Tolerates mildew and thrips. Bulbs don't keep long, best used fresh. #66103 Pkt \$2.50



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Seasonal Items: Shipping Surcharges Apply

Perennial Onions (bulbs)

Allium cepa var. aggregatum

Shipping Surcharge for Onion Bulbs: \$2 for one item, \$4 total for any two or more items. Includes all fall shipped items: garlic (pg. 20-21), woodland medicinals (pg. 64), and onion bulbs.

Onion Bulbs ship in the fall (September – November, northern-most areas first), but may be pre-ordered at any time. U.S. shipping addresses only.

Culture: Multiplier onions are hardy, productive perennials. According to the National Gardening Bureau, multiplier onions can produce a larger yield per area than any other vegetable except staked tomatoes. Multiplier onions produce a cluster of bulbs at ground level from a single planted bulb. The larger bulbs are saved for eating, and the medium and small bulbs are stored and

replanted. Both potato onions and shallots can be grown in pots for forcing green onions during the winter. Multiplier onions exist in two horticultural forms: potato onions and shallots. Shallots may be distinguished from potato onions by the shape and division pattern of the bulbs. Shallots vary in their ability to produce seed, but potato onions rarely produce seed. There are several advantages of growing multiplier onions: (1) They are not as readily bothered by the onion fly as are seed onions. (2) Once you have enough potato onions or shallots you need not buy seeds or sets again. (3) Some types of multiplier onions are in demand as gourmet items in restaurants. (4) Potato onions and many shallots store well, and can withstand subfreezing temperatures in every area of the continental U.S. when properly planted. Multiplier Onions Starter Package: Multiplier onions are sold by weight rather than bulb count. Bulb size varies according to crop conditions and bulbs are usually supplied as mixed sizes. Your starter Package includes a free 4-page growing guide which covers perennial onions and garlic.



Egyptian Walking Onions **0G S 🌞** 🛣 (Tree Onions) (var. proliferum) Grows well all through North America. The onion to plant if you always want onions. Egyptian Walking Onions grow perennially in beds. The hardy bulbs set bulblets on stalks. Air-bound bulblets will sprout new smaller stalks, which fall over and replant themselves, hence the name Walking. Bulbs can be harvested over the fall and winter. Green onions can be harvested selectively as they grow. Plant them where you intend to have them for a long time, as they are quite hardy. They tend not to yield very much the first year, but after that they will keep you supplied with onions. Planting instructions included. #66604 Starter Package (bulbs, 1 oz, see shipping info above) \$12.95; #66604A (3 oz) \$24.50

Perennial Leeks White Multiplier Onions

Available online only as spring shipped plants. Check our website for availability!

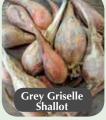
Shallots (bulbs) Allium spp.

Shallots are planted and harvested in essentially the same manner as potato onions. They have a delicate, mild flavor and some varieties are especially valued in gourmet cooking. Our shallots are widely adapted and do not require special day lengths to yield well. **Note:** Shallots are shipped only in September and October.



FRENCH RED SHALLOT OG (*A. cepa* var. *ag-gregatum*) These shallots have reddish-pink bulb scales and a pale, purple-pink flesh. The size of mature bulbs ranges from 1–2 in. in diameter. Note: This should not to be confused with the gray French shallot which produces a prolific amount of tough-skinned, undersized bulbs in the middle and southern U.S. latitudes. The French Red shallot is more widely adapted and has superior flavor, though it does not keep as well as other shallots. Valued in gourmet cooking and fine restaurants. **#66701 Starter Package (bulbs, 8 oz, see shipping info above-left) \$11.95; #66701A (20 oz) \$24.50**

GREY GRISELLE SHALLOT OG S \clubsuit \gtrsim (A. oschaninii) 180 days. [French heirloom.] Prized by French gourmet chefs, these small, teardropshaped (1 × 1½ in.) bulbs have a hard, grey skin and tender, pinkish-white flesh. They have a distinctive, rich,



earthy smell, and mild, delicious flavor. Grey shallots are considered by many to be the only "true shallot." **#66708 Starter Package (bulbs, 4 oz, see shipping info above-left) \$9.95**

Shallots Sampler

COOK'S SHALLOT SAMPLER OG S \clubsuit Explore the diversity and rich, mild, melt-in-yourmouth flavor of shallots grown fresh in your garden. Several of our great varieties for you to try. From 8 oz each of 3 different varieties, you may harvest up to 10 lbs in good conditions. #92508 Starter Package (bulbs, 24 oz, see shipping info above-left) \$29.00

Perennial Onion Sampler





Yellow Potato Onion 🛛 S 🌞 🕿 (Hill, Mother, Pregnant Onion) [In 1982 SESE reintroduced an heirloom strain dating prior to 1790.] Produces onions up to 4 in. in diameter under good conditions, and 3 in. in diameter under average conditions. Flavorful, yet not strong. This has always been a popular variety with our customers. The Yellow Potato onion has good drought resistance, pink root resistance, and is widely adapted for different growing regions, except Florida and southern Texas. Especially valued for the keeping quality of the small and medium-sized bulbs, which keep 8–12 months under good conditions. We've kept small bulbs up to 18 months under ideal conditions. Some old-timers grow this heirloom onion exclusively because it provides all the onions they ever need. #66601 Starter Package (bulbs, 8 oz, see shipping info above) \$12.95; #66601B (20 oz) \$24.50

> Seasonally Shipped rganic Onion Bulbs

Especially Well Suited to the Southeast 🛛 🕿 Heirloom 🛛 S Seed from Small Farms 🛛 🔀 USDA Certified Organic 💦 🚺 Onio

Peas Pisum sativum

Culture: Peas are a fast-maturing cool-weather crop. In the Mid-Atlantic region springplanted peas produce a better quality crop than fall-planted peas. Spring planting is also better because the vines are more resistant to freezing than the pods, which are more

likely to freeze as they mature in the fall. Sow peas as soon as the soil can be worked. Soil should be well drained with pH in the range of 6.0-6.8. Peas require a soil rich in phosphorus and potassium for good production. Too much nitrogen causes lush vine growth at the expense of pod production. Sow seed 1 in. deep, 1/2-1 in. apart in double rows 4 in. apart. Thin to 2 in. apart. Single or double rows should be planted 2 ft. apart for dwarf varieties and 21/2-3 ft. apart for tall varieties. Support tall varieties on a trellis or fence, or use well-branched brush stuck into the ground. Peas normally do not need to be watered unless the soil is consistently dry at the time of pod production. Harvest: Pick as soon as pods are full. The sugar in peas converts to starch soon after harvest, so to keep the sweet flavor, use or process within two hours. Diseases: Peas are susceptible to a variety of diseases, most commonly in soils that have grown peas for many years. If disease is a problem, use resistant varieties and follow a 5-year rotation. **Seed Savers:** Isolate varieties by a minimum of 50 ft. for home use. For pure seed isolate by 150 ft. Packet: 1

oz (28 g) (90-220 seeds, depending on variety) sows 12-20 ft.

Snap Peas

This class of peas was developed by Dr. Calvin Lamborn at Gallatin Valley Seed Co. Snap peas originated by breeding the sweet pea Mammoth Melting Sugar with a chance mutant of a popular freezing pea called Dark Skinned Perfection. For home gardeners, snap peas represent one of the more significant breeding advances in fifty years. Snap peas have excellent disease resistance and thick pods remain sweet and tender when mature. Snap peas more than double the amount of food produced by a crop of peas. Culture: See above. Germination Note: Because snap pea seeds have a high sugar content, the seed may rot in cold soil before germinating. We recommend pre-sprouting the seeds for early-season plantings in cold soil. Harvest: Harvest when pods are filled out and peas inside are full size. Strings can be removed while picking by holding the vine in one hand and pulling the pod upward and off the vine with the other hand. Preparation: Shelling isn't necessary since pods and peas are eaten together like a snap bean. The small strings along the pod sutures are not noticeable when eaten raw, but they should be stripped off before cooking. Flavor is excellent, but is easily destroyed by overcooking or canning. Packet: 1 oz. (28 g) unless otherwise stated (about 100 seeds) sows 12–20 ft.

AMISH SNAP (tall) OG

🎏 🕿 62 days. [Amish heirloom predates the more recent Sugar Snap *varieties.]* Tall vines have excellent quality and very sweet flavor. Vigorous vines yield many medium-sized deep- green pods. #15502 Pkt \$2.75

SUGAR ANN (dwarf) OG **S** 🌞 56 days *[1984*, AAS Winner.] Extraearly. Crisp, flavorful 3 in. snap peas. Compact 2 ft. vines don't require trellising. Also good for fall crop. Freezes well. #15507 Pkt \$2.75; #15507F (¼ lb) \$4.50; #15507G (½ lb) \$7.25; #15507H (1 lb) \$10.25

Peas, Southern Peas

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SUGAR SNAP (tall) OG S 70 days. *[1979. AAS* winner.] The best flavored snap pea. 3 in. pods on 6–8 ft. vines. Tolerant of pea wilt but not powdery mildew. Highly recommended. **#15501 Pkt** \$2.75; #15501F (1/4 lb) \$4.50; #15501G (1/2 lb) \$7.25; #15501H (1 lb) \$10.25

Shelling (English) Peas

Wrinkle-seeded peas are sweeter and earlier than smooth-seeded peas and maintain picking quality longer. Use these peas for shelling and eating fresh.

GREEN ARROW OG S 🔀 68 days. [English heirloom.] This favorite variety for home gardeners produces loads of 4-5 in. pods full of plump, sweet, dark green peas on 30 in. plants. Double

pods set heavily at the top of the plant for easy picking. Excellent fresh flavor holds well for canning and freezing. Resists wilt and mildew (DM, FW, RR, & LCV). #15204 Pkt \$2.75; #15204F (1/4 lb) \$4.50; #15204G (1/2 lb) \$7.25; #15204H (1 lb) \$10.25

Little Marvel 🔀 (Improved American Wonder) 62 days. [1908.] Dwarf, 16 in. vines produce doubleborne pods. 3¹/₂ in. pods contain 6-7 peas. Resistant to Fusarium wilt. An old dependable variety. #15201 Pkt \$2.50; #15201F (¼ lb) \$3.75;

#15201G (1/2 lb) \$6.25

WANDO 🏶 68 days. *[1943.]* Popular since its introduction. Heat- and cold-resistant, the most productive pea for late sowings where heat is a problem. Recommended especially for southern and coastal regions. 24-30 in. vines bear $3\frac{1}{2}$ in. pods filled with 7–8 dark-green, medium-sized peas. Use fresh or

frozen. #15202 Pkt \$2.50; #15202F (1/4 lb) \$3.75; #15202G (1/2 lb) \$6.25

Southern Peas (Cowpeas)

Southern peas, cowpeas, field peas: Vigna unguiculata Black-eyed peas: Vigna unguiculata unguiculata

> This vegetable seems to have a different name in each section of the country. Southern peas are also called cowpeas, field peas, crowder peas, and black-eyed peas. By whatever name you call them, they're an old favorite in the South and can be grown wherever both days and nights are warm for a period of 60–90 days. Culture: Sow seed 1 in. deep, 2 in. apart in rows 3-6 ft. apart, thinning to 4 in. apart. Vining varieties are very vigorous and drought resistant, but they should be given extra room, or trellised, or planted so they can climb stalks of dent corn. Southern peas have cultural requirements similar to beans. They need warmer soil, so wait until 3-4 weeks after last frost to plant. Need full sun and a warm growing season. For best results provide a well-drained soil, with pH in the range of 5.5–6.5. Do not apply nitrogen, which will result in poor yield and lush foliage. The ability of southern peas to grow in poor soil is quite remarkable – many varieties are also used as cover crops – and they are relatively free of insects and disease in the Mid-Atlantic. Harvest: Days to maturity are for fresh shelly-stage peas. For dry peas, add 2-3 weeks. For fresh use, harvest when seeds have filled the green pods, but before seeds have hardened. For dried use, make sure to harvest dried pods before rain or else seeds will mold. Let dried pods finish drying under cover in a rodent-proof space. Cooking: Can be boiled, frozen, canned, or dried. Green seeds can be roasted like peanuts. Scorched seeds can be used as a coffee substitute. Leaves may be used as a potherb. Animal Pests: Deer love them. Fence off crops or cover plants with row cover when pods emerge. Insect Pests: Weevils sometimes infest dried seed. To kill weevils, freeze thoroughlydried seed in sealed containers for 48 hours. Seed Savers: Isolate from southern peas and asparagus beans by a minimum of 10-20

> ft. for home use. For pure seed isolate 50 ft. Packet: 1 oz (28 g) unless stated (about 85-270 seeds, depending on variety) sows 15-45 ft.

Snow Peas

Snow Peas are harvested before the pods fill out. They are eaten along with the pods either raw or cooked. Often cooked in Asian dishes. For best quality, pods should be harvested at least twice a week.

MAMMOTH MELTING SUGAR (tall) **OG** 70 Days. Wilt-resistant vines grow to 5 ft. A 35 ft. row can yield as much as a bushel. Sweet, flavorful pods hold their quality even when picked a bit late. #15301 Pkt \$2.50

OREGON GIANT (dwarf) OG S 70 days [Improved] selection of old favorite Oregon Sugar Pod II.] One of the best yielding snow peas. Giant (5 in.) pods have mild, sweet flavor. 3 ft. vines resist common wilt, mosaic virus, powdery mildew. **#15302 Pkt** \$2.75; #15302F (¼ lb) \$4.50; #15302G (½ lb) \$6.75; #15302H (1 lb) \$9.75



Oregon Giant

www.SouthernExposure.com



Little Marvel

Green Arrow

Sugar Sn<u>ap</u>



Wando

Bettersnap S 🌞 61 days. [Richard Fery and Philip Dukes, ARS/ USDA, 1994.] Like



snap peas or snap beans, the young pods of Bettersnap can be eaten! 9-11 in. green pods, 1-3 pods/cluster, small white seeds, bush habit. Resistant to root knot nematodes and many other Southern afflictions. #16129 Pkt (14 g, ~112 seeds) \$2.50

BIG RED RIPPER S 🐫 🔀 70 days. [VA and NC heirloom.] Good flavored table pea with 10 in. pods containing as many as 18 large peas per pod! Use fresh or dried. Reddishgreen pods are borne high and are easy to see in the foliage.



Resistant to very hot, dry summers. Vigorous, sprawling vines. Very popular with our Texas customers. **#16107 Pkt (132 seeds)** \$2.50; #16107F (1/4 lb) \$5.75

Calico Crowder **OG S** 🔀 (Hereford Pea, Polecat Pea) 79 days. One of the more flavorful southern peas, and one of our favorites. Peas are buff-colored with maroon splashes. Vigorous, sprawling vines. #16101 Pkt (140 seeds) \$2.75

Carolina Crowder S 🌞 63 days. [Richard Fery and Philip Dukes, ARS/USDA, 1990.] Mississippi Silver-type with beautiful cranberry red pods. Redbrown seeds, great flavor. Semi-bush plants, 7-in. pods. Improved resistance for root-knot nematodes

and many other Southern afflictions. #16130 Pkt (~164 seeds) \$2.50; #16130F (¼ lb) \$5.75

BACK! COLOSSUS OG **S *** 62 days [1972, Clemson AÉS/ One of the largest and best crowder peas. Light- brown seeds in straw-colored, purple-tinted 7-9 in. pods. Large, bushy plants, very prolific, easy to shell. #16114 Pkt (~94 seeds) \$2.75; #16114F (¼ lb) \$6.25

CREEL CROWDER S F 🖾 61 days. *[Fam*ily heirloom of Cheryl and Garey Hughes, from Garey's great-uncle R.E.

Creel, a truck farmer in Warrior, Alabama in the 1930s.] 6-in. curved pods turn golden yellow when dry, large brown seeds. Semivining plants, very productive! #16120 Pkt (~125 seeds) \$2.50; #16120F (1/4 lb) \$5.50; #16120G (1/2 lb) \$8.75



Carolina Crowder

FAST LADY NORTHERN Southern Pea S 🌞 58 days. Carol Deppe selected this small, white lady pea in Oregon to mature fast in the NW's cool summers, but it handles Southern summers as well! Great for shortseason areas. 7-8 in. long,



yellow pods are easy to pick and shell. Bushy, semi-erect plants. Tender, tasty seeds cook fast without any soaking. #16124 Pkt (250 seeds) \$3.25; #16124F (¾ lb) \$7.25

New! Green Dixie Blackeye S 🌞 60 days. [Richard Fery, ARS/USDA, 2000.] Seeds retain their green color even when dry/mature, making this a great canning/freezing variety for that "fresh" look. Sweet, fruity flavor. 8-9 in. light green pods, 1-2 pods/cluster, upright for easy picking. #16135 Pkt (~147 seeds) \$2.50; #16135F (1/4 lb) \$6.25

HARDEE OG S 🌞 🕿 (US-1136) [USDA/ARS, Charleston, SC, 2010; selected from SC heirloom collected in 1992 by J. Powell Smith. Introduced 2017 by SESE.] 102 days. Tasty red-brown seeds. Vigorous, sprawling/climbing 10-15 ft. vines – as with "Iron and Clay," a great cover crop. A 2006 study found it to have even more disease resistance (including nematode resistance) than Iron and Clay!

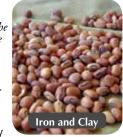
#16136 Pkt (~118 seeds) \$2.75; #16136F (¼ lb) \$6.25

HERCULES S 🜞 75 days. [1981, Clemson AES/ Large, brown seeds are the biggest we offer. 8-9-in. pods held upright on bushy plants with short runners. Easy to shell. #16123 Pkt (~88 seeds) \$2.50; #16123F (¼ lb) \$5.75

HOG BRAIN S 🌞 🖾 62 days. [Alabama heirloom, from seed sent by Douglas Pitts, whose neighbors grew them when Douglas was a boy. Possibly the best name for a vegetable variety ever, but no one seems to know how it got its name -- was it cooked with hog brains? Did it somehow remind people of hog brains?] 1-4 pods/cluster, 7-9 in. pods, cream-and-maroon seeds. Great flavor, good drought resistance. #16128 Pkt (~122 seeds) \$2.50

Iron and Clay 🌞 🛣 110 days [Brought to the U.S. by slaves before the American Revolution. Clay peas were carried as rations by Confeder-

ate soldiers. Iron and Clay peas sustained newly freed



Hercules

African-Americans after the Civil War according to George Washington Carver's 1908 "Cookbook of Field Pea Recipes."] Vigorous, drought-hardy plants. Good root-knot

nematode resistance. Sprawling vines. A great nitrogen-fixing cover crop. Late-maturing pods can be harvested for the kitchen or used for fodder. 6-7 in. pods, light tan seeds. **#16125** (245 seeds) \$2.50; #16125F (1/4 lb) \$4.75; #16125H (1 lb) \$10.25



Root knot disease, caused by root-knot nematodes (tiny worms that feed on plant roots), is a soil problem in many parts of the Southeast. Heirloom varieties particularly resistant to nematodes include Hardee and Îron and Ćlay. Newer varieties such as Carolina Crowder, Kiawah Pinkeye Purple Hull, Bettersnap, Green Dixie Blackeye, and KnuckleHull-VNR have been bred to resist nematodes, and we plan to offer more in the future!



KNUCKLEHULL-VNR S 🜞 61 days. [Richard Fery, Judy Thies, and A. Graves Gillaspie, ARS/USDA, 2002. Large brown peas in 6 in. purple pods. Bushy plants. Classic Alabama variety, now updated to add resistance to root-knot nematodes and other soil problems. #16133 Pkt (~165 seeds) \$2.50; #16133F (¼ lb) \$5.75; #16133G (½ lb) \$8.75

MACKEY PEA S 🌞 🕿 68 days. [E. Texas heirloom, seedstock thanks to Mike Neder. Introduced 2014 by SESE.] Similar to pinkeye purple hull, vining plants

are drought-resistant and also hold up well in cooler fall temperatures. 6–7 in. pods, 8-15 seeds/pod, pods turn beige when dry. Seeds have a flavor between blackeye peas and cream crowders, good fresh or dried. Mike and Lola say they like them best when the seeds are still green, just before the pods turn dry! #16126 Pkt (120 seeds) \$2.50

MISSISSIPPI SILVER Unavailable for 2019. See Carolina Crowder above left.

Ozark Razorback S 🌞 🕿 65 days. [Developed by Horus Botanicals of Salem, AR. / Very colorful red-andwhite calico peas with good flavor. Smaller seeds and shorter (3 ft.) vines than Calico Crowder. 7-8 in. pods. #16115 Pkt (214 seeds) \$2.50



Peking Black Crowder S 🜞 🕿

69 days. [From the Southern Seed Legacy collection via grower Harry Cooksey.] There is a bit of mystery about this variety's origins. But there is no doubt that it produces an abundance of delicious black crowder-type peas on vigorous disease-free plants. 8-9 in. pods. #16110 Pkt (125 seeds) \$2.50; #16110F (¼ lb) \$5.75

PIGGOTT PEA Unavailable for 2019.

PINKEYE PURPLE HULL, CORONET **OG S *** 63 days. [U. of GA/AES, 1975.] Improved Pinkeye Purple Hull with good disease resistance. Upright, semi-bush plants, easy picking. **#16137 Pkt** (~170 seeds) \$2.50; *#16137F* (¼ *lb*) \$5.25; *#16137H* (1 lb) \$12.50

PINKEYE PURPLE HULL, KIAWAH S 🌞 61 days. [1988, Richard Fery & P.D. Dukes, ARS/USDA. Named for the Native American tribe who welcomed English settlers to Charleston, SC./ Popular favorite Pinkeye Purple Hull, bred to add nematode resistance. 6-8-in. dark purple pods. 2-4 pods/cluster. Upright for easy harvesting on bushy plants. #16132 Pkt (~203 seeds) \$2.50; #16132F (¼ lb) \$5.75; #16132H (1 lb) \$12.50

> Southern Peas Continue on Next Page 37





Southern Peas Continued

QUEEN ANN BLACKEYE Ред 🜞 60 days. /VA/AES.] Dependable and heavy producer. Highly recommended for green shell or dry use, freezing, or canning. Can be grown in most northern states. (Note: this used to be a more compact plant, but the commercial strain has become much more viney, though it's still as early as ever!) 7 in. pods. #16103 Pkt (127 seeds) \$2.50; #16103F (¼ lb) \$4.50; #16103G (1/2 lb) \$6.50



Rouge et Noir S 🌞 🕿 63

days. [Heirloom from Washington Parrish, LA.] Similar to Peking Black but earlier. Large seeds are red when fresh, drying to black. Vigorous, semi-vining plants. Food historian William Woys Weaver notes that in Louisiana these peas are often cooked with limas and green peanuts. #16118 Pkt (~122 seeds) \$2.50

Tohono O'odham S 🐔

🔀 (Papago) 63 days. [SW Native American heirloom.] Highly drought- and heattolerant variety often used for summer cover crops. 6-7 in. purple-tinged pods. Earthy-flavored seeds have black and white markings like Hol-



stein cows. #16119 Pkt (170 seeds) \$2.50

WASHDAY S 🌞 🕿 63 days. /1800s. Quickcooking seeds made for a faster meal on busy washdays! Introduced 2010 by SESE.] Mediumsize tan peas, 5–6 in. pods, half-runner vines. Very productive, pods borne in clusters of 3–4 for easy picking. #16112 Pkt (180 seeds) \$2.50

Whippoorwill **OG S 🜞** 72 days. [Brought to the Americas from Africa during the slave trade. Grown by Jefferson at Monticello.] Once the standard for southern peas, this variety is drought-tolerant and will grow in almost all



soils. 5 ft. vines produce extended harvests of 7–9 in. green pods. Small seeds are light brown with dark speckles, good eaten green or dried. #16111 Pkt (170 seeds) \$2.75

Whippoorwill, Steele's Black OG S 🌞 🕿 75 days. [OK/AR family heirloom. Introduced 2012 by SESE.] 6 in. pods with grey-black speckled seeds. Vigorous vines best trellised or given plenty of room to sprawl, as the vines will produce several harvests as they continue



to grow. #16121 Pkt (208 seeds) \$2.75

Peanuts

Arachis hypogaea

History: Originally from Brazil, peanuts were brought to France and Africa, and then later introduced into the U.S. during the

1700s. The first commercial peanuts were grown near Wilmington, NC, around 1800. Culture: Shell out the seeds and sow 1–2 in. deep, 6–12 in. apart, in rows 30–36 in. apart. If planting in hills, plant 3 nuts per hill, 10–12 in. apart in hills 2–3 ft. apart. Loose, well-drained soil is important for good germination, and a soil pH of 5–6 will give the best results. Plant a month after last frost once soil has warmed up. Peanuts transplant well, and can be started indoors 3-4 weeks before transplanting out. (Even when direct sowing, we find it useful to start a few seeds in pots for transplanting out to fill any gaps in the rows.) Peanuts are slow growing at first, so keep the seedlings well weeded. A useful technique is to inter-plant with a fast-maturing weed-suppressing crop (radishes, green onions, lettuce, cilantro) that will be harvested before the peanut plants grow large enough to need the space. Peanuts require 110–130 days of hot weather and ample water, especially once plants have begun to set pods. When plants are 12 in. high, hill them up with loose soil as you would with potatoes, and mulch between the rows. Once plants start flowering, they need at least an inch of rain/irrigation every week for best production. Harvest: Harvest during a dry spell in October or after a light frost. After 3 consecutive nights of low temperatures (40°F or colder), plants will not mature pods any further, so harvest can happen anytime. (In the Deep South, peanuts may need to be harvested earlier to keep pods from sprouting in cold/wet soil late in the season.) If weather and critters allow, dig vines and let them sun-dry for several days before pulling pods off. Cure indoors in a rodent-proof space for 2-3 weeks before storing. Seed Savers: Isolate varieties by at least 10-50 ft. Packet: Peanuts are sold in the shell to preserve seed freshness. See variety descriptions for packet weights. Peanuts are sold in shell. Cannot ship to California or Canada.

White Acre S 🌞 🔀 62 days. Highyielding heirloom southern pea has superior flavor. Quick early growth and dense foliage reduces much of the need for weeding. 7–8 in. pods, small white seeds, 18-25 peas/pod. #16109 Pkt (274



seeds) \$2.75; #16109F (1/4 lb) \$6.50

YELLOW RIPPER OG S * 60 days. [Joe West found this one at the Lucedale, MS, co-op. We've had no luck finding out any more about this great variety. If you know anything, let us know! Introduced 2015 by SESE.] 6 in., easy to shell, yellow pods. Big, yellow-tan seeds. Vigorous and productive semi-bush plants. #16122 Pkt (~100 seeds) \$2.50

ZIPPER CREAM S 🌻 67 days. *[1972*, FL AES. Thanks to Bob Bulluck for our seedstock!] Southern favorite. Bushy 2–3 ft. plants bear prolifically. 6–9 in. pods with large, creamy-white seeds, 18-20 seeds/ pod, easy to shell. Unusually, seeds have a taste between English peas and cowpeas when fresh. #16116 Pkt (116 seeds)



\$2.75; #16116F (1/4 lb) \$6.50



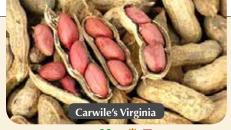
CAROLINA AFRICAN RUNNER OG S 🌞 🕿 130 days. [Brought to the US in the 1600s by West African slaves, this is the original American peanut!] Thought to be extinct since the 1930s, until Dr. David Shields tracked down a small sample in NC State University's seed archives. From a 2013 planting of 20 seeds, Brian Ward of Clemson's Coastal Research and Education Center has been building up the population. The peanuts are smaller, denser, and oilier than other peanuts, and sweeter than Virginia peanuts. Historically, they were used for making peanut oil, used in savory dishes, desserts, and beverages, and later for peanut butter. 1-2 seeds/pod (mostly 2 seeds/pod). A runner peanut, vines can spread 3+ ft (great for keeping down weeds), but needs 2-3 weeks longer to mature than other peanuts

- if trying to grow these north of SE Virginia, start seedlings inside, then transplant out a month after last spring frost. Hardy and vigorous, and excellent for small crops, but this variety is vulnerable to a few modern peanut diseases when grown on a large commercial scale. #17114 Pkt (~57 seeds) \$5.25; #17114F (1/4 lb) \$10.75

CAROLINA BLACK S * S 110 days. [Introduced 1999 by SESE from seed sent by Derek Morris.] One of the varieties grown during the 1800s was the African peanut (also known as the N. Carolina pea-



nut). It may have been a black peanut, possibly the same as 'Carolina Black.' According to food historian William Woys Weaver, the black peanut may have been used as a substitute for Black Bambarra (African ground nut) by the black community. Black Bambarra is important in African folk medicine as an aphrodisiac. The N. Carolina climate won't support black Bambarra, but black peanuts grow there without difficulty. Carolina Black produces sweet-tasting, black-skinned peanuts that are slightly larger than Spanish peanuts. 2–3 seeds/pod. #17103 Pkt (28 g, ~45 seeds) \$4.50



CARWILE'S VIRGINIA OG S ♣ ≈ 120 days. [Introduced 1989 by SESE.] Family heirloom from SW Virginia since 1910. Grown by Frank Carwile for over 75 years since he was given this peanut by a traveler when he was 8 years old. He later tried other varieties but found none with a better flavor. 2–4 seeds per pod. Plants have average disease resistance but excellent production and drought resistance. #17101 Pkt (28 g, ~40 seeds) \$4.95; #17101F (¼ lb) \$9.25

FASTIGIATA PIN STRIPED OG S ☆ ≈ 125 days. [Ecuadorean type peanut collected by Joseph Simcox.] Large wavy pods with mostly pink and purple skinned peanuts, drying to orange and purple. 3-4 seeds/pod, very sweet seeds! #17111 Pkt (28 g, ~40 seeds) \$4.95

Georganic S 🜞 130

days. [2006 USDA/ARS & U. of GA] Bred for organic growers, Georganic has sprawling runner growth that helps to suppress weeds, and excellent disease resistance. Redskinned seeds have good

flavor. 1-2 seeds/pod (mostly 2 seeds/pod). Later maturity, best for Coastal areas and Deep South. **#17106 Pkt (28 g, ~33 seeds) \$4.95**

JUNGLE STRIPED, SUNDANCE STRIPED S 2125 days. [Georgia farmer Ed Janosik has been improving this one since getting them at a seed swap in 2004. Introduced by SESE 2018.] Ecuadorean type peanut, 2-4 seeds/pod, with wavy ridged shells and orange/purple skins. Ed has been



Fastigiata

Georganic

selecting for larger yields, bigger seeds, and more color variation. Tasty boiled, roasted, or fried. **#17115 Pkt (28 g, ~30 seeds) \$4.75**

SCHRONCE'S DEEP BLACK OG S [™] 110 days. [Selected since 1980 by NC gardener Gordon Schronce. Seedstock sent by his son Arty. Introduced 2011 by SESE.] Black peanut selected for larger seeds with darker (violet-black) skins than Carolina Black and 3–4 seeds per pod. Very productive. Gordon's favorite way to serve these is to fry up a mix of black and red peanuts in canola oil. #17108 Pkt (28 g, -42 seeds) \$4.95; #17108F (¼ lb) \$9.25; #17108G (½ lb) \$15.25

 TALBERT SMALL RED S

 Image: State 110 days. [Family heir-loom from Lincoln County,

 NC. Maintained by Gordon

 Schronce. Introduced 2013 by

 SESE.] Small red bunching

 peanuts originally from a local

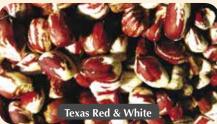
 4-H member who was given



the peanuts by her Grandfather Talbert. Her family simply called them the small, red peanut and had grown them for almost 100 years. Vigorous, productive plants. #17107 Pkt (28 g, ~46 seeds) \$4.95; #17107F (¼ lb) \$9.25

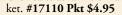


TENNESSEE RED VALENCIA OG S ☆ [∞] **(Valencia Tennessee Red)** 110 days. [*Pre-1930.*] Rich, sweet peanuts with red skins. 2–4 seeds/ pod. Easy to grow without hilling, even in clay soils. An early variety for those who have trouble maturing Virginia-type peanuts. We're again offering the best strain of this variety, with larger pods and better yields. #17104 Pkt (28 g, ~40 seeds) \$4.95; #17104F (¼ lb) \$9.25



TEXAS RED AND WHITE S 110 days. [Peanut said to have been developed in the school colors by a Texas university for selling at football games. Seed given to Ron Thuma by friends in Andover, KS. Introduced 2012 by SESE.] Seeds have lovely red-and-white streaked skins. 2–4 seeds/ pod, compact 3–ft. plants grow well in heavy clay soil. #17109 Pkt (28 g, ~34 seeds) \$4.95; #17109F (¼ lb) \$9.25

NEW! VIRGINIA JUMBO, CHAMPS OG S 120-135 days. *[VA Tech, 2004.]* Early maturing plants with runner-type growth habit make good yields of large, plump nuts in Virginia. Delicious for roasting. Pod size, shape and color are suited for in-shell sales at farmers mar-





Peppers Capsicum annuum, unless noted

Culture: Sow seeds 8-10 weeks before planting out after last frost. Plant seeds 1/4 in. deep in well-drained soil in shallow flats. Maintain soil temperature at least 75-85°F for good germination. Peppers won't germinate in cold potting soil – heat makes a big difference in seeds germinating in 5 days, or seeds taking up to 20 days! (Since germination can be slower if seeds don't have enough heat, make sure to sow extra seeds in case germination is low.) Don't overwater seeds or they may rot. Transplant to 3 in. pots as soon as several leaves have developed. Maintain day temperature 75–80°F, and night temperature at least 65°F. Water plants with warm water. Transplant again to larger pots if the seedlings become too large. Peppers need to have an uncrowded root system or subsequent yields will be reduced. Harden the plants by giving them plenty of light and setting them outside for a few hours on warm days. Be careful not to let the plants wilt. Don't rush the season: a good rule of thumb is to transfer peppers to the garden after the dogwood blossoms have fallen, or when average soil temperature is 65°F or above (usually a month after last frost). Space plants 18-24 in. apart in rows or blocks. Wait a month to mulch peppers so that the soil can heat up. Small-fruited varieties tolerate hot humid conditions better than large-fruited varieties. Once flowering begins, fertilizer should be withheld; otherwise, flowers may drop without setting fruit. Other factors causing flower drop are low humidity (sometimes caused by wide spacing), poor pollination, full fruit set, or night temperatures above 80°F or below 65°F. In the greenhouse, pollinate peppers the same way tomatoes are pollinated. Maintain high levels of phosphorus for sustained yields. Once fruit production begins, short stakes or small tomato cages may be necessary to prevent large-fruited varieties from falling over. Flavor: Peppers are fully ripe after turning color. Although all peppers may be eaten in the green stage, ripening to red, yellow, etc. increases fla-vor and nearly doubles the vitamin C content. Extended Harvest: Mature plants have good vigor in fall, so cover plants on frosty nights for 1–2 weeks to extend the harvest season. Then, before the first killing frost, uproot plants and place the roots in a bucket of water and store in a cool location to extend harvest by one month, or grow the variety Doe Hill Golden Bell which is an excellent keeper. Diseases: Peppers are fairly disease-resistant, but are susceptible to anthracnose, bacterial leaf spot, and tobacco mosaic virus (TMV). Use resistant varieties and control aphids. TMV may not kill plants but will greatly reduce the yield. Keep cigarettes out of the garden and greenhouse. Physiological Diseases: Sunscald is common on varieties with sparse foliage. Blossom-end rot is rare in peppers, and is due to inadequate calcium supply or uneven supply of water. Greenhouse Pests: Similar to treatment of tomato pests. Seed Savers: Wear gloves when collecting seeds from hot peppers. Isolate varieties by 300 ft. Note: Days to maturity are days after transplanting. Days are for green peppers; for ripe peppers, add 2-4 weeks. Packet: 0.3 g unless stated (about 36-60 seeds, depending on variety) sows 21-60 feet of transplants.

Extra-Early Sweet **Peppers**

ASHE COUNTY PIMENTO



OG S 🌞 52 days. (green > red) [Revived

by NC seed saver Rob Danford.] One of the few peppers that reliably produces well in the short Smoky Mountain growing season (150 days or less). An incredibly sweet, bright red, thickfleshed pimento pepper, $4 \times 1^{1/2}$ in. Great raw, as well as for cooking, roasting, and canning. Small (24-30 in.) plants may be closely spaced (18 in. apart). #46136 Pkt \$2.95; #46136B (3 g) \$7.50

Early Hungarian Sweet **OG S** $\stackrel{\clubsuit}{\Rightarrow}$ (TH 122) 55 days. (creamy white > red) [Seed from Dr. Terry Berke at the Asian Vegetable Research Center. Introduced by SESE 1999.] An extra-early, large wax Hungarian



sweet pepper. Similar to Feherozon except that plants are taller (14-18 in.) and fruits are slightly longer (2¹/₂ × 4 in.). #46125 Pkt \$2.75

FEHEROZON OG (creamy white > orange > red) 55 days. [Seed from Dr. Terry Berke at the Asian Vegetable Research Center. Introduced by SESE 1999.] An extra-early, large wax, Hungarian sweet pepper with compact growth and concentrated fruit set. Dwarf plants are only 12–15 in. tall, yet produce an early yield of 7 fruits per plant on the first harvest. Thickwalled pointed bells, $2\frac{1}{2} \times 3\frac{1}{2}$ in. Excellent variety for container gardens, early crops, and short-season areas. #46124 Pkt \$2.75

LIPSTICK **OG S** \clubsuit 55 days. (green > red) [Johnny's Selected Seeds.] Early and productive, a great choice for short season areas. Chunky triangular peppers, 2 × 3¹/₂ in., on 4 ft. plants. Good flavor, juicy flesh. #46139 Pkt \$2.75



SWEET PICKLE **OG** (Christmas Tree Pepper) 55 days. (purple > pale yellow > orange > red) Beautiful plant, a great edible ornamental. Compact 18-24 in. plants are loaded with upright fruits in many colors. Thick walled fruits, 1 in. wide \times 2-3 in. long, best flavor when red. #46143 Pkt \$2.75



Red Bells

Bull Nose 🛛 S 🌞 🕿 (Large Sweet Spanish) 58 days. (green > scarlet red) [Introduced in 1759 from India. Pre-1900 this variety was often stuffed with cabbage and pickled.] Early maturing. An unusual combination of sweet and heat: the thick flesh is sweet and

the cell partitions or ribs are slightly pungent. In our trials we have noted that the heat can be very subtle or absent and may depend on growing conditions. 3 × 4 in. fruits are 4-lobed, borne on tall, prolific plants. #46101 Pkt \$2.95; #46101B (3 g) \$7.50

CALIFORNIA WONDER **OG**

➡ ≥ 75 days. (green > red) [1928.] Widely adapted variety, wellknown and preferred by many market growers and gardeners. A smooth, blocky bell, mostly 4-lobed, with thick walls. Fruits up to 4



Bull Nose

× 4¾ in. Foliage provides good cover for fruits. Tobacco mosaic resistant. #46102 Pkt \$2.50

JUPITER OG S #75 days. (green > red) One of the largest and best sweet bell peppers. Sturdy 3-5 ft. plants have an excellent canopy of dark green leaves to protect the high yields of 4 in. fruits. Excellent drought



resistance. Great for stuffing. #46134 Pkt \$2.95; #46134B (3 g) \$7.25

Keystone Resistant Giant OG S 79 days. (green > red) A California Wonder type with large, blocky, pendant fruit $(3\frac{1}{2} \times 4 \text{ in.})$. Mosaic resistant. Heavy foliage reduces susceptibility to sunscald. Thick stems hold up under heavy fruit load. Well suited to the Mid-Atlantic, but not recommended for the Deep South. #46106 Pkt \$2.75

Napoleon Sweet 🛛 S 🐫 \geq 90 days. (green > red) 6–7 in. long bells with sweet, mild flavor. Very productive, tasty thick fleshed fruit can be used fresh, dried or for frying. #46130 Pkt \$2.75; #46130B (3 g) \$6.75



WORLD BEATER **OG S (Ruby Giant)**

72 days. (green > red) [Pre-1912. Developed from a cross combining the size and production of Chinese Giant with the shape and color of Ruby King.] 3 × 4 in., thick fleshed bells, very sweet when red. 3 ft. tall plants. #46108 Pkt \$2.95



Yellow & Orange Bells

CORONA OG S 🌞 68 days. (green > golden orange) [Dutch variety, 1991./ Fancy, flavorful, very sweet bell pepper often featured in gourmet produce markets. 3¹/₂ in. fruits are 3- to 4-lobed, averaging 6–7 oz. Fruit stem separates easily from plant for trouble-free harvest. Choice



variety for salad use. Good foliage cover of fruits. 4 ft. plants. Mosaic resistant. #46104 Pkt \$3.25; #46104B (3 g) \$7.50

DOE HILL GOLDEN BELL OG S 🔀 (green > orange) [Pre-1900 family heirloom from the Doe Hill area in Highland County, VA. Introduced by SESE 2000.] Miniature (1 × Ž1/4 in.), 4- to 6-Doe Hill Golden lobed, flattened orange bells, with sweet, fruity, multidimensional flavor. High yielding, 30 in. plants widely adapted and disease resistant. Fruits keep well. #46126 Pkt \$2.75

Golden Cal Wonder **OG** 72

days. (green > gold) Widely adapted and similar to California Wonder. The thick-walled, golden ripe fruits average $3 \times \overline{3}$ in. 3 ft. plants. Does well in the Mid-Atlantic. #46105 Pkt \$2.50 Golden Cal

KEVIN'S EARLY ORANGE Unavailable for 2019.

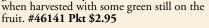
Orange Bell **OG S 🌞** 90

days. (green > orange) [Seedstock from Craig LeHoullier in NC.] Large, thick-walled, sweet bells. Though later maturing, the quality and flavor is the best of any orange bell we've grown. Fruits are large, blocky bells, 31/2

in. wide by 4 in. long. An outstanding variety. #46120 Pkt \$2.75

Sweet Jemison 🛛 S 💭

80 days (green > yellow) Large, elongated bell pepper developed by North Carolina farmer Doug Jones, one of the biggest and sweetest we've grown. Fruits keep best



Yellow Belle S 65 days. (yellow > yellow-orange > crimson red) Mostly four-lobed, $2\frac{1}{2} \times 3$ in., thick flesh, borne erect on the plant. Heavy foliage, compact



Orange Bell



growth, and very attractive. In Southern areas fully ripe peppers may develop fungus in the seed cavity during hot weather. A first-class salad pepper, very reliable and heavily productive. #46109 Pkt \$2.95

World Beater



Chocolate & Purple Bells



PURPLE BEAUTY OG S 🌞 80 days. (green > purple > deep red) On their way to deep red, the peppers stop and linger at a dark purple color (lime green inside) that's lovely in salads. Medium-sized bells, 3×3 in., thick flesh, good foliage cover. 3 ft. tall, mosaic resistant plants. #46140 Pkt \$2.50; #46140B (3 g) \$6.50

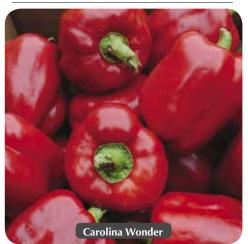
SWEET CHOCOLATE (Choco) **OG S 🜞** 86 days. (green > chocolate brown) Mediumsized, shiny, chocolatecherrycolored bells,



 $2\frac{1}{2} \times 4\frac{1}{2}$ in., 3-lobed. Unusual dark maroon interior fruit color. Extremely productive, continuous fruiting, very disease resistant. Stake tall plants for best production. #46103 Pkt \$2.75; #46103B (3 g) \$7.50

Nematode-Resistant **Sweet Peppers**

The first nematode-resistant bell peppers were intro-duced by SESE. They were developed by Drs. Fery, Duke, and Thies at the USDA, Charleston, SC. Many gardeners in the South have found it difficult or impossible to grow sweet bell peppers because of southern root-knot nematodes. Previously they had to sterilize their soil or find alternative growing sites. Nematode-resistant varieties now make it easy for organic growers and home gardeners to grow bell peppers.



Sweet Non-Bell Peppers

Sweet peppers don't have to be bell-shaped. Nonbells are often earlier, more productive, and more vigorous than bell peppers.

CORNO DI TORO OG S 80 days. (green > red) "Horn of the Bull" thick bull's horn type, extremely productive, plants will produce so much fruit that the plants can use a good staking! Great flavor, beautiful vigorous plants. Good pepper for frying and cooking. #46131 Pkt \$2.75

GAMBA S #62 days.

(green > red) Excels as a

Very thick, meaty flesh

favorite for sweet, stir-

fried peppers. Flattened

bells, 3-31/2 in. in diam-

eter and 11/2-2 in. deep

#46116 Pkt \$2.50

holds up well and sweet-





CAROLINA WONDER OG S #75 days. (green > red) [Introduced by SESE 1999.] The best nematode-resistant bell for home gardeners. Foliage, fruits, and yields are very similar to California Wonder. This variety is a potentially valuable line for developing other nematode-resistant bell peppers. It is also less prone to developing fungus in the seed cavity. The premium-grade, 3- and 4-lobed, fruits weigh $\frac{1}{4}-\frac{1}{3}$ lb and measure 3 × 4 in. Sweet flavor even when green. #46123 Pkt \$2.95; #46123B (3 g) \$7.50

CHARLESTON BELLE Unavailable for 2019.



TRUHART-NR OG S 🌞 75 days. (green > crimson red) [2009, Richard Fery & Judy Theis, ARS/USDĂ. Introduced 2017 by SESE.] A classic Southern pimento pepper, now with newly added nematode resistance. Very flavorful heart-shaped fruits (2 × 3 in.), thick flesh. Use fresh, roasted, peeled, or canned. Especially well suited for salads, Spanish omelets, or eating out of hand. Productive plants are tall and sturdy, with good foliage cover. #46142 Pkt \$2.75; #46142B (3 g) \$7.50



Jimmy Nardello's Italian **OG S 🌞** 🕿 75 days. (green > crimson red) Best sweet variety for drying. This treasure was in our seed bank for 15 years before we grew it in our pepper trials; we wish we'd offered it sooner! One of the more productive, disease-resistant, and most widely adapted heirloom sweet peppers we have grown. Tapered banana-shaped fruits are multidimensionally sweet and intensely flavored. Excellent for drying, frying, freezing, relishes, or salads. Thin-walled fruits are 34 in. to 11/4 in. at the shoulder and 5-8 in. long. 3 ft. plants. #46122 Pkt \$2.75; #46122B (3 g) \$7.50

MARCONI OG 🌞 🕿 80 days. (green > red) Fabulous yields with this 7 in. horn shaped Italian heirloom. Great for frying, drying, or using fresh in salads. Very sweet whether green or red, stands up well to the heat. #46110 Pkt \$2.50

MELROSE **OG S** \clubsuit **(**green > red) [Heirloom Italian frying pepper discovered in Melrose Park, IL.] Productive plants full of 2 × 4 in. peppers that turn brilliant red early. Very sweet flavor, rich and full-bodied. Excellent for salads, roasting, and stir-frying. #46133 Pkt \$2.75; #46133B (3 g) \$7.50

SUPER SHEPHERD OG S 🌞 66 days. (green > red-brown > red) This Italian sweet pepper is one of our most productive and versatile varieties. Early yields of high quality, defect-free fruits. Thick, juicy flesh good fresh, fried or pickled. 3-4 lobed fruits average 2 × 4 in. long. Tall, vigorous plants. **#46119**

Super Shepherd

Pkt \$2.75; #46119B (3 g) \$7.50 Seed grown and stewarded by Living Energy Farm in Louisa, VA.

SWEET BANANA OG

S 🌞 (Long Sweet

Hungarian) 70 days.

(pale green > yellow >

orange > crimson red) [1941, AAS winner.]

Heavy yields of attrac-

tive, banana-shaped

peppers, $6 \times 1\frac{1}{2}$ in.

stage, but sweetest

when red. Great for

colorful salads, frying,

Eaten at any ripeness



and freezing. 42 in. plants. Excellent choice for Mid-Atlantic region. #46111 Pkt \$2.75; #46111B (3 g) \$7.50



Marconi

Spice Peppers Aji Dulce 🛛 🗲 🛎 🕿

(C. chinense) 111 days. (green > orange-red > red) [Venezuelan heirloom. Seed source from Donna Hudson in TN.]

Has the same shape, size, color and aroma as Habanero, but is sweet, spicy, and delicious, with only a trace of heat. Highly aromatic fruits; their flavor is unusual and complex, with overtones of black pepper and coriander, and undertones of other spicy flavors. An excellent choice for sautéed vegetables, rice and bean dishes, paprika, or herbal vinegars. The thin-walled pendant fruits are 1 × 2 in., tapering at both the stem and blossom end. Plants have good foliage cover and bear at 18 in. high. Seedlings grow slowly at first, but grow rapidly later in the season to 48 in. or more. **#46601** Pkt (0.20 g) \$2.75; #46601B (3 g) \$7.50



Dulce

HUNGARIAN PAPRIKA OG S 🔀 70 days. (green > red) Our seedstock originally came from Hungary, where the paprika pepper has been developed to its finest quality. This strain has excellent color and



sweet, spicy flavor. 3 ft. plants produce an abundance of 11/2 \times 4¹/₂ in. peppers. Fruit shows some susceptibility to sunscald and blossom-end rot, but is otherwise an excellent vari-

ety. The fruits keep well. The sweet, very dry flesh is ideal for drying. Grind dried fruits for a superb paprika seasoning. #46117 Pkt \$2.95; #46117B (3 g) \$7.50

TRINIDAD PERFUME S 🌞 🖾 (C. chinense) 105 days. (green > yellow) A spice pepper with lots of sweet flavor and a trace of heat. 42 in. tall, bushy plants with light green foliage. $1 \times 1^{\frac{1}{2}}$ in. bright yellow peppers. #46138 Pkt (0.20 g) \$2.50

ZAVORY S 🌞 🕿 (C. chinenese) 109 days. Similar in many respects to Aji Dulce, but less wrinkled and slightly smaller. The bright scarlet fruits have a simpler, sweeter flavor. A seed swap favorite. **#46602 Pkt (0.20 g)** \$2.50

Hot Peppers

Aji Chinchi Amarillo S 🌞 🛣 (C. baccatum) 52 days. (green > golden orange-yellow) [Introduced by SESE 2018. | Fruity, flavorful, with medium-high heat. A heavy yielder and a favorite in our 2016 pepper taste test. Aji Amarillo peppers are a key ingredient in Peruvian cuisine. This rare "Chinchi" strain bears smaller peppers, about $3 \times \frac{1}{2}$

in., much earlier in the season than the standard Aji Amarillo. Thanks to Chris Watson for providing our seedstock. #46526 Pkt \$2.50

ANAHEIM CHILE **OG** 77

days. (green > deep red) A versatile mild pepper used fresh, canned, fried, or dried. 6–8 in. pendant fruits are borne abundantly on tall, productive, vigorous plants.



Anaheim

#46501 Pkt \$2.50; #46501B (3 g) \$5.50

Ancho Poblano 🛛 🏶 🕿 79 days. (green > red) Mexican cuisine favorite. Called poblanos when stuffed as a green pepper, and anchos when dried as a red pepper. Chunky fruits, 1¹/2–4 in. long × 11/2-21/4 in. wide. Variable, mild heat when green; mild to medium heat when red. #46524 Pkt \$2.75

Ancho Poblano

New! Brazilian Starfish OG S 🌞 (C. baccatum) 82 days. Ribbed, spaceship-shaped fruits, 1¹/₂-2 in. wide by half as tall, with mild heat and great fruity flavor on 31/2 ft plants. #46528 Pkt (0.2 g) \$2.75

Aji Chinchi Amarillo

CAYENNE, LONG RED OG ➡ Z 72 days. (green > red) [*Pre-1827.*] A choice, fiery, red-hot seasoning pepper. Use fresh or dried, especially in salsa or chili. $\frac{1}{2} \times 3-5$ in. fruits. 42 in. plants. #46504 Pkt \$2.50; #46504B (3 g) \$5.50

Снімачо **ОG S 🌞** 🕿 52 davs. (green > red) [New Mexico *heirloom drying pepper famous*

for its mild heat and great flavor.] Widely adapted, thin-walled fruits dry well on plants even in wet conditions. Pleasant, fruity flavor. Mild heat when green, medium heat when ripe. Pointed, angular fruits, 1 in. wide × 3 in. long. One of our earliest peppers. Excellent production. #46525 Pkt \$2.75

CHINESE FIVE COLOR OG S

📑 🖾 70–90 days. (purple > creamy yellow > yellow > orange > red) Lovely ornamental hot pepper with a stunning palette of bright fruit colors all present at the same time. Foliage is green with purple veins and purple blush on some leaves. 48 in. tall plants bear upright conical fruits $\frac{34}{4} \times 1\frac{1}{2}$ in.

An arresting ornamental with hot fiery fruits. #46517 Pkt (0.20 g) \$2.75

Czechoslovakian Black OG S 🌞 🕿 58 days. (green > black > red) [Czech heirloom.] Highly ornamental. Pendant fruits $(1 \times 2^{\frac{1}{2}} \text{ in.})$ are bluntly conical and are medium-hot when red. 3 ft. plants, upright branches. Showy: red fruit at the base, purple black fruit at the top contrasts with purple green leaves and whitestreaked lavender flowers. Widely adapted and very flavorful. #46505 Pkt \$2.75



g) \$7.50











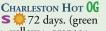




Nematode-Resistant Hot Peppers

More great nematode-resistant peppers – see text box on p. 41 for info on nematode-resistance!

Carolina Cayenne **OG S** 70 days. (green > red) [1986, Clemson U. & USDA.] 2-3 times more hot than regular Cayennes! Heavy yields of 1×5 in. fruits, larger than most Cayenne peppers. Excellent nematode resistance. 3 ft. plants. **#46521** Pkt \$2.95; #46521B (3



> yellow > orange > red) [1993, Charleston/ USDA.] Almost as hot as Habaneros! Flavorful 1/2 × 5 in. fruits; a favorite for hot sauce in the Carolinas. Colorful fruits and the unusual yellow leaves make this

an interesting ornamental. Very good nematode resistance. 30-36 in. plants. #46522 Pkt \$2.95; #46522B (3 g) \$7.50

COMBAHEE RED HABA-

NERO **OG S 🌞** (**PA-559**) (*C*. chinense) 95 days. (green > red) [2008, Richard Fery and Judy Theis, ARS/USDA. Introduced by SESE 2015.] Red-fruited habanero bred for root-knot nematode resistance. Clocking in at 256,433 Scoville heat units,



Charleston Hot

Carolina Cayenne

this is probably our most potent hot pepper! 1 in. wide x 1³/₄ in. long fruits. #46523 Pkt (0.20 g) \$2.95; #46523B (3 g) \$7.50

Fish Pepper OG S 🌞 🕿 55 days. (green-white > greenyellow > red) [African-American heirloom from MD.] White and green mottled leaves. Most of the 2 in. long fruits have variegated colors before ripening to red. Beautiful edible landscape



plant. Great heat tolerance. Very hot, used traditionally in shellfish and fish cookery. Also good for drying. #46518 Pkt \$2.75; #46518B (3 g) \$6.50

Habanero 🛛 🖉 🐫

(C. chinense) 95 days. (green > orange-red) [Cultivated in the Yucatan, Trinidad, and West Indies.] A very aromatic, flavorful, very hot pepper used in Caribbean curries and jerk sauces. 11/4



 $\times 2$ in. thinwalled fruits. Slow germinating. Requires a long warm growing season; plants eventually reach 3-4 ft. #46506 Pkt (0.20 g) \$2.75





HUNGARIAN WAX **OG** (Hot Banana) 60 days. (pale green > yellow > crimson red) Long, banana-shaped, medium-hot, spicy peppers, $1\frac{1}{2} \times 6-7$ in. A very reliable and productive variety adapted to the cool North as well as the Deep South. Use fresh, canned, or pickled. #46507 Pkt \$2.75

JALAPEÑO OG

72 days. (green > red) The classic salsa chile. Hot $1\frac{1}{2} \times 2\frac{1}{2}$ in. thick-walled peppers usually harvested green, but



can be left to mature to red, or removed from the plants to redden indoors. (A chipotle is a smoked red jalapeño.) A teaspoon of jalapeño vinegar is excellent seasoning for bean soups. Jalapeños filled with cream cheese and fried are a Southern specialty. #46508 Pkt \$2.50; #46508B (3 g) \$5.50

Jasmyn Rissie OG S 🌞

(C. baccatum) 62 days. (pale green > red) A delightful little pepper with lots of sweetness, intense, fruity pepper flavor, and mild heat. The heat seems to us to be even more concentrated in the ribs



and seeds than with other hot pepper varieties. Oblong to oblate, lantern-shaped fruits, about $1\frac{1}{4} \times 1\frac{1}{2}$ in., on 4-ft. plants. The most loved pepper in our 2016 pepper taste test. Similar to Peppadew. Collected in Hartbeespoort, South Africa. #46527 Pkt \$2.75

JOE'S ROUND Unavailable for 2019.

LOMBOK OG S 🌞 🕿 90 days. (green >

orange > red) [Heirloom from a food market in Yogyakarta, Indonesia.] An excellent hot



drying pepper with great taste and rich color. Fruits measure 1 in. at the shoulder and taper to 5–6 in. long. The lower third of the fruit is without heat and may be eaten like a sweet pepper. The best of our dried hot pepper trials. 42 in. plants. #46515 Pkt \$2.75; #46515B (3 g) \$6.50

NUMEX BIG JIM OG S # 80 days. (green > red) [1975, New Mex-ico State U.] Large, mild, Anaheim-type peppers up to 12 in. long, on 48 in. plants. Great for stuffing. Listed by the Guinness Book of World Records as the largest



hot pepper! Good yields even under hot dry conditions. Ripe fruits hold well on the plants. #46520 Pkt \$2.95; #46520B (3 g) \$7.50



Orozco S 🌞 70 days. (green > bright orange) [Of Ē. European origin, developed by John Adams.] Bright orange carrot-shaped peppers cluster in bunches on the plants. 5 in. long and 1½ in. wide at the shoulders. Mildly hot fruit are are also sweet and flavorful. 3 ft. plants. #46513 Pkt \$2.50

ROYAL BLACK Unavailable for 2019.

Radishes Raphanus sativus

Culture: Sow seed in spring as soon as the soil can be worked. Successive sowings can be made through May, and again in late summer. Hot, dry weather hastens bolting and causes the roots to become strong-flavored and woody. Sow seeds 34 in. apart, 1/2 in. deep in rows 8-12 in. apart and thin to 11/2 in. apart. Maintain adequate soil moisture. Harvest: Harvest salad-type radishes when small, when roots are about the same diameter as a quarter. Storage: Store in plastic bags or containers in the refrigerator. Seed Savers: Isolate a minimum of 1/8

1/2 mile. Packet: 7 g (about 625 seeds), sows 35 ft. CHERRY BELLE OG 24 days. [1949, AAS winner.] Round roots, bright red skin, and firm white flesh. Somewhat less susceptible to developing pithiness compared to other varieties. Our sweetest spring radish. #28103 Pkt \$2.50; #28103E (28 g) \$5.50

Easter Egg **OG** 💭 24 days. Colorful mix of purple, red, and white round radishes. Longer harvesting period thanks to the variety of types. #28951 Pkt \$2.75; #28951E (28 g) \$6.25

RED HEAD Unavailable for 2019.

SPARKLER WHITE TIP 0G 🌞 24 days. Bicolored globes, bright scarlet on the upper portion, and white on the lower third. Medium tops and sweet, white flesh. #28108 Pkt \$2.50

White Icicle OG 🌞 🕿 Sparkler White Tip (Lady Finger) 29 days. [Pre-1865.] Mild-flavored, white, carrot-shaped roots up to 4–5 in. long. Best harvested small, but remains milder than other varieties when harvested large. Stands heat well. One of our favorites. Gardeners growing this for the first time are often pleasantly surprised by this good variety. #28106 Pkt

\$2.50; #28106E (28 g) \$5.50





\$2.75; #46512B (3 g) \$7.50 Potatoes pg. 82; Sweet Potatoes pg. 83.

hot whether green or red. Dries

easily. #46512 Pkt (0.20 g)

SERRANO TAMPIQUEÑO

0G S 🌞 75 days.

(green > orange >

red-orange) Attrac-

tive 4 ft. plants with

pendant, thin-walled

fruit (½ × 2¼ in.).

ideal for chili, salsa,

hot pepper vinegar,

and pickling. Very

Flavorful pepper,

Winter Storage Radishes

Culture: Sow 5-10 weeks before first fall frost. Thin to wider spacing (4–6 in. apart) than regular radishes. Harvest before temperatures drop below 20°F. Trimmed roots can store 2-3 months in the refrigerator or root cellar. These radishes are daylength-sensitive and should not be sown in spring. Packet: 4 g (about 350 seeds), sows 20 ft.

Black Spanish Round OG 🌞 🕿 53 days [Pre-1824.] Round roots grows 3-4 in. or larger in diameter. Firm, white flesh and thin, nearly-black skin. Very hardy, an excellent winter keeper. Flesh is crisp and pungent. **#28102** Black Spanish Pkt \$2.50

DAIKON, MIYASHIGE WHITE **0G** ∰ (*Raphanus sativus* var. longipinnatu) 65 days. [Originating from Asia, daikon (pronounced "dye-con") is the Japanese word for radish.] Juicy and flavorful, can be used fresh in salads, cooked in vegetable dishes, pickled, used in kimchi, or grated and mixed with ginger and soy sauce to make a dip. Usually harvested when 12 in. long and 2–3 in. in diameter, though it will grow much larger! #28201 Pkt \$2.95

MISATO ROSE OG S 💭

60 days. Our favorite fall radish. Green and white skin, rose and white flesh. Beautiful when sliced or grated for salads. Round roots up to 5 in. Very forgiving crop – unlike many radishes, this one will still bulb



properly even if crowded or thinned late. #28109 Pkt \$2.95; #28109E (28g) \$7.50

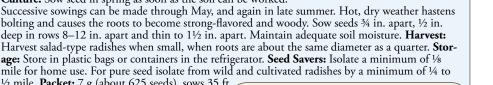


Round



43 🜞 Especially Well Suited to the Southeast 🛛 🕿 Heirloom 🛛 Seed from Small Farms 🛛 OG USDA Certified Organic Peppers, Radishes

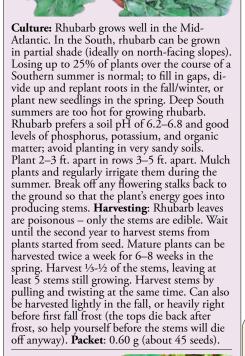
White Icicle



Serrano

Tampiqueño





VICTORIA ≈ [1837, English variety named for Queen Victoria; popular variety still widely grown commercially.] 30–36 in. red-green stems, select plants for the largest and thickest stems. #34101 Pkt \$3.25





SANDWICH ISLAND MAMMOTH $0G \$ \cong 2 120 days. [Pre-1900.] Easy-to-grow roots, 1–1½ in. wide by 8 in. long. Sow in spring, seeds 1 in. apart, in rows 12–18 in. apart, thinning to 3–4 in. apart. Roots have an oyster-like flavor (some say scallop-like or artichoke-like). Best harvested after frost, roots keep well in ground. Use stewed, baked, or in a cream sauce. #63101 Pkt (3 g, ~185 seeds) \$3.25

Squash, Zucchini, & Pumpkins Cucurbita spp.

Culture: Culture of squash and pumpkins is similar to that of cantaloupe and cucumber, which are also members of the squash family. Squash and pumpkins require warm days and warm nights to mature properly. Sow seeds 1/2 to 1 in. deep. Bush varieties should be spaced 18-30 in. apart in rows 4 ft. apart, or 6–8 seeds per hill, in hills 4 ft. apart. Vining varieties are planted in rows or hills 6–8 ft. apart. Keep soil moisture high by mulching. Seed Watering Notes: See Cucumbers section. Transplanting Notes: See Cucumbers section. Fruit Set: Flowers may not set fruit in exceptionally hot weather. Plant out winter squash early enough so that fruit will already be forming when high heat arrives. Harvesting Summer Squash: Harvest crooknecks and zucchini when 6–8 in. long. Zucchinis will grow large enough to become "attack zucchinis" if you don't keep them harvested. Yellow squash are the easiest to find when harvesting! Harvesting Winter Squash: Winter squash is ready for harvest when the rind loses its shiny luster, becomes duller, can no longer be dented by a fingernail, and when stems have dried. Harvest by cutting stems 1 in. above the fruit (leave stems on, squash will store better). Do not allow fruits to become frosted. Store at 45-60°F and maintain good air circulation. Culinary: All squash seeds can be eaten. Diseases: Squash is affected by downy and powdery mildew, and bacterial wilt. (See Cucumbers section.) To prevent blossom-end rot, maintain an even supply of moisture. Insect Pests: See Cucumber section for notes on cucumber beetles. For vine borers, mix charcoal into soil just before planting to reduce their numbers. For small varieties another strategy is to pinch growing tip(s) when vines are 1-2 ft. long. This creates multiple vines, increasing odds of escaping borer damage. Use pyrethrum or sabadilla to control cucumber beetles and squash bugs. Destroy eggs of squash bug by hand, or deposit eggs in a jar of soapy water. To trap squash bugs, place boards around base of plants. Squash bugs will hide under the boards at night and can be collected in the morning. Vine borers can be cut out of stems by making a cut along the length of the stem and removing larvae of the borers. Some additional protection from borers may be obtained by applying rotenone around the base of the plant. Keeping plants under row cover until flowering extends plant survival. For non-resistant varieties of squash a succession of plantings may be required. Use resistant varieties, like Tromboncino, where possible, or substitute edible gourds. Seed Savers: There are 4 species of pumpkins and squash. Species is listed in parentheses beside the name of each variety. Crossing occurs easily within a species and rarely between species. Isolate varieties of the same species by a minimum of 1/8 mile if you save seed for home use. Pure seed requires hand pollination or a minimum isolation of 1/4 to 1 mile, depending on planting size. Summer Squash Packet: 3-4 g (about 25-59 seeds, average 35 seeds) Winter Squash Packet: 2–6 g (about 22–47 seeds, average 31 seeds).

Squash Species Guide (Summer Squash, Zucchini, Winter Squash & Pumpkins) Cucurbita pepo Most zucchini and summer squash are of this species. Winter squash variet-

squash are of this species. Winter squash varieties do not store well and are best eaten within a few months of harvest, but also need less time curing to sweeten up. Best planted in monthly successions throughout the summer due to vine borer susceptibility. If you have trouble growing these squash, try luffa gourds or Tromboncino summer squash as a substitute for zucchini.

C. maxima Often quite large-growing, this species generally keeps well in storage, from a few months to a year or more, depending on the variety. Fine-textured flesh and very good flavor. May be tender and sensitive to wilt, as well as vine borers and other insect pests. These are a good choice where nights are cool. *C. moschata* Excellent keepers, with flavorful, sweet flesh that is often fragrant. Well-suited

for pies and cakes, though they are often just baked or boiled. Good resistance to vine borers and cucumber beetles once the plants are beyond the seedling stage. During the growing season, these plants need night temperatures above 60°F to grow well.

C. mixta (*C. argyrosperma*) A traditional Southern crop, though their popularity has diminished. The somewhat coarse flesh is typically not as sweet as *maximas* and *moschatas*, though it is well-suited to savory dishes or may be sweetened. Many are grown for the large, flavorful seeds, perfect for roasting. Like *moschatas*, they have good resistance to vine borers and cucumber beetles. Excellent drought tolerance.

Summer Squash & Zucchini

BENNING'S GREEN TINT OG ⇒ Z days. [~1914.] One of the most beautiful and hardy varieties of Patty Pan squash. Saucer-shaped fruits with scalloped edges and pale-green, fine-textured flesh of good flavor. Harvest when small. #53115 Pkt (4 g, ~42 seeds) \$2.50

CocczELLE ITALIAN OG → ≈ (C. pepo) 59 days. [Pre-1934.] This Italian zucchini is long and cylindrical. Young fruits are dark green with light-green stripes and the flesh is greenish-white and firm. Fruits grow

10–12 in. long and become yellow when mature, but best quality when harvested at 6–8 in. long. **#53116 Pkt (3 g, ~33 seeds) \$2.75**

COSTATA ROMANESCA OG COSTATA ROMANESCA OG C. pepo) 62 days. This Italian heirloom zucchini is favored for flavor. Fruits remain tender even at 18 in.; best picked at 12 in. Heavily ribbed fruits are striped with alternating light and dark green shades. Hardy vines grow larger than other summer squash. #53120 Pkt (3 g, ~19 seeds) \$2.75; #53120E (28 g) \$8.50



Cocozelle Italian

Costata Romanesca

44 Rhubarb, Salsify, Squash

EARLY GOLDEN SUMMER Crookneck OG S 🌞 🛣 (Early Yellow Summer Crookneck, Dwarf Summer Crookneck) (C. pepo) 50 days. [Native American variety dating to before European contact. It was commonly grown in Appalachia.] Picked at 5–6 in., the fruit is a bright golden yellow with a curved neck, creamy white flesh, and excellent flavor. #53121 Pkt (3 g, ~52 seeds) \$2.95; #53121E (28 g) \$8.50

EARLY PROLIFIC STRAIGHTNECK OG 🌞 초 (C. pepo) 48 days. [1938, AAS winner.] Straight, lemon-yellow, slightly club-shaped fruits. Harvest small, when 3–7 in. long. Quality of the flesh is excellent.



Plants are very vigorous, hardy, and productive. #53101 Pkt (4 g, ~54 seeds) \$2.50; #53101E (28 g) \$5.50

EARLY WHITE BUSH SCALLOP **OG S S** (White

Patty Pan) (*C. pepo*) 54 days. [*Pre-1722.*] White-fleshed fruits are whitish-green ripening to white. Fruits average 6-7 in. in diameter by 3 in. tall. Very productive. #53103 Pkt (3 g, ~35 seeds) \$2.75; #53103E (28 g) \$8.50

GOLDEN BUSH SCALLOP

OG S 🌞 🛣 (C. pepo) 68 days. Golden-yellow, plump, Patty-Pan fruits on space-saving bush plants. Prolific and hardy, the plants bear continuously over a long season. Downy mildew resistant. Harvest fruits when 4-5 in. across. Use boiled, fried or stir-fried. Matures 2 weeks later than other varieties, but flavor is superior. #53104 Pkt (3 g, ~41 seeds) \$2.75; #53104E (28



g) \$8.50 Seed grown and stewarded by Twin Oaks Seed Farm in Louisa, VA.

LEMON SQUASH OG S S C. pepo) 50 days. Bright yellow fruits look like lemons! Very prolific. Delicious when eaten young while the skin is tender and the seeds are small. Tasty and attractive for farmers markets as well as the home



garden. Some fruit shape variability. Good pest resistance: plants are more likely to outlast the bugs and sprawl a bit. **#53124 Pkt (3 g) \$2.95**



Tromboncino **0G S 🌞** 🕿 (C. moschata) 80 days. [Italian heirloom.] Light green fruits grow long, curving to a bell at one end. Vining plants can be grown on a trellis. Harvest at 8–10 in. long when the flavor is fine and sweet. Vigorous



moschata plants can bear all season in areas where insects are a problem for other summer squash. If left to mature, skin will ripen to tan like a butternut squash. Grower Richard Moyer notes that the male squash blossoms sell well at market! #53607 Pkt (3 g, ~29 seeds) \$2.75

Yellow Crookneck OG ♣ ≥ (C. pepo) 55 days. [-1700.] Yellow, bulbshaped fruit with a narrow, curved neck. Skin becomes bumpy and warted on large fruits. Best eaten when fruits are no longer than 6 in. A consistently popular variety. **#53102 Pkt (4 g,** ~56 seeds) \$2.50

ZAPALLO DEL TRONCO **OG**

S 53 days. (*C. maxima*) Rare Argentinian maximatype summer squash. Light green fruits have a uniquely sweet, rich texture. Harvest smooth, round fruits at 2-4 in. Squash bugs and squash vine borers

make it hard to mature maxima winter squash in the Southeast, but with this one, we at least get to enjoy some great summer squash for a while! Pkt (5 g, ~29 seeds) \$3.25

ZUCCHINI, BLACK BEAUTY OG (C.

pepo) 48 days. [1957, AAS winner.] Fruits are dark green, turning black green as fruit matures. Plants are semi-spineless, semi-upright, with an open growth habit. Flesh is white with small seed cavity. Freezes well. Note: Our observations over several seasons indicate that Black Beauty attracts squash bugs much more than other varieties and we have used it successfully as a trap plant for handpicking squash bugs. #53105 Pkt (4 g, ~29 seeds) \$2.75

ZUCCHINI, DARK GREEN OG 🌞 (C. pepo) 50 days. Mottled dark green fruits with pale green flesh. A vigorous, productive bush variety with early concentrated yields. #53106 Pkt (4 g, ~28 seeds) \$2.75

ZUCCHINI, GREY 🛛 S 🌞 (Tender

Grey) (C. pepo) 42 days. Small to medium zucchini, often still tender at 18 in., with gray-green mottled skin. Small-seeded with extended keeping quality. Long harvest period. Excellent flavor and texture; we've added "Tender Grey" to the name to try to get this deserving variety some more attention! #53107 Pkt (3 g, ~25 seeds) \$2.95











Winter Squash

Growing instructions & species information on previous page.

Bush Varieties



BURPEE'S BUTTERBUSH OG S 🔅 (C. moschata) 86 days. [1978.] Earlier and smaller than Waltham Butternut, but even better tasting. A space-saving variety for small gardens: most plants are bush-like, some have short runners. 1¹/₂ lb. fruits with sweet orange flesh, average 3-6 fruits per plant. (Not downy mildew resistant in summer 2013.) #53615 Pkt (3 g, -43 seeds) \$2.95; #53615E (28 g) \$9.25

Table Queen Bush **OG** (Acorn) (C. pepo) 80 days. [1948.] Space-saving version of Table Queen (see description on next page). Averages 5 fruits per plant. #53108 Pkt (3 g, ~24 seeds) \$2.50



Vining Varieties

BUTTERCUP, BURGESS OG (C. maxima) 100 days.
[1932.] This Burgess strain of Buttercup is noted for its thick, fine-grained flesh and excellent flavor. Fruits are flattened turbans, approximately $4\frac{1}{2} \times 6\frac{1}{2}$ in., weighing 4–5 lbs. Rinds are dark green with slight ribs and a "button" on the blossom end. #53301 Pkt (5 g, ~29 seeds) \$2.50





CANDY ROASTER MELON **OG S** $\mathbb{Z}(C. maxima)$ 112 days. [Appalachian heirloom from western NC.] 6–30 lb. squash with great flavor. Pinkish-orange fruits with some blue-green color. Ribbed pumpkin shape, big vines. #53302 Pkt (5 g, ~18 seeds) \$3.25

Winter Squash Continues on the Next Page.

🌞 Especially Well Suited to the Southeast 🛛 🕿 Heirloom 🛛 🕏 Seed from Small Farms 🛛 🛈 USDA Certified Organic

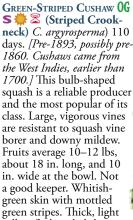
Grey Zucchini

Winter Squash Continued



DELICATA, CANDYSTICK DESSERT **OG S** (*C. pepo*) 98 days. [Bred by Carol Deppe and Nate France.] Larger and sweeter than other delicatas, 2-3 lb. fruits have orange-tan skin with green stripes. Very sweet, dry flesh, bred to be a squash that you can serve up for dessert, with flavor "reminiscent of Medjool dates!" #53123 Pkt (2 g, ~31 seeds) \$2.75; #53123E (28 g) \$9.50

DELICATA ZEPPELIN **OG S** (*C. pepo*) 97 days. [*Frank Morton*] One of the sweetest winter squashes we offer. Cream-colored skin has dark-green stripes. 2 lb oblong fruits, 10 × 3 in. Semi-bush vines yield up to 8 fruits per plant. #53117 Pkt (2 g, ~32 seeds) \$2.75





open source seed initiative

Green-Striped Cushaw

yellow flesh is slightly sweet and mediumcoarse. Fine for pies and baking. The mashed squash is great when fried with savory herbs. #53501 Pkt (4 g, ~18 seeds) \$2.95



ILLINOIS OG S 🌞 🕿 (White Crookneck Pumpkin) (C. argyosperma) 95 days. [Grown in s. Illinois since at least the 1830s, including by friends of Abraham Lincoln's parents. | Long white 15-30 lb. fruits with large curved necks and some green mottled striping. Light yellow flesh has mild, pleasant flavor. Earlier and better keeping than Green-Striped Cushaw. #53503 Pkt (4 g, ~16 seeds) \$2.95

Mrs. Amerson's S 🐫 🔀 (C. moschata) 110 days. 5-9 lb. squash with great flavor, bakes quickly despite its size. Tan skin, orange flesh. Two different shapes make up the variety: one slightly bell-shaped, the other



flatter. Favorite of our 2009 heirloom moschata trials. #53612 Pkt (3 g, ~28 seeds) \$2.75

NORTH GEORGIA CANDY ROASTER OG $S \boxtimes (C. maxima)$ 100 days. [Early 1900s Appalachian Thanksgiving feasts included "candy roaster pie" instead of pumpkin pie.] Řáre heirloom variety. Banana-shaped



Pennsylvania Dutch

Crookneck

fruits are up to 18 in. long and 6 in. wide, pink with blue tips. Smooth, delicious orange flesh. #53304 Pkt (5 g, ~17 seeds) \$3.25

PENNSYLVANIA **DUTCH CROOKNECK** S 🌞 초 (C. moschata) 102 days. [PA Heirloom. / Similar to butternuts, but with much longer necks. Tan skin and deep orange flesh with great flavor. Seeds are in the bulb

end of the squash, so slicing up the long neck is fast and easy work in the kitchen. Vigorous vines, impressive yields even in 2013's cold, wet summer. Good keepers. **#53618 Pkt** (3 g, ~35 seeds) \$2.75

SOUTH ANNA BUTTERNUT OG S (C. moschata) 100 days. A new Downy Mildew resistant butternut developed by Edmund Frost of Common Wealth Seed Growers. Stemming from a 2011 cross between Seminole Pumpkin and Waltham Butternut, the final stages of selection are ongoing.



Expect excellent DM resistance, productivity and keeping quality, as well as rich sweet flavor and 95% butternut-shaped fruits. Immature fruits are mostly dark green. These ones take longer to turn fully tan, but when they do you can be sure that they are ripe. South Anna will avoid the crop failure that can occur in years when DM comes early, and provide higher, better quality yields in years with average DM pressure. Can be planted late, allowing for later harvests that will keep better into the winter and spring. #53621 Pkt (3 g, -23 seeds) \$3.50; #53621D (14 g) \$11.50

SPAGHETTI SQUASH 🛛 🔀 (Vegetable Spaghetti) (C. pepo) 90 days. 9 in. pale yellow fruits. Keeps well. Pale flesh breaks up into spaghetti-like strands when cooked – boil fruit for 20-30 minutes and remove flesh with a fork. Tasty flesh may be used like spaghetti, topped with your favorite sauce - a good low-carb option! #53110 Pkt (4 g, ~25 Spaghetti Squash seeds) \$2.50

SWEET MEAT SQUASH Z (C.

maxima) This excellent 12-15 lb squash has a slate green skin and orange flesh. Flesh has a dry texture and a buttery flavor that sweetens with age. Excellent keeper. Thanks to its tender dry texture, can substitute for summer squash in cooked foods. #53606 Pkt (4 g, ~13 seeds) \$2.50

TABLE QUEEN VINE OG 🔀

(Acorn) (C. pepo) 85 days. [1913. The precursor of this variety was grown by the Arikara Indian tribe in the early 1800s.] Acorn squash, averages 6 in. long. Dark-green rind, fine textured, golden-yellow flesh. Sweetens in storage. Excellent for baking. #53109 Pkt (3 g, ~34 seeds) Table Queen Vine \$2.50

TAHITIAN MELON OG S

🕻 (C. moschata) 120 days. Long-necked butternut type has one of the highest sugar contents of any winter squash. The sweet, fine-textured neck flesh is excellent for pies and soups. Large (10-20 lb) fruits keep well for 9+ months. #53613 Pkt (3 g, ~27 seeds) \$2.75

THELMA SANDERS' SWEET

Ротато OG 🕿 (С. реро) 96 days. [Family heirloom from Thelma Sanders in Adair County, MD. Introduced 1988 by SESE.] Acorn-type squash up to 6 in. long. Ripens from cream to light gold. Lighter squash color helps prevent sunscald in Deep South. Thick, golden

yellow flesh with fine texture and superb flavor. Sweetens in storage. Great vigor in VABF's 2009 squash trials. #53111 (2 g, ~34 seeds) \$2.75

UPPER GROUND SWEET POтато S 🌞 🕿 (C. moschata) 100 days. [Appalachian heirloom from KY. Introduced 1988 by SESE.] Vigorous vines, hardy and productive even in drought. Resembles a butternut squash without the neck. The yellow-orange to orange flesh is sweet and similar to butternut. #53614 Pkt (3 g) \$2.75

Upper Ground Sweet Potato



Tahitian Melon

Sweet Meat

Thelma Sanders' **Sweet Potato**

www.SouthernExposure.com





WALTHAM BUTTERNUT OG 🌞 (C. moschata) 95 days. [1970, AAS winner.] Very vigorous and dependable. Fruits average 8-9 in. long, 3-4 lbs, and have buff-colored skin, and finetextured, sweet, orange flesh. Can be harvested when small and used like a summer squash. Excellent resistance to vine borers. Stores very well. #53601 Pkt (4 g, ~49 seeds) \$2.50; #53601E (28 g) \$5.50

WALTHAM BUTTERNUT, Virginia Select S 🖡 (C. moschata) 95 days.

[Introduced 2008 by SESE.] Virginia grower Barbara Kling started this selection back in the '70s, and her son Carl continues the work, selecting for shorter necks and for squash that can keep up to a year! One of the best



performers in Twin Oaks Seeds' 2012 butternut trials. #53608 Pkt (3 g, ~34 seeds) \$3.25

Pumpkins

Pumpkin is the word used to describe a pumpkinshaped squash, but there are many colors, sizes, and types of pumpkins in the different squash species. Generally, Hallowe'en pumpkins for carv-ing are pepo types. The best-flavored pumpkins are maxima and moschata types. The most bug-resistant pumpkins are moschata types.

BIG MAX **OG** (C. maxima)

115 days. Extra large pumpkin often grown for county fairs and Hallowe'en. Weighs up to 100 lbs. or more when well grown. Bright



orange fruits with orange flesh good for pies. #53303 Pkt (6 g, ~22 seeds) \$2.75

Connecticut Field OG (Big Tom, Yankee Cow Pumpkin) (C. pepo) 110 days. [Pre-1700 cultivar of Native American origin.] Still the most popular variety of large Hallowe'en pumpkins. 15–20 lbs fruits are bright orange, slightly ribbed, and vary in shape and size. Good for canning, baking, and pies. #53113 Pkt (4 g, ~20 seeds) \$2.75

OLD-FASHIONED TENNESSEE VINING Pumpkin S 🌞 🖾 (C. moschata) [Introduced 1988 by SESE.] Oval-shaped pumpkin, 12–15 lbs., skin ripens to tan. Deep orange flesh. Thinner shell makes this the easiest moschata-type pumpkin to carve for Hallowe'en. Vines are resistant to

squash vine borer. #53603 Pkt (3 g, ~28 seeds) \$2.75

Rouge Vif d'Étampes 🛛 🖉 (Cinderella) (C. maxima) 120 days. [First available in the US in 1883. "Rouge Vif" is French for "deep red. "] Beautiful, rich orange pumpkin with deep ribs and a flattened shape. Good for pies. 12-35 lb fruits. #53305 Pkt (5 g, ~18 seeds) \$2.75

Seminole 🛛 S 🌞 🕿

(C. moschata) 95 days. [Cultivated in Florida by the Native Americans in the 1500s.] Keeps up to 1 year at room temperature! Small fruits are sweeter than Butternut and have firm, deeporange flesh. Large vines bear bellshaped buff-colored

fruits averaging 6 in. in diameter. Resistant to vine borers. Excellent downy mildew resistance; a good choice for hot, humid, disease-prone areas. Give it ample water and room to roam. Also good as a summer squash when picked young. #53604 Pkt (3 g, ~28 seeds) \$2.75; #53604E (28 g) \$9.25 Seed grown and stewarded by Living Energy Farm in Louisa, VA.

Seminole, Larger Fruited S 🌞 🕿 (C. moschata) 105 days. [Strain selected by NC grower



Dan Zipple. Introduced 2014 by SESE.] An interesting strain of Seminole, with fruits up to 8–9 lbs., along with Seminole's usual vigor. Alabama grower Tim Fields measured a vine up to 36 ft. long! #53610 Pkt (3 g, ~31 seeds) \$2.75





Pumpkin

Rouge Vif

d'Étampes

Ark of Taste

Seminole

Small Sugar OG 🔀 (New England Pie, Sugar Pumpkin) (C. pepo) 100 days. [Pre-1860.] A traditional favorite of home gardeners. Sweet dry flesh is high in solids and low in stringiness. Round orange fruits weigh



6-8 lbs. #53114 Pkt (4 g, ~34 seeds) \$2.50; #53114E (28 g) \$5.50

Tan Cheese **OG S** 🖡 🛣 (C. mos-

chata) 110 days. [Pre-1824, one of the oldest varieties cultivated. | Cheese pumpkins are hardy, productive, and superior to most field pumpkins. Smooth, tan skin, moder-



ately deep ribs, and deep orange sweet flesh. Good keepers. 8 in. high fruits weigh 6-12 lbs. #53605 Pkt (4 g, ~23 seeds) \$2.75; #53605E (28 g) \$8.50

Thai Kang Kob 🛛 🗲 💭 🕿 (C. moschata) 110 days. [Thai variety.] High yields of flattened, ribbed 6–8 lb. fruits turning from green to tan in storage. Thin, edible skins make peeling unnecessary. Appealing flavor, stronger than most moschata squash. Excellent Downy mildew resistance. One of the best in our 2013 moschata trials. #53617 Pkt (3 g, ~29 seeds) \$2.75



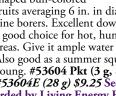
BACK! S 🌞 🖾 THAI

RAI KAW TOK (C. moschata) 120 days. [Thai variety.] Very high yields of attractive flattened, ribbed, speckled 5-12 lb fruits. Green and tan at maturity, turning increasingly tan in storage. Thin, edible skins make peeling unnecessary. Seeds are especially easy to scoop out and to separate for roasting. Rich, slightly spicy taste well-suited to Asian cooking. Very good Downy Mildew resistance, great yields in our 2013 moschata squash

trials. #53619 Pkt (~21 seeds) \$2.75

WINTER LUXURY PIE **OG S** 🔀 (*C. pepo*) 100 days. [1893, improved and popularized by Gill Brothers Seeds by 1917.] Deep orange and slightly netted with sweet, tender flesh. Fruits are 61/2 in. tall, 8 in. wide, average 6¹/₂ lbs. In *The Compleat Squash*, author Amy Goldman says, "Winter Luxury Pie makes the smoothest and most velvety pumpkin pie I've ever had." #53152 Pkt (4 g, ~34 seeds) \$2.95





Tomatoes

Sweet Potatoes pg. 83.

Solanum lycopersicum Culture: Sow seeds 6 weeks before the last frost date for your area. Plant seed 1/4 in. deep in shallow flats and maintain soil temperature in the range of 75–85°F for good germination. When the seedlings have produced several leaves, transplant to 3 in. pots to promote root growth. After transplanting, keep seedlings at a lower temperature at night, 50–60°F, to promote earlier flowering in some varieties. Day temperatures should rise to 75–85°F to promote rapid growth. Expose plants to light and air currents to harden the plants and to encourage stockiness. Water sparingly, but do not allow the growth to be checked. Fertilize with complete, soluble fertilizer or fish emulsion if leaves become yellow and/or purple. Keep phosphorous levels high. Too much nitrogen will delay fruiting. For transplanting to the garden, average soil temperature should be 60–65°F. Spacing: Staked plants should be spaced 24 in. apart. Caged plants should be spaced 36-48 in. apart in rows 60 in. apart. Diseases: Plant disease-resistant varieties for a sustained harvest. Leaf blight diseases such as early blight and alternaria begin to appear about mid-July, and plants are more susceptible once fruit production begins. To reduce disease problems, use resistant or tolerant varieties and rotate tomatoes to different parts of the garden each year, using a 4-year rotation. Mulching and caging/staking plants helps prevent disease. Fusarium wilt (race 1), a disease caused by a soil fungus, is common in the Mid-Atlantic region during mid- to late-season. Fusarium races 1 and 2 are present in southern regions. Where Fusarium wilt is present a 6-year rotation or use of resistant varieties is recommended. Do not plant eggplants, peppers, or potatoes in wilt-infested soil during the rotation period. Avoid planting tomatoes near walnut trees to avoid "walnut wilt." Early blight and anthracnose are common in the Mid-Atlantic region, and are favored by hot, humid conditions. Late blight is more common in inland regions at higher elevations, especially during the spring and fall. Blossom-end rot is prevented by ensuring an adequate level of soil calcium and steady moisture. Pests: Tomatoes planted in healthy soil will generally have few severe pest problems. Foliage: Many heirlooms are "potatoleafed" – their leaves look like those of potatoes. Some folks think these larger leaves improve fruit flavor and aide pest control. Flavor: Type of fertilizer used has an effect on flavor. Highly flavored tomatoes are sometimes subject to "off flavors" under certain growing conditions. Avoid placing freshly harvested tomatoes in the refrigerator because refrigeration will destroy much of the delicate flavor. Tomatoes are best stored at a temperature above 50°F. Seed Savers: Isolate varieties of *L. lycopersicon* by a minimum of 35 ft. for home use and 75–150 ft. for pure seed. Isolate varieties of *L. pimpinellifolium* from all other tomatoes by a minimum of 150 ft. Maturation: Days to maturity are the number of days after transplanting. Packet: Seed size varies considerably. 0.16 g unless otherwise stated (about 40-83 seeds, depending

on variety, average 64 seeds) sows 100 ft. Seeds/ oz: 7,000–15,000 seeds/oz (average 11,500) sows $1\frac{1}{2}-2\frac{1}{2}$ acres of transplants at 24 in. spacing in rows 60 in. apart.

Geranium Kiss

Dwarf Tomatoes

The Dwarf Tomato Project is an international group of tomato enthusiasts devoted to breeding short tomato varieties with great flavor.

Dwarf Emerald Giant S 🐥 [2011, Dwarf Tomato Project.] 77 days. Tasty, bright green fruits, 6-16 oz; some fruits have a pink blushing on the bottom when ripe. (If unsure, feel the fruits - ripe ones will be soft!) One of the tastiest and most disease-resistant dwarfs in Craig LeHoullier's 2015 trials. 2-4 ft. tall plants, rugose foliage. #49256 Pkt \$2.95

GERANIUM KISS OG S 🌞 68 days. (Dwarf Indeterminate) [Alan Kapuler] Massive clusters of 1/2-4 oz. red fruits with pointed blossom ends borne high on stocky 1¹/₂-4 ft. plants. A great container variety. Late Blight resistant. #49259 Pkt (0.08 g) \$2.95



ROSELLA PURPLE 0G S ⇔65 days. (Dwarf determinate) [Dwarf Tomato *Project.]* Similar to Cherokee Purple for great flavor and 6–10 oz. deep-purple fruits, but on shorter plants suitable for container gardening. Productive 36 in. plants need some staking to keep upright and to prevent

sunscald. Fruits have few seeds. Rugose foliage. #49250 Pkt \$3.25

Culture of Greenhouse Tomatoes: Greenhouse-grown tomatoes require pollination for good fruit set. Vibrate the blossom clusters with an electric toothbrush or tap them with a pencil. Daytime temperature should not exceed 90°F, and night temperatures should drop below 70°F, but not lower than 55°F. Optimum night temperature is 59-68°F. At 40°F some tomato varieties show tissue damage not readily visible. Greenhouse Pests: Greenhouse tomato pests such as whiteflies, mealybugs, aphids, and spider mites can be controlled with insecticidal soap up to one day before harvest. Whiteflies, winged-aphids, and leafminers are attracted to and trapped by sticky-yellow traps.

Determinate vs. Indeterminate: Determinate varieties are short-vined plants that may not need staking, though yields will be much better if plants are staked. Indeterminate varieties are long-vined plants that bear fruit continuously. These varieties should be caged or staked. Some varieties are semi-determinate. **Mulching:** Too much mulch on the soil in the spring may delay growth by preventing soil temperature from rising enough to support active root growth. In June, apply a deep mulch around plants to conserve moisture, prevent disease, and increase yield. Yield: Too much nitrogen after transplanting will delay flowering. High levels of phosphorus are necessary to produce good yields. Pruning and staking increase early fruiting at the expense of yield. Indeterminate varieties may be pruned if necessary. Pruning of determinate varieties should be kept to a minimum. For largest yields, cages 21/2 ft. wide by 5 ft. tall are recommended for indeterminate varieties.

Red Tomatoes

ABRAHAM LINCOLN OG S 🌞 🕿 (Early Abraham Lincoln) 70 days. (ab, asc) (Indeterminate) [The original Abraham Lincoln was a late-maturing variety introduced about 1923. This early season selection (circa 1975) ripens 10–12 days earlier, has



smaller fruit, and does not have the bronzegreen foliage characteristic of the original.] Flavor is slightly acidic and distinctive. Plants have excellent resistance to foliage disease - highly recommended where foliage disease is a problem. Medium-sized, red fruits are very uniform. #49101 Pkt \$2.75; #49101A (1.5 g) \$6.50

Atkinson **OG S 🌞** 70 days. (Indeterminate) (fw1,rkn,gls) [Introduced 1966 for hot humid areas by Alabama's Auburn U.] An excellent producer of 6–10 oz flattened globular red fruit on vigorous plants with heavy foliage. Medium fruits keep well, meaty with good color and flavor. #49212 Pkt \$2.75; #49212A (1.5 g) \$6.50



COSTOLUTO FIORENтіло **ОG S 🌞** 🕿 83 days (Indeterminate) /Italian heirloom from the Tuscany region.] One of the most heat tolerant and productive varieties in a 2011 U. of Georgia trial. Also did well in Virginia in 2013's cool, wet summer. 8-12 oz. red, deeply lobed



Atkinson

fruits. Richly flavorful for sauces and stuffers, or just slice them up! #49251 Pkt \$2.75

COSTOLUTO GENOVESE OG

🔀 80 days. (Determinate) [Italian heirloom.] 5 oz., bright-red, flattened globes

with heavily scalloped edges. Fruit shape varies from nearly smooth to heavily scalloped



and convoluted - very pretty! Branches emerge from the stem at a wide angle, a characteristic that helps support the plant when grown without support. Fruits are soft in texture, juicy, and slightly tart. #49108 Pkt \$2.75

DELICIOUS S 77 days. (cr) (Indeterminate) [Introduced by Burpee after years of selection from Beefsteak.] Large, meaty beefsteak-type tomatoes, most 1–2 lbs; a 7³/₄ lb fruit held the world's record for largest tomato for almost 30 years! Relatively free of defects for a large-fruited tomato. Red, meaty flesh with small seed cavities. **#49110 Pkt \$2.75**

> DRUZBA OG S ♣ ☎ (ab, ber, cf, cr) 75 days. (Indeterminate) [Bulgarian heirloom. Introduced 1995 by SESE from seed from Dr. Carolyn Male.] Excellent juicy sweet flavor. 5 oz fruits are borne 2–4 to a cluster. Although the fruit walls are tender, they are resistant to fruit diseases, cracking, and blossom end rot. Produces a large percentage of uniform-ripening, high-quality blemish-free fruit. Well liked at farmers markets. #49157 Pkt \$2.75;

#49157A (1.5 g) \$6.50

Druzba

GERMAN RED STRAWBERRY S 80 days. (Indeterminate) [Introduced 1995 by SESE, seed from Dr. Carolyn Male.] This German heirloom resembles a strawberry in color and shape, though much larger! Meaty with scant seed and



juice, the flavor spectrum runs broad and deep. A favorite at our 2007 festival. Fruits average 10 oz, $3 \times 3\frac{1}{2}$ in. Shoulders are smooth to slightly ribbed and slower to ripen. Plants have light foliage cover. **#49158 Pkt \$2.75**

HAZELFIELD FARM RED S 80 days. (Indeterminate) [A volunteer in a farmer's field that was performing better than any of the planted tomatoes!] Medium-height plants produce 8 oz flattened red tomatoes. Highly productive, a favorite at the Lexington, KY, Farmers Market. **#49213 Pkt \$2.50**

HOMESTEAD 24 0G S (asc, cf, cr, fw1) 80 days. (Semi-determinate) [1966.] Developed for hot humid coastal areas, especially Florida. Often grown in the Mid-Atlantic region, where it reliably sets fruit at high temperatures. Red 8 oz slightly flattened globes. #49121 Pkt \$2.75

ab

asc

an

ber

bw

cf clm



ILLINI STAR **OG S** 65 days. (Indeterminate) [Developed by IL grower Merlyn Niedens.] Produces heavy crops of 6–8 oz fruits on 4–6 ft. plants. Deep red tomatoes have excellent flavor and good disease- and split-resistance. Strongly



recommended to market growers and home gardeners alike. **#49199 Pkt \$2.75**

Joe Thieneman Australian Heart S 🌞

80 days. (Indeterminate)[Kentucky family heirloom, from seed brought back by a friend returning from WW2 service in Australia.] Moderate production of large, meaty, heartshaped red tomatoes. 12-oz fruits have few seeds and great taste. Produces until frost. #49226 Pkt \$2.50

LARGE RED **OG** S **S** 85 days. (Indeterminate) [Original seed from the USDA. Historical notes by Hank and Linda Trent. Prior to the Civil War, one of the most commonly

grown and best



documented tomato varieties in the country. Listed in the 1843 Shaker seed catalog at New Lebanon, NY, the Large Red tomato is vital for ante-bellum garden recreations and historic farms. Fearing Burr in his 1865 book stated, "From the time of the introduction of the tomato to its general use in this country, the Large Red was almost the only kind cultivated, or even commonly known."] 2×4 in. deep-red fruits are heavily ribbed or lobed and flattened in shape – quite distinct from modern tomatoes. Sweet with a bit of tang and some flavor intricacy.

Vines provide medium foliage cover. We introduced Large Red for historical reasons, but we were surprised and pleased during our 1996 trials to find that it became a favorite of a local restaurant's chef. **#49183 Pkt \$2.75**



Key to Tomato Disease Tolerance: Known disease tolerance or resistance is indicated in parentheses after the variety name. V, F, and N at the end of a variety name indicate known resistance to Verticillium wilt, Fusarium wilt, and nematodes, respectively. Many factors affect disease resistance and results may vary from region to region and from season to season. Disease resistant varieties will not be totally disease-free but they will resist or tolerate disease better than other varieties. Note that many heirloom tomatoes have not been extensively tested for disease tolerance either in the laboratory, or in extensive field trials – absence of disease resistance information in the variety description does not imply lack of resistance.

Alternaria (early blight)	cr	Crack resistance	nhr	Nail head rust
Alternaria stem canker	CS	Crease stem	rkn	Root knot nematode
Anthracnose	fw1	Fusarium wilt, race 1	sls	Septoria leaf spot
Blossom end rot	fw2	Fusarium wilt, race 2	st	Stemphylium spot
Bacteria wilt	gw	Gray wall	sun	Sun scald
Cat facing	gls	Gray leaf spot	tmv	Tobacco mosaic virus
Cladosporium leaf mold	lb	Late blight	vw	Verticillium wilt

Favorite disease-resistant varieties: Atkinson, Druzba, Eva Purple Ball, Geranium Kiss, Homestead 24, Marglobe VF, Matt's Wild Cherry, Mortgage Lifter VFN, Mountaineer Delight, Mountaineer Pride, Neptune, Ozark Pink VF, Roma VF Virginia Select, Tropic VFN, West Virginia 63



GLACIER OG S 58 days. (Determinate) Unlike other extra-early varieties, produces both an early crop and continues to bear the entire season. Great flavor, especially for an early variety. 1½ in. bright red fruits. We have had yields of 3/4



bushel per plant. Very cold-tolerant and may survive a light frost. Potato leaf foliage. **#49196 Pkt \$2.75; #49196A** (1.5 g) **\$6.50**

SOPHIE'S CHOICE OG S 🕿 55 days. (De-

terminate) [Heirloom from Edmonton] Canada, sent to SESE from Dr. Male. Introduced 1997.] Highly productive, flavorful and large-fruited. Ripens ahead of all other extraearly varieties in our trials. Unlike other extra-early varieties, the fruits are flavorful and large, averaging 6-8 oz and weighing up to 12 oz. Large fruits with orange-red exteriors and deep-red interiors on small plants, only 18-24 in. tall. Quality is best in cooler climates - does not handle heat or drought well. #49188 Pkt \$2.75; #49188A (1.5 g) \$5.50

ZARNITSA OG S \cong 60 days. (Short indeterminate) [Seeds collected from a region 60 km south of Moscow, introduced by SESE 1999. Zarnitsa translates as "summer lightning."] An early-bearing, productive, red-fruited variety with fruit averaging 2 × 2½ in. Short vines are suited for staking or ground culture. Well-balanced flavor – sweet, buttery, and smooth. Resists cracking. **#49193 Pkt \$2.75**

MARGLOBE VF 0G S ♣ ∑ (Marglobe Improved) (vw, fw1, asc, clm, nhr, st, sun) 70 days. (Determinate) [A select strain of the old favorite Marglobe originally released by the USDA in 1925.] Marglobe has been in demand for several generations while many other varieties have come and gone. This selection has been improved for disease-resistance.

Red, medium-sized, 5–8 oz. fruits with firm walls and good flavor. Stocky, vigorous plants with excellent disease tolerance. Vines provide good protection from sunscald. #49126 Pkt \$2.75; #49126A (1.5g) \$5.75

MARTIAN GIANT SLICER **OG S \$** 95 days.

(Semi-determinate) [Developed for organic market gardeners by Seeds of Change, further selected by Bill Reynolds of Eel River Produce.] Juicy red beefsteak with firm texture and a good acid/sweet balance. It has done well in our trials – even in the very wet 2004 season it produced loads of big, beautiful tomatoes. #49202 Pkt \$2.75

Red Tomatoes continue on the next page

Red Tomatoes Continued

MORTGAGE LIFTER VFN 0G S 🌞 (Red Mortgage Lifter) 83 days. (ab, asc, vw, fw1, rkn) (Indeterminate) An improved version of Radiator Charlie's Mortgage Lifter (see Pink & Pink-Red



Tomatoes) with increased disease-resistance and more uniform fruit, ripening to red rather than pink-red. Large, 10-14 oz. fruits, not as large as the original Mortgage Lifter, but the plants are much more productive. It still deserves the Mortgage Lifter reputation and is one of our most productive tomatoes. 6-7 ft. tall plants bear until frost. #49129 Pkt \$2.95



Mountain Princess OG S 🕿 68 days. (Determinate) [Heirloom from the Monongahela National Forest Region of WV.] Very early and productive. 4–6 oz red fruit is round, smooth, and solid, a good choice for early season farmers markets. Best in cool, short-season areas. #49228 Pkt \$2.75; #49228A (1.5g) \$5.75

In 1963, West Virginia U. professor Mannon Gallegly released West Virginia 63 tomato (see lower right), one of the first tomatoes bred for Late Blight resistance. 50 years later, Gallegly and colleague Mahfuz Rahman used WV 63 tomato to breed two new, larger tomatoes, with disease resistance now including Septoria leaf spot!

New! MOUNTAINEER DELIGHT OG S 🌞 (West Virginia '17B) (fw, lb, sls, vw) 77 days. (Indeterminate) [WVU 2017.] Medium red slicers, good flavor, great disease resistance. Firmer skins make this a good variety for market growers to



Mountaineer Delight

ship and to bring to market. Fruits hold well on the vine. #49264 Pkt \$2.95

New! MOUNTAINEER Pride OG S 🌞 (West Virginia '17A) (fw, lb, sls, vw) 80 days. (Indeterminate) [WVU 2017.] Larger red beefsteak, sweeter flavor than the original West Virginia



63 tomato. Great disease resistance, fruits hold well on the vine. #49262 Pkt \$2.95



Mule Team OG S 🌞 🕿 86 days. (Indeterminate) [Introduced 1997 by SESE. Seed sent by Dr. Carolyn Male.] Aptly named workhorse of a tomato which delivers well and long into the season. Uniform, red, 8-12 oz. fruits are slightly ovate with slightly dented shoulders and are defect-free. Sweet with a slight tang

#49187 Pkt \$2.75; #49187A (I.5 g) \$5.50

Neptune **OG S 🌞** (vw, fw1, fw2, bw, gls) 67 days. (Determinate) [Developed and released to SESÊ in 1999 by Dr. J. W. Scott at the U. of Florida.] An early- to mid-season fresh market



tomato specially bred for heat tolerance and resistance to bacteria wilt which is prevalent in the Southeast and Florida. Recommended for gardeners and market growers in hot, humid, rainy growing regions where it is difficult to grow tomatoes. 4-oz. red fruits in clusters of 2–4 on short vines. #49195 Pkt \$2.75

Old Virginia 🛛 S 🌞 🕿

80 days. (Indeterminate) [Heirloom from the Giltner family. | Old-time sweet/tart tomato taste. 4–7 oz., dark red, smooth, round fruits with few seeds. The 5-6 ft. tall plants produce even in long hot summers. Good yields and flavor make this a keeper. #49215 Pkt \$2.75; #49215A (1.5 g) \$6.50

OTV BRANDYWINE

0G S 🌞 72 days. (Indeterminate) [Named and released by Dr. Carolyn Male and Craig LeHoul*lier, editors of* Off the Vine (OTV), heirloom tomato newsletter. Bred from an accidental cross of Yellow Brandywine and an unknown red



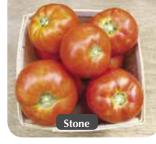
beefsteak. | One of the best Brandywine strains. Smooth, creamy, almost buttery texture, and harmonious sweet flavor. Fruits are a rich red color with an orange undertone. Produces a large percentage of usable attractive tomatoes, relatively free of defects, averaging 12 oz. Excellent potato leaf foliage cover. 6–8 ft. tall plants. The most productive and heat-tolerant Brandywine. A must for every tomato lover. #49189 Pkt \$2.95; #49189A (1.5 g) \$7.50



PERON OG S 🌞 (Peron Sprayless) 70 days. (Indeterminate) [Introduced 1951 by Gleckler's from Argentina. Called "Sprayless" because the

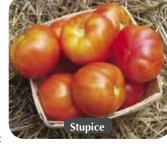
vigorous vines needed no treatment. / Tasty red tomatoes on disease-resistant vines. Produces a high percentage of uniform, defectfree 3-4 in. fruits. Flavor is sweet with some intricacy. Reliable, flavorful, and a garden mainstay. #49184 Pkt \$2.75; #49184A (1.5 g) \$6.50





recommended for canning. Fruits are somewhat acidic, and not as sweet as other varieties, but Stone is a dependable, very drought-hardy tomato that will last the full season. This old variety has shown better resistance to foliage disease and fruit rot than some of the other old varieties we have grown. #49140 Pkt \$2.50; #49140A (1.5 g) \$5.50

STUPICE OG S 62 days. (Indeterminate) [Czech.] Pronounced stoo-PEECH. Early bearing, produc-tive, disease-tolerant, and flavorful. It usually produces until frost. Great flavor depth with excellent sweet-tart balance. Juicy 3-4

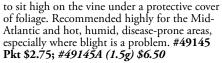


oz. fruits borne in clusters of 6-8. Fruit ripens to red (with an orange undertone) with some tendency for green shoulders later in the season. A great salad tomato. #49141 Pkt \$2.75; #49141A (1.5 g) \$5.50

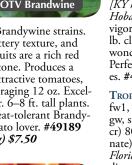
Super Choice OG S 🌞 🕿 85 days. (Indeterminate) [KY heirloom from Rev. Hobart Pearson. / Tall (7 ft.) vigorous vines yield 1-11/2 lb. classic beefsteaks with wonderful flavor and texture. Perfect for tomato sandwiches. #49216 Pkt \$2.75

TROPIC VFN OG S 🌞 (vw,

fw1, asc, rkn, ab, clm, gw, st, tmv1, tmv4, sun, cr) 80 days. (Indeterminate) [Developed by U. of Florida.] This exceptionally disease-resistant variety has excellent versatility as a garden, greenhouse, or market tomato. Sweet-flavored fruit averages 8-9 oz, is thick-walled, and tends



West Virginia 63 (Centennial) **0G S** 🐥 70 days. (fw1, lb, sun, vw) (Indeterminate) [1963, WVU AES. / 6-8 oz red fruits, meaty flesh, small cores, few blemishes. Excellent, mildly sweet flavor. Good disease resistance includes resistance to late blight race T-0 and some resistance to T-1. #49239 Pkt \$2.75; #49239A (1.5 g) \$6.50



West Virginia 63





Tropic VFN



Winter Storage Tomatoes

Though the quality of winter storage varieties doesn't match that of fresh garden tomatoes, flavor and texture is superior to most winter supermarket tomatoes. Best planted 1-2 months after the main tomato crop, timing the harvest for fall. Avoid watering plants in the 2 weeks before frost. Harvest unblemished tomatoes before frost. Dark green fruits won't ripen off the vines. Keep out of direct sunlight, ripen at room temperature or lower. Store so fruits aren't touching, and check for ripeness and rotting weekly. Used apple boxes with their fruit separators are convenient for this. Some folks wrap individual fruits in newspaper. One longtime grower says he prevents rot by regularly turning over the fruits so they ripen more evenly.

GARDEN PEACH See Yellow & Gold Tomatoes.

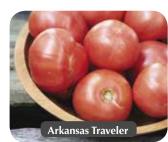
LONG KEEPER OG 78 days. (Semi-determinate) Fruits become ripe 6-12 weeks after harvest. Some customers report storing it for 4-6 months. Fruits are mature for harvest when they have a pale pink blush. 4-7 oz fruits ripen in storage to a satiny, red-orange color. #49125 Pkt \$2.75

Reverend Morrow's Long KEEPER S 🌞 🕿 83 days. (Determinate) [Louisiana

heirloom.] Lots of 6-10 oz reddishorange fruit with reddish-pink flesh. This tomato's excellent storage quality earned it a place in our garden. Stake plants for the highest quality fruit. #49231 Pkt \$2.50

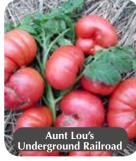
Pink & Pink-Red Tomatoes

ARKANSAS TRAVELER **OG S ⇔ ≥** 89 days. (Indeterminate) [Pre-1900 heirloom grown throughout the South from NW Arkansas to



North Carolina.] An old Southern heirloom esteemed for its ability to produce flavorful tomatoes under conditions of drought and high heat where many other varieties fail. Good disease resistance. Médium-size, pink fruits with wonderful flavor. Keeps well. **#49102 Pkt** \$2.75; #49102A (1.5 g) \$6.50

AUNT LOU'S UNDERGROUND RAILROAD 🔀 S 82 days. (Indeterminate) [Heirloom carried through the Underground Railroad by an unnamed black man as he crossed to freedom in Ripley, OH, from KŶ. Seeds were passed on to Aunt Lou,



who passed them on to her great nephew, and eventually on to heirloom tomato enthusiast Gary Millwood.] Dark pink, tangy and juicy, 4-12 oz fruits. Sparse foliage. #49240 Pkt \$2.50

BARNES MOUNTAIN Pink S 🜞 90 days. (Tall indeterminate.) [Kentucky heirloom. | Good resistance to leaf disease. Produces lots of 10-20 oz. reddishpink fruit. Some fruit color variability. Good producer: bears until



Barnes Mountain Pink

frost. One of our favorites. #49221 Pkt \$2.50

BRANDYWINE (SUDDUTH STRAIN) **ÒG S** ⊠74 days. (Indeterminate) /TN heirloom popularized by Ben Quisenberry.] Prized for distinctively flavorful fruit, highly rated in our taste trials. 'Brandywine' has achieved a national reputation as the flavor standard for tomatoes. Dark reddish-pink, 10-12 oz. fruits. Potato leaf vines are not as disease-resistant as other Brandywine



strains, but we were impressed by how well it held up in 2013's cold, wet summer. The flavor of the tomatoes is of gourmet quality. Use for slices, salads, and sandwiches. #49104 Pkt \$2.95; #49104A (1.5 g) \$7.50

Brimmer S 🌞 🕿 (Pink Brimmer) 82 days. (Indeterminate) [This old Virginia variety won the Grand Prize for size and quality at the Jamestown Exposition held in 1907 at Sewell's Point, VA./ Large, meaty, pink-purple fruits can reach 21/2 lbs. or more when well



grown. Often preferred by gardeners wanting large, "low acid" pink tomatoes that have a high sugar content. Thick skin – a useful quality in a canning tomato, and one that offers some protection against fruit worm. #49105 Pkt \$2.50

CRNKOVIC YUGOSLAVIAN 🌞 🕿 85 days. (Indeterminate) [From the Vojvodina region of Serbia, brought to the U.S. by Yasha Crnkovic, a colleague of Dr Carolyn Male.] Prolific, diseaseresistant heirloom produces large, 1-lb. pink beefsteaks. Meaty and juicy, with robust, complex flavor. #49222 Pkt \$2.25





days. (Indeterminate) [from New Zealand.] One of the best heirlooms for market gardeners. Medium-tall indeterminate produces lots of delicious, low-acid, 8-oz. red globes. #49223 Pkt \$2.50

GERMAN JOHNSON OG S

🛚 🔀 76 days. (Indeterminate) [Popular heirloom] from VA and NC, a favorite *at farmers markets.]* One of the four parent lines of "Mortgage Lifter" tomato, very similar in flavor. Pinkred fruits average 34 to 1½ lbs. with generally smooth tops. Good for slicing or canning. Fruits have few seeds. Plants are very pro-



German Johnson

ductive and fairly resistant to disease. Potatoleaf strain. #49115 Pkt \$2.95; #49115A (1.5 g) \$6.25; #49115C (7 g) \$18.25

GRANDFATHER ASHLOCK S 🛿 🔀 85 days. (Indeterminate) [Family heirloom of Carl Ashlock. Three Ashlock brothers served George Washington during the Revolutionary War; one brother settled in Kentucky. Carl Ashlock, now of Franklin, NC, is descended from that patriot. / Potato leaf foliage, fair yield of 10–16 oz pink beefsteaks, very good flavor. #49234 Pkt \$2.50

GRANNY CANTRELL'S GERMAN RED/PINK OG S

≥69–80 days. (Indeterminate) [KY heirloom. The only tomato grown by Lettie Cantrell of West *Liberty since the '40s.* | Large beefsteak, 1+ lb, tasty fruit on large, vigorous plants. Lettie died in January 2006, at the age of 96. Her tomato was voted best flavor at the 2010 Monticello Tomato Tasting. #49208 Pkt \$2.75; #49208A (1.5 g) \$6.25

Hege German Pink S 🐫 🔀 80 days. (Indeterminate) [Popular heirloom sold at farmers markets by Welcome, NC, grower Hege, known as L. E.]





Granny Cantrell's

Large pink beefsteaks with terrific flavor. 12–24 oz. #49241 Pkt \$2.50

Pink & Pink-Red **Tomatoes** Continue on the Next Page

Pink & Pink-Red Tomatoes Continued

ILLINOIS BEAUTY S 80 days. (Indeterminate) [Selected by grower Merlyn Niedens from an accidental cross.] 6-ft. plants are heavy producers of 4–6-oz. blemish-free fruit. Even in the hot, dry summer of 2007 the plants continued



to set good quantities of tasty fruit. A tomato tasting favorite. **#49214 Pkt \$2.50**

JUNE PINK Unavailable for 2019.

KENTUCKY PINK STAMPER S 90 days. (Indeterminate) [Family heirloom of James A. Stamper of Dwarf, KY. Seedstock via Gary Millwood and Maria Stenger.] Nice yields of 10–18 oz. pink beefsteak with very good flavor and few seeds. Potato leaf foliage. #49242 Pkt \$2.95

LADY LUCY S * 285 days. (Indeterminate) [Nantahala Forest area in n. GA.] Potato-leaf variety produces lots of red/ pink 12 oz fruit. Sweet, complex flavor with an acid zing, good for slicing and canning. #49227 Pkt \$2.50



Oxheart

MORTGAGE LIFTER VFN - See Red Tomatoes.



OMAR'S LEBANESE S 80 days. (Indeterminate) [Heirloom from farmers in a Lebanese bill town. The best of Dr. Carolyn Male's extensive 1995 heirloom tomato trials.] Huge pink beefsteak tomato: fruits typically weigh 16–24 oz., or even larger when well grown. A good choice for a gardener's boast or county fair entry. Has a multidimensional sweet flavor that seems to

be expressed best in northern areas. In southern areas the quality is more variable. Good foliage disease resistance. #49190 Pkt \$2.50; #49190A (1.5 g) \$5.50

OXHEART OG S ≥88 days. (Indeterminate) [The oxheart shape is the result of a mutation, about 1925. Somewhat similar to meaty ponderosa types, except for the distinctive shape.] Heavy yielding vines produce extra large, pink tomatoes weighing 1–2 lbs. Firm, meaty flesh with few seeds and mild flavor. #49116 Pkt \$2.75



MORTGAGE LIFTER, RADIATOR CHARLIE'S OG S 🌞 🕿 (vw, fw1) 79 days (Indeterminate) [Developed by M.C. Byles in the 1930s and released to SESE in 1985.] A legendary tomato always in demand in the Mid-Atlantic states. The following history is based on portions of our 1985 taped interview with M.C. Byles who developed this tomato in the early 1930s while in Logan, WV. Mr. Byles is affectionately known as "Řadiator Charlie." He earned that nickname from the radiator-repair business he opened at the foot of a steep hill on which trucks would often overheat. Radiator Charlie had no formal education or plant-breeding experience, yet he created this legendary tomato by cross-breeding four of the largest-fruited tomatoes he could find: German Johnson, Beefsteak, an Italian variety, and an English variety. One of the four varieties was planted in the middle of a circle. Then, using a baby's ear syringe, he cross-pollinated the center plant with pollen from the circle of tomatoes. Next year he selected the best seedlings: he planted the best seedling in the center and the rest in a circle around it. The pollination and selection process was repeated six more years until he had a stable variety. After Charlie developed and named this large tasty tomato he sold plants for \$1 each (in the 1940s) and paid off the \$6000 mortgage on his house in 6 years. Each spring, gardeners drove as far as 200 miles to buy Charlie's seedling tomatoes. Fruits of Mortgage Lifter can average 21/2 lbs and may reach 4 lbs when grown well. Plants are very productive and disease-resistant, and continue to bear until frost. These large, slightly flattened, pink-red tomatoes are meaty and flavorful with few seeds. #49128 Pkt \$3.25

> OZARK PINK VF OG S 🜞 (fw1, vw, ber, cr) 65 days. (Indeterminate) [Introduced 1991 by SESE. Developed by the U. of Arkansas.] Adapted for growing on stakes for vine-ripe harvest in home gardens and for farmer's markets. 5 ft. plants bear 7 oz flattened-globe fruits with few defects, and uniformripening shoulders. The pink fruits have excellent eating quality and good shelf life. Unlike many other varieties, flavor is not greatly affected by early harvest in the post-breaker (pale pink) stage. Very productive all season. Recommended for hot, humid, disease-prone areas. #49132 Pkt \$2.75



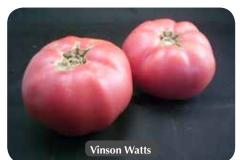
ROSE DE BERNE OG S $\stackrel{>}{\longrightarrow}$ $\stackrel{>}{\sim}$ 86 days. (Indeterminate) [Often called the Brandywine of Europe. This strain was given to The Seed Ambassadors Project by Ulla Grall of Bio-Saatgut in Germany.] Smooth, soft, 6-10 oz. fruits resist cracking. Pleasant, mild, balanced flavor and deep pink color. #49255 Pkt \$2.75;

#49255A (1.5 g) \$5.75

TAPPY'S FINEST ≈ \$77 days. (Indeterminate) [WV family heirloom from before 1948, originally from Italy. Introduced by SESE 1983, named for "Tappy" who selected for regular shape, small cores, few seeds, and fine flavor. The first heirloom tomato SESE



introduced.] Performs best where summers are moderate to cool. Large, pink-red fruits average 14–16 ozs, sometimes up to 2 lbs, and are very meaty. Slightly irregular fruits are somewhat flattened with prominent shoulder indentations. Excellent tomato for processing or for use in salads or sandwiches. Also makes delicious tomato juice. Like all sweet, good-flavored tomatoes, it's not a heavy producer, but has won several flavor trials. **#49142 Pkt \$2.50**



Vinson Watts 🛛 🕻 S 🐔 🔀 85 days. (Indeterminate) /Heirloom originating in Lee County, VA, but perfected by 50 years of selection for flavor, texture and disease resistance by Vinson Watts of Morehead, KY.] The large flattened pink fruit has won many taste tests and is considered by many to be the best tomato they ever tasted - a smoothtextured, finely balanced combination of sweet and acid. #49218 Pkt \$2.75; #49218A (1.5 g) \$6.50

Ozark Pink VF

Purple & Black Tomatoes

BLACK BRANDYwine **OG S** 🔀 85 days. [1920s PA heirloom. Cross between Brandywine and Fejee Improved tomato. William Woys Weaver's grandfather obtained seed from the breeder, Dr. Harold E. Martin.] Indeterminate. Large



dusky rose/purple fruit with rich, sweet flavor and good yields. #49233 Pkt \$2.95

BLACK CHERRY – See Small & Cherry Tomatoes

BLACK PLUM – See Processing/Paste Tomatoes.



BLACK PRINCE OG S 🖾 69 days. (Indeterminate) [A garden jewel from Irkutsk, Siberia.] Deep reddish-brown fruits, grading to dark brown or black on the shoulders. Interior color varies from dark red to a translucent chestnut brown. 7 oz fruits with juicy, tender texture and appealing fruity flavor. #49180 Pkt \$2.75



terminate) [Pre-1890 TN

heirloom, reportedly of Cherokee Indian origin. Introduced 1993 by SESE. Seed courtesy Craig LeHoullier.] Large, smooth fruits (10-12 oz) with slightly ridged shoulders. Ripens to a unique dark, dusky pink/purple. Sometimes called a black tomato, the color carries through to the flesh, especially at the stem end. Good resistance to Septoria leaf spot. A shorter inde-terminate, plants average 5 ft. tall. 'Cherokee Purple' has spread widely since its introduction, with variations developing over time, but our strain is still the original, shorter shape. Seed grown and stewarded by Twin Oaks Seed Farm in Louisa, VA. #49106 Pkt \$2.95; #49106A (1.5g) \$7.25; #49106C (7 g) \$18.25 EVA PURPLE BALL **OG**

S 🜞 🛣 (ab, lb, ber, cr, cf) 78 days. (Indeterminate) [Late 1800s heirloom from the Black Forest region of Germany from Joe Bratka's grandfather. Seed courtesy of Carolyn Male and Čraig LeHoullier. Introduced 1994 by SESE. / Outstanding performer in hot, humid areas. Excellent resistance to diseases, including some resistance to late blight. One of the most blemish-



free tomatoes we have grown, with a soft tender texture. Easy-to-peel, smooth, round, attractive pink-purple fruits weigh 5–7 oz. Fruits are easy to harvest, some dropping from the vine at peak ripeness. A wonderful all-purpose tomato with excellent flavor. #49112 Pkt \$2.75; #49112A (1.5 g) \$6.50

Pkt \$2.50

Eva Purple Ball

Yellow & Gold Tomatoes

Barnes Mountain Orange 🛛 S 🌞 🕿 90

days. (Indeterminate) [KY heirloom.] Large orange fruits, up to 16 oz. Disease-resistant 6–8 ft. tall plants bear until frost. Outstanding flavor, perfect for BĽTs. #49220 Pkt \$2.75

Dad's Sunset S 🌞 75 days. (Indeterminate) Golden orange like the setting sun. Very attractive, round, small-cored fruit with zesty sweet flavor. Fruits are uniform

in shape with very few defects, thick-walled, yet tender. Medium foliage cover, 12-oz fruits measure 2³/₄ × 3¹/₄ in. **#49163 Pkt \$2.50**

DJENA LEE'S GOLDEN GIRL 🛣 S 80 days. (Indeterminate) [Family heirloom of Djena Lee since the early 1920s. Won first prize at the Chicago Fair 10 years in a row! Introduced by SESE 1987. Djena (pronounced "Zshena") was part Indian and grand-



daughter of Minnesota financier Jim Lee. She grew this tomato in Minnesota and on moving to Illinois in 1929 gave plants to Reverend Morrow (then 15 years old) who nurtured this variety and kept it alive.] Beautiful golden-orange fruits, one of the most appetizing golden tomatoes we have grown. 8 oz fruits. Delicious flavor, rich balance of sweetness and tanginess. Favorite at our 2008 festival. #49111 Pkt \$2.75





Ark of Taste

Japanese Black Trifele S 💐 Z 75 days. (Indeterminate) [Russian heirloom.] Unusual pear-shaped 4-6 oz fruits, deep burgundy colored with green shoulders and a rich, complex flavor. Very productive, bearing early through late in the season. Crack-resistant fruits. Potato-leaf foliage. #49247

Paul Robeson 🔀 S OG

74 days. (Indeterminate) [Russian heirloom. Original seed sent to SESE by Marina Danilenko, a Moscow seedswoman. Named after Paul Robeson, performer of "Old Man River" and operatic vo-



Japanese Black

cal artist who was an advocate of equal rights for Blacks. His artistry was appreciated world-wide, especially in the Soviet Union, and hence this tomato bearing his name.] Like other so-called black tomatoes the fruit is more of a dusky dark red with dusky dark green shoulders. 6-oz. fruits, $2 \times 4-5$ in., borne two to a cluster. Excellent flavor. #49161 Pkt \$2.75



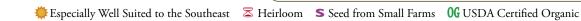
Garden Peach Tomato **OG S** 🌞 73 Days. (Indeterminate) This tomato truly resembles a peach. 2-3 oz fruits have a peach-like fuzz and are yellow, often with a hint of pink blush when fully ripe. Outstanding flavor. A good storage tomato if picked light green right before frost. Highly split-resistant. Vigorous vines bear until frost. **#49201 Pkt \$2.75; #49201A** (1.5 g) \$6.50

GOLDEN PONDEROSA 🗏 S 78 days. (Indeterminate) /WV heirloom, traded by C & O Railroad employees since the early 1900s. The first 'Ponderosa' variety was introduced 1891 by Peter Henderson and



Co.] Somewhat rough, large-cored, yellow-gold fruits weigh over a pound. Not very tolerant of foliage diseases, but a good producer and pretty, with mild-flavored, sub-acid fruits. Our select strain has larger, more uniform fruits. #49117 Pkt \$2.50; #49117A (1.5 g) \$5.50

> Yellow & Gold Tomatoes **Continue on Next Page**



Yellow & Gold Tomatoes Continued

PEG'S ROUND ORANGE S 🛿 🔀 90 days. (Indeterminate) [Family heirloom of Peg Spencer in Cox's Creek, KY.] Disease-resistant plants yield lots of great tasting, sweet, low acid, orange 7 oz tomatoes. #49245 Pkt \$2.50

Persimmon OG S 👙

🔀 88 days. (Indeterminate) [1981.] Beautiful persimmon-colored, rose-orange fruits. 12–16 oz fruits, though early ones can weigh up to 2 lbs. Vigorous vines, well branched, Late Blight tolerant. One of our personal favorites for color and rewarding flavor. #49133 Pkt \$2.75

T. C. JONES S 🖉 80 days. (Indeterminate) [Cumberland County, KY, family heirloom, named by Harry Jones for his grandfather; original seed via Gary Millwood.] 8-12 oz vellow



Persimmon

Peg's Round Orange

fruit with a blushing stripe on the blossom end and great flavor. Flattened fruit; shape and color similar to Yellow Mortgage Lifter, but much more productive. #49232 Pkt \$2.50

YELLOW BELL - See Processing/Paste Tomatoes.

White Tomatoes



WHITE WONDER OG S 🌞 🕿 84 days. (Indeterminate) [Possibly derived from White Apple, pre-1860.] One of the varieties chosen for Alice Waters' famous Chez Panisse restaurant. Medium-sized fruits ripen creamy white color and have a sweet flavor. Productive plants, good foliage cover. We like to serve it as an ingredient in a multicolor tomato marinade (tomatoes, garlic, vinegar, oil, pepper, and herbal seasonings). Fruits are medium-sized. #49149 Pkt \$2.75



Yellow Brandywine 🕿 S 76 days. (Indeterminate) [IN heirloom.] Same great flavor as pink-fruited Brandywine. Large, slightly ribbed beefsteaks are sweet and tangy – our grower prefers it to pink Brandywine! Fruits keep well. Large potato-leaf foliage provides medium fruit cover. #49186 Pkt \$2.50; #49186A (1.5 g) \$6.50

Bicolored Tomatoes

BIG RAINBOW OG S 🌞 🕿 90 days. (ab, asc) (Indeterminate) [Introduced 1990 by SESE.] The most visually spectacular tomato we've grown. As fruits ripen they resemble a rainbow: green on the shoulder, yellow



in the middle, and red on the bottom. Fully ripe fruits are gold on the stem end and red on the blossom end. Early fruits weigh over 2 lbs. with little catfacing or deformities. Very good resistance to foliar disease. Bears until frost. #49103 Pkt \$2.95

CHEROKEE GREEN S 🗭 75 days. (Indeterminate) [Selected from Cherokee Purple tomato by NC grower Craig LeHoullier.] This is one of the best tasting green tomatoes anywhere. 8–12 oz. fruits with green flesh and green-yellow skin with amber to red color on the blossom end. #49249 Pkt \$2.75

GEORGIA STREAK OG S 🎙 🔀 91 days. (Indeterminate) [GA heirloom. Introduced 1990 by SESE. / Bicolored beefsteaks up to 2 lbs, great color and flavor. Yellow and red inside and out; color is mostly yellow with a red blush and red core on the blossom end. Ripens uniformly, keeps well for a beefsteak. 7 ft. tall plants. #49114 Pkt \$2.95

GREEN GRAPE See Small-Fruited Tomatoes, p. 56.



Cherokee Green

Georgia Streak

YELLOW MORTGAGE LIFTER Unavailable for 2019.

Yellow Oxheart 🕿 S 79 days. (Indeterminate) [Possibly first available commercially in 1929 by Livingston Seed Co. though it dates from about 1915 as a family heirloom from Willis, VA. Řeintroduced 1989 by SESE.] Sweet fruits have a small core and a distinctive, rich, full, and exceptionally wellbalanced flavor. Plants not very vigorous, but otherwise



a superb tomato. Thin, lacy foliage. Fruits are bright yellow, meaty, oxheart-shaped and weigh close to a pound. A favorite at our 2008 festival. #49153 Pkt \$2.50

GREEN ZEBRA **OG** (Indeterminate) 86 days. [Developed 1985 by Tom Wagner.] An unusual and exquisite tomato chosen by Alice Waters for the famous California restaurant Chez Panisse. 3-5 oz fruits ripen to yellow-gold with alternating dark-green zebra-like stripes. Emerald flesh with good flavor. Colorful sliced or in salads. Well branched vines provide good foliage cover and have some resistance to septoria leaf spot. #49119 Pkt \$2.75

Old German S 🌞 🕿

(Indeterminate) [Introduced 1985 by SESE. Mennonite family heirloom from Shenandoah Valley, VA./ Large, attractive and tasty tomato. Fruit color is yellow with a red center visible on the surface and throughout the core. Best color of several strains of this heirloom. Not a heavy Old German

Green Zebra

producer, nor does it tolerate drought, but its flavor and color are outstanding. Fruits often weigh over a pound. #49131 Pkt \$2.50; #49131A (1.5 g) \$5.75

STRIPED ROMAN OG S 80 days. (Indeterminate) [Developed by Seed Savers Exchange member John Swenson. / Highly popular variety – orange and red stripes run the length of this long, pointy-ended Roma type. 7–9 oz fruits, thick flesh, great flavor. #49211 Pkt \$2.75

Williams Striped **OG S** 75 days. (Indeterminate) [Family heirloom – seeds saved by an elderly gardener in Glensdale, Kentucky.] Large fruits weigh more than a pound, with beautiful red and vellow stripes inside and out. Another Fall Festival taste test winner from 2005. #49209 Pkt \$2.75



Processing & Paste Tomatoes

Canning varieties have firm, round fruits that are usually canned whole. Drying varieties are small, low-moisture tomatoes well suited to quick drying. Paste tomatoes have thick, dry flesh with few seeds. Sauce tomatoes are more flavorful and have more seeds than paste tomatoes, and because they are juicier they need to be cooked longer to make thick sauce. Drying and paste tomatoes are more susceptible to blossom end rot due to their low moisture content, so during dry spells provide adequate irrrigation and calcium.

Amish Paste OG S 🜞 초 (Indeterminate) One of the largest sauce tomatoes we offer, produces a sauce with a superior flavor. Coreless, topshaped fruits often weigh as much as 12 oz. Tall plants,



Bisignano #2

heavy yields. Despite the name 'Amish Paste,' the juicy fruits are best suited to making sauce. #49197 Pkt \$2.75

BISIGNANO #2 OG S 🌞 초 80 days. (Indeterminate) [Italian heirloom.] Sweet, meaty tomato. Medium fruits, low seeds. Uniquely, fruit shapes vary even on the same plant. Fantastic flavor makes a great sauce. #49206 Pkt \$2.95

BLACK PLUM OG S 🌞 초 70–80 days. (Indeterminate) [Russian heirloom. / Prolific producer of 1 oz elongated deep mahoganybrown fruit. Color develops best in hot dry weather. Rich, complex, full-bodied flavor. Perfect for sauce, drying, or eat-

Black Plum ing out of hand. #49205 Pkt \$2.75; #49205A (1.5 g) \$5.50

HEINZ 1350 VF **0G S 🌞** (vw, fw1, asc, cr) 75 days. (Determinate.) [1963. Developed by the H. J. Heinz Co.] Round 4–6 oz fruits are uniform-ripening,



and have good crack resistance. A productive garden variety with concentrated fruit set, and an excellent processing tomato for canning or cooking. Widely adapted, good for salad use too. #49120 Pkt \$2.75

HUNGARIAN ITALIAN PASTE OG S 🌞 79 days. (Determinate) Highly productive pear-shaped paste tomato with good disease resistance and good holding quality. 3-4 oz. fruits borne in clusters of 4. Makes excellent flavored sauce. #49123 Pkt \$2.75; #49123A (1.5 g) \$5.50

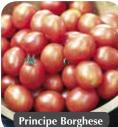




ILLINI GOLD **OG S** #75 days. (Indeterminate) [A chance cross of Dad's Sunset and Bisignano #2, selected by Merlyn and Mary Ann Niedens.] 4-6 oz bright yellow/orange paste-type tomatoes. Attractive in salads, or makes a rich, sweet golden sauce. #49225 Pkt \$2.75

Long Tom 🌞 🕿 85–90 days (Indeterminate) [Family heirloom, sent to Ben Quisenberry by a friend living in PA.] Long, 2 × 5 in. meaty fruits have few seeds. Their sweet flavor and firm texture serves equally well in salads or sauce. Very good yields. #49204 Pkt \$2.50

PRINCIPE BORGHESE 0G 🌞 🕿 78 days. (Determinate) Italian heirloom bred for sun-drying, this low-moisture variety maintains more flavor when dried than do other varieties. Slightly oval, 1 oz fruits. Prized in Italian cooking



when reconstituted in olive oil, they can also be crushed into small flakes to quickly thicken a thin sauce while adding a rich tomato flavor. #49200 Pkt \$2.75

Rома VF 0G 🜞 (vw, fw1, asc) 75 days. (Determinate) Very popular, pear-shaped paste tomato. Widely adapted. Fruit ripens uniformly. Highly productive, good resistance to disease and fruitworm. #49138 Pkt \$2.50



Roma VF, Virginia Select S 🌞 75 days. (Determinate) [Introduced 2009 by SESE.] Neighboring farmer and Growing for Market writer Pam Dawling has been saving this locally adapted strain since 2001, selecting for high, early yields and tolerance to Septoria Leaf Spot. 4-5 oz fruits. #49235 Pkt \$2.50

RUTGERS 250 0G S 🌞 (Semideterminate) 67 days. [2016, in celebration of the 250th anniversary of Rutgers U.] After years of breeding and tasting, Rutgers University



released this new "retro" variety to try to get back to the original "Jersey tomato" qualities of flavor, juiciness, texture, vigor, and all the other good stuff. Red round medium fruits. A tasty tomato bred for home gardeners – the classic Rutgers texture is now considered "too soft" for all the traveling that modern tomatoes do to get to big supermarkets! #49258 Pkt \$2.75; #49258A (1.5 g) \$7.50

SAN MARZANO minate) [Italian heirloom, famous for its use in Neapolitan pizza and other [Italian dishes.] Long Romatype tomatoes, 3-4 oz fruits with pointed



ends. Thick, dry, low acid flesh contains few seeds. Very productive 6 ft. tall plants have good disease resistance. Excellent canning variety. #49248 Pkt \$2.75; #49248A (1.5 g) \$6.50

STRIPED ROMAN – See Bicolored Tomatoes.

SUPER ITALIAN PASTE OG S 🌞 🖾 75 days. (Indeterminate) Meaty, roma-shaped, orange-red, 6-8 oz. fruits. Vigorous, high-yielding plants. These impressively withstood both flooding and drought in 2015. #49254 Pkt \$2.75



YELLOW BELL OG S ⋕ ≥ 60 days. (Indeterminate) [Introduced 1986 by SESE. Family heirloom from TN.] Great yellow sauce tomato for salads or for making lovely tomato paste, juice, preserves, salsa, and yellow catsup! Heavyyielding plants produce 5–12 fruits per cluster. Roma-shaped fruits average $3 \times 1\frac{1}{2}$ in. Survives cool wet conditions better than other sauce tomatoes, bearing heavily until frost. Ripens from green to creamy yellow to yellow. Outstanding flavor, both sweet and rich. #49152 Pkt \$2.75; #49152A (1.5 g) \$5.75

Small & Cherry Tomatoes

AMY'S APRICOT MIX **OG S 🌞** 75 days. (Indeterminate) [Family heirloom given to Dustin Swanland by his Italian aunt. Introduced 2012 by SESE.] Delicious fruit



(always a hit at our tomato tastings)! Vigorous and productive plants! But... a challenging variety for us to offer. Plants vary a lot, even after years of vigorous selection by us. It tends strongly toward the intensely fruity, sweet, luscious orange spheres we originally described. Many plants bear red fruits, and a wide range of orange types is present as well, in clusters of 2-12 and sizes of $\frac{1}{2}$ - $1\frac{1}{2}$ in. We're unsure just how diverse this variety was before we received it, and why it keeps frustrating our selection efforts. But it's so delicious we carry it anyway! #49236 Pkt \$2.75

Amy's Sugar Gem OG S 75 days. (Indeterminate) [Developed by Dr. Jeff McCormack. Čross of Red Cherry and Tappy's Finest. Named for Amy Boor Hereford, whose grandmother Tappy introduced *Jeff to heirloom tomatoes.*]



Excellent in salads, sandwiches, and sauces. A "two-bite" cherry tomato, 11/2 × 13/4 in. Tall, vigorous, and productive vines. The Sugar Gem portion of the name refers to the sweet, full flavor and the tiny light gold sparkles in the red skin. #49198 Pkt \$2.75

BLACK CHERRY OG

75 days (Indeterminate) Cherry tomatoes similar to Cherokee Purple in color and rich, full bodied flavor.1 in. fruits, dusky purple with black highlights.

Vigorous plants. A big favorite at our 2015 tomato tastings! #49252 Pkt (0.08 g) \$2.75

Соуоте ОС S 🌞 🕿 55 days. (Indeterminate) [Grows wild in Veracruz, Mexico. / 1/2-in. pale yellow fruits on vigorous plants. Very sweet with unusual flavor overtones. A favorite in our 2015 tomato tastings. #49253 Pkt (0.08 g) \$2.95;



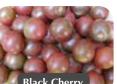
[Selected from a sport of Galinas. Named by Steve Draper in honor of Dr. Carolyn Male who first saved the seed.] The most flavorful yellow cherry

tomato we've grown. Excellent balance of sugar, tartness and depth of flavor. Pale yellow, round, 1¼ in. fruits typically borne 6 to a cluster. Large, vigorous vines provide excellent cover. #49182 Pkt (0.08 g) \$2.50



Dr. CAROLYN S 🌞 63 days. (Indeterminate)

<u>Dr. Car</u>olyn



Black Cherry

green). Striking 11/2 in. cherries, dusky purple with vivid lime-green streaks. Nice balance of sweetness and flavor. Tall, vigorous plants bear til frost. Ŵidely adapted, good split-



Matt's Wild Cherry

ting resistance. #49263 Pkt (0.08 g) \$3.25

RED CHERRY 0G S 🌞 🖾

(Old Fashioned **Red**) 72 days. (Indeterminate) [Pre-1840. This is the small Red Cherry, not the Large Red Cherry



commonly used as a salad tomato. | Bright red 1 in. fruits, sweet, tangy and juicy. Grows so vigorously that it tends to outgrow some diseases. Resistant to fruitworm and high temperatures. #49136 Pkt (0.08 g) \$2.75

www.SouthernExposure.com



Green Grape OG S 🌞 78

days. (Semi-determinate)

[Developed 1983 by Tater

Mater Seed.] Ripens yellow-

cat grapes. Flesh and juice

green, resembling large Mus-

are green. 13% in. fruits borne in clusters of 4–12. Sweeter

is in the top 5% of varieties

with pesto. #49118 Pkt

Lollipop 🛛 S 🌞 🕿

Creamy yellow fruits

hang on the plants like

lollipops. Sweet, lemon-

per cluster, 11/4 in. fruit.

Highly productive in hot

weather. Good resistance

to foliage diseases. Suit-

able for ground culture

Pkt (0.08 g) \$2.75

MATT'S WILD

CHERRY OG S 🐫

terminate) [From

seed collected in the

wild near Hidalgo

in eastern Mexico.]

Plants bear loads

of intensely sweet

deep red cherry

New! PURPLE

BUMBLE BEE OG

77 days (purple/

and flavorful ½ in.

(0.08 g, ~39 seeds) \$2.75

65 days. (Inde-

if desired. Widely adapted, excellent garden va-

riety, well received at farmer's markets. #49172

tomatoes. Plants are vigorous, disease-resis-

tant, and sprawling. Self-sows readily. Harvest

whole trusses to minimize splitting. Always a

favorite at our tomato tastings. #49804 Pkt

like flavor. 6-10 fruits

79 days. (Indeterminate)

(0.08 g) \$2.75



Red Pisa Date 🛛 S 💐 🔀 63 days. (Indeterminate) [Given to Dustin Swanland by his Italian aunt. Introduced 2013 by SESE. / Small, firm, date-shaped, 1 in. long red fruits, sweet and productive. 7–9 ft. plants. This may be the type



of tomato Jefferson served at Monticello as a dessert, the sliced fruits dusted with powdered sugar. #49243 Pkt (0.08 g) \$2.75

RIESENTRAUBE Unavailable for 2019.

WICKLINE CHERRY Unavailable for 2019.

New! Yellow Centiflor

0G S 🌞 65 days. [Alan Kapuler, from a cross of Sungold and Red Centiflor.] Large clusters of golden yellow fruits with pointed tips. Short but highly variable plants range from 1 to 5 ft. tall; shortest plants have lower yield. Good disease resistance



results in extended harvests. One of the most distinctive tomatoes we have grown. #49260 Pkt (0.08 g) \$2.75

Yellow Pear 🛛 🌞 🕿 (asc, fw1) 75 days. (Indeterminate) /Pre-1800./ Pearshaped yellow tomatoes, 11/2 × ¾ in., mild flavor. Very productive and heat-resistant, but prone to splitting if not watered regularly. Excellent for popping in vour mouth or for preserves. #49154 Pkt (0.08 g) \$2.75



Currant Tomatoes Solanum pimpinellifolium

Currant tomatoes are essentially wild tomatoes, little changed by domestication. Vines are long and indeterminate with an open growth habit and generally good disease resistance. Fruits are the size of a berry, 1/2-3/4 in. in diameter. Flavor is intense, sweet and piquant. They are especially suited as salad accents and for the specialty restaurant trade. Seeds are small. Packet: 0.05-0.09 g depending on variety.

Red Currant OG 🌞 🕿 64 days. (Indeterminate) [Wild South American tomato. / Intensely flavored, berry-sized, 1/2 in. red

fruits in clusters of 16-20. #49803 Pkt (0.05 g) \$2.75

Sugar Cherry

SUGAR CHERRY OG S #76 days. (Indeter-minate) [Introduced by SESE 1994.] Large currant-type 1/2-in. orange-red fruits borne in clusters of 12. Berry-sized fruits are larger than true currant tomatoes and are intensely flavored and sweet. #49801 Pkt (0.09 g) \$2.75

Husk Tomatoes

Classification and Historical Notes: Husk tomatoes have light brown, papery husks (calyxes) that enlarge and cover the maturing fruits. The 2 most common cultivated species are ground cherry (*Physalis pruinosa*) and tomatillo (*Physalis ixocarpa*). Both have been cultivated in Central and South America for centuries, before even tomatoes. Ground cherries are so named because the cherry-sized fruits are borne near the ground. The leaves of ground cherries are hairy or fuzzy and the plants grow 1–2 ft. tall with lateral spreading growth. Tomatillos are larger-fruited, typically 1–3 in. diameter, and the plants grow 2-5 ft. tall with smooth leaves. Some varieties may grow 8 ft. or more with a ground-hugging growth habit. The Spanish name tomatillo is derived from the Indian name "tomatl." Culture: Culture of husk tomatoes is similar to tomatoes. (See Tomato section.) Ground cherries need no support, but tomatillos are best caged or trellised. Spacing: Space tomatillos similar to tomatoes (see Tomato section). Ground cherries should be spaced 2-3 ft. apart. Pests: In areas where husk worms are a problem, plant early-maturing varieties crops as early as possible in the spring. (Self-sown plants from the previous year's crop often get a head start on even the earliest plantings.) Harvest: Husk tomatoes usually do not ripen fully until after falling from the plant. Larger tomatillos need to get pulled from the plants. Ground cherries ripen from green to yellow-gold. Most tomatillos ripen from green to yellow-green to pale yellow. Fruit Set: Tomatillos need at least 2 plants for pollination or else they won't set fruits. Most cultivars of ground cherry set fruit in all areas of the U.S. Tomatillos are more sensitive to heat and day length: some cultivars may not set fruit until late summer, or may not set fruit in northern states. Preparation and Uses: Ground cherries are eaten fresh, or are used in desserts, sauces, preserves, fruit toppings, pies and salads. Tomatillos are usually cooked to bring out full flavor: Simmer for 5–10 minutes in a pot of water, then use in chili rellenos, salsa verde, guacamole, or other sauces or dips. Seed Savers: Husk tomatoes self-sow easily. Isolate varieties by 300 ft. for pure seed. Maturation: Days to maturity are the number of days after transplanting. Packet: 0.06–0.09 g (90–140 seeds).

Tomatillos Physalis ixocarpa

CISINEROS GRANDE OG S 🍀 85 days. Large fruits (up to 21/2 in.) make for easy harvest and processing. Highly productive. Most fruits ripen to yellow, while some stay green throughout. Fruits range from the size of a small



lime to a summer apple, though most plants produce the larger fruits. For a tarter salsa, use the bright green fruits while the husk is still green; for a sweet and fruity flavor, wait until the husk dries. 4-6 ft. plants. #48104 Pkt (0.09 g) \$2.75; #48104A (1.5 g) \$5.75



DE MILPA OG S 🌞 🕿 70–80 days. Vigorous variety with 5% in. fruits, mostly purple, some green. Stronger, sharper flavor than most tomatillos, the preferred variety for some Mexican dishes. #48101 Pkt (0.09 g) \$2.75

Dr. Wyche's Yellow **OG S 🌞** 🕿 65 days. [From the collection of Dr. John Wyche of Hugo,

OK, one of SSE's earliest members.] Our earliest tomatillo and one of our sweetest. Heavy yields of 11/2 in. cheerful yellow fruits. (Plus an occasional cheerful purple fruit.) #48106 Pkt (0.09 g) \$2.75

EVERONA LARGE GREEN OG S 🌞 80 days. [Seed collected by Barbara Rosholdt from tomatillos planted by Mexican workers at the Everona

sheep dairy near Unionville, VA. Introduced 2008 by SESE. / Finally a tomatillo that not only has nice large fruits (up to 2½ in. diameter), but can handle a Virginia summer and pests and still produce prolifically! Plants thrive even in heavy clay soil and drought. Green fruits, a few with purple blushing. #48103 Pkt (0.09 g) \$2.75; #48103A (1.5 g) \$5.75

Everona Large Green

Purple

Tomate Verde

Cossack Pineapple

PURPLE OG 🜞 80 days. $1 \times 1\frac{1}{2}$ in. fruits ripen to dark purple. Sweeter than green varieties. 4–6 ft. plants. #**48105** Pkt (0.09 g) \$2.75; #48105A (1.5 g) \$5.75

Tomate Verde 🛛 🖉 💭 75 days. 11/2 in. fruits ripen to pale yellow green. Tall, 4-6 ft. plants. Husks are easy to remove and fruits are excellent quality. **#48102** Pkt (0.09 g) \$2.75

Ground Cherries Physalis pruinosa

COSSACK PINEAPPLE **0G S 🌞** 60 days. 3⁄8–5⁄8 in. fruits with delicious fla-

vor reminiscent of pineapple. Bite-sized fruits are so tasty they may never make it into the kitchen, especially if you have children. Excellent for preserves, hot dessert toppings, salads or mock pineapple yogurt. Plants are short (12–18 in.) but with bushy spreading lateral branches to keep down weeds. Fruits ripen to a pineapple yellow. #47101 Pkt (0.06 g) \$2.75; #47101A (1.5 g) \$7.50

GOLDIE Unavailable for 2019.

Wonderberry Solanum burbankii

Culture: An interesting tomato relative. Grow like tomatoes, but Wonder-



berry is more finicky to germinate – tiny seeds need to keep moist for 2-3 weeks longer than tomatoes. Self sows readily. Start seeds indoors 6–8 weeks before transplanting outside after last frost. Space 30 in. apart. Use row cover to protect young plants from flea beetles.

Wonderberry 🕿 S (Sunberry) [Developed by plant genius Luther Burbank.] 3 ft. plants yield dozens of clusters of dark, 1/4 in. berries; each cluster holds 8-12 fruits. Green fruits are likely toxic and should not be consumed. Unique, huckleberry-like flavor makes for intriguing dessert fillings, jellies, syrups, etc. #47001 Pkt (0.09 g) \$2.75

Garden Huckleberry Solanum melanocerasum

Garden Huckleberry 🛛 🖉 🕿 100 days. A great fruit for jam, pies, and syrup. Heavy yields of easy-to-pick berries. Dull black at full maturity. Keeps very well on and off the plant. Green fruits are likely toxic and should not be consumed. Not sweet on its own, and should be cooked prior to



eating. Grow like ground cherries or Wonderberry. Cover young plants with row cover to protect against flea beetles. 2-3 ft. tall. #47201 Pkt (0.09 g, ~100 seeds) \$2.75

Swedes (Rutabagas)

Brassica napus var. napobrassica

Culture: Similar to turnips, but plant for fall harvest. Plant 8-10 weeks before first fall frost, seeding 1 in. apart in rows 12-16 in. apart, thinning to 8 in. apart. Thin within a month - crowded seedlings won't bulb properly. Harvest: Harvest when roots are 3-6 in. across. Harvest before temperatures drop below 20°F. Cooking: Mash rutabagas and potatoes together for a hearty dish. Packet:

2 g (about 900 seeds) sows 46 ft.

American Purple <u> Top Yellow</u>

American Purple Top Yellow 💐 🕿 90 days. [Introduced before 1920 as an improved strain of Purple Top Yellow (pre-1850).] Long the standard for home and market use. Flesh is mild, yellow, finegrained, and firm. #29501 Pkt \$2.50

GILFEATHER TURNIP OG S 🌞 🕿 (Brassica napus x rapa) 85 days. [1860s.] Famous heirloom selected and named by Vermont farmer Jack Gil-

feather. An early addition to the Slow Foods Ark of Taste. A rare cross between a rutabaga and turnip, roots are white and sweeter than most rutabagas. Greens are also tender and sweet. Plant mid-summer as one would other rutabagas. Best flavor after frost. #29301 Pkt \$2.75

NADMORSKA OG S 🌞 🕿 90 days. [From seed collected in Lithuania in 2007 by the Seed Ambassadsors Project.] Large, vigorous and early maturing. Green tops, sweet golden flesh. Unusually, roots are longer and more oval than regular round rutabagas. #29503 Pkt \$2.75; #29503E (28 g) \$8.50



Nadmorska

Turnips Brassica rapa var. rapifera

Culture: Turnips grow well in a wide range of soils, but do best in a loose, friable soil that allows the roots to expand. Plantings can be made in the spring and at summer's end. Sow seeds 1/4 in. deep and thin to 2-4 in. apart, rows 10-12 in. apart. Harvest: Best-quality roots are 2-3 in. in diameter. Both roots and leaves may be eaten raw or cooked. Pests: Flea beetles and aphids can be controlled with rotenone or row cover. Seed Savers: Isolate a minimum of 600 ft. for home use. For pure seed isolate at least 1/4 to 1 mile from turnips, mustard, and Chinese cabbage, and rapeseed (canola). Packet: 3 g unless stated (about 1350 seeds) sows 68 ft.

AMBER GLOBE OG S

(Yellow Globe) 63 days. [Pre-1840.] Best planted in the fall. Roots are smooth and globe-shaped, 6 in. in diameter. Harvest at 3-4 in. Sweet, fine-grained



flesh is creamy yellow. #29104 Pkt \$2.75

ICE-BRED WHITE EGG Unavailable for 2019.



NABO ROXO COMPRIDO **OG** S 🌞 🕿 40 days (spring), 80 days (fall). Long white turnips with purple tops. Productive dual use variety widely grown in Portugal for fodder as well as great eating for the winter table. #29108 Pkt \$2.75; #29108E (28 g) \$8.50



PURPLE TOP WHITE GLOBE **OG** 茎 50 days. *[Pre-1880.]* A round, white turnip, 5 in. in diameter, with bright purple color around the top where exposed to sunlight. For best texture, harvest at 3 in. diameter or less. Classic turnip flavor. #29102 Pkt \$2.50; #29102E (28 g) \$5.50

SCARLET OHNO REVIVAL **OG S** 🜞 55 days. *[Japa*nese variety reselected by Frank Morton of Wild Garden Seeds.] Lovely scarlet-skinned turnips, some round, some flattened. Shiny hairless strap-leaf greens with pink and scarlet stems. #29106 Pkt \$2.75

White Egg 🛛 🖉 48 days. Fast-growing turnip popular in the South. Egg-shaped roots, $3\frac{1}{2} \times 2\frac{1}{2}$ in., grow partly above ground. Crowns are green-tinted. Flesh is white, fine-grained, and mild-flavored. Good bunching variety. **#29103 Pkt** \$2.75; #29103E (28 g) \$8.50





Watermelon Citrullus lanatus

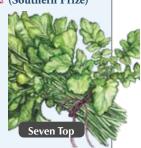
Culture: See Muskmelons section. Space 12–18 in. apart in rows 6-8 ft. apart. Vines require anywhere from 36-100 sq. ft. of vine space per hill, depending on variety. Don't disturb vines while fruit is ripening or else fruit may ripen unevenly. When planted in good soil under good environmental conditions, melons will do well, but are not as consistent producers as some other crops. The fruit weights we list are for what the variety can achieve given ideal conditions. Harvest: For most varieties, fruit is mature and most desirable during a 10-14 day period. It may take some experience to tell when a watermelon is ripe. There are four methods commonly used to determine peak harvest stage: (1) The spot where the fruit touches the ground turns yellow. (2) Look for the presence of a dried-up tendril on the portion of the vine nearest the fruit. (3) The rind feels slightly rough and ridged, and has a dull, opaque appearance, whereas immature fruits are smoother and glossier. (4) When a watermelon is ripe, it will have a hollow sound when you thump it with your knuckles: The melon sounds more like your chest when it is ripe; when green, it sounds more like your head; when over-ripe, it sounds more like your stomach. Mark Twain described it this way: "A ripe melon says 'punk' when thumped, a green one says 'pink' or 'pank." Culinary: Watermelon seeds are edible, have a nutty taste, and are commonly sold as a snack in some parts of the world. Seeds that mature to black are easier to eat than white seeds. Seed Savers: Isolate varieties by at least 1/8 mile for home use, or 1/2 to 1 mile for pure seed. Packet: 1-3 g (20-58 seeds, average 39 seeds).



Ali Вава 🛈 🌞 🕿 80 days. [Iraqi heirloom.] Light green oblong melons, 15-25 lbs. Vigorous vines. Sweet red flesh has few seeds. The hard rind makes this a good choice for market gardeners and home storage. Great texture, outstanding flavor. #55126 Pkt (2 g, ~28 seeds) \$2.95

Turnip Greens (Salad Turnips) SEVEN TOP OG 🌞 🕿 (Southern Prize)

45 days. [Pre-1880.] Popular Southern variety often grown for winter green. Used for greens, not the roots, which are woody. Leaves grow 18-22 in. tall, but should be harvested when young and tender. (28 g) \$5.50



#29201 Pkt \$2.50; #29201E

AMISH MOON AND STARS **0G S 🌞** 🛣 100 days. [Reintroduced 1987 by SESE. An Amish heirloom, possibly a variant of 'Sun, Moon, and Stars' introduced 1920.] 15-25 lb. oblong fruits with large yellow moons and small



stars on dark green rinds. Foliage marked with yellow stars. This strain has a smooth, slightly ridged rind. Mottled brown seeds. Sweet, reddish-pink flesh. Seed grown and stewarded by Living Energy Farm in Louisa, VA. #55103 Pkt (3 g, ~24 seeds) \$2.95

BLACKTAIL MOUNTAIN 0G 73 days. *[1977*, developed by Glenn Drowns. / Small-fruited, earliest of all. An excellent small, fast maturing, highly productive watermelon that can be successfully grown in cool short season areas or southern hot, humid, areas. The earliest of



114 varieties that Glenn Drowns grew in 1994. Round 9 in. fruits have a dark green rind with small brown seeds. Orange-red flesh has sweet, rich flavor. When harvested just underripe, melons will ripen in storage and keep up to 2 months. #55113 Pkt (1 g, ~22 seeds) \$2.50

New! Cekirdegi Oyali OG S 🌞 🕿 (Crocheted Seed) [Turkish heirloom. Introduced to the US by Two Seeds in a Pod.] Unique seeds look like they have been carved, because as they dry the black seed casing cracks to reveal the white seed inside.



Small, seedy melons, about 5 lbs each, with sweet red flesh. #55131 Pkt (2 g, ~18 seeds) \$2.95 Limit 2 packets per customer this year (order early!)

CRIMSON SWEET OG

85 days. [1964.] Medium-sized, striped melon with tolerance to anthracnose (race 1 and 3) and Fusarium (race 1 and 2). Great-tasting melons are typically 10 × 12 in., weighing 23-27 lbs. A unique feature of this variety is its ability to promote beneficial soil

fungi that inhibit Fusarium wilt. A reliable variety for the Southeast. This is the variety many melon lovers come back to after trying the rest! #55101 Pkt (2 g, ~48 seeds) \$2.50

CRIMSON SWEET, VIRGINIA SELECT S 🌞 [Introduced 2009 by SESE. / It's hard to improve on Crimson Sweet's vigor and great flavor, but Pam Dawling is at it! Since 2001, she's been saving this locally adapted strain, selecting for large, early melons with good flavor and healthy foliage. #55118 Pkt (2 g, ~46 seeds) \$2.75



Crimson Sweet

58 **Turnips**, Watermelon

EARLY MOONBEAM OG **S** 76 days. *[Alan* Kapuler.] Sweet, crisp yellow icebox melon, 5–8 lbs. Thin, light green rind. Short vines make this a great melon for small gardens. #55123 Pkt (2 g, ~42 seeds) \$2.75





GOLDEN MIDGET S 72 days [1959.] Early, small 3-lb. melons with salmon-red flesh and a built-in ripeness indicator: the rind turns yellow when the melons are ready for harvest. (Don't be alarmed by the leaves: some yellow foliage is normal for this variety.) **#55129 Pkt** (2 g, ~36 seeds) \$2.50

Katanya S 🌞 🕿 85–90 days. [Russian heirloom.] Very sweet reddish-pink flesh with small seeds. 10–20 lb. round green melons. Early ripening variety, popular in Appalachia and further north. Needs a

fair amount of room to grow, but not as aggressive as melons that bear larger

fruit. #55121 Pkt (2 g, ~43 seeds) \$2.50 New! Marmony Marble S 🌞 🕿 Mediumsized fruits with sweet pink flesh and mottled rinds. Small, reddish seeds that several of us found pleasant to munch on along with the

Katanya



Moon And Stars, Yellow Fleshed OG S 💭 Solution (Early 1900s GA family heirloom) Solution Introduced 1987 by SESE. Years ago, a melon of this description was routinely shipped from Bermuda to some Southern states around Christmas time.] Good flavor, the sweetest Moon and Stars variety. 15-35 lb fruits. Has some tolerance to disease and drought. Rind has many small yellow stars and some moons. To serve, try halving melons and scooping out the insides using a melon ball scoop. Scallop the edges and fill with melon balls of red and yellow watermelon, muskmelon, and assorted fruit. #55106 Pkt (3 g, ~28 seeds) \$2.75

Nancy **OG S 🌞** 90 days /Pre-1885, GA. The thinner rind made it hard to ship, so this was the variety that commercial watermelon growers would save for their own



families!] 14 in. x 16 in. melons average 25 lbs. Very sweet pink-red flesh, white seeds. Aboveaverage disease resistance, excellent drought resistance. #55128 Pkt (3 g, ~36 seeds) \$2.75

ODELL'S LARGE WHITE 0G S 🌞 🛣 (White Stoney Mountain) 90 days *[Rare SC heirloom*] - 1840 from Pomaria Nursery.] Very large melons (30-35 lbs) have exceptional storage quality and a rich sweet flavor said to rival the legendary "Bradford."



The fruit is light green with pink flesh and tender white rind perfect for pickling. Our seed is grown by Rodger Winn from stock stewarded by his wife Karen Metzes's family since 1880. #55130 Pkt (2 g, ~31 seeds) \$2.75

OrangeGlo 🛛 🗲 🌞

85 days. One of the best orange-flesh watermelons. Very crisp, sweet, and flavorful deep orange flesh. Vigorous plant produces heavy yields of 25 lb. melons with light and dark green stripes. #55127 Pkt (3 g, ~30 seeds) \$2.95

QUETZALI PVP 📛

83 days. Best of our 1999 taste trials. Very sweet, crisp 7–13 lb. The rind is unusually thick, so loss to splitting tends to be low. Dark and light green stripes. Pink-red flesh, small seeds. #55115 Pkt (2 g, ~47 seeds) \$2.75

SCALY BARK OG **S 🌞** 90 days. [1881, Peter

Henderson Co.] Unusual blue-green mottled skin has a rough look like that of tree bark, and the rind is also as tough as bark; in Peter Henderson's book Gardening for Profit, he enthused, "in 1884, a specimen

of this variety left in our office stood a pressure of 1250 pounds before breaking." (Grower Rodger Winn notes that this is not true if the melons are left too long in the field!) 12-25 lb roundish fruits, scarlet red flesh, black seeds, crisp, sweet flavor. #55125 Pkt (3 g, ~32 seeds) \$2.75



OrangeGlo





Scaly Bark

Stone Mountain OG S 🗦 🛣 95 days. /1923. A commercial bestseller from the '30s and '40s – thanks to grower Rodger Winn for bringing back this old Southern favorite.] Slightly oval 30 lb fruits with a dark green rind and sweet, juicy red flesh.



Thick, split-resistant rind makes it great for shipping and storage. #55117 Pkt (3 g, ~30 seeds) \$2.75

BACK! STRAWBERRY OG S 🌞 🕿 85 days. *[Selected* from a FL heirloom by Walt Childs, introduced 1989 by SESE.] Strawberry-red flesh ripens to within 1/2 in. of the rind. Delicate texture and outstanding flavor, one of the best we offer. Long melons (8 × 20 in.), 15-25 lbs, dark green rind with darker green stripes, white seeds. Very good disease resistance. **#55110 Pkt (3** g, ~31 seeds) \$2.75





Handles drought well. 6-10 lb fruits with red flesh and small seeds. Consistently reliable and widely adapted, a good space-saving variety. **#55111 Pkt (2 g,** ~45 seeds) \$2.50

White Wonder **OG S 🌞** 80 days. [Rare today, whitefleshed melons were common in the 1800s.] High yields of 3-10 lb icebox-size melons. Creamy white flesh is crisp with a fresh, sweet taste. Green rind with darker green stripes, this unique white fleshed melon



will be a hit at farmers markets or on the picnic table. **#55119 Pkt (2 g, ~47 seeds) \$2.50**

Wilson Sweet **OG S 🌞** 🕿 85 days. The sweet red flesh and crisp juicy texture of this melon draws comments like "the best melon I ever tasted." The unusual green mottled rind protects from sun scald. Thanks to Sand Hill Preservation Center and grower Merlyn Niedens for saving this excellent melon from near-extinction. Try it, we think you'll like it! #55120 Pkt (2 g, ~28 seeds) \$2.75





co Herbs co

Culture and germination: Each herb has specific growing requirements. Please see our book section for additional growing information, as well as culinary and medicinal uses. **Medicinal herbs:** Information on medicinal herbs is condensed from various literature sources and is intended as a guide for decisions for planting only. Any remedies described here are not intended as medical claims, nor as a prescription for self-treatment, nor as a substitute for professional care or medical treatment. See your physician or qualified health professional prior to using herbs medicinally. **Germination of herb seed:** Many herbs naturally vary greatly in their germination. Some can be higher than 80% while others can be lower than 20%. Also please note that some herbs have special germination requirements.

Key to Herb Cultural Notes

Cultural notes for herbs are often given in brackets after the variety name or category name. *The notes may also include spacing requirements and days to maturity.*

A = annual, B = biennial, P = perennial The USDA Plant Hardiness Zone number is given for most biennials and perennials. For example, B4 means biennial in zones 4 through 10. Note that some perennials perform as annuals in the North.

Temperature °**F** = recommended soil temperature for germination.

Stratify (Pre-chill) = Seeds require a moist cold treatment to break dormancy. Put seeds in covered moist planting medium in refrigerator for at least 4 - 6 weeks. **Scarify** = Abrade in order to break dormancy, such as with a nail file or sandpaper.

D = Dark required for germination. Cover with soil, or use black plastic. **L** = Light required for germination. Cover lightly with soil or leave exposed on the soil surface.

LD = No specific light requirement.

Days to germinate: Average number of days to germinate.

sun = Needs full sun for best results.
shade = Tolerates/requires shade.

Planting: ds = direct sow, **tp** = transplant. **Sp** = Spring, **Su** = Summer, **Fall** = Fall

ALF = after last frost **BLF** = before last frost.

Height Mature plant height in inches.

Example: ANISE (*Pimpinella anisum*) [A/70°F/LD/14/dsALF/sun/24 in.]: Anise is an annual (A) whose seeds germinate best at 70°F. The seeds have no specific requirement for light (L) or dark (D) in order to germinate. Seedlings will emerge in approximately 14 days at the recommended germination temperature of 70°F. Direct sow (ds) after the last frost (ALF). Anise grows best in full sun and reaches an average height of 24 in. ANISE (Pimpinella anisum) 75 days. [A/70°F/LD/14/ dsALF/sun/24 in./does best in cool weather.] Seeds are often used in applesauce, breads, soups, and teas for licorice-like flavor. Leaves can be used in salads. Medicinal: Hot tea helps break up bronchial mucous. Carminative – a digestive aid for relief of gas and cramping. #71201 Pkt (0.75 g, ~145 seeds) \$2.50

Basil (Sweet & Fancy Types) Ocimum basilicum, unless noted

Culture: A/70°F/D/7–14/tp,ds,ALF/sun/18–30 in. Medicinal: Basil has been used as a carminative. Research indicates it may inhibit gastric acid secretion

Bolloso NAPOLETANO BASIL OG S 2 This variety comes from Naples and is highly prized for its strong flavor. Giant rumpled 6 in. leaves are great for pesto, though the thick leaves are harder to dry than most. Vigorous 3 ft. plants are pest-resistant and slow to

CINNAMON BASIL OG Has a spicy cinnamon fragrance. Use as a tea or potpourri. #71102 Pkt (0.25 g, ~88 seeds) \$2.50

DARK OPAL BASIL OG (var. purpureum) [1962, AAS winner.] Ornamental dark purple basil used like common basil for seasoning. May have a few green leaves. Beautiful in salads. #71103 Pkt (0.15 g, ~111 seeds) \$2.75

ERITREAN BASIL OG S ♣ ゑ (O. gratissimum) [Family heirloom from an Eritrean exchange student. Introduced by SESE 2008.] Compact plant with beautiful, small, purple-tinged green foliage, stunning in flower. It has a strongly attractive and spicy odor, and is much used in African cuisine. #71302 Pkt (0.12 g, ~116 seeds) \$2.75



ar up, ds, ALP/Sull/18–30 m. n used as a carminative. Renhibit gastric acid secretion

Bolloso Napoletano

flower. #71111 Pkt (0.15 g, ~102 seeds) \$2.75

SIL OG Has a on fragrance. potpourri. 0.25 g, ~88





ANISE-HYSSOP **OG** (Licorice **Mint**) (*Agastache foeniculum*) [P/70°F/LD/7/tp,ds/sun, part shade/18-48 in.] Native to the North-Central US. Beautiful decorative herb used for potpourri and to make a superb aromatic herb tea. Also quite tasty as a salad green. Excellent nectar plant for beekeepers. Attractive spires of lavender flowers. Medicinal: Relaxes capillaries. Used by some Asians and American Indians for chest pain and respiratory ailments. #71202 Pkt (0.05 g, ~230 seeds) \$2.75



ASTRAGALUS OG (Chinese Milk Vetch) (Astragalus membranaceus) [P/scarify seed/D/7–12/ Sp,Fall/tp,ds/sun/24 in.] Legume with reclining, spreading growth habit. Medicinal: The 4th or 5th year root is a traditional Chinese herb, Huang Qi, used since ancient times to increase and tonify qi. Said to be a deep immune system activator. #71283 Pkt (0.2 g, ~50 seeds) \$2.75 Cannot ship to HI

KAPOOR TULSI OG S (Holy Basil) (O. sanctum) [A/55°F night, 70°F day/D/14/tp,ds/18 in.] Fragrance reminscent of fruit and cloves. Many medicinal and culinary uses. Stems, leaves, flowers, and seeds are all good for making tea. Frequent harvests recommended. Easy to grow. Self-sows readily. #71104 Pkt (0.12 g, ~211 seeds) \$2.75; #71104B (3 g) \$5.75



NEW! KRISHNA TULSI OG S CRed Holy Basil) (O. Sanctum) Red-leaved plants make a red-tinted tisane. Grown outside holy sanctu-

aries in India. Traditionally used in ceremonies, in food, and for tea. Slow to flower. **#71113 Pkt (0.12 g) \$2.75**

LEMON BASIL OG (O. citrio-

dora) Deep lemon fragrance. Use for fish dishes, herb vinegars, and tea. **#71105** Pkt (0.12 g, ~89 seeds) \$2.50

LEMON BASIL, MRS. BURNS' OG S 🗰 🛣 (O. citriodora) [New Mexico heirloom.] Larger leaves (2½ in.) and stronger flavor make this the preferred lemon basil variety for chefs. #71305 Pkt (0.12 g, ~80 seeds) \$2.75

LETTUCE LEAF BASIL OG

S (*O. basilicum* var. *crispum*) 85 days. The most productive of the basils, this large Italian variety is excellent for pesto and basil in oil. **#71106 Pkt (0.15 g,** ~94 seeds) \$2.75



Lemon



Bergamot (Bee Balm) Monarda spp.

[P4/70°F/LD/14-21/sun, part shade/48 in.]

LEMON BERGAMOT \geq (*M. citriodora*) [Native to the Appalachians.] Some variation in blossom color and citrus odor. Use dried leaves for lemon scented herb tea or for flavoring meat or fish dishes. Harvest leaves before flowers

appear. #71203 Pkt (0.15 g, ~270 seeds) \$2.50

WILD BERGAMOT (M. fistulosa) A favorite of hummingbirds and bees. Flowers of varying shades of lavender may be added to salads. Use fragrant dried leaves for tea and potpourris. Medicinal: Used by several Native Ámerican tribes as a carminative. #71204 Pkt (0.1 g, ~197 seeds) \$2.50

LIME BASIL OG (O. americanum) Similar to

Lemon Basil but with darker green leaves and a lime fragrance. Accent for soups, salads, and fish. #71288 Pkt (0.12 g, ~85 seeds) \$2.50

MAMMOTH BASIL OG S

Huge, wide, shiny green leaves, twice as large as other Italian basils. A few leaves make a harvest. Add it to salads or to make a fineflavored pesto. #71290 Pkt (0.12 g, ~101 seeds) \$2.75



Wild Bergamot





New! MRIHANI OG S 🌞 🕿 Great-tasting, relatively mild, ruffled leaves with notes of anise. Slow to bolt, and has very good resistance to basil downy mildew. From Zanzibar, where it is used in perfumes as well as food. **#71114 Pkt** (0.12 g, ~70 seeds) \$2.95

RED RUBIN BASIL OGA purple version of Italian Large Leaf basil. Leaves are larger and more uniformly colored than Dark Opal basil. Sweet aroma and flavor. #71289 Pkt (0.12 g, ~93 seeds) \$2.50

BORAGE OG (Borago officinalis) 80 days. [A/70°F/L/10/ds, tp/ sun/ 24-36 in.] Borage is a bushy herb with bright blue edible flowers.



The plant has been used to attract bumble bee pollinators to garden plots. The leaves can be used sparingly to add a cucumber-like flavor in salads, or for flavoring cool drinks. Plants fade in deep summer heat and humidity, but can be reseeded for late summer/early fall harvest Medicinal: Seeds contain over 20% GLA (gamma linolenic acid) which is extracted and used commercially as an economical substitute for evening primrose oil. #71205 Pkt (1 g, ~56 seeds) \$2.50

BURNET, SALAD OG (Poterium sanguisorba) [P4/70°F/ LD/tp,ds/sun/18 in.] Highly cold-hardy plant has a nutty-cucumber flavor, a great way to add cucumber flavor to winter salads. Flowers during the summer, then revives in



picy Bush

Sweet Genovese

cooler weather. In hot climates, shade plants during summer, or sow a new batch in late summer. #71206 Pkt (0.6 g, ~85 seeds) \$2.75

SPICY BUSH BASIL OG **S** (O. basilicum var. minimum) Very aromatic miniature (8–12 in.) bush basil. One of the prettiest basils with small shiny leaves on highly branched stems. **#71108** Pkt (0.15 g, ~127 seeds) \$2.75

SWEET GENOVESE BASIL OG 85 days. A select large-leaf strain. Use fresh or dried for flavoring sauces, soups, dressings, and pesto. Our most popular basil. #71107 Pkt (0.45 g, ~254 seeds) \$2.50; #71107C (7 g) \$5.75

SWEET THAI BASIL OG Dicy flavor reminiscent of anise and cloves goes well in curries and many other Asian dishes. Purple stems and flowers contrast attractively with the 2 in. green

leaves. 12-18 in. plants. **#71112 Pkt** (0.18 g, ~102 seeds) \$2.75





Calendula Calendula officianalis

Culture: A/55–65°F/D/14/tp,ds/sun/18 in. /85 days. Plants fade in deep summer heat and humidity, but can be reseeded for late summer/ early fall harvest. Flowers are used as a food color, natural dye, and substitute for saffron. For edible flowers, use the outer part of the petals (the whitish bit where the petals connect to the head is the most bitter). Medicinal: Traditionally used as an anti-inflammatory herb for localized skin problems. Reported to activate cellular defense mechanisms.

CALENDULA, PACIFIC BEAUTY MIX **OG S** 85 days. 3 in. yelloworange flowers. #71207 Pkt (0.5 g, ~92 seeds) \$2.75

CALENDULA, RESINA OG S Bright yellow, mediumsize flowers; variety includes a few orange flowers. Medicinal: This strain has the highest amount of the resins prized by herbalists. #71303 Pkt (0.5 g, ~31 seeds) \$2.75; #71303C (7 g) \$6.25





CARAWAY (Carum carvi) 70 days. [B4/70°F/L/ 14/ds/sun/24 in.] Use the dried seeds for flavoring breads, leaves for salads, and roots as a vegetable (raw or cooked). Used especially to flavor rye bread and cabbage dishes. This biennial produces seeds its second year after over-wintering. Medicinal: Highly regarded as a carminative. Also has anti-spasmodic and anti-microbial properties. #71208 Pkt (0.4 g, ~162 seeds) \$2.50

Cardoon 🕿 (Cynara cardunculus) [A/70°F/ LD/tp/sun/48-72 in.] The ancestor of artichokes, with spinier leaves and a non-edible flower head, but the stalks are harvested like celery and cooked. The leaves are bitter and should be removed. Good in soups or stews, pickled or fried. #71209 Pkt (0.5 g, ~14 seeds) \$2.50



Catnip 🛛 🏶 🕿 (Nepeta cataria) [P4 / 70°F / L / 7–21 / tp / sun / 24–30 in.] Use this mint for teas, or for amusing your cat. (Note that only about 2 out of 3 cats are amused! The remainder, who do not have the dominant gene for this response, are bored by this plant.) Medicinal: Traditionally used for colds and flu primarily as a diaphoretic for feverish conditions. Nepetalactone, the primary ingredient of the essential oil, is chemically similar to the sedative component of Valerian. #71210 Pkt (0.45 g, ~650 seeds) \$2.50

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CHAMOMILE, GERMAN OG

(Matricaria recutita) [A/55-60°F/ L/tp/sun/24-30 in.] The sweet-scented flowers of Chamomile are used to make Chamomile tea which has a distinctive apple-like flavor and fragrance. Medicinal: Chamomile has long been used as a carminative, and as an anti-inflammatory, anti-ulcer remedy to protect



Vinter Chervil

gastric mucous membranes. It is also anti-spasmodic, and anti-microbial. Used as a nasal wash to treat sinusitis. #71212 Pkt (0.35 g, ~3360 seeds) \$2.75

CHERVIL, BRUSSELS WINTER **OG S** (Anthriscus cerefolium) [A/55°F/L/7–21/tp,ds/ part shade/24 in.] Fresh chervil is an excellent flavoring for peas, potatoes, carrots, eggs, and fish. Loses its flavor when dried, but the flavor can be preserved in chervil butter. Best quality comes

from plants grown in partial shade in successive sowings. Medicinal: Traditionally used as a diaphoretic to treat fevers. #71213 Pkt (1 g, ~440 seeds) \$2.75

Chives Allium spp.

[P3/60-70°F/D/tp,ds/sun, part shade/12 in.]

CHIVES OG (A. schoenoprasum) 80 days. Grow indoors or outdoors for year-round onion flavoring. Use chopped leaves and young flowers to add flavor and decorative garnish to salads. Medicinal: A tonifying and healthful herb. The essential oil is highly antibacterial. #71214 Pkt (0.2 g, ~183 seeds) \$2.75; #71214D (14 g) \$6.50

GARLIC CHIVES **OG** (Chinese Leeks, Chinese Chives) (A. tuberosum) 80 days. Leaves are larger and flatter than chives. Garlic flavor for salads and seasoning. #71215 Pkt (0.7 g, ~173 seeds) \$2.75



Garlic Chives

CILANTRO/CORIANDER OG (Coriander sativum) [A/60°F/D/7-21/ds/sun/30 in.] Both leaves (cilantro) and seeds (coriander) are used in Chinese, Indian, and Mexican cuisine. Plant monthly successions. Difficult to germinate in hot weather - sow in shade, or keep soil covered and cool until seeds emerge. Self-seeds well in cool weather. Cold-hardy to 15°F. Medicinal: known in Chinese medicine as 'yuan-xu-zi' (Chinese parsley), the seeds are used as a diaphoretic and appetite stimulant. #71216 Pkt (1 g ~90 seeds) \$2.50; #71216E (28 g) \$5.50



CUMIN (Cuminum cyminum) [A4/70°F/ds/sun/12 in.] Long warm growing season required. Used for flavoring chili and dishes spiced with hot peppers. #71220 Pkt (0.5 g, ~194 seeds) \$2.50

Dill Anethum graveolens

[A/70°F/L/7-21/ds/sun/30-48 in.]

BOUQUET DILL OG Similar to Long Island Mammoth but shorter plants with larger flower/seed heads and larger leaves. A choice popular variety for pickling. #71221 Pkt (0.75 g, ~576 seeds) \$2.50

DUKAT DILL **OG** A

European selection from Mammoth bred for high essential oil content which gives this variety a delicate aromatic fragrance and flavor. Plants up to 6 ft. tall! #71263 Pkt (0.75 g, ~515 seeds) \$2.50; #71263D (14 g) \$5.50

FERNLEAF DILL [1992, AAS winner.] An attractive, early, compact dill variety, 18 in. tall with finely divided fern-like dark-green leaves. Best variety for leaf production and early fall crops. Fernleaf is a slow-bolting, space-saving variety especially suitable for containers. #71222 Pkt (0.75 g, ~528 seeds) \$2.75

LONG ISLAND MAMMOTH DILL **OG** Z 70 days. The standard heirloom variety for flavoring pickles, soups, breads, stews, salads, and sauces. #71223 Pkt (0.75 g, ~576 seeds) \$2.50; #71223D (14 g) \$5.50

EPAZOTE (Mexican Tea, American Wormseed, **Paico**) **OG S** $\stackrel{\text{\tiny{\bullet}}}{=}$ (*Dysphania ambrosioides*) [A/70°F/LD/21/tp/sun/24-48 in.] Fresh leaves are ground or crushed for seasoning corn, beans, and sauces used in Mexican dishes. Medicinal: A strong tea rubbed on the skin repels insects and reduces irritation from insect bites. Also helps reduce flatulence from beans and relieves indigestion. #71225 Pkt (0.1 g, ~630

seeds) \$2.75

Florence Fennel











Echinacea (Coneflower) Echinacea spp.

Culture: P3-9/stratify at 40°F if needed/ LD/tp,ds/Sp/sun/24-36 in. All Echinaceas are drought resistant. Keep young plants well weeded. Germination is typically around 50% and all species except E. purpurea require stratification (a period of moist pre-chilling) to break seed dormancy. Seeds may be stratified by sowing in flats or pots in a cold frame over the winter, or a refrigerator for 2-4 months depending on the species. As little as 3 weeks of stratification will give some germina-tion. Medicinal: All 9 species are medicinally important, and all parts of the plant have some activity. Several pharmacological studies have demonstrated immuno-stimulant, bacteriostatic, and anti-viral activity. It may be used as an anti-microbial anywhere in the body. It activates macrophages, increases white blood cell levels, and inhibits microbial hyaluronidase (an enzyme that causes host cells to break down.) Echinacea is often used as a short term immune stimulant (2 weeks maximum), but it is contraindicated in autoimmune system disorders and progressive diseases.



ECHINACEA ANGUSTIFOLIA OG (Narrow-Leaved Coneflower) [stratify 90–120 days.] [Native to the dry prairies of the central U.S. This species has a long history of medicinal use starting with the Native American tribes of the Great Plains.] The plants are the smallest of the echinaceas (8-18 in.) and the spreading pink ray petals are the shortest (¾–1¾ in. long). **#71264 Pkt (0.2 g,** ~52 seeds) \$2.75

Fennel Foeniculum vulgare dulce

Culture: B2-5,P6-10/70°F/D/7-14/ds/ sun/36-60 in. Medicinal: Fennel is used as a carminative to relieve flatulence and colic while stimulating digestion. It is also anti-spasmodic, anti-inflammatory, and is similar to anise in calming bronchial coughs. It has estrogenic activity and stimulates milk flow in nursing mothers.

FENNEL, BRONZE OG S (var. Rubrum) This decorative fennel has beautiful lacy bronze leaves. Useful as an ornamental as well as a culinary sweet fennel. #71226 Pkt (0.2 g, ~75 seeds) \$2.50

FENNEL, FLORENCE **OG** (var. *Azoricum*) 90 days. Known to Italian gardeners as Finocchio. Dill-shaped leaves with distinctive licorice flavor. May produce bulbs, which can be blanched or eaten raw in salads. #71227 Pkt (1 g, ~300 seeds) \$2.75

Bronze Fennel





ECHINACEA PALLIDA **OG** (Pale Purple Coneflower) [P3–9/stratify 60 days at 40°F/LD/ tp,ds/Sp/sun/24–36 in.] [Native to open woods and rocky prairies from NE Texas to central Illinois.] Drooping flower petals are 1½–3½ in. long and may range in color from pink, purple, or white, but are typically rosy purple, with a purple-brown flower disc. Long, narrow leaves. 18–36 in. tall. Medicinal, drought-tolerant plant. **#71265 Pkt (0.2 g, ~42 seeds) \$2.75**

ECHINACEA PARADOXA **OG** (Yellow Coneflower) [stratify 60 days.] *[Native to open woods, balds, and rocky prairies; especially common to the Arkansas Ozarks and Missouri.]* The most exceptional of the echinaceas because the petals are yellow rather than purple, hence the name *E. paradoxa*. Leaves are long and narrow. 24–48 in. tall. Deserves a place in both medicinal and ornamental gardens. **#71266 Pkt (0.2 g, ~52 seeds) \$2.75**



ECHINACEA PURPUREA **OG** (Purple Coneflower) A very popular ornamental and the most common species, widely used as a medicinal plant. The flowers are 3–4 in. across with pink-orange cone-shaped centers and purple-pink rays. Easy to germinate and widely adapted. Unlike other echinaceas the seeds do not require cold treatment, the roots are fibrous rather than taprooted, and the plant is more highly branched at the top. **#71224 Pkt (0.2 g, ~45 seeds) \$2.50**

> Feverfew **OG** (Chrysanthemum parthenium) [P4-10/70°F/L/10-14/ds,tp/sun/30 in./Remove flower heads before seed forms, otherwise the plant will grow as an annual.] Small daisy-like blooms on lightgreen foliage. Medicinal: Vasodilator and anti-inflammatory. Studies published in the British medical journal Lancet reported that 2-3 fresh leaves of feverfew eaten daily over a period

of time reduced the severity and frequency of migraines. Feverfew has potential value in relieving arthritis symptoms. Contraindicated during pregnancy. **#71228 Pkt (0.1 g, ~800** seeds) \$2.75

HIBISCUS – See Roselle, page 64.

HOREHOUND, WHITE (*Marrubium vulgare*) [P4/60°F/D/tp,ds/sun/18– 24 in.] This member of the mint family has a pleasant fragrance and a menthollike flavor. Use as a tea and a flavoring for Horehound candies. Medicinal: Contains substances which



Contains substances which stimulate secretions of the bronchial mucosa, soothe coughs, and break up

mucus. #71229 Pkt (0.15 g, ~140 seeds) \$2.50

Hyssop **OG** (*Hyssopus of-ficinalis*) [P4/65°F/D/tp/ sun/24 in.] Ornamental shrubby herb used to season poultry. Active constituents of hyssop include volatile oils with a camphor-like odor and strong flavor. Medicinal: Hyssop tea flavored with honey is used as an expectorant. Collect the flowering tops in August and dry in the



sun. #71230 Pkt (0.1 g, ~95 seeds) \$2.50

LAVENDER, ENGLISH

(Munstead) (Lavandula vera var. Munstead) [P5

/ 70°F min / LD / 30 / tp / sun / 18 in. / Requires good drainage and wind protection. Sow seed in slightly alkaline sterile medium. Germinates and grows slowly.] Munstead, the most aromatic of the lavenders, is sweet and delicate. Flowers are deeper blue than other lavender strains.



Long-lasting, pleasant scent also prevents moth damage in woolens and discourages musty odors in linens. Medicinal: Traditional herbal remedy used for stress-related headaches. Also a carminative, antidepressant and calming tonic for the nervous system. **#71231 Pkt (0.15 g, ~150 seeds) \$2.50**

LEMON BALM OG 🐡 (Melissa officinalis) [P4/70°F/ L/10/tp/sun/30 in.] Use for hot and refreshing cold teas as a lemon substitute. Essential oils are volatile resulting in more fragrance than flavor. Medicinal: Lemon balm has anti-viral action in lab tests against herpes simplex, mumps, and other viruses. Also a sedative, calmative, and carminative. #71232 Pkt (0.19 g, ~345 seeds) \$2.50



LOVAGE (*Levisticum officinale*) [P3/65°F/D/14/ tp/sun, part shade/60 in.] As a culinary herb, lovage has a celery-like flavor but richer with hints of fennel and curry. Use the stems, leaves, and seeds in the same fashion as celery. Medicinal: As a medicinal herb, lovage is used as a tea for its diuretic effect and as a carminative (relief of gas). **#71233 Pkt (0.25 g, ~70 seeds) \$2.50** MARJORAM, SWEET OG (Origanum hortensis) 70 days. [P10/60°F/ LD/21/tp/sun/12 in./Don't overwater.] Resembles oregano in flavor though milder with subtle overtones of balsam. Add it fresh to salads and tomatoes. Uses are similar to oregano. Medicinal: Inhibits herpes simplex virus in laboratory stud-



simplex virus in laboratory studies. #71234 Pkt (0.18 g, ~1080 seeds) \$2.50



MEXICAN MINT MARIGOLD $06 \stackrel{*}{\Leftrightarrow} \cong$ (Mexican Tarragon, Sweet Mace) (*Tagetes lucida*) [P8/ 70°F / L /5–15 days / sun / ds, tp ALF.] Used as a substitute for French tarragon. Often compared to licorice and anise. Leaves are best used raw or added at the end of cooking; goes well in fish and chicken dishes, soups, salads, pestos, and vinegars. In Mexico, leaves and flowers are used for tea. Can be used for dried flower arrangements. Does very well in hot climates, perennial in zones 8–11. #71309 Pkt (0.10 g, ~200 seeds) \$2.75

MILK THISTLE OG (Silybum marianum) [A or B/L/7–14/Sp, Fall/ds/sun/48–60 in.] All parts are edible. The young leaves (with spines removed) may be used in salads or cooked as a vegetable. Attractive, showy rose-purple flowers. Medicinal: The active principle is silymarin, a complex that helps stabilize and regenerate liver cells. #71274 Pkt (1 g, ~40 seeds) \$2.50 Cannot ship to TX.

MINT (Mentha sp.)

[P5/70°F/L/14/tp/sun, part shade/18 in.] Hardy, aromatic native plant. Variable. Mint grown from seed does not come true and produces plants that vary widely in flavor from spearmint to menthol mint to peppermint. Sow in pots and transplant your favorite plants. Can be used for mint sauce, jelly, desserts, and, fresh or dried, for tea. Medicinal: A cooling herb for external inflammation. Internally it has spasmolytic, carminative, and expectorant properties. #71235 Pkt (0.05 g, ~600 seeds) \$2.75

OREGANO, GREEK OG

(Origanum uulgare) [P5/60°F/D/14–21/tp/ sun/12 in.] An essential spice of pizza as well as tomato, cheese, and meat dishes. This is the flavorful Greek Oregano, not the flavorless oregano commonly available. Medicinal: Mildly carminative and anti-spasmodic. #71237 Pkt (0.05 g, ~500 seeds) \$2.75





Wild Garden Perennial Insectary

0G S The backbones of a spring through fall oasis for your resident beneficial insects. A complement of self-sowing annuals, biennials, and perennials provide food, shelter, and pollen. Broadcast or sow in rows 14 in. apart, thinning to a final spacing of 12 in. Manage plants by weeding and thin-

ning volunteers each spring. The leaves are edible. Includes fennel, Korean mint, garden sorrel, alexanders, chervil, parsley, chicory,

cress, turnip, mustard, calendula, amaranth, and orach. **#92010 Pkt (7 g) \$7.25**

PAPALO (Papaloquelite) (Porophyllum ruderale) [A/70/LD/7-10/ tp,ds/sun/72 in.] Mexican herb with decorative round 2 in. leaves (wider than the Bolivian type). The unique, complex taste is most often compared to cilantro, but also sometimes to arugula, lemon, and even rue. Generally used raw; great in tacos, salsa, and many other Mexican dishes. Like cilantro, it is

loved by many and hated by a few, although many prefer one to the other. Once established, papalo grows quickly and easily. One planting can provide fresh greens for months. May selfsow in warm areas. **#71308 Pkt (0.20 g, ~100 seeds) \$2.75**

Seasonal Items: Shipping Surcharges Apply

At-Risk Medicinal Herbs

Shipping Surcharge: \$2 for one item, \$4 total for any two or more items includes all fall shipped items: garlic, woodland medicinals (below), and onion bulbs.

Ginseng & Goldenseal ship in October.

If ordering by mail, pre-order by September 1st. U.S. shipping addresses only.

The following herbs are on the Appendix 2 of the CITES (Convention on International Trade in Endangered Species) list. They are also on the United Plant Savers primary list. Wild stands of these plants are disappearing from the woods of N. America. Whenever we plant these native plants in our woodlands we help ensure their long-term survival. Planting instructions included.

Ginseng



GINSENG ROOT **S** (*Panax quinquefolium*) Requires north slope in a dense deciduous forest. Grows well with goldenseal and other native woodland plants as companions. Roots are planted in the fall and can be harvested after the 4th to 7th year. Medicinal: Used traditionally as a "cure-all" herb. It is known to enhance physical health due to its ability to help the body adapt to stress. Please read more about this herb before using it medicinally. Planting guide included. #71601 3 roots (2 years old, see shipping info above) \$14.95; #71601Y 8 roots (2 years old) \$39.50 GOLDENSEAL RHIZOMES (*Hydrastis canadensis*) Grows up to 16 in. with light green leaves, small flower in late spring followed by a red berry. Yellow rhizome is planted by root divisions in the fall. A mature plant can be divided 3 to 5 times. Requires 75% shade in rich soil. Plant grows from southern Canada to Georgia, Alabama, and Kansas. Medicinal: Well known to contain powerful antibacterial properties and has been used to treat inflamed mucous membranes. #71602 8 rhizomes (see shipping info above) \$14.95

GROWING & MARKETING GIN-SENG, GOLDENSEAL & OTHER WOODLAND MEDICINALS [W. Scott Persons and Jeanine M. Davis.] This newly updated and expanded edition gives recommended methods of growing and marketing ginseng, goldenseal, ramps, black cohosh, bethroot, bloodroot, blue cohosh,



Goldenseal

false unicorn, galax, mayapple, pinkroot, spikenard, wild ginger, wild indigo, and other native woodland medicinals. Includes over 200 photographs, numerous tables, and extensive references and resources. This invaluable resource will excite and inspire everyone from the home gardener to the full-time farmer. 2nd edition. Softcover, 480 pp. **#91160 \$39.95**



Parsley (Various Varieties) See Greens, p. 26. Pennyroyal, English

PENNYROYAL, ENGLISH Unavailable for 2019.

PURSLANE, GOLDEN **OG S** (*Portulaca oleracea sativa*) [A/70°F/7–10/LD/ds,tp/ Sp ALF/sun/12–18 in.] Upright plants with orange

stems and large smooth succulent leaves. Cut-and-come-again edible for salads. Medicinal: Wild purslane is a source of omega-3 fatty acids. Hypotensive and diuretic properti

Golden Purslane

of omega-3 fatty acids. Hypotensive and diuretic properties reported. **#71299 Pkt (0.15 g, ~360 seeds) \$2.50**

RoseLLE, THAI RED OG S ♣ ≈ (*Hi-biscus sabdariffa*) [TP/75–85°F/7–14 days/sun/36–60 in./tp.] Beautiful 3–5 ft. plants with red stems and leaf veins. The bright red calyxes can be used to make

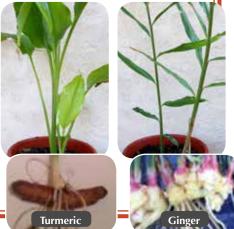


"zingy" tea, sauce, syrup, or jam, or candied whole for an unusual treat. For strongly flavored teas, simmer for 10–20 minutes. Roselle was called "Florida cranberry" in the 1890s. The flowers and young leaves are edible and have a citrus tang. The stir-fried greens are much used in Burmese cooking! Space plants 3-6 ft. apart – the wider the spacing, the more calyxes will ripen. The only variety in several trials to begin flowering by mid-summer here in Virginia. #71301 Pkt (0.6 g, ~20 seeds) \$2.95; #71301C (7 g) \$8.50

Turmeric & Ginger LIVE PLANTS & RHIZOMES

For Late Spring Planting Pre-Order Late Spring Shipments Available Online Only

Grow these popular rhizomes in your garden or greenhouse for medicinal uses, delicious dishes, and refreshing juices. Limited quantities - check our website for availability!



www.SouthernExposure.com

ROSEMARY OG (Rosemarinus officinalis) [P8/55°F night, 70°F day/L/14-30 in./ tp/sun.] Requires a well-drained, alkaline soil. Sow seed in a sterile seed starting mix with limestone added. Germination is normally low and growth of seedlings is slow. Rosemary is a versatile culinary season-

Rosemar

ing for many vegetable or meat dishes. Medicinal: Rosemary has diverse medicinal properties, the most notable being its use as a circulatory and nervine stimulant. Extracts of rosemary have strong antioxidant and preservative properties. #71239 Pkt (0.07 g, ~58 seeds) \$2.75

SAGE, COMMON OG (Salvia officinalis) 75 days. [P4/70°F/D/7–21/tp,ds/ sun/22–28 in.] Best known as a flavoring herb for meats, dressings, and sauces. As an ornamental, sage provides a restful focal point for any herb garden. Medicinal: Traditionally used as a digestive tonic and nerve tonic. Astringent and antibacterial. #71241 Pkt (0.33 g, ~40 seeds) \$2.50; #71241C (7 g) \$6.25

SKULLCAP (Scutellaria lateriflora) [P/stratify 4-6 weeks/D/14-21/ Sp/tp,ds/sun or light sĥade/12–24 in.] [Also called Virginian Scullcap or Mad-Dog Scullcap. The latter name refers to its historical use in treating rabies.] Small purpleblue flowers are borne



Common Sag

in slender one-sided racemes in the leaf axils. Leaves are oval-shaped with serrated edges. Medicinal: Nervine tonic, sedative, and antispasmodic used to revivify, calm, and nourish the nervous system. Harvest aerial parts during August and September. #71292 Pkt (0.1 g,

~55 seeds) \$2.75

SOAPWORT (Saponaria officinalis) [P3/70°F/ LD/10-21 days/tp, ds/sun, part shade /12–24 in.] Used as a natural soap, the roots and leaves are soaked or heated in water to extract saponins which produce a lather. A non-irritating skin cleanser, shampoo, and soap for delicate fabrics. #71245 Pkt (0.15 g, ~100 seeds) \$2.50



Sorrel, Garden **OG S** (Rumex acetosa) [P4/70°F /L/3–14/ ds/sun/36 in.] Cold-hardy to 12°F. Use sparingly as a salad green for its lemon-like flavor. Sorrel is best used in soups, where it excels. #71246 Pkt (0.4 g, ~430 seeds) \$2.50

Garden Sorrel

St. JOHNSWORT (Hypericum perforatum) [P/stratify/7-30/Sp,Fall/tp,ds/ sun/12-48 in.] A woody-stemmed herb with balsam-scented leaves and clusters of yellow, lemon-scented flowers. Harvest flowers shortly after the plant comes into bloom. Olive oil extracts of the flowers impart a red color to the oil. Medicinal: Anti-inflammatory, anti-viral, and anti-depressive. Many other uses for this multi-faceted herb. #71279 Pkt (0.05 g, ~600 seeds) \$2.50 Cannot ship to CA, CO, ID,

HI, MT, NV, OR, or WA.

SUMMER SAVORY OG (Satureja hortensis) 60 days. [A/70°F min./L/7-21/tp,ds/ sun/12 in.] Cooking herb used for flavoring meats, dressings, soups, and salads. Especially good in bean and cabbage dishes, herb butters, and vinegars. A blending herb with a peppery thyme quality, summer savory draws together Summer diverse flavors. Medicinal: Reportedly the fresh leaves may be

rubbed on insect stings to relieve pain. #71242 Pkt (0.25 g, ~450 seeds) \$2.50

Thyme Thymus spp. Culture: P4/55-60°F/LD/14-30/tp

CREEPING THYME (T. serpyllum) [Plant in full sun in the north, part shade in the south/4 in.] A low-growing herb suited for rock gardens and raised herb beds. Slow growing at first, it later forms dense mats. Provide shade where the summers are hot. For culinary and ornamental use. #71249 Pkt (0.2 g, ~1015 seeds) \$2.50

GERMAN WINTER THYME **OG** (T. vulgaris) 85 days. [Ht. 8 in., space 12 in. apart.] Flavoring for sauces, soups, meats, dressings, and bean dishes. Shrubby, evergreen perennial. Medicinal: Used as an expectorant and bronchial anti-spasmodic and carminative. #71250 Pkt (0.2 g) \$2.50

Summer Thyme **OG** 🌞 (*T.* vulgaris) 90 days [Ht 6-12 in., perennial in zones 6–9.] Stronger flavor for cooking, smaller plants than German Winter Thyme. **#71304** Pkt (0.2 g) \$2.75



Creeping

German Winter

Summer

Midewiwan Ceremonial Tobacco

TOBACCO, MIDEWIWAN CEREMONIAL (MAPUCHO, WILD TOBACCO) (Nicotiana rustica) [A/70°F/ LD/tp/sun/12-18 in.] Widely used in Native American ceremonies, generally without inhaling. Several times higher in nicotine than common smoking tobacco. The dried leaves are used as an insecticide for greenhouse insects such as aphids, mites, and whiteflies. Protect young seedlings from flea beetles. #71248 Pkt (0.12 g, ~545 seeds) \$2.75

VALERIAN (Valeriana officinalis) [P4/65°F/ ĽD/21-30/tp/sun, part shade/ 48–60 in.] Small aromatic white flowers are borne in sprays on tall plants. Naturalizes easily. Medicinal: Pharmacological studies have shown valerian root to be an effective tranquilizer and calmative without



the side effects associated with Valium. #71251 Pkt (0.1 g, ~80 seeds) \$2.50

Wormwood

WORMWOOD (Artemisia absinthium) [P4/55°F/ LD/7–10/ tp,ds/ sun, part shade/24-36 in.] Wormwood has been used as a traditional bitter herb, but is now considered hazardous for internal use. It is

an attractive ornamental and can be used fresh or dried for flower arrangements. Wormwood repels cabbageworm butterflies, flea beetles, and clothes moths. #71255 Pkt (0.1 g, ~1400

seeds) \$2.50

WORMWOOD, SWEET **OG** (Sweet Annie) (Artemisia annua) [A/70°F/ LD/ds/sun/72 in./ Self-sows readily.] Grown mostly for its sweetly scented



foliage, its ornamental value, its use in wreathmaking, and for use in pressed leaf and flower arrangements. Seed is difficult to clean and contains some light chaff. Medicinal: Sweet Annie is currently being investigated for its medicinal value as an antihelminthic, and for the treatment of chloroquine-resistant malaria. #71256 Pkt (0.05 g, ~1700 seeds) \$2.75



S Flowers S

Key to Cultural Notes on page 60. **Everlasting (drying) Flowers pg. 71.**

Ageratum Ageratum houstonianum

Annual. Germination: 75°F, light required, 5-10 days. Full sun or part shade. Transplant after last frost.

NEW! AGERATUM, DONDO BLUE OG S 🐺 (Floss Flow-



er, Bluemink) Prolific clusters of blue flowers. Long stems do well in bouquets, but may fall over and take root if unsupported. Native to Mexico. Self-sows. #01190 Pkt (0.1 g, ~400 seeds) \$2.75 Limited quantity – order early.

Sweet Alyssum Lobularia maritima

Annual. Germination: 70°F, 5-15 days, light required. Full sun or part shade. Direct sow or transplant after last frost. Ht. 8-12 in.



SWEET ALYSSUM 🌞 🖾 Low,

spreading mounds with sweetly fragrant tiny white flowers in clusters. Often blooms so thickly as to completely hide the foliage! Longblooming, especially if spent blooms are cut back. Attractive to bees, butterflies, and other pollinators. Great for undersowing, planting between paving stones, or as a ground cover. **#01180 Pkt (0.25 g, ~625 seeds) \$2.50**

Amaranth Amaranthus caudatus

Annual. Germination: 70–75°F, light required, 7–10 days. Full sun. Direct sow after last frost.Space 12-24 in. apart. Ht 36–60 in.

LOVE-LIES-BLEEDING OG Crimson tassels up to 24 in. long "drip" from these showy plants. Good fresh or dried. Stake plants for best display. #01154 Pkt (0.15 g, ~750 seeds) \$2.50

Asters Callistephus chinensis

Annual. Germination: 70°F, 9 days. Full sun. Direct sow or transplant. Space 6-12 in. apart. 85 days.

CREGO GIANT MIXED Colors OG 🜞 🕿 Very popular old favorite with large showy blooms in a mix of 6 colors. Tall plants up to 3 ft. Excellent cut flowers. #01101 Pkt (0.1 g, ~46 seeds) \$2.75



Love-Lies-

Bleeding

Baby's Breath Glysophila elegans

Annual. Germination: 70°F, 14-21 days. Full sun. Direct sow or transplant mid-spring. Space 18 in. apart.



ELEGANS ALBA GRANDIFLORA Pure white, 1/2 in. flowers. Sprawling 18 in. tall plants. **#01102 Pkt (0.4 g, ~352 seeds) \$2.50**

Bachelor's Button

(Cornflower) Centaurea cyanus

Annual. Germination: 60°F, darkness required, 14 days. Full sun. Direct sow in mid-spring. Space 12-16 in. apart.

BLACK BALL OG S 🌞 Striking maroon-black flowers, 30-36 in. tall. Dark colors contrast nicely with the lighter shades of more traditional bachelor's buttons. #01176 Pkt (0.5 g, ~106 seeds) \$2.50

BLUE BOY OG S 🌞 An old favorite for cut or dried deep-blue flowers. Plants are 30 in. tall and are especially suited for backs of borders. #01103 Pkt (0.5 g, ~106 seeds) \$2.50

Polka Dot 06 Polka Dot is a mix-

ture of red, rose, blue, and lavender shades. Compact plants are 16 in. tall and flower more profusely than taller varieties. #01104 Pkt (0.5 g, ~106 seeds) \$2.50

POWDER PUFF MIXED Colors OG S Double blooms in 7 colors: white, pink, rose, peach, crimson red, sky blue, and medium blue on 3 ft. tall plants. Excellent cut flowers for bouquets. #**01133 Pkt** (0.1 g, ~50 seeds) \$2.75







Powder Puff

Balsam

Impatiens balsamina

Annual. Germination: 70°F, 5 days. Full sun to partial shade. Direct sow or start indoors 4-6 weeks before transplanting after last frost. Space 10–12 in. apart.

OLD FASHIONED BALSAM 🛛 🗲 🌞 🛣 [SE Asian heirloom; popular in American gardens by 1900.] Camelia-shaped 2 in. flowers in shades of rose, lavender, and white are held close to the stem. Children love to see the ripe seedpods explode. A good choice for shady spots in Southern gardens. #01163 Pkt (0.3 g, ~34 seeds) \$2.75



Butterfly Weed Asclepias tuberosa Perennial. Germina-

tion: 65–75°F, light required, 20–90 days. Full sun. Direct sow. Ht. 24 in.

BUTTERFLY WEED OG [Perennial native to North America.] Bright orange flowers attract bees, butter-



flies, and some birds throughout the growing season. Requires a very well-drained or gravelly soil in full sun. Quickest blooms come from seed sown in the fall; may take up to two years to become established from seed. Established plants are drought tolerant and freely self sow. #01159 Pkt (0.25 g, ~50 seeds) \$2.75

Celosia Celosia cristata

Annual. Germination: 60–90°F, 3–6 days. Full sun. Direct sow after last frost or transplant 4-week-old plants. Space 4–8 in. apart. Ht. 24 in.

BRENDA JORDAN'S Heirloom OG S 🖡 fashioned cockscomb with large scarlet, velvet crested flowers 3 in. thick by 9 in. long on 18 in. plants. Produces a number of side shoots as well. #01168 Pkt (0.2 g, ~350 seeds) \$2.75

COCKSCOMB MIX OG 🌞 (75 days) Vivid multi-colored velvetcrested combs. Impressive fresh or dried. #01156 Pkt (0.2 g, ~225 seeds) \$2.75





66 Flowers

Cleome (Spider Flower) Cleome spinosa

Queen Cleome

Annual. Germination: 60–80°F, 14 days. Full sun. Pre-chill moist seeds at 40°F for 2–4 days, direct sow mid-spring. Space 16–20 in. apart. 70 days.

QUEEN OG S Pink, rose, and purple flowers with many side blooms. Attractive to bumblebees and hummingbirds. Blooms all summer. A great trap crop for harlequin bugs and stinkbugs. Ht. 48 in. #01105 Pkt (0.5 g, ~225 seeds) \$2.75

Coreopsis Coreposis tinctoria

Annual. Germination: 55-70°F, 21-28 days. Full sun or part shade. Direct sow or transplant after last frost. Space 6 in. apart or closer. Ht. 24-36 in.

DYER'S COREOPSIS MIX 283 days. Native plant. Abundant 1¹/₂ in. flowers with yellow petals and dark red centers. Attracts bees and birds. Yields a broad range of dye colors. Very

narrow leaves, even on young plants. Self-sows readily; does well in meadow plantings. **#01177 Pkt (0.25 g, ~500 seeds) \$2.75**

Evening Scented Primrose Oenothera glazioviana

Dyer's Coreopsis

Cosmos

Cosmos bipinnatus unless indicated

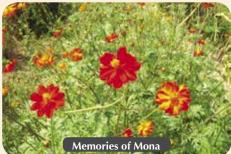
Annual. Germination: 14 days, 70 degrees F. Prefers full sun. Tolerates partial shade, poor soils, and drought once established. For earlier blooms sow indoors 4-6 weeks before last frost. Or sow outdoors after all danger

of frost. Plant ¹/₄ in. deep; thin to 12-14 in. spacing. Deadhead to prolong blooming. Seed heads will attract birds. *C. sulphureus* petals are edible.

BRIGHT LIGHTS ORANGE Unavailable for 2019.

New! LIMARA LEMON OG S (C. sulphureus) 50 days. Rare yellow cosmos! Short 12-18 in. plants good for containers. #01191 Pkt (0.5 g) \$3.25





MEMORIES OF MONA OG S $\stackrel{(c)}{\Rightarrow}$ (*C. sulphureus*) 57 days. [Introduced 1998 by SESE. A red selection of Mona's Orange developed by Dr. Jeff McCormack as a tribute to Mona Spangler.] An extremely hardy, drought-resistant, brightly colored cosmos. Orange and red flowers range from solid deep red to bright orange, many with red borders and streaks. Flowers are 2–2½ in. wide. 6 ft. plants bear until frost. #01141 Pkt (0.5 g, ~52 seeds) \$2.75; #01141D (14 g) \$9.75

MONA'S ORANGE OG S 🐡 🕿 (C. sulphureus) 59 days. [Introduced 1990 by SESE. Family heirloom from southern California.] Radiant orange, mostly single-petalled blooms, 2–2½ in. on 6–7 ft. plants. About 10% have red-bordered petals with some interior red streaks. Blooms all summer, very hardy. #01107 Pkt (1 g, ~105 seeds) \$2.75

Biennial. Germination: 65–75°F, 14–21 days. Full sun. Sow May through July in pots or flats; transplant after several true leaves have developed. Space 16–18 in. apart. Ht. 36–48 in.

TINA JAMES' MAGIC OG S \Rightarrow \gtrsim *[Introduced 1987 by SESE.]* The large fragrant blooms burst open suddenly at dusk. The crisp, yellow, showy four-petalled flowers circle a spire of reddish, swollen buds. Blooms are 2/3 open within 10 seconds or less, and fully open within 1–2 minutes! Blooming lasts 5–6 weeks or more. Will bloom indoors as a cut flower for approximately a week. Dim



lights to induce flowers to open indoors in the evening. Produces a flat rosette of leaves the first year, followed by 3–4 ft. yellow spires the second year. Very hardy. During the evening the flowers are pollinated by night-flying moths as large as hummingbirds. This variety was discovered by garden writer Tina James who hosts "primrose parties" every year. Makes an interesting container plant for a deck or balcony and is a great conversation piece. **#01118 Pkt (0.05 g, ~110 seeds) \$3.85**



SEA SHELLS MIX OG 65 days. Uniquely rolled and ruffled petals come in mixed shades of red, pink and white, giving a bi-color feel. Well-branched plants up to 6 ft. tall thrive in difficult sunny and dry spots, flowering freely all summer. #01165 Pkt (1 g, ~115 seeds) \$2.50





SENSATION MIX OG 🗰 🕿 45 days. [1936, AAS winner.] Our earliest cosmos. Large single flowers in a mixture of white, pink, and purple. Popular old favorite. 4–5 ft. plants. #01106 Pkt (0.5 g, ~110 seeds) \$2.50



Flax Linum grandiflorum

Annual. Germination: 65–70°F, light required, 20–25 days. Full sun. Direct sow or transplant.

Sow seed ¹/₄ in. deep, thinning to 6–9 in. apart. Ht. 24 in.

SCARLET FLAX OG [Introduced to the U.S. from N. Africa and S. Europe and naturalized in many areas by 1900] Mounds of brilliant velvety-red blossoms May through September. Grow in clumps in



borders or beds, and in mixed plantings such as cottage gardens. A good addition to wildflower or meadow gardens. Can be fall-sown in mild areas, or spring everywhere else. Self sows. **#01160 Pkt (0.30 g, ~85 seeds) \$2.75**

Four O'Clocks Mirabilis jalapa

Annual. Germination: 70°F, 14 days. Full sun. Direct sow in late spring. Space 12-18 in. apart. Self sows.

BROKEN COLORS OG S 🌞 🕿 This almost lost heirloom variety fills the garden with a riot of bi-colored and splashed patterns every afternoon in tones of raspberry, yellow, orange, gold and white. Drought tolerant plants are 36 in. tall and produce a profusion of new flowers daily from mid-summer until frost. #01164 Pkt (2 g, ~20 seeds) \$2.95

DON PEDROS MIXED COLORS 0G S 🜞 🗏 [Introduced 1982 by SESE. Our neighbor brought this heirloom back from her mother's home town in Spain where this flower is locally



known as Don Pedros. / Unlike modern Four O'Clocks it has beautiful variegated flowers. Flowers are primarily magenta or yellow. On some plants both color types occur, on other plants the flowers are variegated striped or spotted. Flowers open about 4:00 in the afternoon and in the evening are pollinated by large hawkmoths and sphinx moths. Ht. 18 in. #01108 Pkt (2 g, ~20 seeds) \$2.95

Hollyhock Alcea rosea

Biennial, Germination: 60°F. 14–21 days. Full sun. Direct sow or transplant. Grows best in cool season areas sheltered from the wind. Space 12-24 in. apart. Ht. 6 ft.

BLACK OG S 🌞 🕿 [Pre-1830.] Magnificent spikes of satiny blue-black single flowers form the second year from first-year leafy 18 in. leaf rosettes. Flowers may be used for tea. #01109 Pkt (0.25 g, ~25 seeds) \$2.75



Blac

OUTHOUSE OG S 🌞 🕿 Mixed colored hollyhock can grow up to 9 ft. tall. Single pink, white, red and burgundy flowers. Traditionally grown near outhouses. #01145 Pkt 0.4 g (~35 seeds) \$2.75

FRENCH HOLLYHOCK ZEBRINA Unavailable for 2019.

Flowers

68

Hyacinth Bean Lablab purpureus

Annual. Germination: 60–70°F, 7days. Direct sow or transplant 1 month after last frost.

PURPLE HYACINTH BEAN **OG** S 🌞 🕿 [Pre-1802, the same variety grown by Thomas Jefferson.] Beautiful climbing bean with purple-green stems and foliage. Edible young leaves, flowers, and tender young pods The pink-purple flowers are borne above the foliage and develop into 3 in. long purple pods. Grows 10–20 ft.



depending on conditions. Thick foliage cover makes a good screen. Especially recommended for arbors. #11401 Pkt (8 g, ~20 seeds) \$4.25

Johnny-Jump-Up Viola tricolor

Perennial. Germination: 70°F, dark required, 12 days. Full sun. Direct sow or transplant after

last frost. Space 9 in. apart. Ht. 7 in.

HELEN MOUNT Old-fashioned favorite. Tricolor blooms of purple, blue, and yellow. #011111 Pkt (0.08 g, ~121 seeds) \$2.50



KISS-ME-OVER-THE-GARDEN-GATE (Polygonum orientale)

Annual. Chill before planting. Germination: 50°F, 21 days. Full sun. Transplant with care after last frost or direct sow. Ht. 4-7 ft. Space 2-4 ft. apart.

New! KISS-ME-OVER-THE-GARDEN-Gate S 🜞 🛣 (Prince's Feather, **Oriental Persicary**) Pink flower clusters hang gracefully. Heart-shaped leaves. Grown by Thomas Jefferson. **#01192** Pkt (1 g, ~105 seeds) \$3.25



Larkspur Consolida ambigua

Annual. Germination: 60°F, dark required, 21 days. Full sun. Direct sow as soon as soil can be worked. Space 8-16 in. apart. Ht. 36-48 in.

BACK! BLUE LARKSPUR OG S 🌞 (Consolida ambigua) 60 days. 36 in. spires of double and single blue flowers. Blooms early. #01161 Pkt (0.3 g, ~95 seeds) \$2.75

Galilee Mix **OG** (Delphinium consolida) 85 days. Nice mix of blue, pink, lilac, white, and rose. 3 ft. plants. #01169 Pkt (0.3 g, ~95 seeds) \$2.75

French Marigold Tagetes patula

Annual. Germination: 70°F, 4-8 days. Full sun. Direct sow or transplant after last frost. Space 8-16 in. apart.

Frances' Choice 0 S 🐫 93 days. [Named for plant pioneer Frances Huffman by Alan Kapuler.] Tidy 3–4 ft. tall plants are covered with dark red-purple single flowers with a dramatic gold rim around each petal. 8 in. stems make lovely bouquets. #01153 Pkt (0.5 g, ~180 seeds) \$2.75



LEMON DROP Unavailable for 2019.

NAUGHTY MARIETTA OG S 75 days. Old fashioned marigold. Golden-yellow single flowers with splashes of mahogany. 2 ft. tall plants. (Šimilar to "Dainty Marietta," but somehow "Naughty Marietta" gets more attention...) #01167 Pkt (0.5 g, ~140 seeds)



RED METAMORPH Unavailable for 2019.

Spanish Brocade 469

\$2.75

days. Yellow and gold petals splashed with red flecks. An old favorite of the Brocade class. 24-30 in. plants #01138 Pkt (0.5 g, ~165 seeds) \$2.50

Tashkent #1 OG S 🜞 🕿 78 days. [Found outside

an old Muslim school in Tashkent, Uzbekistan in 1992. A favorite of flower seed collector Bob Bell. Introduced 1999 by SESE.] 24–30 in. tall plants with a sweet marigold fragrance. Lacks the common astringent odor of other marigolds. The plants are so fragrant they sweeten the air on a hot summer day. Bears numerous 11/2-2 in. single petalled flowers that have yellow centers and velvet mahogany petals, with a fine orange border. Petals change from mahogany-red to orangered as they mature. One of our favorites. #01142 Pkt (0.5 g, ~148 seeds) \$2.75



Signet Marigold Tagetes tenuifolia

LEMON GEM 59 days. Powerfully scented 10-20 in. tall plants with abundant 1-in. bright yellow blooms. Fern-like leaves can reach 21/2 in. long x 11/2 in. wide but are generally much smaller. Can be planted more closely (6-8 in. apart) than other marigolds. Petals and leaves are edible; the leaves taste very similar to Peruvian huacatay and can be used as a substitute for parsley. #01181 Pkt (0.5 g, ~775 seeds) \$2.95



Lemon Gem

African Marigold Tagetes erecta



AFRICAN MARIGOLD, CRACKERJACK MIX **OG** 82 days. Classic marigold. Large, 3-4 in., double yellow and orange flowers on 3-4-ft. plants. When Ira was growing up in Florida, this was her grandmother's favorite marigold. #01183 Pkt \$2.75

Morning Glory Ipomoea purpurea

Annual. Germination: 70°F, 14 days. Full sun. Soak seeds 2 days, changing water every 12 hours, then direct sow or transplant after frost. Space 8 in. apart. 65 days. Cannot ship to AZ, AR, Puerto Rico.

Grandpa Ott's 🌞 🛣 [Family heirloom from Diane Ott Whealy. One of the original varieties that started Seed Saver's Exchange and the whole heirlooms movement.] Beautiful deeppurple flowers with a ruby throat that can climb 15 ft.



Grandpa Ott's

or more. Reliably self-seeds here on our central Virginia farm and at Heritage Farm in Iowa. #01149 Pkt (1 g, ~25 seeds) \$2.50

HEAVENLY BLUE OG Tall-climbing, fast-growing vine with bright 4 in. sky-blue flowers. Popular old favorite. #01115 Pkt (1 g, ~27 seeds) \$2.75



Phoenician

Mullein

Phoenican Mullein

Verbascum chaxii

Perennial. Germination: 55-70°F, 14-28 days. Direct sow or transplant. Space 15-18 in. apart. Self sows readily.

PHOENICIAN MULLEIN (Nettle Leafed Mullein) 🛛 🖉 💐

100 days. Hardy peren-nial produces 3–4 ft. spires of white/mauve blooms rising above a decorative rosette of large, dark green, crinkled leaves. Plants flower the first year from seed sown indoors. Drought tolerance and self sowing habit makes it perfect for cottage gardens and informal borders. #01171 Pkt (0.05 g, ~1000 seeds) \$2.75

of colors: Red, yellow, orange, pink, and rose.

Single and double flowers with some bicolored flowers. Use edible flowers in vinegar to make Indian Cress vinegar, or use

Annual. Germina-

tion: 65°F, 14 days.

Transplant or direct

sow after last frost. Space 6–12 in. apart.

JEWEL MIXED COLORS

OG Upright, bushy

growth in a mixture

Ht. 9–18 in.

flowers and leaves in salads. #01116 Pkt (4 g, ~20 seeds) \$2.95; #01116E (28 g) \$8.50

Nasturtium (Indian Cress) Tropaeolum majus

Nicotiana Nicotiana alata (Flowering Tobacco)

Annual. Germination: 75°F, light required, 14 days. Full sun. Transplant. Space 9-12 in. apart.

Old Fashioned Mix 0 💭 Flowing cascades of star shaped blooms in shades of white, pink, fuschia, maroon, and purple. Sweetly fragrant 2 in. flowers with 3 in. tubes. Ht. 36 in. #01140 Pkt (0.05 g, ~440 seeds) \$2.95



Petunia Petunia spp.

Annual. Germination: 70°F, light required, 10 days. Full sun. Sow in flats or pots in March or April; transplant after last frost. Space 12 in. apart. Ht. 15–30 in.

Balcony Petunia 🛛 🖉 💭 🔀 (*P. pendula*) Heirloom described in 1934 as the most showy of all petunias. Evening brings out the sweet fragrance of these rich velvety textured flowers in shades of violet, white, pink, and purple. Plants bloom until frost. Hardy and self-sowing. #01157 Pkt (0.05 g, ~475) seeds) \$2.95



fragrance, reminiscent of Lily-of-the-Valley.

#01131 Pkt (0.05 g, ~475 seeds) \$2.95



Poppy, Breadseed Papaver somniforum Annual. Germination: 60°F, light required. 6-10 days. Direct seed. Plant in late fall to early spring. Thin to 24-36 in. apart.

POPPY, BREADSEED, CHARLOT-TESVILLE OLD OG S 🌞 🛣 Scarlet Blooms with purple centers. Long bloom time. Thanks to SŠE members Christina Wenger & Patrick Holland for keeping this variety alive. #01189 Pkt (0.25 g) \$2.95 **Charlottesville Old**

POPPY, BREADSEED, HUNGARIAN BLUE ÓG S

[A/60°F/L/ 6-10/ds/24-36 in.] Beautiful bluish-purple flowers give way to attractive pods filled with poppyseed for baking. Pods can also be used in dried arrangements. Stake seed heads to prevent seed loss. Plant in late fall to very early spring. #71306 Pkt (0.25 g, ~500 seeds) \$2.95

New! Elka White Oilseed OG S Z White blossoms with lavender centers, followed by good yields of pods with white seeds. Closed vents

help prevent seed loss. Rare variety selected in Slovakia for oil production; also ornamental and good for using the delicious, nutty-flavored seeds whole in baked goods. #01194 Pkt (0.25 g) \$2.95

Elka White Oilseed



Annual. Germination: 70°F, 7-21 days. Full sun. Transplant or direct seed 4-6 weeks before last frost. Ht. 6-12 in.

RED DRUMMOND 🌞 🖾 80 days.[Named for Thomas Drummond, who sent seeds from Texas to England in 1835.] Texas native with clusters of 1 in. magentared flowers with burgundy centers and pale pink undersides; Small, pointed leaves. Very hardy - in the fall, flowers survive down to at least 20°F! #01179 Pkt (0.3 g, ~170 seeds) \$2.50





Hungarian Blue Breadseed Poppy



Phlox Phlox drummondii

Portulaca Portulaca grandiflora

Annual. 75°F, light required, 14 days. Full sun. Direct sow or sow indoors 6-8 weeks before transplanting after danger of frost. Space 6-12 in. apart.

OLD-FASHIONED Moss Rose OG S A lovely mix of semidouble and double flowers resembling miniature roses. The 6 in. plants bear a profusion of 2 in. flowers in delicate shades of yellow, rose, white, and pink. Capable of storing water in its fleshy stems, Portulaca is drought resistant and grows well even in poor soil once established. Bears until frost. #01148 Pkt (0.05 g, ~200 seeds) \$2.75



Rose Portulaca

Rose Campion Lychnis cherise

Biennial or short lived perennial. Germination: 60–65°F, light required. Sow in fall or early spring, needs exposure to cold for good germi-nation. Space 18 in. apart. Ht. 32 in.

ROSE CAMPION OG S 🔰 🔀 80 days. Bright pink-red flowers with silver-grey woolly leaves that are soft to the touch. Tall stems make it perfect

for cut flowers. Deadhead spent stems to keep it blooming. Hardy and freely self sowing. #01170 Pkt (0.06 g, ~110 seeds) \$2.75

Rudbeckia Rudbeckia fulgida (Black-Eyed Susan)

Perennial. Germination: 70°F, darkness required, 21 days. Full sun. Transplant or direct sow after frost. Space 15–24 in. apart. Ĥt. 24 in.

GOLDSTURM 🜞 Sometimes called Black-Eyed Susan. Attractive, goldcolored 3-4 in. flowers with chocolate-colored centers. Self-sows and naturalizes aggressively. Very hardy. #01119 Pkt (0.2 g, ~20 seeds) \$2.95





Sweet Pea Lathyrus odoratus

Annual. Germination 55°F, requires darkness, 15 days. Full sun. Soak seed 24 hours, direct sow in fertile soil as soon as soil can be worked. Space 6–12 in. apart. Does best in cooler temperatures.

Old Spice Mix OG 🌞 🕿

[Heirloom mix of varieties dating from 1699 to 1907.] Highly fragrant, heatresistant flowers in many colors. Climbing vines are best trellised. (Note: Toxic in large quantities.) #01155 Pkt (2 g, ~27 seeds) \$2.75

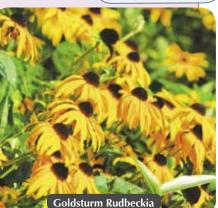
Sweet William Dianthus barbatus

Old Spice Mix

Perennial. Germination: 60–70°F, 14–30 days. Direct sow in spring or fall or transplant after danger of frost. Space 12–15 in. apart. Ht. 12-18 in.



SWEET WILLIAM OG S 🌞 초 A sweet-scented perennial usually treated as an annual. Brilliant little flowers are tinged with pink, red, purple, or violet. Prefers a moist but well-drained soil in full sun (partial shade in the South). Used as a spring bulb cover and as a long lasting cut flower. Reseeds easily. #01166 Pkt (0.07 g, ~67 seeds) \$2.75



Zinnia Zinnia spp.

Annual. Germination: 70°F, 7 days. Full sun. Direct sow or sow indoors 3-4 weeks before transplanting after the last frost. Space 12-24 in. apart depending on plant height. Easy to grow.



CACTUS-FLOWERED OG S 🌞 Spiky looking 2-5-in. blooms are a striking contrast to regular zinnias, bringing cactus flowers to mind. Mixed colors, 30-54 in. plants bloom over a long season. #01184 Pkt (0.50 g) \$2.75

Peruviana Red OG S 🐔 ≥ (Z. peruviana) [Pre-1700. Introduced 1992 by SESE.] Flowers of uncluttered simplicity and antique elegance. Single blooms, 11/2 in. diameter, are bronze-red, changing to antique-red, then fading to pastels of red. Appropriate for historical gardens, mass plantings, rockeries, or natural settings. Ht. 18–24 in. #01124 Pkt (0.5 g, ~70 seeds) \$2.75



Tithonia Tithonia rotundifolia (Mexican Sunflower)

Annual. Germination: 68-86°F, 8 days. Full sun. Direct sow or sow indoors 3-4 weeks before transplanting after the last frost. Space 24 in. apart. 80 days. Ht. 5 ft. Do not over-fertilize; plants may grow to 6–8 ft.

RED TORCH OG S 🗏 58 days. *[1951*, AAS winner] A member of the sunflower family. Flowers are 31/2 in. orange discs surrounded by orange-red petals. Highly branched. Attracts butterflies. Spectacular in mass plantings. **#01122 Pkt (0.5 g, ~38** seeds) \$2.75

Yellow Torch OG S 🌞 62 days. A color breakthrough, the first yellow-flower Tithonia. Flowers are 3 in. orange discs surrounded by yellow petals. #01123 Pkt (0.4 g, ~43 seeds) \$2.75





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PERUVIANA YELLOW Introduced 1994 by SESE.] Single blooms, 1½ in. diameter, are yellow changing to light yellow. Appropriate for historical



gardens, mass plantings, rockeries, or natural settings. Ht. 18-24 in. #01125 Pkt (0.5 g, ~125 seeds) \$2.75

BACK! OG S 🌞 RED

BEAUTY Beautiful dark red double flowers with gold-tipped centers. 4-5 in. flowers on 3-ft. tall plants. Long stems and great vase life make this an ideal cut flower. #01175 Pkt (1 g, ~125 seeds) \$2.75

State Fair Mix 🂭 (Z. elegans) Large 4 in. single, double and semi-double blooms in mixed colors on 48 in. tall plants. Tolerant to alternaria and mildew. A wonderful cut flower for bouquets. Popular variety. #01126 Pkt (1 g, ~125 seeds) \$2.50

New! ZAHARA STAR-LIGHT ROSE OG S (Zinnia marylandica) 15 in. plants with 1¹/₂-2¹/₂ in. white blossoms with faint pink around many of the centers. Resistant to heat, disease, and drought. #01193 Pkt (0.5 g) \$2.75





Wild Garden Perennial Insectary

OG S the backbones of a spring through fall oasis for your resident beneficial insects. A complement of self-sowing annuals, biennials, and perennials provide food, shelter, and pollen. Broadcast or sow in rows 14 in. apart, thinning to a final spacing of 12 in. Manage plants by weeding and thinning volunteers each spring. The leaves are edible. Includes fennel, Korean mint, garden sorrel, alexanders, chervil, parsley, chicory, cress, turnip, mustard, calendula, amaranth, and orach. #92010 Pkt (7 g) \$7.25

Red Beauty



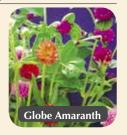
Our flower selection emphasizes open-pollinated traditional favorites. Many people have told us that they enjoy the single-flowered old fashioned types because of their elegant simplicity and beauty, and others have commented that the fragrance has been bred out of many modern varieties. Our Seed Shares exchange policy (pg. 2) also applies to family heirloom flowers. With your help we all may be able to enjoy the fragrance and simplicity of old-fashioned flowers in modern gardens.

Everlasting Flowers Drying flowers for year-round blooms.

Globe Amaranth (Gomphrena) Gomphrena globosa

Annual. Germination: 70°F, darkness required, 20 days. Sow indoors in March, transplant in May. Space 9-12 in. apart.

GLOBE AMARANTH MIXED COLORS Mixture of colors includes purple, red, pink, and white clover-like flowers. Drought tolerant. Ht. 30 in. Clean seed. #01602 Pkt (0.15 g, ~29 seeds) \$2.75



Jewels of Opar See Greens, p. 22

Job's Tears Coix lacryma-jobi

Annual. Germination: 70 degrees, 21 days. Scarify to speed germination. Full sun. Direct sow or transplant after last frost. Space 2-3 ft. apart.

JOB'S TEARS OG S

🄰 🛣 110 days. 1/4 in. x 3/8 in. tear-



shaped seeds in an attractive mix of mottled patterns dominated by shades of gray, with some black and white. Seeds are easily threaded and frequently used in rosaries and other beaded accessories. Seeds borne in clusters on mostly 3 ft. tall grass plants; some plants reach about 5 ft. tall. Hard pseudocarps make this variety unsuitable for culinary use. Cannot ship to HI. #01622 Pkt (12 g, ~55 seeds) \$2.95

Nigella (Love-in-a-Mist) Nigella damascena

Annual. Germination: 60°F, 21 days. Full sun. Direct sow after frost since it does not transplant easily. Space 9 in. apart. 75 days. Self

sows readily.

NIGELLA LOVE-IN-A-MIST MIXED COLORS **OG** S 🔀 An old-fashioned flower from southern Europe sometimes called Fennel Flower because of its nutmeg-flavored seeds. Mixed flowers in shades



of blue, pink, white, and purple, averaging 11/2 in. in diameter. #01605 Pkt (0.2 g, ~77 seeds) \$2.75; #01605C (7 g) \$6.50

Statice (Sea Lavender) Limonium sinuatum

Annual. Germination: 60°F, 18 days. Full sun. Sow indoors in early spring and transplant after last frost to good loam. Space 9-12 in. apart. Ht. 30 in.

STATICE MIXED COLORS Pleasing blend of colors: blue, purple, rose, yellow, and white. #01607 Pkt (0.15 g, ~67 seeds) \$2.50



Strawflower Helichrysum bracteatum

Annual. Germination: 60°F, light required, 10 days. Full sun. Sow indoors in March, transplant after frost. Space 9–12 in. apart. Harvest flowers when blooms are 2/3 open. The flowers keep for months, great for indoor color after fall frosts.



STRAWFLOWER TALL MIX OG S 🌞 Standard tall strawflower with mixed colors: yellow, bronze, crimson, white, and shades of rose. #01608 Pkt (0.2 g, ~280 seeds) \$2.75

Ornamental Wheat *Triticum sp.*

An excellent addition to dried flower arrangements. All require full sun for good color development. Plant in the spring as soon as soil can be worked. Matures in mid-to-late summer. Space 12 in. apart.



BLACK EAGLE OG S [24-36 in.] Mostly black, ornamental hard red spring wheat with black awns and black/white glumes. #01611 Pkt (7 g, ~175 seeds) \$2.75 Cannot ship to Canada.

Sunflowers Helianthus annuus

Culture: Annual/70°F/LD/14 days/sun/direct sow in May or June/space 12-18 in. apart. Taller varieties may need staking. Early in the growth stage, place a pole at the base of the stalk. As the stem grows, use twine or soft ties to secure it to the stake every 6 ft. or so. History: Some archaeologists believe that Native Americans may have cultivated sunflowers as early as 3000 B.C. Uses: You can leave any remaining seed-heads in the garden for fall and winter visitors. Or you can cut and dry the seed-heads indoors. Throughout the winter months, tie dried heads to fences or to your deck or suspend in trees to feed birds.

Confectionery Sunflowers

Маммотн 0G 71 days. Stalks average 9 ft. tall and may reach a height of 10 ft. or more. Heads average 11 in. across, with some reaching 14 in. or more when plants are well grown. Gray and black seeds. Space 18 in. apart. **#05106 Pkt**



(7 g, ~70 seeds) \$2.50; #05106E (28 g) \$5.75

Oil Seed Sunflowers

PEREDOVIK OG S 🌞 55 days. Commercial Russian cultivar used for making sunflower oil; also used as a source of sunflower seed in bird seed mixes. 4-5 ft. stalks, mostly poly-headed. 4-11 in. blooms. Elongated black seeds. Great for feeding wild birds. #05201 Pkt (4 g, ~76 seeds) \$2.75; #05201D (14 g) \$7.50

Dwarf Sunflowers

Short Stuff OG S 🌞 54 days. [Selected by Merlyn and Mary Ann Niedens of Illinois.] Beautiful 5–7 in. golden yellow flowers borne on 30 in. plants, perfect for borders and growing seed to feed the birds in winter. Rogue out the occasional tall plant to keep your border neat. A great alternative to PVP varieties.

#05314 Pkt (2 g, ~40 seeds) \$2.75; #05314D (14 g) \$7.50

SUNSPOT OG * 65 days. 4–4¹/₂ ft. high dwarf sunflower. Produces a single large flower head 8-12 in. in diameter. Yellow flowers with golden brown centers. Can be grown as an ornamental or used for edible seed or bird food. Great for children. #05312 Pkt (4 g, ~60 seeds) \$2.50

Teddy Bear OG 🌞 59 days. An attractive doubleflowered ornamental with 3-5 in. yellow to light orange blooms on compact 3 ft. plants. Excellent for cut flowers. #05306 Pkt (4 g, ~225 seeds) \$2.50



Sunspot



Dye Seed Sunflowers

Hopi Dye OG S 🔀 62 days, 95 days for seed. Purple-black seeds are used by the Hopis as a natural dye source, especially for coloring baskets. Seeds may also be used for food or feed, and this is the best variety for dehulling. 7–11 ft. stalks with 5-13 in. heads, mostly poly-headed. Yellow



rays surround attractive purple-green centers. Adapted to cool, high desert areas, but can be grown elsewhere. If grown for seed, plan to mature seed in driest part of the growing season. Mounding soil around the base of stalks helps keep plants upright. #05401 Pkt (3 g, ~45 seeds) \$2.75; #05401E (28 g) \$8.50

Ornamental Sunflowers

We chose the sunflower for our logo because it symbolizes for us the unity of beauty and utility, and serves as a reminder of the boundless source of life's energy and creation. We

offer sunflowers for both the body and the spirit.

AUTUMN BEAUTY **OG** 70 days. 3-5 in. flowers in light fall colors. The polyheaded 5–7 ft. stalks may require staking once the seed heads have formed. Excellent tall screen, cut flower, and food source for self-feeding small

birds. #05301 Pkt (4 g, ~120 seeds) \$2.50; #05301E (28 g) \$5.75

BEACH SUNFLOWER **OG**

S 🏶 (Cucumber-Leaf) (H. debilis cucumerifolius) 56 days. Attractive wild sunflower native to the Gulf Coast. Multi-branching plants grow to 6 ft., with dozens of 2–4 in. yellow flowers on long stems. Leaves are similar to cucumbers' a lighter green and more ragged. Drought tolerant and vigorous, keeps blooming for up to 3 months. Longest

bloomer in our 2013 sunflower trials. Birds love the small seeds, choosing them over other sunflowers. #05315 Pkt (1 g, ~190 seeds) \$2.75; #05315D (14 g) \$8.50



Beach

BACK! COLOR FASHION MIX OG S 🜞 55 days. A sunny blend of yellow, red, and purple. Single blooms are 4-5 in. across and are very attractive in cut flower arrangements. Stalks up to 9 ft. make an attractive screen or background. Pkt #05302 (2 g, ~122 seeds) \$2.75

EVENING SUN **OG** 53 days. Shades of autumn colors ranging from red, mahogany-red, burgundy, russet-bronze, vivid gold, all in bicolor blends. 3-5 in. flowers. Plants grow 6–8 ft. tall with a number of secondary blooms. #05309

\$7.25



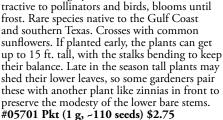
Selma Suns

INCA JEWELS Unavailable for 2019.

Pkt (2 g, ~50 seeds) \$2.50; #05309D (14 g)

Selma Suns OG S 🔅 61 davs. 7–8 ft. sturdy plants support between 6-30 heads with many striking earth tone colors including red, orange, brown, green, and yellow. Many multi-color flowers. Heads range from 3-6 in. and store well as cut flowers. #05313 Pkt (2 g, ~56 seeds) \$2.75; #05313D (14 g) \$8.50

SILVERLEAF SUNFLOWER OG S 🌞 🕿 (H. argophyllus) 54 days. Very unusual silvery green, soft, fuzzy leaves like Lamb's-ear! 6-15 ft. plants have many branches. 2-4 in. bright yellow flowers with 3/4-11/2 in. centers. Highly at-



New! Taiyo 🛛 🖉 🖉 68 days. [Japanese heirloom; in Japanese, "taiyo" means "sun."] 3-6 in. golden-yellow heads on 6 ft. plants, long blooming period. #05316 Pkt (4 g, ~99 seeds) \$2.75

Velvet Queen 0 🌞 55

days. 4–6 in. flowers in gold, brown, cream, orange, and muted reds and violets. Well-branched, sturdy, poly-headed 6–7 ft. plants. Use for cut flowers and tall borders. #05311 Pkt (4 g, ~140 seeds) \$2.50; #05311E (28 g) \$5.75





တ Grains & Cover Crops တ

Grain Amaranth Amaranthus spp.

Amaranth has been grown as a staple crop for at least 8,000 years in Central American cultures. Amaranth has many valuable qualities: (1) high content of lysine-rich protein, (2) high mineral and vitamin content, and (3) ability to grow at high temperatures when many other crops become unproductive. **Pest Control:** Try using amaranth as a trap crop or decoy crop for cucumber beetles, which are highly attracted to amaranth. This strategy may reduce the number of beetles on cucurbits planted nearby. **Culture:** Amaranth is planted at about the same time as corn. Two weeks after the last frost date sow seed $\frac{1}{4-3}$ in. deep, 1 in. apart in rows 2–3 ft. apart. Thin to 4–10 in. apart. The seeds are quite small and the soil must be kept moist until the crop has germinated. Once plants are established they can withstand dry soil. Too much nitrogen causes amaranth plants to lodge. Amaranth is a nitrate accumulator, so avoid any synthetic nitrogen. Plant height is very dependent on soil fertility and moisture content.



GOLDEN AMARANTH S \clubsuit \gtrsim (*A. hypochondriacus*) 80 days. A high-quality Aztec grain amaranth. Stalks and leaves are golden yellow with bronze-gold seed heads. Stalks average 6 ft. Can be used as a dry land/irrigated amaranth. In the far north long days may delay flowering. **#72101 Pkt (-2,700 seeds) \$2.75**

MAYO INDIAN Unavailable for 2019.

PLAINSMAN S (A. hypochondriacus x hybridus) [1991, U. of Nebraska.] Widely-adapted, early, highyielding variety. Golden seed, maroon flowers, 5-6 ft. tall plants. #72104 Pkt \$2.75

Buckwheat Fagopyron esculentum

BUCKWHEAT OG 30–45 days as a green manure crop, 80 days for grain. Wait until grain heads form if you want the crop to re-seed. May be used as a nutritious cereal grain or pancake flour. Young leaves



may be added to salads. The deep root system of buckwheat is good at mining subsurface minerals and it is an excellent crop for utilizing the nutrients in rock powder fertilizers. Sow any time between last spring frost and 1 month prior to first fall frost. A great quick summer crop – fast-growing plants choke out weeds, bees love the white flowers that appear in 4–5 weeks, and the tender stems are easy to cut down when the crop's done. For a fall/winter cover crop we recommend sowing buckwheat together with crimson clover. The buckwheat acts as a nurse crop for the crimson clover during the heat of the day. In the fall, the buckwheat is killed by frost. 1 lb sows 400 sq. ft. **#73101 Pkt (1 lb) \$6.75; #73101A (4 lbs) \$15.75**

Grinding Corn Pgs. 13–15.

Seed Sowing Tip: For ease of sowing, place seeds in a salt shaker and sprinkle seeds into the

row. Seed Harvest: Seed heads mature unevenly.

Some early seed may be collected by "massag-

ing" the seed heads above a bucket. To harvest

later maturing seed wait until after frost to cut the seed heads. Thresh the seed heads (while

wearing a dust mask), screen out the chaff, and

have a high moisture content. Spread the seed in thin layers until it has fully cured. **Preparation**:

Grind grain in a flour mill, sprout it, pop it like

popcorn, or use it in hot cereal. Seed Savers:

Amaranth is primarily self-pollinated. Separate

varieties by at least 150 ft. for pure seed. **Packet:** 2 g (about 1700 seeds) sows 65–130 ft.

winnow the seed. Freshly harvested seed may

Millet

Plainsman Amaranth

Culture: Direct seed or transplant (transplants well) after soil has warmed after last frost, spacing 4–6 in. apart, and harvest the dried seed heads as they mature.



DRAGON'S CLAW **OG** S ♣ ℤ (*Ele-usine coracana*) 95 days. A highly productive, drought-tolerant variety that is very ornamental, especially as a border. Annual plants, 3 ft. high, produce seed heads that resembles the claws of a dragon's foot. A staple food in India and Africa, with good flavor, though the seeds are difficult to separate from chaff. **#72651 Pkt** (**2 g**, ~1050 seeds) \$2.75

Oats Avena nuda

OATS, HULLESS OG Growing your own oats is easy with Hulless Oats. Sow in early spring as soon as the ground can be worked. Harvest in mid- to late summer, thresh, and winnow. Hulless Oats lack the indigestible husk of common oats; they do have a hull, but it's easily threshed off. Grind



into oat flour or crack in a grain mill to make oatmeal. Oatstraw, the green leafy stems, can be harvested for tea. For a winter cover crop, sow in late summer; in cold areas, oats will get winter-killed when temperatures drop below 10°F, and the crop residue is then easy to work under for planting early spring crops like peas and potatoes. ½ lb sows 175–250 sq. ft. **#72552 Pkt** (½ lb) \$4.25

Rice Oryza sativa

Culture: Rice needs nitrogen-rich soil. Rice does not need to be flooded – flooding is traditionally used for weed control – but plants will need an inch of rain or irrigation per week. Direct seed or transplant healthy seedlings, rows 9–12 in. apart, 6 in. in rows. Keep wellweeded – don't let grass weeds become mixed up in your rice! **Harvest:** Finches and other birds love rice, so use bird netting to protect the mature seedheads. Harvest when seeds are brown, gently pulling mature seeds off the stalks, harvesting several times over a period of a few days. For eating, rice needs to be dehulled, which requires specialized machinery, such as Grain Maker's Homestead Huller.



CAROLINA GOLD S ♣ ≈ 150 days. [1685 or earlier. The main rice grown in Carolina wetlands for hundreds of years. Seedstock from Anson Mills.] Golden long grain rice. Slow Food USA, in the Ark of Taste listing, praises its "stunning subtle green tea, nutty almond and floral aromas and flavors. Carolina Gold brown rice tastes almost like barley with a nutty taste and a little bit of a sweet finish. It has a beautiful chewy texture." #72555 Pkt (7 g, ~230 seeds) \$3.25

BACK! CHARLESTON GOLD S [Seedstock thanks to the Carolina Rice Foundation.] A modern refinement of the classic Carolina Gold, keeping its great flavor, color, and texture, but with the bonuses of longer and more fragrant grains, as well as shorter stalks to make the plants more storm-hardy. #72557 Pkt (7 g) \$3.25

M-101 Unavailable for 2019.

Especially Well Suited to the Southeast 🛛 Heirloom S Seed from Small Farms OG USDA Certified Organic Grains & Cover Crops 73

Winter Rye Secale cereale

WINTER RYE, COMMON OG Rye cover crop is great for controlling erosion, adding organic matter, enhancing soil life, and suppressing weeds. Its extensive root system makes it among the best green manures for improv-



ing soil structure. It is an excellent soil renovator and pioneer crop for new fields. Rye is very good at releasing phosphorus and potassium. It also stabilizes excess soil and manure nitrogen. Rye and vetch together are one of the preferred cover crops for no-till tomato planting. Rye is also good for animal grazing; it's highly palatable and of good nutritional quality, and regrows after grazing. Rapid establishment and growth together with germination suppression make rye an excellent choice preceeding organic transplants. Sow Aug. 1–Nov. 15 as a winter cover crop. Plant at 4–6 lbs per 1000 sq. ft., or 60–112 lbs per acre. **#72702 Pkt (½ lb) \$2.95; #72702A (4 lbs) \$14.75**

WREN'S ABRUZZI Unavailable for 2019.

Wheat Triticum aestivum

New! WHEAT, HARD WINTER, NU EAST [2009, *ARS/USDA*] A great new wheat variety bred for the Southeast, a favorite for many bakeries. High yields, very good wheat rust resistance. Plant 2-4 lbs per 1000 sq. ft. for cover crop, or 2 lbs per 1000 sq. ft. for grain crop. **#72802 Pkt** (½ **lb**) \$3.50; **#72802A** (*4 lbs*) \$15.75 **Cannot ship to Canada.**

Sesame Sesamum indicum

Culture: Vigorous, heat-loving plants. Direct seed or transplant after last danger of frost. Space plants at 8-24 in. May benefit from staking. Harvest either by cutting stalks when there are more brown pods than green and standing them upright to dry, or by cutting dried stalks with open pods. Turn dried stalks upside down over a tarp or cloth, shake seeds out, and winnow.

BENNE SESAME OG S ♣ ≥ 160 days. [Thanks to David Shields for seedstock.] An old-fashioned sesame, common in 19th century Southern cooking, traditionally processed into flour and oil. Richly flavored brown seeds with lower oil content than modern sesames. 7-ft. plants. #72622 Pkt (1.5 g) \$2.75

MONTICELLO WHITE SEA-ME OG S 2 150 days. [Thomas Jefferson was an enthusiastic sesame grower. Thanks to Monticello for our seedstock.] 6-ft. plants. Tan seeds with medium oil content. #72601 Pkt (1.5 g, ~450 seeds) \$2.75





Legume Cover Crops Legume cover crops belong to the Fabaceae (Leguminosae) plant family, commonly called the pea or bean family. They all share a common trait: they form symbiotic relationships in their roots with nitrogen-fixing bacteria found in plain old garden soil. Plant these cover crops to create an astounding underground community that pulls nitrogen out of the air! Most of the nitrogen winds up in the plants themselves, not the soil, so for the most benefit, till these crops under when they're still live and green... before they die back and release all that nourishing nitrogen back into the atomosphere!

Legume Inoculant see page 79.

Austrian Winter Peas OG (Pisum sativum subsp. arvense) (annual) Sow Aug. 15-Nov. 1 as a winter cover crop in zones 6 and up. Hardy to 0°F. A great edible cover crop – snip off the tendrils and growing tips for salads! Flowers earlier (April) than hairy vetch. For maximum nitrogen



fixing, wait until at least 50% of the plants have flowered before mowing crop. Sow at rate of $\frac{1}{2}-\frac{1}{2}$ lb per 500 sq. ft. Best sown with annual rye in a ratio of 1 lb peas to 4 lbs rye. **#73205 Pkt (\frac{1}{2} lb) \$3.50**

HAIRY VETCH OG

(*Vicia villosa*) (annual) Sow Aug. 1–Nov. 1 as a winter cover crop. Grows slowly in fall, then rapidly in spring, putting out beautiful purple flowers that bees love. Highly efficient nitrogen fixer; for maximum nitrogen fixing, wait until at least 50% of the plants have flowered before mow-

ing crop. Mow it in the spring after flowering starts and transplant tomatoes or other large plants directly into the vetch, or till under. Sow at rate of ½ lb per 500 sq. ft. Best sown with annual rye in a ratio of 1 lb vetch to 4 lbs rye. **#73203 Pkt (½ lb) \$4.95**

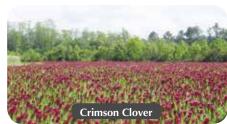
HARDEE – See Southern Peas (p. 37)

IRON & CLAY – See Southern Peas (p. 37).

SUNN HEMP (*Crotalaria juncea*) [*Native to South Asia*] Summer cover crop can grow to 6 ft. within 60 days. Fixes lots of nitrogen, suppresses nematodes, thrives in heat, tolerates drought, pulls nutrients from deep in the subsoil, and dies with frost. Day-length-sensitive

plants produce lots with nost. Day plants produce lots of attractive bright yellow flowers late in the season but won't mature seed above 28°N latitude (i.e., only makes seed in s. Florida and the s. tip of Texas). Best planted in rows 2-3 feet apart. In warm areas, mow when plants reach 5-8 ft. to keep stems from becoming too massive and fibrous. ¹/₄ lb sows 250 sq ft. Traditionally used for soil improvement and fiber. **#73221 Pkt (¹/₄ lb) \$4.95**





Clover Trifolium spp.

CRIMSON CLOVER OG (*Trifolium incarnatum*) (annual) Upright winter annual resembles red clover in size and growth, but with longer, bright crimson blooms. Widely used in Mid-Atlantic areas where winter lows stay above 10°F. Sow from mid-July through mid-September. ¹/₄ Ib. sows 450 sq. ft.

#73204 Pkt (¼ lb) \$4.50

RED CLOVER OG (*Trifolium pratense*) (biennial) Rapidgrowing green manure crop to 10–18 in. The flowers can be harvested for tea. Sow in the spring or fall for turndown to incorporate organic nitrogen into the soil. Sow in the aisles between taller crops to deter weeds. Buckwheat



may be used as a nurse crop to aide germination of clover in summer heat. The clover will grow slowly under the buckwheat until fall frost kills the buckwheat and allows the clover to establish quickly. This method eliminates fall tilling. ¼ lb sows 500 sq. ft. **#73201 Pkt (¼ Ib) \$3.95**

WHITE DUTCH CLOVER (Trifolium repens) (perennial) A low-growing (4–8 in.) clover sometimes used in grass seed mixtures. Can be sown between garden rows or



used as a living mulch to add nitrogen and to smother out weeds. Sow in late winter, spring, late summer, or fall. ¼ lb sows 1000 sq. ft. **#73202 Pkt (¼ lb) \$4.25**



74 Grains & Cover Crops

www.SouthernExposure.com

Sorghum & Broom Corn Sorghum bicolor

Classification and Historical Notes: Sorghum originated in Africa, where it has been cultivated since 2,200 B.C. Though sorghum may have been grown in the U.S. as early as 1700, the first recorded introduction was by William R. Prince of Flushing, NY in 1853. By 1859 it was grown in 32 states. There are four main classes of sorghum and many cultivars: (1) cane sorghum with sweet stalks used for making syrup, (2) grain sorghum used for feed or for making flour or cereal, (3) broom corns, and (4) grass sorghum used for pasturing. Sorghum has excellent resistance to drought due to its extensive root system. It is a valuable crop in dry areas since it will produce grain where corn may fail. **Culture:** Sorghum is planted in the same fashion as corn, with similar spacing. (See corn section.) Sow seeds $\frac{1}{2}$ - $\frac{3}{4}$ in. deep. **Seed Harvest:** Seed is mature for harvest when the seed stalk has started to dry. Cut the stalk, allow to dry further under cover, strip the seeds by hand, and winnow to clean. Grain sorghum can be used like flour corn. It is especially good for making pancake flour. Syrup Harvest: In the fall, strip the leaves, and after cutting the cane into convenient lengths, crush the cane and press out the juice into a pot. Cook to reduce the liquid until it reaches the consistency of maple syrup. The sweet canes of cane sorghum can be peeled and chewed like candy – we like to plant a small patch for snacking. **Seed Savers:** Isolate ¹/₂ mile from other sorghum, broom corn, grass and sudan grass. **Packet:** 7 g (about 350 seeds) sows 50 ft. NOTE: Cannot Ship to Canada.

SWEET SORGHUM: PRODUCTION & PROCESSING [George Kuepper.] A simple guide to smallscale, ecological production of pure sorghum syrup. Chapters on harvesting, milling, juicing, cooking, packaging, labeling, pricing, and more. Includes sources of supplies and equipment. Spiral bound paperback, 96 pp. **#91134 \$16.95**

BLACK AMBER CANE **OG S 🌞** 99 days. [Heirloom sent to us from R.C. Mauldin of the Southwestern Seed Service Lab in Waco, TX. Reintroduced by SESE 1997.] One of the earliest sweet canes introduced to American agriculture. Not as sweet as other syrup sorghums. As a silage crop it has the



hay and wild game quality of 'Merit.' A good intercrop with beans and peas. 8-9 ft. stalks, loose heads of shiny black seeds are grown by many folks for their chickens.. #72606 Pkt \$2.75; #72606F (¼ lb) \$11.50

Coral S $rightarrow \mathbb{Z}$ [From the Shilluk, or Chollo, people of Malakal, South Sudan, via the USDA and the Experimental Farm Network. / Multi-use and high-yielding. Huge stalks, $1\frac{1}{2}$ in. wide and 9-12 ft. tall. Sometimes tillers to produce multiple stalks per plant. Sweet stalks are good for syrup or chewing. Immature sorghum seeds are a traditional food both in Sudan and in South India; this



variety is ready when the highest seeds have just begun to turn purple. We found them tasty but still haven't managed to thresh them efficiently. Mature seeds can be ground into flour, cooked whole, or popped like popcorn, making for an impressive range of foods from one variety. 30% of proceeds from this rare variety will go to the Experimental Farm Network and their seed grower, to support their work to preserve and return varieties from communities endangered by war. #72616 Pkt \$2.75

DALE S * 120 days. [1970 USDA/ADS & MAESS.] Sturdy 12 ft. stalks with excellent disease resistance, well adapted throughout the Southeast. Syrup has mild flavor with good color; small, reddishbrown seed also good for grits and pancake



flour. Missouri's Sandhill Farm uses this variety for their fine sorghum syrup. #72609 Pkt \$2.50; #72609F (¼ lb) \$10.50

Della S 🌞 115

days. [1991, Virginia Polytechnic U.] Similar to Dale, good disease resistance, makes mild light syrup. A week earlier than Dale, with more variable stalk height (10-11 ft.). #72612 Pkt \$2.50; #72612F (¼ lb) \$10.50

HUNGARIAN BLACK-SEEDED BROOM CORN **0G S 🌞** 105 days. Heirloom broom corn traditionally used for making brooms. Grows 8–10 ft. tall, producing long seedheads heavily laden with shiny black seeds. An





Hungarian Black-Seeded

important historical variety. #72602 Pkt \$2.75



IOWA SWEET 🕿 S 110 days. [Sand Hill Preservation Center.] A very sweet sugar cane type, about 9 ft. tall with juicy stalks. #72610 Pkt \$2.50; #72610F (¼ lb) \$10.50

MENNONITE **OG** 🕻 🔀 S 105

days. [Mennonite heirloom from Jamesport, MO area.] This old fashioned cane sorghum is used to make lightcolored syrup for pancakes or waffles.



7–9 ft. tall stalks. The red-hulled seed may be ground to make flour, especially for pancakes. #72604 Pkt \$2.75; #72604F (1/4 lb) \$11.50

RAINBOW BROOMCORN **OG S 🌞** 110 days. Gorgeous ornamental. 7–8 ft. tall mix of colorful sprays of red-bronze, brown, black, and burgundy, plus natural straw color. #72615 Pkt \$2.75

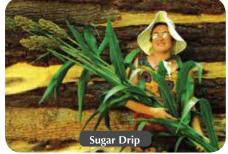


Rainbow Broomcorr

Red Broomseed Corn **OG** S 🌞 🕿 100 days.Traditionally used for making hearth brooms, also great for dried arrangements. Large, splayed seedheads form at the top of 7–9 ft. tall stalks. Important historical variety. #72605 Pkt \$2.75



Red Broomseed



SUGAR DRIP **OG S** $rac{1}{2}$ 102 days. One of the earliest-maturing varieties for the South, and one of the most widely grown varieties in the southern mountains. Grows 6-8 ft. tall; susceptible to lodging if not harvested early. Used for early production of very good quality syrup. #72608 Pkt \$2.75; #72608F (1/4 lb) \$11.50



Tarahumara Popping S 🌞 🖾 115 days. [From the Tarahumara people of NW Mexico.] The dried seeds can be popped like popcorn! Small, white seeds with nutty flavor. As with popcorn, the seeds need to dry a good while after harvest before they'll pop well. Unlike popcorn, unpopped kernels in the pan are tender enough to eat. 10–12 ft. tall plants. #72607 Pkt \$2.50; #72607F (1/4 lb) \$10.50

CO Books & DVDs CO

Agricultural Calendar & Records

PERPETUAL GARDENING RECORD BOOK Just the thing for gardeners who prefer to use pen and paper to keep track of what's happening in the garden. Inspired by Thomas Jefferson's meticulous garden record books and proudly made in Alabama using recycled materials, it includes growing charts, calendar pages, sketch pages, and a resource page for keeping all records for several years in one place. The large calendar pages allow one to compare one's planting dates, harvest dates, and yields over many years. This wonderful book works in all zones, needs no batteries, chargers or wifi. Timeless garden quotes and photographs make it a great gift for the gardener in your life. Softcover, 80 pp. #91179 \$14.95

STELLA NATURA: KIMBERTON HILLS AG-RICULTURAL CALENDAR A yearly guidebook to using the cosmic rhythms in working the land to help determine the best times for planting, pruning, and harvesting. Based on ages of farming experience and observation, this guide connects



astronomical events to the biological rhythms of plants. Included are 12 articles, one for each month. Hand-illustrated wall calendar and 40 page book, 9 × 12 in. Includes space for garden notes. Current edition. **#91131 \$16.95**

Cookbooks & Food Preservation

WILD FERMENTATION: THE FLAVOR, NUTRITION, AND CRAFT OF LIVE-**CULTURE FOODS** [Sandor Katz.] This book is a fave. Nearly 100 home recipes for vegetable ferments (sauerkraut, kimchi, pickles); bean ferments (miso, dosas); dairy ferments (yogurt); cheesemaking (and vegan alternatives); sourdough and other grain fermentations from Cherokee, African, Japanese, and Russian traditions; vinegars and alcohol. Fascinating reading about the amazing world of beneficial bacteria and fungi! 2nd ed. Softcover, 298 pp. #91161 \$29.95.

WINTER FOODS [Brett Grohsgal and Julia Shanks.] Over 50 delicious, inexpensive, seasonally inspired recipes designed for winter CSA subscribers at Even' Star Organic Farm in Maryland. The authors draw on their combined 35 years of professional cooking experience to bring recipes designed to use the vegetables we can grow in winter. Includes tips on storing produce

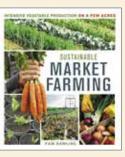
for optimal freshness, definitions of cooking terms and a key to cooking techniques used in the recipes that make the recipes easy for beginners as well as experienced cooks looking to eat local all year round. Softcover, 90 pp. #91171 \$12.00

Featured Growing Guides from Lousia County, VA

Pam Dawling, Twin Oaks **Community Farm**

SUSTAINABLE

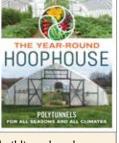
MARKET FARMING [Pam Dawling.] A practical guide for farmers or serious gardeners raising a variety of crops on a few acres. Pam is a contributing editor to Growing for Market magazine. She provides a wealth of how-to growing details, time-saving



field techniques, and extensive info on variety selections with a welcome Southeastern flavor from her years of experience providing yearround vegetables for 100 people at Twin Oaks Community in central Virginia. Chapters on cover crops, cultivation, individual vegetables, crop rotation, succession planting and more offer time and money-saving insights for experienced growers as well as beginning farmers. Pam's early years as a gardener in England provide insights that make this volume an excellent resource for serious growers in any climate zone. Softcover, 400 pp. #91174 \$34.95

New! The Year-**ROUND HOOPHOUSE: POLYTUNNELS FOR ALL** SEASONS AND ALL CLI-MATES [Pam Dawling] Another must-have book from SESE neighbor and author of Sustainable Market Farming. This is a thorough, clear and easy-to-follow guide for de-

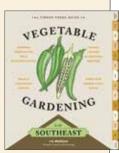




signing and building a hoophouse and making a success of growing abundant, delicious fresh produce all year round, in any climate, for market or just your family. Softcover 320 pp. **#91194 \$33.00**

Ira Wallace, Southern Exposure Seed Exchange

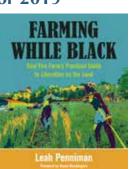
VEGETABLE GARDENING IN THE SOUTHEAST, THE TIMBER PRESS GUIDE TO [Ira Wallace.] This new book by Southern Exposure's own gardening expert Ira Wallace gives home gardeners the regionally specific information needed to succeed in our hot, humid climate. It features what to plant, when to



plant it, and when to harvest, based on our climate, weather, and other info. The Southeast region includes Alabama, Arkansas, northern Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, N. Carolina, S. Carolina, Tennessee, Virginia, W. Virginia, and a slice of NE Texas. Monthly planting guides show ex-actly what you can do all year long. The "Skill Sets" go beyond the basics, with tutorials on seed saving, worm bins, and much more. Also includes a comprehensive gardening primer and an A-to-Z of edibles – a detailed guide for the region's tried-and-true varieties. Softcover, 216 pp. **#91178 \$19.95**

New for 2019

New! FARMING WHILE BLACK: SOUL FIRE FARM'S **PRACTICAL GUIDE TO** LIBERATION ON THE LAND [Leah Penniman] A rich and culturally relevant how-to manual for black and brown farmers. Filled with uplifting stories of black contributions to agriculture and



the ongoing work at Soul Fire Farm to build an anti-racist and just food system. "This is the most inspiring book I have read in years" - Ira Wallace. Softcover, 368 pp. #91193 \$34.95

"Made Easy": Perfect for Beginners

JOUR OWA

MADE EASY

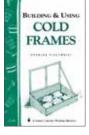
GROW YOUR OWN FOOD - MADE EASY [C. Forrest McDowell, PhD & Tricia Clark-McDowell.] This small, inexpensive treasure of a book distills the basics into 68 colorful, accessible, even humorous, pages. The authors have decades of experience growing food and teaching others to grow food. This book is a step-by-step guide to producing lots of nutritious,

delicious food using everyday skills, even if you have a small space. When we show this book at workshops and festivals, people gobble it up. Softcover, 68 pp. #91162 \$6.95

HOME COMPOSTING MADE EASY [C. Forrest McDowell, PhD & Tricia Clark-McDowell.] Over a million copies of this delightful and inspiring book are in print. It's used by hundreds of municipalities, organizations, and businesses to spread the word about home composting. It covers pretty much all you need to know in a simple, direct, and amusing style. Lots of practical tips, how-to information, and answers to common questions. Softcover, 32 pp. **#91163** \$3.95







BUILDING AND USING COLD FRAMES [Charles Siegchrist.] This handy booklet gives easy-tofollow instructions for the using and constructing of cold frames. Softcover, 32 pp. #91103 \$3.95



COLLARDS: A SOUTHERN TRADITION FROM SEED TO TABLE [Edward H. Davis & John T. Morgan] Collards are an icon of southern food and an underrated nutritional powerhouse that has long sustained southerners both black and white. This book by two respected geographers traces the path of collards,

exploring origins, sharing collard history, and preserving the stories of dozens of aging stewards of heirloom landrace varieties. These stories and the seeds donated by Davis and Morgan inspired the "Heirloom Collard Project" to preserve this living history of the South. To learn why collards matter read this book! Hardcover, 291 pp. **#91191 \$34.95**



EPIC TOMATOES: HOW TO SELECT AND GROW THE **BEST VARIETIES OF ALL TIME** [Craig Lehoullier.] Craig introduced Cherokee Purple to SESE and the world. He has grown thousands of tomato varieties, most of them in hot and humid North Carolina, and here he shares his hard-won wisdom on how to grow great tasting

tomatoes. A beautiful book is filled with great pictures of amazing tomatoes. Softcover, 256 pp. #91184 \$29.95



FOUR SEASON HARVEST [Eliot Coleman.] Organic grower Eliot Coleman grows food year-round on his farm in Maine; those of us further south can too! Besides spring and summer vegetables, Coleman gives great advice on growing fall and winter veggies in cold frames, under row covers, and inside

unheated greenhouses (high tunnels). Good illustrations and photos. A great read and an invaluable resource. 2nd edition. Softcover, 236 pp. #91164 \$24.95

GARDENING WHEN IT COUNTS – GROWING

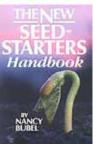
FOOD IN HARD TIMES [Steve Solomon.] Here's the scoop on traditional techniques that produce the most food in hard times, without a lot of mulch, compost and water. Current popular intensive vegetable garden styles require a lot of water, fertility and organic matter. This book shows you how to reduce your garden "inputs" and make your personal food supply more truly sustainable. Feed yourself and your family with less money, less fossil fuel, and less high maintenance equipment. Applicable to most areas except tropics and hot deserts. Softcover, 360 pp. #91105 \$19.95

Growing Guides & Companions



THE MARKET GARDENER: A SUCCESSFUL GROWER'S HANDBOOK FOR SMALL-SCALE ORGANIC FARMING [Jean-Martin Fortier.] Practical information for the small-scale organic farmer: how to grow better, not bigger. The style is down-to-earth and so

readable you want to sit down with it like a novel. Learn how Jean-Martin and his wife Maude-Helen gross \$110,000 on 1.5 acres. Anyone starting out in market farming or serious about producing their own food can benefit from reading this book. Softcover, 224 pp. #91185 \$24.95



THE NEW SEED STARTER'S HANDBOOK [Nancy Bubel.] Comprehensive, updated guide to seed and seedling care, indoors and out. Topics include light and temperature requirements, transplanting, diagnosing, and correcting problems, requirements of vegetable crops, pollination, selection, seed saving, and seed storage. Contains numerous

informative tables and supply sources. Readable reference for all gardeners. Softcover, 363 pp. #91118 \$17.95



BOOK FOR GARDENERS [Herrick Kimball] A handy book of easy-tofollow DIY projects and advice for the frugal gardener, with historical gardening tidbits interspersed throughout. Includes plans such as how to make your own wheel hoe, how to harvest and use wood stove biochar, and how to make your own

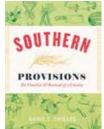
PLANET WHIZBANG IDEA

T-Post trellising. Useful for the experienced gardener looking to upgrade their technique in an economical fashion or for the newer gardener looking to dabble in practical, creative garden projects. Softcover, 124 pp. #91189 \$21.95



THE RESILIENT GARDENER [Carol Deppe.] Oregon farmer and plant breeder Carol Deppe's new book is a great read for intermediate and advanced growers. Deppe gives good strategies for how to successfully garden when health and other issues limit one's time. She focuses on 5

main subsistence foods (corn, beans, squash, potatoes, and...ducks!) Great information on growing, cooking, and storing the tastiest and most nutritious varieties. Softcover, 323 pp. #91166 \$29.95



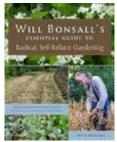
SOUTHERN PROVISIONS: THE CREATION & REVIVAL OF A **CUISINE** [David S. Shields] Shields brings 10 years of experience researching and exploring the traditional cuisine of the coastal Carolinas "low country" to this enthralling work. Filled with solid history and great stories about the crops and livestock that originally

defined the flavors of this cuisine. He introduces readers to the farmers, chefs and seeds people who are seeking to bring back flavorful ingredients like Carolina Gold rice, Carolina African Runner peanuts, Benne sesame, and sorghum to our gardens and tables.Softcover, 481pp. #91190 \$19.00



THE TAO OF VEGETABLE GARDENING: CULTIVAT-ING TOMATOES, GREENS, PEAS, BEANS, SQUASH, JOY, AND SERENITY [Carol Deppe.] Carol's newest book complements her previous book, The Resilient Gardener, focusing on all the vegetables she couldn't fit into her last book. We have so many

conversations that include us saying "Hey, have you read what Carol Deppe had to say about that?" We can't wait to read her newest book! Softcover, 280 pp. #91183 \$24.95



WILL BONSALL'S ESSEN-TIAL GUIDE TO RADICAL, SELF-RELIANT GARDEN-ING [Will Bonsall.] Soak up the wisdom of a homesteader with more than 40 years' experience. Will grows his own veggies, beans, grains, oil seed crops, fruit, and other crops, most on only a few acres, with minimal machinery and

no animal inputs. Will's also a famous seedsaver, saving seeds of hundreds and thousands of varieties, and there's some great seedsaving advice here too. Will lives in Maine, but Southern readers will find useful ideas and advice in this friendly and engaging book. Softcover, 388 pp. #91188 \$34.95

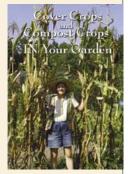
Native American Gardening

NATIVE AMERICAN GARDENING [Michael J. Caduto and Joseph Bruchac.] Stories, projects, and recipes for families. Combines the magical world of Native American stories with the nurturing experience of gardening. Learn to grow traditional "Three Sisters" gardens of corn, beans, and squash. Explore the relationships between people and the gardens of the Earth, seed preservation, Native diets and recipes, garden crafts, and games. Softcover, 158 pp. **#91148 \$16.95**

www.SouthernExposure.com

Cindy Conner, Homeplace Earth

COVER CROPS AND COMPOST CROPS IN YOUR GARDEN Cindy Conner takes you through a year in her garden. Using hand tools she grows cover crops amongst her vegetables to keep down weeds and nourish the soil, then cuts down the cover crops for mulch and compost. Features many of our faves (Bloody Butcher



corn, Mississippi Silver crowder peas, and more!). 2008. DVD, 66 min. #91301 \$25.00

DEVELOP A SUSTAINABLE VEGETABLE GARDEN PLAN Cindy Conner is back with a winning DVD and accompanying CD to help you enjoy your garden to the max. Cindy shows how to put together a plan unique to your garden conditions and growing preferences. Field trips to a half-dozen gardens illustrate her points, and a companion CD contains worksheets to help guide your seed purchases, crop rotations, and cover crop choices, and to keep your garden full and productive all year round. We love how Cindy uses many of our varieties for food and to build soil! A great companion to her DVD on cover crops and compost. 2009. DVD, 120 min., plus CD. #91302 \$30.00

GROW A SUSTAINABLE DIET: PLANNING AND GROWING TO FEED OURSELVES AND THE EARTH Cindy Conner brings us a must-read book for anyone working toward increased food self-sufficiency for their family. This guide combines the garden planning and cover crop information from her DVDs with more about growing a complete diet, food preservation, storage, and getting it all to the table so everyone in the family is satisfied, all using the least amount of fossil fuel. It is a tall order that Cindy handles well, using permaculture and bio-intensive gardening methods. She ends with a chapter on "Rethinking Everything" based on her years of helping gardeners make this change. Softcover, 240 pp. **#91180 \$19.95**

Garlic

GROWING AND USING GARLIC [Glen Andrews.] This Storey Country Wisdom booklet has good practical advice for the first time garlic grower, stressing advance soil preparation for success. Covers a range of preservation techniques from braiding to making your own garlic salt, including 29 recipes. Softcover, 32 pp. **#91182 \$3.95**

GROWING GREAT GARLIC [Ron Engeland.] The definitive sourcebook for growing garlic organically. Written for gardeners and small farmers, it covers everything from site preparation through planting, fertilizing, harvesting, storing, and marketing. Also includes chapters on the history and evolution of garlic. Based on the author's experience with over 200 strains. Softcover, 226 pp. **#91111 \$16.95**

BREED YOUR OWN VEG-ETABLE VARIETIES [Carol Deppe.] 2nd edition. Great info for farmers and gardeners on how to breed your own locally adapted varieties, with inspiring tales of such interesting vegetables as popping chickpeas, hairy

mustards, purple peas, rainbow corn, storage watermelons, and many more. Softcover, 384 pp. **#91116 \$27.95**

BREEDING ORGANIC VEGETABLES: A STEP-BY-STEP GUIDE FOR GROWERS [Rowen White and Bryan Connolly.] A simple and thorough introduction to on-farm seed saving, breeding and selection for farmers and gardeners. Step-by-step instructions for creating a new breeding project, from deciding on goals

and finding seedstock to making selections and evaluating crops. Inspiring examples from five farmers show how each has improved their crops. Excellent tables and charts; a great reference. Spiral bound softcover, 98 pp. **#91172 \$15.00**

KENTUCKY HEIRLOOM

SEEDS: GROWING, EATING, SAVING [Bill Best with Dobree Adams] More great stories from Bill Best of heirloom varieties and their seedsavers! Stories of Aunt Lou's Underground Railroad tomato, Kentucky Rainbow corn, greasy beans, Vinson Watts tomato, and many more of our favorite varieties.

Hardcover, 269 pp. #91192 \$26.95

THE ORGANIC SEED

Navazio.] Written for

Savers and diversified

who want to learn the

necessary steps involved

in successfully produc-

seed crop organically.

"An essential guide to

small-scale farmers

ing a commercial

high-quality, organic seed

production: well grounded

in fundamental principles,

brimming with practical

techniques, thorough in coverage, and remarkably

well organized, accessible,

and readable." - Jeff Mc-

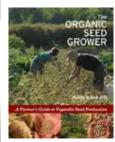
sure founder. Hardcover,

388 pp. #91176 \$49.95

Cormack, Southern Expo-

both serious home Seed

GROWER [John

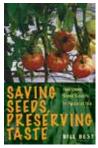




Seed Saving Guides



SAVING SEEDS, PRESERVING TASTE: HEIRLOOM SEED SAVERS IN APPALACHIA [Bill Best.] Highlights Appalachian varieties like Lazy Wife Greasy bean, Cherokee Flour corn, Case Knife bean, and Radiator Charlie's Mortgage Lifter tomato, along with the stories of the



Seed Savers that have preserved them. For over 50 years Bill Best has been in the forefront of a movement to preserve flavor, regionally adapted varieties, and the wealth of genetic diversity of beans, corn, squash, apples and tomatoes still existing in Appalachia. Reflecting his work as director of Sustainable Mountain Agriculture Center in Kentucky, this book not only talks about heirloom seeds and how to save them, but also the culture that values and maintains them. This book is an invitation for all of us to join in preserving this living heritage. Softcover, 288 pp. **#91177 \$22.95**

THE SEED GARDEN: THE ART AND PRACTICE OF SEED SAVING [Shanyn Siegel and Lee Buttala (editors), Micaela Colley and Jared Zystro (authors).] Seed Savers Exchange partnered with the Organic Seed Alliance to publish this beautifully illustrated volume written both for home gardeners



and farmers. An excellent complement to *Seed* to Seed, focusing on more of the main vegetable and herb families, and including new seed saving research. Guidelines that break down numbers and methods for the home garden, commercial seed crops, and variety preservation are especially valuable. Softcover, 390 pp. **#91187 \$29.95**

SEED TO SEED: SAVING OUR

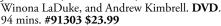
VEGETABLE HERITAGE [Suzanne Ashworth.] 2nd edition. A thorough and comprehensive book on seed saving for both new and experienced seed savers. Covers all major and minor vegetable crops, many herbs, and unusual or rare vegetable



crops. Discusses pollination dynamics, methods of maintaining variety purity, seed cleaning methods, seed collection and storage. An essential reference for Seed Savers. Large format softcover, 222 pp. **#91117 \$24.95**

SEED: THE UNTOLD STORY As

many irreplaceable seeds near extinction, this documentary reveals the harrowing and heartening story of passionate seed keepers as they wage a David and Goliath battle against chemical seed companies, defending a 12,000 year food legacy. Features Dr. Jane Goodall, Vandana Shiva,



Herbs & Herbal Medicine

BUSH MEDICINE OF THE BAHAMAS: A CROSS-CULTURAL PERSPECTIVE FROM SAN SALVADOR

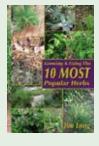
ISLAND, INCLUDING PHAR-MACOLOGY AND ORAL HIS-TORIES [Southern Exposure founder Jeff McCormack, Kathleen Maier, Patty Wallens.] A comprehensive treatment of Bahamian bush medicine, dedicated to the preservation and continued use of this knowledge before it is lost.



Covers 120 medicinal plants, including details of administration and dosage, pharmacology, and cross-cultural uses; non-botanical remedies are covered as well. Fascinating oral histories provide details of the healers' practice and glimpses of the culture of San Salvador Island. Includes color illustrations of over 100 medicinal plants, and the people who use them. Large Hardcover, 396 pp. **#91169 \$37.00**

GROWING AND USING THE TOP 10 MOST POPULAR

HERBS [Jim Long.] Ozarks herbalist Jim Long's overview of the US's most popular herbs: basil, lavender, parsley, mint, rosemary, oregano/marjoram, thyme, sage, chives, and cilantro. Good growing, harvesting, and drying info, as well as tasty recipes. Softcover, 36 pp. **#91167 \$6.95**



THE HERBAL MEDICINE-MAKER'S HANDBOOK [James Green.] An indispensable guide for anyone who wants to make their own herbal medicines. The author is a practicing herbalist and medicine-maker who teaches at the California School of Herbal Studies. Covers the science and art of herbal medicine making. Topics include harvesting, drying, storing, methods of herbal extraction, solvents, plant constituents, absorbability, dosage calculations and more. Includes references, charts, forms, index, and illustrations. 2000. Paperback, 384 pp. **#91137 \$22.95**

HERBS 101: A GUIDE TO GROWING AND USING HERBS [Jim Long.] A nice intro to the basics of herb gardening by Ozarks herbalist Jim Long. Choosing, growing, harvesting, using, and storing herbs are all covered. Many great recipes as well! Softcover, 36 pp. #91181 \$5.95

Weeds and Plant Disease

WEEDS AND WHAT THEY TELL US [E. Pfeiffer.] 3rd edition. The presence of common garden weeds provides valuable clues about your soil, your garden environment, and the kinds of conditions that favor weed growth.

This book tells you how to read the weeds. Softcover, 80 pp. **#91123 \$13.95**

Weeds

and what they tell us

s Supplies s

Seedling Pots

3-INCH BIODEGRADABLE CowPorts Created by two dairy farmers, CowPots are biodegradable seedling pots made with 100% renewable composted cow manure fiber. CowPots allow for unrestricted root growth creating stronger,



healthier plants. A great alternative to plastic and peat pots. The manufacturing process removes all weeds, pathogens and odor. All that's left is the natural fiber and goodness of manure. Once planted, the 3 in. round pot stays intact for up to 3 months in a greenhouse setting. Unused and kept in a cool, dry location, shelf life is indefinite. **#81655 24 pots for \$10.00**

Handheld All-Purpose Gardening Tool

COBRAHEAD "STEEL FINGERNALL" WEEDER AND CULTIVATOR Made in the USA of knifequality steel, the CobraHead is simply the best

all-around small tool I've come across. It cuts through all types of soils. The weeds it can't cut, it lifts. The self-sharpening blade can be used in all directions. The comfortable handle is made from recycled plastic. The CobraHead has a full one-year warranty against manufacturer defects.



If defective, return it within the year together with your receipt, and we'll send you another or refund your money. (Review by Ira Wallace) #81643 \$24.95

Row Cover / Season Extender

REEMAY[®] GARDEN BLANKET (Row Cover) Extend your gardening season and control insects. Floating row cover is a spun-bonded, reusable polyester material that can be placed directly over row crops without use of support hoops. Under



Reemay® Garden Blanket

normal use it should last 1–2 growing seasons; with care it can last longer. Crops grown under row cover produce earlier and higher quality harvests. In sunny weather, raises daytime temperatures 10°F. Frost protection averages 4°F. Use to protect crops from wind and destructive insects. Allows passage of light, air, moisture, and sprays. Some delicate crops may require wire support hoops. Simply unfold the row cover loosely over the seed or plant bed. To secure the edges, cover with a board, bury the edges in soil, or use fabric staples (see below). Store dry, clean row cover out of sunlight to extend row cover life. **#81617 Reemay 67 in.** × **50 ft. (279 sq. ft.) \$22.50**

Labels, Markers, and Tags

ALL-WEATHER MARKING PEN Permanent, xylenefree, quick-drying ink writes on all materials, even when surfaces are cold or wet. An ultra-violet filter in the ink reduces fading. #81403 \$3.50



PLASTIC PLANT TAGS (for pots and garden rows) Tags measuring $5 \times \frac{5}{16}$ in. last one or two seasons depending on the amount of sunlight exposure. Can also be fastened directly to plants by using a hole punch and a twist tie. **#81406 50 for \$3.25**

WOODEN GARDEN LABELS (for

garden rows.) Made from New England White Birch. These sturdy labels have been coated with an environmentally friendly preservative to resist rot. Labels are 10 in. tall × 7% in. wide × 1/8 in. thick.

#81408 25 for \$7.95 #81408A 100 for \$22.50 #81408B 200 for \$38.50



Bird-Scare Tape

BIRD SCARE FLASH TAPE Bird repellent tape resembles a fire when blown by the wind. Helps keep birds out of gardens and fruit crops during the ripening period. Made of highly reflective, red and silver mylar ribbon that is twisted in a spiral and suspended from stakes over crops. Slight breezes vibrate the ribbon creating the visual effects of a brush fire. 290 ft. roll, 7/16 in. wide. **#81501 \$6.50**

Watering Supplies

DRAMM 170 WATER BREAKER Allows for a concentrated and gentle flow of water into small areas. Use for hand-watering of raised beds, garden areas, and potted plants. Ideal for watering trays of seedlings. Durable aluminum construction. Fits



standard ³/₄ in. hose thread. **#81102 \$21.20**

FOGG-IT NOZZLE Unavailable for 2019.

Legume Inoculant

GUARD-N LEGUME INOCULANT For garden peas, sweet peas, lima beans, soybeans, peanuts, vetch, and common beans such as snap beans. Beneficial rhizobial bacteria in the inoculant

powder (also in healthy soils) help legumes fix nitrogen, increasing vigor and yield. Contains at least 200 million viable cells per gram of each of the following strains: *Bradyrhizobium* sp. (*Vigna*), *Rhizobium leguminosarum* biovar *viceae*, *Rhizobium leguminosarum*



biovar *phaseoli*, and *Bradyrhizobium japonicum*. Keep closed until time of use. Protect inoculant bag and inoculated seed from sun, high temperatures, hot winds, and freezing. Store between 40°F and 77°F. Expires the December following purchase. **#85150B (1.5 oz, treats 8 lbs of seed) \$5.50**

Seed Saving Supplies S

Seed Packets & Bags

SELF-SEAL SEED PACKETS White kraft with double-sealed seams, top and bottom siftproof corners (prevents loss of small seed), and self-seal re-closable tops. Can be opened and resealed 5 or more times in normal use. Measures 3 x 434 in.

#85110 50 for \$4.95 #85110A 200 for \$15.95 #85110B 500 for \$33.95 #85110C 1000 for \$62.00

LIGHTWEIGHT ZIP-LOCK BAGS, 2 \times 2 IN. Re-sealable 2-mil polyethylene bags with single-locking seal for short-term storage of small seed samples. #85115 100 for \$2.95



HEAVY DUTY ZIP-LOCK BAGS, 3×5 IN. Re-sealable 4-mil polyethylene bags. These high-quality bags have a double-locking seal for better moisture protection, and resists puncture by sharp seeds. Good size for peas, beans, and corn. May also be used for storing dried herbs. #85116 100 for \$7.50

FOAM POUCHES FOR SEED, 20 31/2 in. × 5 in. polyethylene foam pouches are great for trading small seeds through the mail. Provides padding while fitting in a regular envelope and allowing small seeds to be sent as a letter. #85109 \$3.75



Corn Shellers

CORN SHELLER This hand-held aluminum sheller makes quick work of shelling corn. #85111 \$10.00

POPCORN SHELLER A smaller corn sheller for popcorn and other small-eared corn. #85112 \$10.00



Moisture-Proof Seed Saver VialsTM

Seed Saver Vials[™] have a patented inner and outer valve design that ensures that the caps are leak-proof and airtight. Developed by university researchers for industrial uses, these highdensity polypropylene hinged-capped reusable vials are ideal for seed savers and gardeners who do not want to invest in heat-sealing equipment. Vials are sterile, non-toxic and translucent, and won't break or crack. We have filled them with silica gel and boiled and chilled them to create pressure changes for two cycles. We've squeezed them repeatedly under water without apparent movement of moisture into the containers. Recommended for mediumterm seed storage to long-term seed storage. Supplied in four sizes.

SEED SAVER VIAL[™] #12 Our smallest vial, ideal for protecting small amounts of seed. Measuring 3/4 in. diameter by 2¼ in. tall, it has a 12 ml volume.

#86012 25 for \$9.90 SEED SAVER VIAL[™] #14 Unavailable for 2019.

Seed Saver VialTM #57 A wider version of #14, these tall vials measure $1\frac{1}{8} \times 3\frac{3}{4}$ in. Holds up to 1.2 oz of peas, beans, corn or other large seed.

#86057 25 for \$12.60



Vial #57

Not Just for Grafting: Ensure the Security of Frozen Seeds



SEALING/GRAFTING FILM A self-sealing, stretchable, thermoplastic film that is impervious to water. Use it as a secondary seal on lids of seed storage containers to prevent passage of moisture past the lid. Simply stretch the film while wrapping it around the edge of the container lid. This is also the preferred material for grafting and is superior to grafting wax. Supplied as a 5 ft. long, 4 in. wide roll. **#85108 \$3.25** per roll

Seed Cleaning Screens & Frames



SEED-CLEANING SCREENS, SET OF 5 Screens are some of the most essential tools for smallscale cleaning of seeds that mature dry. These five screens - 2 mesh (strands per inch), 4 mesh, 8 mesh, 16 mesh, and 32 mesh - are effective for cleaning seeds ranging in size from amaranth to beans, on a homestead or small farm scale. For most types of seeds, we recommend pouring the seed harvest over two sizes of screens: one to separate out the larger chaff, and one to separate out smaller chaff and dust. Screening generally comple-ments winnowing and threshing, but can also be effective on its own. This set of screens is affordable in part because of how little space it takes up. Comes with instructions on how to use screens, and how to build a frame that screens can easily be moved in and out of, similar to the ones we sell. Avoid small cuts by wearing rubber or leather gloves to handle

unframed screens. Screens are hand-cut to 11 in. x 11 in. See our website for further seed-saving instructions, and p. 2 for more on how and why we support seed-savers. #85131 \$30.00



SEED CLEANING FRAMES These sturdy, weatherresistant frames are handmade from white oak, and coated with linseed oil. Screens are easily removable for cleaning and switching. Routed exterior frames measure 13×13 in. Interior frames nest in the routing to hold your choice of 11×11 in. screen. Set of 2 frames holds one screen. By including the third piece in the set of 3, you can hold two screens 11/3 in. apart, enabling simultaneous separation of seeds from larger chaff and from smaller chaff. Each frame piece in the set weighs about 1 lb 3 oz. #85142 Set of 2, \$48.00

#85143 Set of 3, \$68.00

S Mixes & Sampler Packs S

Garlic & Perennial Onion Sampler Packs – p. 21, 35 Potato & Sweet Potato Sampler Packs – p. 82–83

Grow a Traditional 3-Sisters Garden!



Three Sisters Garden Package **0G S 🌞** Native Americans have been companion planting the three sisters (squash, corn, and pole beans) for thousands of years. A well-maintained three sisters garden is both beautiful and productive. The corn provides a tall stalk for the beans to climb. The transpiration from the corn leaves provides mild cooling for the beans. The beans, in turn, have the amazing ability to fix nitrogen from the atmosphere. The squash serves to provide a living mulch, suppressing weeds and keeping the hot summer sun from baking the earth dry. A Three Sisters garden is beautiful. The circular yet directional pattern provides a calming space to work in. The bean flowers draping from the corn leaves seem to dance over the large squash leaves. The squash and bean flowers are heavily visited by pollinating insects. Included is enough corn (Pungo Creek Butcher), beans (Kentucky Wonder), and squash (Seminole pumpkin) seeds to plant a 25 ft. circular Three Sisters garden, and our plant-ing guide. **#92001 (3 full-size packets) \$8.50**

Mesclun Mixes

SPRING MESCLUN MIX OG A wonderful collection of spring salad greens. Includes one packet each of Long Standing Bloomsdale spinach, Swordleaf lettuce, Red Deer Tongue Lettuce, Crawford lettuce, Susan's Red Bibb lettuce, Red Russian kale, and Mizuna mustard greens. #92006 \$13.00

SUMMER MESCLUN MIX OG These heatresistant greens should provide great salads all summer long. Includes one packet each of Tatsoi mustard greens, Magenta Magic orach, Parris Island Cos lettuce, Buttercrunch lettuce, Anuenue lettuce, and Jericho lettuce. #92002 \$11.00

Pollinator Collection



Welcome-to-the-Garden Pollinator COLLECTION 🌞 We've added phlox, for an even more diverse sampler! Bees and other pollinators need pollen, nectar and shelter all season, from early spring through late fall. Support your pollinators with this special collection of 13 old-fashioned single-blossomed heirloom, open-pollinated flowers and herbs. The white, purple, yellow, and orange colors preferred by pollinators provide beautiful blooms for the gardener as well as food and shelter for honeybees and a variety of native pollinators. Includes phlox, calendula, echinacea, cosmos, sweet alyssum, bachelor's button, cleome, sunflowers, rudbeckia, beebalm, and zinnia, as well as our Gardeners Quick Guide to Welcoming Pollinators and Other Beneficial Insects. We give 30% of your purchase price to the Piedmont Environmental Council for their "Buy Fresh Buy Local" Campaign. #92019 (13 full-size packets) \$25.00

Perennial Insectary



WILD GARDEN PERENNIAL INSECTARY OG S The backbones of a spring through fall oasis for your resident beneficial insects. A complement of self-sowing annuals, biennials, and perennials provide food, shelter, and pollen. Broadcast or sow in rows 14 in. apart, thinning to a final spacing of 12 in. Manage plants by weeding and thinning volunteers each spring. The leaves are edible. Includes fennel, Korean mint, garden sorrel, alexanders, chervil, parsley, chicory, cress, turnip, mustard, calendula, amaranth, and orach. **#92010 (1 packet of mixed seeds)** (7 g) \$7.25

Our Heritage Collection



Virginia Heritage Seed Collection

Virginia Heritage Seed Collection OG 🌞

A specially priced collection of 12 varieties rich in flavor and history, all associated with Virginia and the Appalachians. All are certified organic and open-pollinated. Includes one packet each of Contender Bush Bean, Henderson Bush Lima Bean, Benne Sesame, Champion Collards, Lemon Cucumber, Deer Tongue Lettuce, Bowling Red Okra, Long Standing Bloomsdale Spinach, Early Golden Summer Crookneck Summer Squash, Old Virginia Tomato, Doe Hill Golden Bell Sweet Pepper, and Stone Mountain Watermelon. We give 30% of your purchase to the Piedmont Environmental Council for their "Buy Fresh Buy Local" Campaign. #92011 (12 full-size packets) \$25.00

Celebrate Heirloom Veg Diversity with our Rainbow Mix!



RAINBOW STARTERS COLLECTION OG A colorful mix of 10 easy-to-grow varieties, great for families and for beginning gardeners. Jewel Mix nasturtiums, Autumn Beauty sunflowers, Royalty Purple Pod bush beans, Lacinato Rainbow kale, Easter Egg radishes, Rainbow chard, Purple Dragon carrots, Lemon cucumbers, Tromboncino summer squash, and Wild Garden lettuce mix. A great garden gift. **#92014** (10 full-size packets) \$20.00

Seasonal Items: Shipping Surcharges Apply

Potatoes Solanum tuberosum

Shipping Surcharge for Seedling Potatoes: \$2 for one item, \$4 total for any two or more items. Seedling Potatoes ship in the spring: beginning in March, southernmost areas first, directly from our grower's farm in Maine (but may be pre-ordered at any time). U.S. shipping addresses only.

Culture: Cut potatoes into pieces no smaller than an egg with no fewer than 2 eyes. Plant at 12 in. spacing, rows 3-4 ft. apart, in rich soil with lots of extra compost. Kill Colorado Potato Beetles as soon as they appear. The adults lay many eggs, and the pink-purple larvae are much more destructive than the adults. When plants are 6 in. high, side dress with compost and hill them by mounding dirt up against them until only the very tip of the top leaves are showing. For best results, hill again when plants have grown another 6 in. Dig potatoes from the ground after the plants have died and the stems are dry to the ground level. Potatoes are shipped at appropriate spring planting time for your area. For more specific shipping dates, see our website or call us. Order by April 1st. If you intend to make a second, later planting, please order extra seed potatoes to store in the refrigerator or root cellar until planting time. Warning: After eating some home grown potatoes, you may never be able to eat commercial potatoes again. Bag: 1 lb, sows 6-10 ft. Each 1 lb of Certified Organic Seed Potatoes includes detailed planting instructions and a variety photo card.

Adirondack Red 🛛 S 🌞

A brand new, delicious, moist, redskinned, pink-fleshed selection from the Wood Prairie Farm trial gardens. Creamy, mid-dry, cranberry-red flesh. **#39505 (seedling potatoes, see shipping info above) \$13.95**

CARIBE OG S One of the earliest and prettiest potatoes you'll dig. Deep purple skin with snow white flesh. Can be quite large with good yields. Good for boiling, baking, and frying. Lovely as a new potato. Very early maturing. #39201 (seedling potatoes, see shipping info above) \$13.95

CAROLA OG S S S The best-yielding yellow-fleshed potato we have ever grown here in our central Virginia garden. Heavy yields of medium-size potatoes with a light beige skin. The sunny yellow interior has a smooth creamy texture suitable for baking or frying. Mid-season. #39302 (seedling potatoes, see shipping info above) \$13.95

DARK RED NORLAND OG S Very dark red skin, bright white flesh, and high yields make this early maturing selection a favorite with both home gardeners and market growers. The moist, waxy, firm flesh is delicious boiled, mashed, in potato salad or served whole as "baby reds." #39504 (seedling potatoes, see shipping info above) \$13.95 Adirondack Red

Caribe



Dark Red

Norland



FAVORITE POTATO MIX OG S Try four of our most popular potatoes and save \$10.00. Assortment includes 1 pound each of Carola, Dark Red Norland, Russian Banana Fingerling, and Yukon Gold. Shipped in a sturdy box with planting instructions, recipes, and variety photo cards. Certified organic seed potatoes – 4 separate 1 lb bags. **#39804 (seedling potatoes, see shipping info at left) \$49.00**

Соок's Ротато Mix OG S includes four different tempting varieties for the adventurous cook's garden. You'll love Caribe, Adirondack Red, King Harry, and Red Cloud. 1 pound of each variety packed in a sturdy box with planting instructions, recipes, and variety photo cards. Save \$5.00 off the individual bag price. Certified organic seed potatoes – 4 separate 1 lb bags. **#39805 (seedling potatoes, see shipping info at left) \$49.00**

FULL POTATO MIX OG S Try all eight of our selected potato varieties and save \$26.00 off the per bag price. 1 pound each of Caribe, Carola, Adirondack Red, Dark Red Norland, King Harry, Red Cloud, Russian Banana Fingerling, and Yukon Gold. All shipped in a sturdy box with planting instructions, recipes, and variety photo cards. Certified organic seed potatoes – 8 separate 1 lb bags.

#39803 (seedling potatoes, see shipping info at left) \$87.00

KING HARRY OG S A new firm-fleshed round white potato from Cornell University that holds its shape well when boiled. These early and productive plants have hairy leaves, thanks to a wild potato from Bolivia, which deter pests like the Colorado Potato beetle. Great for potato salads, boiling, sautées and soups.

#39202 (seedling potatoes, see shipping info above left) \$13.95

BACK! RED CLOUD OG S Beautiful crimson-skinned, white-fleshed potato is uncommonly dry and delicious baked or boiled. Red Cloud is named for the Ogalala Sioux Chief. Dig them early and small for new potatoes. Mid-season. #39503 (seedling potatoes, see shipping info above left) \$13.95

RUSSIAN BANANA FINGERLING OG

S Description of the set of the s

YUKON GOLD 0G S ♣ Z Renowned for outstanding flavor. The best known of the European-style yellow-flesh potatoes. Drier than most other yellow flesh potatoes. Perfect for baking and mashing. Good yields and an excellent keeper. Very early maturing. #39301 (seedling potatoes, see shipping info above left) \$13.95 Russian Banana Fingerling

King Harry

Red Cloud

Yukon Gold

Seasonal Items: Shipping Surcharges Apply

Sweet Potatoes Ipomoea batatas

Shipping Surcharge for Sweet Potato Slips: \$2 for one item, \$4 total for any two or more items. Seedling Potatoes ship in the spring: mid-May to early June, southern-most areas first, (but may be pre-ordered at any time). U.S. shipping addresses only.

Culture: Plant slips one month after average last spring frost. Sweet potatoes need full sun and warm, settled weather to grow well; slips planted too early won't thrive. Provide loose, well-drained soil high in organic matter. For maximum production, plant in raised beds. Space slips 10–18 in. apart in rows 3–5 ft. apart. Keep the slips well-watered for several days after planting while the roots establish. In northern areas, use black plastic mulch and row cover to warm the soil. Harvest: Sweet potatoes need at least 90-120 days to mature. Use a garden fork to gently dig the mature tubers before frost. Cure for 7–10 days in a dark room at 80-90°F and approximately 90% relative humidity. Curing sweetens the flavor and toughens the skins, which increases storage life. Store above 55°F. Every order includes our detailed Sweet Potato Growing Guide (also available online at www.SouthernExposure.com).



ALL PURPLE OG S 🔅 🖾 120 days. [Traditional Japanese variety.] True to its name, All Purple has dark purple flesh and skin. One of the hardiest roots in our collection, a fast and strong grower sure to give a generous harvest at season's end. Roots are starchy, dry, slightly sweet, and store well; good in savory dishes and mixed mashes. #74101 (live slips, see shipping & pricing info above)



BEAUREGARD OG S [★] ≈ 100 days. Visit any sweet potato farm and there's a good chance they're growing some Beauregard. Thousands of farmers rely on this reliable, high yielding variety. Crack-resistant roots and deep orange color with dry flesh. Compared to other varieties even big roots will bake quickly. **#74102 (live slips, see shipping & pricing info above)**

BUNCH PORTO RICO OG S ♣ ≈ 110 days. A great variety for folks with small gardens. Short compact vines produce roots with copper-colored skins and light red flesh. Popular for baking. #74109 (live slips, see shipping & pricing info above)



Sweet Potato Pricing

Remember to include the correct letter on the Order Form or Quick Order webpage!

A (6 slips) \$10.00 B (12 slips) \$15.99 C (24 slips) \$24.99

D (48 slips) \$39.00 E (100 slips) \$59.00



CAROLINA RUBY OG S \clubsuit 2 100 days. A reliable variety with high yields. Dark orange flesh when cooked and a smooth ruby skin. Perhaps the most strikingly red of the red-skinned sweet potatoes. High level of resistance to Fusarium wilt and soil rot. Moist texture and moderate sweetness. Stores well. **#74104 (live slips, see shipping & pricing info above)**





GINSENG **0G S** \clubsuit 2 120 days. While we can only guess why this sweet potato was named after the famous energy-boosting root, it may be due to the high beta carotene content of this sweet potato. But don't just choose Ginseng for the vitamin A, it tastes great as well! Dry, semisweet deep orange flesh, lobed leaves. **#74106**

Hernandez OG S 🌞 🕿

120 days. Purple-stemmed with light red-skin and orange flesh. Excellent yields and a tendency to produce a couple "jumbo" roots in each bunch. Very sweet and moist when cooked. Great baking potato. #74113 (live slips, see shipping & pricing info above)



Limited Quantities – Order Early!

GEORGIA JET VARDAMAN VIRGINIA BAKER

Check <u>www.SouthernExposure.com</u> for limited quantities of these varieties and possibly a few more. Order early as we expect to sell out quickly.

Sweet Potato Collections

Sweet POTATO MIX, 3 ORANGE VARIETIES OG S 6 slips each of 3 orange-fleshed sweet potato varieties of our choosing, from a selection of many varieties. #74155 (18 live slips, see shipping info above left) \$29.00

SWEET POTATO MIX: ORANGE, WHITE, PURPLE OG S A mix of 3 different sweet potato varieties of our choosing: 6 orange-fleshed slips, 6 white-fleshed slips, and 6 purple-fleshed slips, from a selection of many varieties. #74156 (18 live slips, see shipping info above left) \$29.00

HAYMAN OG S DE S (White Haymon, White Hamon) 100 days. Vining plants with cream-colored skin and white flesh that turns slightly yellow when cooked. Like O'Henry, this variety is a great substitute for "Irish Potatoes," but with a sweeter flavor.



Produces large uniform roots. Traditional heirloom of Eastern Shore Maryland. **#74111 (live slips, see shipping & pricing info above left**)



O'HENRY OG S \clubsuit 2 100 days. White-fleshed sweet potatoes were classically considered easier to grow than "Irish" potatoes in the Southeast. When you taste how sweet and creamy O'Henry is in mashed sweet potatoes, we think it will come to be your first choice. **#74107** (live slips, see shipping & pricing info above left)



New! RED JAPANESE OG S \$ 95 days. Deep red-purple skin and deliciously sweet, smooth, dry white flesh. New staff favorite at Southern Exposure in 2017. The vigorous, disease-resistant vines produce abundantly and can do well in the North as well as in the South. Popular at many California Asian food markets. **#74117** (live slips, see shipping & pricing info above left)

4 Easy Ways to Order

Online www.SouthernExposure.com

Enter your member number (located on the back of your catalog) to receive a 5% discount online. Our online store contains everything in our catalog and more! Browse our website or save time with our online Quick Order form.

Phone (540) 894-9480

Our phone hours are: 9 am-5 pm, M-F, January 1-May 31, and 11 am-3 pm, M-F, June 1-December 31 (EST). Please have your order and credit card ready.

Fax (540) 266-1021

Fax your order anytime 24/7. Please use the order form on page 85 or download one at <u>www.SouthernExposure.com</u>

Mail P.O. Box 460, Mineral, VA, 23117

Please use the order form on page 85.

Payment

We accept all major credit cards (Visa, MasterCard, Discover & American Express), personal checks & money orders. Your credit card is charged the day your order is received, including back-ordered and seasonal items.

Shipping & Handling

Up to \$10.00	\$3.50
\$10.01 - \$30.00	\$4.50
\$30.01 - \$50.00	\$5.50
\$50.01 - \$120.00	\$6.50
over \$120	add 5% to total

We ship all orders via the United States Postal Service. Orders usually ship within 2–3 days. During our busy season please allow 4-6 days to ship. We notify you via phone or email if a delay is anticipated. Shipping & Handling fees are non-refundable.

Priority Handling Service

For expedited processing, order online or over the phone and request priority handling.

Virginia Sales Tax

There is a 5.3% state sales tax on orders shipped to Virginia addresses, unless accompanied by a signed exemption certificate.

Substitutions

Some seed may be in short supply or out of stock after our catalog goes to press. Let us know if substitutions are not acceptable and we will not supply similar substitutes.

Back-Orders

Back-orders are held for a maximum of 45 days, unless other arrangements are made. We ship your order and send the backordered items separately when they become available.

> Order online at www.SouthernExposure.com for fastest service and largest selection.

where they are grown. Shipment is to southern areas first, starting in March, moving north. We cannot ship potatoes early due to the danger of freezing damage in transit. Please add \$2 for one potato

Virginia. Shipment is to southern areas first, starting in mid-May, moving north. Please add \$2 for one sweet potato item or \$4 for any two or more sweet potato items.

item or \$4 for any two or more potato items.

Foreign Orders

Spring & Fall Items Shipping Surcharge

Potatoes, Sweet Potatoes, Ginseng & Goldenseal,

Garlic & Onion Bulbs!!!

Seasonal items do not delay your order. Your order ships normally

and the spring or fall items ship when they are ready. Garlic, Perennial Onions, Shallots, Perennial Leeks, Ginseng and

Goldenseal ship in the fall, mid-September through early November.

deliver these items within the 48 contiguous U.S. states. Please add

\$2 for any one fall-shipped item or \$4 for any two or more items.

Seed Potatoes ship in the spring directly from the farm in Maine

Sweet Potato Slips ship in the spring from our farm and offices in

Shipment is to northern areas first, moving south. We can only

We only ship internationally to Canada and Mexico. If ordering seeds only, add \$2 to the shipping and handling, otherwise double the shipping. Please pay with a credit card or with a Postal Money Order payable in U.S. dollars. Because of the time, expense, and complexity involved in international shipping, we do not ship to any other foreign countries.

Questions About Your Order?

E-mail us at gardens@SouthernExposure.com (include "SESE" in the subject line) or call us at (540) 894-9480.

PRICES & QUANTITIES Prices are in effect until December 31, 2019 or until superseded by the next catalog. Seed is sold by weight; seed counts per packet are approximate. We reserve the right to change prices and quantities without notice.

GUARANTEE We want you to be 100% satisfied with your purchase. If your purchase proves dissatisfactory we will replace the item or refund the purchase price according to your preference. Limitation of remedy and conditions of sale: Southern Exposure Seed Exchange (SESE) warrants only that our seeds and nursery stock are labeled in conformance with the Virginia Seed Law and the Federal Seed Act. We make no other or further warranties, expressed or implied. SESE disclaims any warranty of merchantability, fitness of purpose, or otherwise, of its products or the seed or crops grown from such seeds. SESE limits its remedy to the replacement of the dissatisfactory item or to the refund of the purchase price.

RETURNS Prior authorization by SESE is required for return of hard goods. Claims for defects must be presented to SESE as soon as practicable within 30 days of discovery, and in any event, no later than 60 days from date of shipment. If the item is not returned in saleable condition, SESE may assess a restocking fee based on the condition of the item. Claims for defects in seeds or nursery stock must be presented within 30 days of discovery, and in any event, no later than 6 months from date of shipment.

RESTRICTIONS ON SALE By placing and accepting an order the customer agrees to all terms and conditions. We reserve the right to limit or refuse sale in any locality, state, or country.

www.SouthernExposure.com

Southern Exposure Seed Exchange P.O. Box 460, Mineral, VA, 23117 gardens@SouthernExposure.com Phone (540) 894-9480 Fax (540) 266-1021 www.SouthernExposure.com

Billing Addr	ess Please print all information. If your address has changed, indicate your former zip code:							
Date	Member # Shipping Address (If Different from Billing Address				illing Address)			
Name				Name				
Address			_	Address				
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			Shipping & Handling (see left):					
			Seed Potato Surcharge (Shipped in Spring, see left):					
		over \$120 5% of total	Sweet Potato Slip Surcharge (Shipped in Spring, see left):			+		
March 1)	ed beginning			Onion Bulbs & Garlic Surcharge (Shipped in Fall, see left): Ginseng & Goldenseal			+	
Sweet Potato Slips: \$2 for 1 item, \$4 for 2+ items (Shipped beginning				Subtract Credit/Gift Certificate (<i>Enclose</i>): -			-	
mid-May)		Order Online www.So	outhe	ernExposure.	com Or	der Total:		

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Order Online www.SouthernExposure.com

Recommended Planting Dates

We've found the dates below to be the best times to plant in the **inland plains of the mid-Atlantic**, based on our experience in central Virginia (Zone 7a. Average last spring frost April 15. Average first fall frost October 15). Adjust according to your own frost dates.

Row cover (pg. 79), cold frames, or other frost protection can allow for planting 1–2 weeks earlier in the spring and 1–2 weeks later for fall harvest in all regions.



Adjust these dates for your region!

We consider the mid-Atlantic to be divided into 3 distinct gardening regions: inland plains, coastal, and mountain. *Use these guidelnes to adjust dates for your region:*

Coastal Gardens:

Mild winters allow for planting spring crops up to 2–4 weeks earlier in late winter and early spring. Continue to plant cool-season fall crops up to 2–4 weeks later in summer and fall.

Mountain Gardens:

You may need to delay plantings up to 2–4 weeks in the late winter and early spring to allow the soil to warm up and dry out. Take advantage of long springs by planting cool-season spring crops up to 2–4 weeks later. Discontinue fall plantings up to 2–4 weeks earlier to ensure adequate time before frosts. Hot-season crops should be planted early enough to ensure adequate heat and time for maturation, but be sure to allow the soil

to adequately warm. Choose faster-maturing varieties for hotseason crops.

Mid-Atlantic Inland Plains Planting Dates

Artichoke	sow indoors Feb 21–Mar 21, transplant out Apr 21–May 21
Beans, Bush	direct sow Apr 15–Aug 10
Beans, Pole	direct sow Apr 15–Jul 15
Beans, Lima	direct sow May 7–Jul 25
Beets	direct sow Mar 15–Jun 15, Aug 15–Sept 15
Broccoli	direct sow Mar 10–Jul 1 sow indoors Jan 31–May 31, transplant out Mar 15–Jul 15
Brussels Sprouts	direct sow May 1–Jun 1 sow indoors Apr 1–May 15, transplant out May 15–Jun 15
Cabbage	direct sow Mar 10–Jul 15 sow indoors Jan 31–Jul 1, transplant out Mar 15–Aug 1
Cabbage, Chinese	direct sow Mar 10–Apr 7, Jul 15–Aug 15
Carrots	direct sow Mar 10–May 1, Jul 25–Aug 15
Cauliflower (spring)	sow indoors Jan 31–Mar 7 transplant out Mar 15–Apr 7
Cauliflower (fall)	direct sow Jun 1–Jul 1
Celery & Celeriac	sow indoors Jan 21–Feb 15 move to cold frame Mar 1–Mar 15, transplant out May 1–Jun 1
Collards	direct sow Mar 10–Sept 1
Corn	direct sow Apr 21–Jul 15
Cucumbers	direct sow May 1–Jul 21

Eggplants	sow indoors Mar 7–Apr 21 transplant out May 7–Jun 21
Endive	direct sow Mar 15–Apr 15, Jul 21–Sept 15
Garlic	plant bulbs Oct 15–Nov 15
Kale	direct sow Mar 10–Apr 15, Jul 21–Sept 15
Kohlrabi	direct sow Mar 10–Apr 15, Jul 15–Aug 21
Lettuce	direct sow Mar 10–Jun 1, Aug 7–Sept 21
Muskmelon	direct sow May 1–Jun 15
Mustards	direct sow Mar 10–May 1, Jul 25–Oct 1
Okra	direct sow May 1–Jul 1
Onions, Green	sow indoors starting Feb 10 direct sow Mar 15–Aug 10
Onions, Bulb	sow in cold frame Nov 10– Dec 1 (or indoors Jan 1–Jan 21), transplant out Mar 1–Mar 21
Onion, Multiplier	plant bulbs Oct 15–Nov 15
Parsnips	direct sow Mar 1–May 1
Peas	direct sow Mar 1–Apr 15, Jul 15–Aug 1
Southern Peas	direct sow May 7–Jul 25
Peppers	sow indoors Mar 7–Apr 21 transplant out May 7–Jun 21
Potatoes	transplant out Mar 15–Apr 15, Jun 1–25 (mulch)

Jun 1–25 (mulch)

Radishes	direct sow Mar 10–Jun 1, Aug 1–Nov 1
Rutabaga	direct sow Aug 1–Aug 21
Spinach	direct sow Mar 1–Apr 21, Sept 1–Oct 1
Summer Squash & Zucchini	direct sow Apr 21–Jul 21
Winter Squash & Pumpkins	direct sow May 1–Jun 10
Sunflowers	direct sow Apr 15–Jul 7
Sweet Potatoes	transplant out May 15–Jun 21
Swiss Chard	direct sow Mar 15–Aug 1
Tomatoes	sow indoors Feb 21–May 7 transplant out Apr 21–Jun 21
Turnips	direct sow Mar 10–Apr 15, Aug 7– Oct 1
Watermelon	direct sow May 1–Jun 10



Cold Season Gardening Quick Reference

Cold hardiness varies with variety, the health of the garden soil (the healthier the soil, the hardier the plants), wind chill, etc. Be aware of the idiosyncracies of your garden – low areas collect cold air, south-facing slopes with good air drainage stay warmest. Take notes, experiment, find (or breed!) the varieties right for you! CROP Recommended Varieties Cold Hardiness Advice

Early Summer

Start planting for fall and winter with two of the hardiest winter vegetables, but also the slowest to reach maturity. We direct sow parsnips by early May, when the soil is still cool, and we sow Brussels sprouts by mid-June. BRUSSELS SPROUTS Catskill • 20-25°F PARSNIPS Harris Model, Hollow Crown, Turga • 0°F SALSIFY Sandwich Island Mammoth • 0°F

Late Summer to Early Fall

For fall & winter salads, start weekly sowings of lettuce. In late summer, sow greens more thickly to survive insect damage. Add cilantro and parsley in early fall. Radishes and turnips can be sown earlier, but we prefer to wait for cooler temperatures in early fall. Wait for the soil temperature to cool before direct sowing spinach (when galinsoga weeds bloom).

LETTUCE Red Salad Bowl, Bronze Arrow, Winter Density, Rouge d'Hiver, Red Sails · 25°F (large leaves), 15°F and lower (small leaves)

• Red lettuces are more attractive for fall planting, as cold temperatures intensify red colors, while

green lettuces look yellow and sickly. Lettuce may have difficulty germinating in hot soil. LARGE LETTUCE Large heads don't handle very cold weather well. They usually rot and decline by mid–Dec. SMALL LETTUCE TO OVERWINTER Plants should have 4–10 leaves before winter. Growth slows with onset of cold, then resumes, with plants reaching maturity in Feb./March.

ENDIVE, ESCAROLE 25°F and lower · Similar to lettuce.

COLLARDS 12°F · Young collards are shorter and easier to cover, so start a fall crop!

KALE Red Russian · 15°F · Vates, Siberian, Lacinato Rainbow, Lacinato · 12°F · Even' Star Smooth Kale · 6°F



Catskill Brussels

Sprouts p. 10

Turga Parsnips

p. 33

Winter Density Lettuce p. 27 Mid-Summer

We sow our earliest fall broccoli and cabbage in early June, by July 4th at the latest. We make a second, late sowing by mid-July, adding cauliflower & Chinese cabbage. We do a large sowing of carrots late-July through mid-August for fall and winter harvest. Kohlrabi and rutabaga should be sown by early to mid-August.

BEETS Lutz Green Leaf, Chioggia, Bulls Blood · 20°F (roots), 16°F (leaves) · Sow before the soil warms or wait until cool weather to try again, as beets don't germinate well in hot soil.

BROCCOLI 28°F · Leaves can handle to 15°F, but heads are more tender.

CABBAGE 20–25°F · If damaged by frost, harvest and peel off damaged layers before storing.

MUSTARDS Red Giant, Southern

Curled · 25°F · Bolt in Jan./Feb. as

days lengthen. Tat Soi · Succession

mustard to overwinter · hardy, close

lengthen. Even' Star Tender Tat, New

Star Mustard, Chinese Thick–Stem

Mustard · Even' Star winter–hardy

RADISHES Cherry Belle · 20°F

Rose, Black Spanish Round,

(roots), 16°F (leaves)

most cold-hardy.

· 6°F

hardier.

Champion

Red Russian

Kale p. 25

Collards p. 23

(roots), 16°F (leaves) DAIKON

Miyashige White Daikon · 20°F

RADICCHIO · 25°F and lower

Swiss Chard · 25°F? (Variable)

· Smaller-leaved varieties are the

TURNIPS Purple Top White Globe,

Seven Top (greens) . 20°F (roots),

CILANTRO 15°F · Plant earlier

overwintering crops. Younger/

SPINACH Abundant Bloomsdale,

Long-Standing Bloomsdale, Winter

Bloomsdale · 10°F (large leaves),

germinate/survive well in hot soil.

5°F (small leaves) · Wait until cool

weather to seed as spinach seed doesn't

smaller plants overwinter best. May

have problems germinating in hot soil.

PARSLEY FLAT Flat Leaf Italian · 20°F ·

CURLY Moss Curled . 15°F . Prettier &

Best for flavor and drying, but less hardy.

for fall harvests, later for

16°F (leaves) · Ice-Bred White Egg

RADISHES, FALL RADISHES · Misato

varieties · 6–12°F

plantings 1–2 weeks apart. Good

to the ground, & easy to cover,

but will bolt in Jan./Feb. as days

CARROTS Danvers, Oxheart • 12°F CAULIFLOWER 32°F • Leaves

Early Wonder Tall Top Beets p. 9

CHINESE CABBAGE 25°F

LEEKS American Flag 10°F (probably lower) · Don't overwinter tender 'Summer' types

ONIONS, GREEN Evergreen Hardy White, Deep Purple · 25°F · Purple types have more color in cold weather.

KOHLRABI Early Purple Vienna, Gigant Winter · 20°F? We're still experimenting.

Goliath

Red Acre

Cabbage p. 10

Tatsoi

p. 25

Miyashige White Daikon Radish p. 43

Purple Top White

Globe Turnips p. 58

Moss Curled

Parsley p. 26

Winter Bloomsdale

Spinach p. 26

Broccoli p. 9

RUTABAGAS American Purple Top Yellow · 20°F (roots), 16°F (leaves)

DILL Fernleaf · 25°F

Rutabaga p. 57

Kohlrabi p. 27

Danvers 126

Carrots p. 11

American Flag Leek p. 27

Belle Isle

Cress p. 24

Hardneck

Garlic p. 20

Cherry Belle

Radish p. 43

French Red

Shallot p. 35

Snowball

Mid- to Late Fall

Wait until mid-Fall to plant garlic & perennial onion bulbs (including shallots). Don't despair if you still haven't planted winter greens we've had success sowing greens in early November in a makeshift cold frame. Our fastest growing fall-sown greens are arugula, cress, Tatsoi, and kale. Lettuce seedlings can be transplanted under row cover in early November. We've even harvested a last round of radishes from a November sowing.

last minute sowings: Arugula, Cress, Tatsoi, baby Kale, Radishes

ARUGULA Even' Star WinterArugula $(6^{\circ}F) \cdot 22^{\circ}F \cdot$ Will bolt inJan./Feb. as days lengthen.Arugula p. 23

CRESS *Belle Isle* Plant by mid-fall, (slow germinating).

GARLIC · 5°F if not too much topgrowth · Frost-burned plants will survive, but won't produce as large a bulb. Plant later to avoid frost damage.

PERENNIAL ONIONS (SHALLOTS) Yellow Potato Onions · 0°F · Withstand colder temperatures so long as they are mulched and deeply planted.

RADISHES *Cherry Belle* · Choose quick-growing spring-type radishes for late plantings.

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Common Wealth Seed Growers

Farmer Direct Seeds from Virginia www.CommonWealthSeeds.com (540) 223-5861



We specialize in research, development, and seed production of downy mildew resistant cucurbit varieties. See DMR 401 Cucumber (pg. 17) and South Anna Butternut (pg. 46) in this catalog.

DMR 401 produced substantially more marketable fruit than the other varieties, whose yield and fruit quality were severely impacted by downy mildew. – Margaret McGrath, Plant Pathologist, Cornell University. From "Evaluation of Cucumber Varieties Resistant to Downy Mildew," 2017.



and on

Since 1983, we have been offering gardeners & herbalists a thoughtfully curated selection of seeds, roots, supplies, & books. We only offer untreated, open pollinated seed & roots.

naries unique worker-owned seeds roots woodland medicinals Traditional Chinese Medicine



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