

Southern Exposure Seed Exchange

2005 Catalog
and Garden Guide



Dear Gardeners and Farmers,

Welcome to our 2005 catalog! Thank you all for making our 21st year our best ever. In spite of record rainfall and four hurricanes we grew some great seed—a testament to the vitality and adaptability of our heirloom and open-pollinated varieties.

We are introducing several exciting new varieties this year, along with a few old favorites that have been unavailable for some time. We're happy to have a much better supply of Kaskaskia Garlic (in 2004 it sold out in June!) as well as more perennial onions. For you organic market gardeners we now offer many more bulk packs of your favorite organic seeds.

Our cooperative will miss Cricket Rakita, our hard-working manager for the past five years. Cricket now coordinates the Saving Our Seed project (www.savingourseed.org), which works on seed saving with farmers, gardeners, and extension agents to increase the availability of certified organic seed in the southeast. Southern Exposure has co-hosted several exciting and productive seed-saving workshops with them. We hope you will join us in supporting a cooperative and self-reliant seed movement.

When you buy seed from Southern Exposure Seed Exchange, you are helping to support our mission of genetic preservation, seed saving, ecological agriculture, and local food production. If you like our seeds, please give your Southern Exposure catalog to a gardening friend or neighbor! We'll be happy to send you another copy for free. Our entire catalog is also available on the internet at www.southernexposure.com. Once you're an SESE member, you get a discount on all on-line orders.

Have you any comments or questions about our seeds and other products? Please call or e-mail with your input. We hope you enjoy our catalog and that our seeds bring abundance to your gardens!

Ira Wallace

Ira Wallace

New and Returning Varieties for 2005

Three new garlics: after the wonderfully high demand for garlic this past fall, we're adding Loiacono, Music, and German Extra-Hardy.

Cherokee White Eagle Corn: many people can see a white eagle on the mixed blue and white kernels!

Boston Pickling Cucumber: a very reliable and high-yielding heirloom introduced in 1880.

Whopper Peanut: remarkably large peanuts—another winner from grower Merlyn Niedens.

Butte: the tasty russet baking potato you've been asking us for.

Golden Jenny Muskmelon: a vigorous, compact, and productive variety with sweet orange flesh.

Big Red Ripper Southern Pea: a delicious heirloom with large peas and easy-to-harvest reddish-green pods.

Yamato Cucumber: very hardy and reliable; sweet, somewhat buttery, crisp, and succulent.

Rudbeckia Goldstrum Black-Eyed Susan: attractive gold-colored flowers with chocolate-colored centers.

Tashkent #1 Marigold: velvet mahogany petals with yellow centers, with a strong and unusually pleasant scent.

Large Mennonite Heritage Tomato: an attractive plump red tomato with a slight green shoulder.



ART CREDITS:

Our front catalog cover is an original watercolor by Marielle Mackin. Most of the text illustrations are original drawings by botanical illustrator Lucia Stanton. Others are by Danyell Jarrell, Marielle Mackin, Nancy Nye, Kate Steere, Cricket Rakita, and Robin Rogers. Design by Barbara Wallace, Jeff McCormack, Patty Wallens, Cricket Rakita, and Michelle Hansen.



About Southern Exposure Seed Exchange

Our mission is to ensure that people retain control of their food supply, that genetic resources are conserved, and that gardeners have the option of saving their own seed.

We are committed to genetic preservation. We are well-known for our outstanding introduction of heirloom varieties. We will never knowingly buy or sell genetically engineered seeds or plants.

Much of our seed is certified organic. Much of the rest is produced ecologically by small growers who have opted to forgo the costly certification process.

We encourage seed saving. We specialize in open-pollinated varieties, and offer supplies and information of interest to seed savers.

All of our seed is free of chemical treatment. It is safe for children and the Earth.

We grow at least 40% of our own seed, on our own certified organic farm or through our network of growers. This is one of the highest percentages in the mail-order seed trade.

We give detailed, accurate, and honest variety descriptions, backed up by extensive variety testing and history research.

We emphasize quality customer service and guarantee 100% satisfaction. Every time seeds are placed into a packet, we envision plants succeeding in your garden.

Visit us online at www.southernexposure.com

Read our catalog online, shop our secure site, and keep up-to-date on changes and additions. Here you can also explore references, articles, and links of interest to gardeners.


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KEY TO SYMBOLS

 Heirloom varieties introduced before 1940.

 Varieties suited to climates similar to the Mid-Atlantic region.



 Certified Organic by Quality Certification Services.

Much of the historical information on heirloom seed varieties has been researched by Southern Exposure Seed Exchange. Historical information is noted in brackets after the variety name.

See also key to cultural notes on page two

SEED RACKS FOR RETAIL STORES

Do you know of a garden shop which could use a SESE seed rack? Please let them and us know!

Retailers: please call, write, or e-mail for information about our seed racks.

WE DO NOT SELL CUSTOMER INFORMATION!

We do not sell, rent, or exchange any customer names, phone numbers, e-mail addresses or other information from our mailing list. Our relationship with our customers is based on trust. This is part of our customer satisfaction guarantee.

CERTIFIED ORGANIC VARIETIES IN BULK SIZES

KEY TO CULTURAL NOTES

Larger bulk sizes and other varieties may be available; please contact us!

Jewel Mixed Colors Nasturtium 01116D (1/2 oz) \$5.50	California Wonder Red Bell Pepper 46102B (3g) \$5.50
Mammoth Grey Stripe Sunflower 05103E (1 oz) \$5.50	Jimmy Nardello's Italian Pepper 46122B (3g) \$5.50
Stringless Black Valentine Bush Bean 13101F (1/4 lb) \$3.95 13101G (1/2 lb) \$5.75	Jalapeno Hot Pepper 46508B (3g) \$5.50
Contender Bush Bean 13103F (1/4 lb) \$3.95 13103G (1/2 lb) \$5.75	Brandywine Tomato 49104B (3g) \$5.50
Blue Lake Bush Bean 13103F (1/4 lb) \$3.95 13103G (1/2 lb) \$5.75	Cherokee Purple Tomato 49106B (3g) \$5.50
Royalty Purple Pod Bush Bean 13351F (1/4 lb) \$3.95 13351G (1/2 lb) \$5.75 13351H (1 lb) \$7.50	Radiator Charlie's Mortgage Lifter Tomato 49128B (3g) \$5.50
Jacob's Cattle Soup Bean 13402F (1/4 lb) \$4.00 13402G (1/2 lb) \$6.00 13402H (1 lb) \$8.50	Mortgage Lifter VFN Tomato 49129B (3g) \$5.50
Kentucky Wonder Pole Bean 13351F (1/4 lb) \$3.95 13351G (1/2 lb) \$5.75 13351H (1 lb) \$7.50	Roma VF Tomato 49138B (3g) \$5.50
Tatsoi 22601E (1 oz) \$5.50	Tropic VFN Tomato 49145B (3g) \$5.50
Red Russian Kale 25102E (1 oz) \$4.50	Cajun Jewel Okra 69102E (1 oz) \$5.50
Red Giant Mustard 27102E (1 oz) \$5.50	Early Prolific Straightneck Summer Squash 53101E (1 oz) \$5.50
Seven Top Turnip Greens 29201D (1/2 oz) \$3.75	Yellow Crookneck Summer Squash 53102E (1 oz) \$5.50
Ruby Red Swiss Chard 32102E (1 oz) \$4.50	Dark Green Zucchini 53106E (1 oz) \$5.50
Rainbow Swiss Chard 32951E (1 oz) \$5.50	Table Queen Bush Acorn Squash 53108E (1 oz) \$5.50
White Icicle Radish 28106E (1 oz) \$5.50	Small Sugar Pumpkin 53114E (1 oz) \$5.50
Detroit Dark Red Beet 31103E (1 oz) \$5.50	Waltham Butternut Squash 53601E (1 oz) \$5.50
Chantenay Red Core Carrot 35101E (1 oz) \$5.50	Black-Seeded Simpson Lettuce 62102C (7g) \$5.50
Danvers 126 Carrot 35103E (1 oz) \$5.50	Red Deer Tongue Lettuce 62104C (7g) \$5.50
Black Beauty Eggplant 45101B (3g) \$4.50	Oakleaf Lettuce 62106C (7g) \$5.50
Long Purple Eggplant 45103B (3g) \$4.50	Buttercrunch Lettuce 62302C (7g) \$5.50
Straight Eights Cucumber 51107E (1 oz) \$5.50	Salad Bowl Lettuce 62502C (7g) \$5.50
Marketmore 76 Cucumber 51108E (1 oz) \$5.50	Parris Island Cos Lettuce 62702C (7g) \$5.50
	Arugula 64101C (7g) \$5.50
	Dark Green Italian Parsley 37101E (1 oz) \$5.50
	Chives 71214D (1/2 oz) \$7.50
	Garlic Chives 71215D (1/2 oz) \$7.50
	Cilantro (Coriander) 71216D (1/2 oz) \$5.50

Cultural notes for some varieties (especially herbs and flowers) are given in brackets, after the variety name. Read this key and then refer to the example below showing how the key is used.

- **Seasonal growth cycle:**
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,
max = maximum,
min = minimum.
Stratify (Pre-chill) = seeds require a moist cold treatment to break dormancy. Put seeds in covered moist planting medium in refrigerator at least 4 to 6 weeks.
- **Light requirement:**
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 or shade requirement:**
sun = Needs full sun for best results.
shade = Tolerates or requires shade.
- **How and when to plant:**
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.
- The notes may also include **spacing requirements** and **days to maturity**.

EXAMPLE OF THE USE OF THIS KEY:

ANISE (*Pimpinella anisum*):
[A/70°F/LD/14/tpALF/sun/24"]

In this example, **ANISE** is the common name and *Pimpinella anisum* is the Latin name given as genus and species. Anise is an annual (A) whose seeds germinate well at 70°F or better. 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. Transplant (tp) after the last frost (ALF) when several sets of true leaves have developed. Anise grows best in full sun and reaches an average height of 24".

RECOMMENDED PLANTING DATES

seed, bulb or transplant		Mountains	Inland Plains	Coastal
Asparagus	S	Mar 15-Apr 21	Mar 10-Apr 20	Feb 15-Mar 21
Beans, Bush	S	May 1-Aug 20.	Apr 10-Jul 7 Jul 21-Sept 1	Apr 10-Jun 10 Aug. 7-Sept 7
Beans, Pole	S	May 1-Jun 15	Apr 15-Jul 7 Jul 21-Sept 1	Apr 15-Jun 15
Beans, Lima	S	Jun 1-Jul 15	May 21-Jul 21	May 15-Jul 21
Beets	S	Mar 21-May 21 Jul 21-Aug 21	Mar 15-Apr 15 Aug 7-Sept 7	Mar 1-Apr 21 Aug 1-Sept 7
Broccoli	S	Jul 14-Aug 1	Jul 14-Aug 1	Jul 14-Aug 1
Broccoli	TP	Apr 15-May 21 Aug 1-Sept 7	Apr 7-May 15 Aug 7-Aug 21	Mar 15-Apr 21 Aug 7-Sept 1
Brussels	S	Jun 7-Jul 15	Jun 7-Jul 15	Jun 7-Jul 15
Sprouts	TP	Apr 7-May 21 Jul 15-Aug 21	Apr 7-May 7 Jul 15-Aug 21	Mar 7-Apr 15 Jul 15-Aug 21
Cabbage	S	Jul 15-Aug 7	Jun 7-Jul 21	Jun 7-Aug 7
Cabbage	TP	Mar 21-May 15 Jul 7-Aug 15	Mar 15-May 7 Jul 1-Sept 1	Mar 1-Apr 21 Jul 7-Sept 15
Cabbage, Chinese	S	Apr 15-Aug 21	Apr 15-May 7 Jul 7-Aug 1	Apr 1-Jul 1 Jul 21-Sept 1
Carrots	S	Apr 7-May 21 Jul 21-Aug 21	Mar 7-Apr 21 Jul 21-Aug 21	Feb 27-Apr 7 Jul 21-Aug 21
Cauliflower	S	Jul 7-Aug 1	Jul 7-Jul 21	Jul 7-Jul 21
Cauliflower	TP	Apr 15-May 21 Jul 21-Aug 21	Apr 15-May 7 Aug 7-Sept 1	Mar 21-Apr 21 Aug 7-Aug 21
Collards	S	Jul 15-Aug 21	Aug 7-Sept 15	Aug 7-Sept 21
Corn, Sweet	S	May 21-Jul 21	Apr 21-Jul 15	Apr 15-Jun 21
Cucumbers	S	May 15-Jun 15 Jun 7-Aug 21	May 7-May 21 Jul 21-Aug 15	Apr 21-May 15 Jul 21-Aug 21
Eggplant	TP	May 1-Jun 21	Apr 21-May 21	Apr 15-May 21
Endive	S	May 7-May 21 Aug 1-Aug 21	Mar 15-Apr 15 Jul 21-Sept 15	Mar 7-Apr 15 Aug 21-Sept 21
Garlic	B	Aug 21-Oct 21	Sept 7-Nov 15	Sept 21-Nov 21
Kale	S	Mar 21-Apr 21 Jul 7-Sept 1	Mar 15-Apr 15 Jul 21-Sept 15	Mar 1-Apr 21 Jul 7-Sept 1
Kohlrabi	S	Apr 21-May 15	Mar 15-Apr 21	Mar 7-Apr 21
Lettuce, Bibb	S	Apr 5-May 21 Aug 7-Sept 1	Mar 7-Apr 21 Aug 21-Sept 10	Mar 7-Apr 1 Sept 7-Nov 7
Lettuce, Leaf	S	Mar 25-Apr 21 Aug 7-Sept 15	Mar 7-Apr 21 Aug 21-Sept 21	Feb 15-Apr 21 Sept 1-Nov 1
Muskmelon	S	May 1-Jun 15	May 1-Jun 7	Apr 21-May 21
Mustard	S	Mar 15-Apr 21 Aug 15-Sept 15	Mar 15-Apr 15 Sept 1-Nov 1	Mar 7-Apr 15 Sept 1-Nov 21
Okra	S	May 25-Jun 15	May 1-Jun 10	May 1-Jun 10
Onions	S	Mar 10-Mar 21	Mar 10-Mar 21 Sept 1-Oct 15	Feb 15-Apr 21 Sept 1-Oct 21
Onion, Multiplier	B	Mar 15-Apr 21 Sept 21-Nov 7	Mar 1-Apr 21 Sept 7-Dec 10	Feb 7-Mar 7 Sept 7-Dec 7
Peas	S	Mar 7-Apr 21 Jul 7-Aug 15	Mar 1-Apr 15	Feb 15-Apr 15
Peas, Southern	S	May 15-Jun 7	May 7-Jul 15	Apr 1-Jul 20
Peppers	S	May 15-Jun 15	May 7-Jun 21	Apr 15-Jun 21
Potatoes	S	Apr 7-May 21	Mar 7-Apr 21 Jul 15-Aug 15	Feb 15-Apr 15 Aug 7-Sept 1
Pumpkins	S	May 21-Jun 21	May 7-Jul 1	Apr 21-Jul 1
Radish	S	Apr 7-May 1 Aug 15-Sept 15	Apr 1-Jun 15 Aug 15-Nov 1	Feb 21-May 7-Aug 21-Nov 15
Rutabaga	S	Mar 15-Apr 15	Aug 7-Aug 21	Aug 7-Sept 21
Spinach	S	Mar 7-Apr 1 Jul 21-Aug 21	Feb 21-Apr 21 Aug 15-Oct 25	Feb 1-Apr 1 Aug 21-Nov 15
Squash, Summer	S	May 15-Jul 1	May 1-Jun 15	Apr 21-Jun 7
Squash, Winter	S	May 7-Jun 15	May 1-Jun 15	Apr 21-Jun 7
Sunflower	S	May 7-Jun 21	Apr 15-Jul 7	Apr 15-Jul 7
Sweet Potato	B	May 15-Jul 1	May 7-Jun 21	Apr 21-Jun 15
Swiss Chard	S	Apr 15-May 7	Mar 7-Jun 21	Mar 1-May 7
Tomatoes	TP	May 21-Jun 15	Apr 21-Jun 21	Apr 15-Jul 7
Turnips	S	Mar 15-Apr 15 Jul 15-Aug 21	Mar 7-Apr 7 Aug 7-Sept 21	Feb 21-Mar 21 Aug 15-Oct 15
Watermelon	S	May 21-Jun 21	May 7-Jun 7	May 1-May 21

We have found the above listed dates to be the easiest times to plant here in the Mid-Atlantic region.
Other dates are definitely possible.

OUR GUARANTEE

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.
See Ordering Information on page 70 for complete details.

HISTORY OF SESE

Southern Exposure Seed Exchange (SESE) started in 1982 as an out-growth of Dr. Jeff H. McCormack's love affair with heirloom varieties and seed saving. We had our beginnings in a small family garden and a kitchen co-opted for seed processing. We have since expanded our growing area to include a number of seed gardens and a nationwide seed grower network. Our facilities now include a germination testing facility and an environmentally controlled seed storage area.

Our first catalog offered 67 varieties and has since expanded to include over 500 varieties, with emphasis on varieties with heritage, flavor, disease resistance, and other qualities of interest to gardeners. Though we specialize in seeds adapted to the Mid-Atlantic region, we have loyal customers throughout the United States, Canada, and the U.S. territorial islands due to the strength of some of our varieties.

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

OUR MISSION

Southern Exposure Seed Exchange encourages cooperative self-reliance in agriculture. We see our mission as promoting and participating in several areas of activity such as: seed saving and exchange, ecological agriculture, and reduction of energy use by increased reliance on locally adapted varieties and regional food production.

To further these aims, we offer a selection of seeds that reflects our commitments and specialties. Our specialties include:

- (1) Disease- and insect-tolerant varieties to reduce fungicide and insecticide use.
- (2) Heirloom varieties to conserve and distribute rare and endangered varieties of vegetables.
- (3) Open-pollinated varieties to encourage seed saving and exchange among gardeners and seed collectors.
- (4) Varieties of interest to growers for local and small-scale specialty markets to encourage regional food production.

ABOUT OUR SEEDS

UNTREATED SEEDS: None of our seeds have been treated by fungicides or insecticides. To help give your seeds the proper start in life we have provided detailed cultural instructions in our catalog. We especially urge you to pay close attention to recommended germination temperatures and moisture requirements.

GERMINATION TESTED: Our seed is germination tested to ensure that you receive seeds that meet both federal and Southern Exposure Seed Exchange standards. Please note that germination tests are often conducted under optimum conditions and that field results may differ somewhat from laboratory results. Germination test results are provided as a service to help you determine planting density and quantity of seed needed for planting. On rare occasions we find it necessary to package seed whose germination test results were below the federal standard. In those cases we add more seed to compensate and the packet is labeled: "Below Standard: More Seed Added." Southern Exposure Seed Exchange germination standards are higher than the federal standard for some types of seed.

REGIONAL VARIETY PERFORMANCE: You'll notice that our variety descriptions are very detailed so that you'll have an accurate basis for deciding which varieties are suited to your region and your needs. Some varieties are adapted to specific kinds of soils, climate conditions, and cultural conditions. Others are widely adapted and will generally perform well under many conditions.

Our emphasis is on Mid-Atlantic adaptability. The Mid-Atlantic region is generally characterized by high summer heat, humidity, numerous plant diseases, uneven precipitation, and occasional high temperatures in the early spring and late fall. This region has predominantly clay soils except along the sandy coastal areas. Varieties that do well in the Mid-Atlantic often do well in other regions sharing similar characteristics; we are often told that varieties we offer do well in the Pacific Northwest, and many varieties will perform fine in warmer and cooler regions if planting and harvesting dates are adjusted accordingly. We also offer a number of varieties suited for early production and short season, northern climates. Information about specific regional adaptability is given in our catalog descriptions and cultural notes.

MATURITY DATES: Maturity dates are provided as general guidelines for comparing relative maturation times of varieties. These dates represent the average dates for our location, our growers location, or the average of several locations. Actual maturation dates depend on climate, soil, 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: Variety names followed by the PVP designation are patented varieties regulated by the Plant Variety Protection Act which prohibits unauthorized marketing.

POLICY ON GENETICALLY ENGINEERED VARIETIES: We will not knowingly offer seed of genetically engineered varieties because of environmental and other concerns. Due to the fact that some studies suggest that genetically modified pollen may require an isolation distance four times greater than naturally bred pollen, we have increased the isolation that we and our contracted growers must maintain. 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 also 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.

WHY WE SPECIALIZE IN OPEN-POLLINATED (NON-HYBRID) SEED

Our mission is to ensure that people retain control of their food supply, that genetic resources are conserved, and that gardeners have the option of saving their own seed.

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 F_1 hybrids. Unless we have genetic diversity in our food crops, our whole food supply is vulnerable to epidemics. This has been a repeated lesson of agricultural history. The Irish potato famine of the mid-1840's and the U.S. corn blight epidemic of 1970 were both examples of 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. For this reason, 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.

OPEN-POLLINATED & HYBRID COMPARED: A BRIEF LOOK AT SOME TRADE-OFFS

Performance of a variety can be measured by many qualities such as appearance, vigor, uniformity, maturation time, nutrient requirements, stress resistance, keeping quality, and tolerance to insects and disease. Hybrids often have an advantage in terms of yield and uniformity, but these are not necessarily advantageous for gardeners. To have all your tomatoes mature at once may be an advantage for a farmer, but not for a gardener who wants an extended harvest. The same is true of many other crops. Many hybrids have been bred primarily for shipping quality and size uniformity—flavor may or may not be a consideration. A large number of the open-pollinated varieties we offer will yield superior quality vegetables for use in a home or market garden where shipping is less of a consideration than flavor; often, open-pollinated varieties just taste better!

Under natural organic gardening conditions, open-pollinated varieties tend to do well. Hybrid varieties tend to do better under conditions of low stress, high fertilizer levels, and intensive cultivation. What many heirloom open-pollinated varieties offer is a long tradition of steady success, often under adverse conditions.

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. Hybrids are used as supplements, not as replacements for open-pollinated varieties in our catalog.

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. More research and testing is necessary to further assess the potential risks of genetically engineered seeds. Further, we wish to support agricultural progress that leads to healthier soils, genetically diverse agricultural ecosystems, and ultimately, people and communities.

SEED SAVING

There can be a great deal of satisfaction in saving your own seed, and a number of benefits: seed saving promotes self-reliance, fosters conservation of agricultural resources, increases your participation in natural processes, and saves you money. You can also develop your own locally adapted strains of vegetables. If you try to save seed from hybrids the seed will not come true to type. In other words, the second and subsequent crops will never again have the characteristics of the original crop grown from the hybrid seed. Thus, gardeners interested in saving seed and perpetuating certain characteristics are advised to save seed of only open-pollinated varieties. New open-pollinated varieties can be created by saving and selecting seed of hybrid varieties, but the process is more complex and usually takes a minimum of 6 to 10 years to select and stabilize new varieties. Because some gardeners have a long tradition of saving their own seed we are able to offer their legacy to you. We offer books and supplies to assist you in saving seeds.


SEED EXCHANGE & PRESERVATION

SEED SHARES™ collects and distributes vegetable, flower, and herb seed varieties that are not in general circulation but have some special interest or usefulness. If you have a variety that you would like to exchange, please let us know. Give the variety name, describe its origin, growth habit, hardiness and cultural requirements as best you can. If possible, the seed you send should include additional information such as county and state of origin, and historical information, such as for how long, and by whom it was saved and how it was used. Family stories related to the seed are of special interest and value, as they are a part of the tradition of saving seeds and these stories help us research the origin of varieties. If the seed is not in our seed bank, we will send mailing instructions and a gift certificate redeemable for items in our catalog. Your seed will be added to the SEED SHARES™ seed bank for later propagation, evaluation, exchange, and distribution. Write, call, or e-mail us; see the back of the catalog for addresses and numbers.



ARTICHOKES, SPECIALTY BEANS, SNAP BEANS

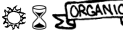
NEW! ARTICHOKE

 **IMPERIAL STAR** PVP: 95 days. In the mid-Atlantic region it can be difficult to over-winter artichokes. *Imperial Star* was the first artichoke bred to produce in one season. Sow indoors 2 months before the last frost date for your area, 1/2" apart and 1/4" deep. Germinate at 70 to 80°F, then transplant to 2 to 4" pots at 60 to 70°F day and 50 to 60°F at night; by two months transplant outdoors, 2 to 3' apart and protect from frost. Get started on this one while you wait for the winner of our 2005 heirloom and open-pollinated artichoke variety trials. **#09101 Pkt. (1g) \$3.50**

ASPARAGUS BEAN

(*Vigna sinensis* var. *unguiculata*)


CULTURE: Asparagus beans are easily grown, produce heavily, harvest easily, thrive in hot weather, are slightly more resistant to drought than snap beans and are tolerant of a wide range of soils. Grow in the same manner as pole beans or along a trellis, 8" apart, 1" deep. Sow in June and make two or three successive plantings about three weeks apart for a steady supply. **HARVEST:** Harvest when pods reach 12-15", before the seeds fill the pods. The mature beans may be threshed or shelled from the pods and cooked in the same fashion as dried beans. Their flavor is like southern peas but with a drier, nutty quality. 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 cowpeas and other varieties of asparagus beans by 150 feet. **PACKET:** (7g) (46 to 55 seeds, depending on variety) sows 20'.

 **GREEN POD RED SEED:** 75 days. [Pre-1860] Light green pods, slightly smaller than *Green Pod Black Seed*. Seeds maroon-brown with darker brown streaks. Always a reliable, trouble-free variety that is an excellent home garden variety. **#11102 Pkt. \$3.65**

FAVA BEANS

(*Vicia faba*)


CULTURE: Favas have approximately the same cultural requirements as peas. Use as a frost-tolerant, spring-planted lima bean substitute from Virginia northward. Fava beans thrive in cool rainy areas and are planted as early as March/April 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. Approximately the size of a large lima, 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 to 3". For use as a green shelled bean, harvest when pods are 4 to 7" long. Prepare in the same manner as peas or beans. **Caution:** A small percentage of people of Mediterranean descent may experience a hereditary allergic reaction to fava beans. **PACKET:** 2 oz (57 g) (about 40 seeds) sows 8' to 10'.

 **BROAD WINDSOR LONG POD:** 85 days. Plants grow 24 to 36" tall and produce 1" wide, 6 to 8" long pods containing 5 to 6 large beans. We love to substitute this bean for chickpeas in hummus. **#11201 Pkt. \$2.80; #11201F (1/4 lb) \$3.75; #11201G (1/2 lb) \$5.50**

HYACINTH BEAN (ORNAMENTAL)

(*Dolichos lablab*)


CULTURE: A/60-70°F/LD/7/*/ds or tp May 15

 **PURPLE HYACINTH BEAN:** [Pre-1802, the same variety grown by Thomas Jefferson.] Beautiful ornamental climbing bean with purple stems and foliage. The pink-purple flowers are borne above the foliage and develop into reddish-purple pods. Grows 10 to 20' depending on conditions. Thick foliage cover makes a good screen. Especially recommended for arbors. **#11401 Pkt. (8g, approx. 20 seeds) \$3.75**

RUNNER BEANS


(*Phaseolus coccineus*)

Runner beans are perennial beans that originate from Central America. They are tolerant of heat, drought, and cool nights (but not frost) and can be grown in most areas of North America. Unlike other beans the cotyledons (seed leaves) remain underground as the seedling emerges, and the vine turns counter-clockwise instead of clockwise. A bulbous root is produced which in mild climates can be dug up in the fall and replanted in the spring. **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. **FLOWER COLOR:** White-seeded varieties have white flowers. Reddish-purple seeded varieties have red flowers. **CULTURE:** Plant 6 to 12" apart and grow in the same manner as pole beans. High temperatures over 90°F may prevent pod set, thus if grown for food, expect pod production only during late summer or early fall in the Mid-Atlantic and southward. **HARVEST:** Runner beans are eaten as snap beans when pods are small, and can be used as green shell or dried shell beans. **SEED SAVERS:** Runner beans readily cross-pollinate. For home use isolate from other runner beans by a minimum of 75 to 150'. For pure seed, isolate by 1/8 to 1/4 mile. **PACKET:** 1.5 oz (42 g, about 42 seeds) sows approximately 9 poles.

 **SCARLET RUNNER:** 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.] A traditional favorite grown for both its food and ornamental value, this is the most popular green bean grown in England. In North America the *Scarlet Runner* is grown mostly for its brilliant scarlet flowers. Grown widely in northern gardens for use as a snap bean or dried bean that has a nut-like flavor. In Virginia, pod set occurs in the fall. Fully grown pods are 8 to 12" long and contain mottled reddish-purple beans. **#11301 Pkt. \$2.85**


BUSH BEANS



(*Phaseolus vulgaris*)



 **BLACK VALENTINE, STRINGLESS:** 50 days. *Germinates well in cool soil.* [Known prior to 1850, introduced in 1897 by Peter Henderson and Co. Improved in 1933 as *Stringless Black Valentine* by crossing *Pencil Pod Black Wax* with *Black Valentine*.] Outstanding features of *Black Valentine* are its hardiness, dependability under adverse conditions, and resistance to bean mosaic. Tall, spreading plants yield dark green pods, 6 to 6-1/2", slightly flattened, and stringless. *Black Valentine* is especially flavorful as a snap bean in vegetable soups. **#13101 Pkt. \$2.35; #13101F (1/4 lb) \$3.95; #13101G (1/2 lb) \$5.75**



SNAP BEANS, SHELL BEANS


CULTURE Beans will grow well in any well-drained garden soil, but do best in a soil with pH above 6.0. After the last frost-free date, plant seeds no more than 1" deep and 2 to 3" apart in a row but do not thin. Beans may benefit from a source of soluble nitrogen (if your soil is low in nitrogen) during the first three 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 (18°C) to germinate well, otherwise rotting may occur. **HARVEST:** Pick when pods are small, before seeds fill the pods. Keep well picked so that plants continue to bear. **DISEASES:** Rotate on a 3-year cycle if disease is a problem. Do not cultivate or harvest when foliage is wet since anthracnose, bacterial blight, and rust diseases may be spread. Avoid watering the plants in the evening. **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' for home use. For pure seed an isolation distance of 100 to 150' is required. **PACKET:** 2 oz (57 g) (about 130 to 232 seeds depending on variety) sows 20 to 33'.

 **BLUE LAKE 274:** 54 days. *A popular variety due to its excellent eating quality.* [Introduced 1961 as a bush version of 'Blue Lake' pole bean.] Produces heavy yields of 6" pods containing white seeds. Pods fill slowly and retain tenderness for a long period. Resistant to bean mosaic and is widely adapted. An excellent variety for canning and freezing. **#13102 Pkt. \$2.25; #13102F (1/4 lb) \$3.75; #13102G (1/2 lb) \$5.50**


  **NEW! BLUE LAKE BUSH:** 52 days. A vigorous bush producing round straight pods with a fine flavor. Prolific. Resistant to bean mosaic. 15 to 18" plant with 6 to 8" pods. An excellent freezer. **#13104 Pkt. (57g) \$2.35; #13104F (1/4 lb) \$3.95; #13104G (1/2 lb) \$5.75**


  **CONTENDER (BUFF VALENTINE):** 42 days. *Our all around favorite.* [Introduced in 1949 by the SC/AES. Possibly derived from pre-1855 *Early Valentine*] The best early green bean for gardeners who desire a combination of good flavor, disease-resistance, and high yield. Has excellent fresh eating quality and is very well liked by our customers. Bears slightly curved thick pods, approximately 5-1/2" long. Fairly hardy under adverse conditions and well suited to solar-greenhouse use because of its earliness, heat-tolerance and disease-resistance. Resistant to common bean mosaic virus (race 1) and tolerant of powdery mildew. **#13103 Pkt. \$2.35; #13103F (1/4 lb) \$3.95; #13103G (1/2 lb) \$5.75**

  **NEW! PROVIDER:** 50 days. [Introduced by Dr. Hoffman of South Carolina in 1965.] A favorite of many market growers, this widely adaptive snap bean offers heavy early yields. Virus resistant and slow to wilt. 16 to 18" plant with 5 to 8" green beans. **#13110 Pkt. (57g) \$2.35; #13110F (1/4 lb) \$3.95; #13110G (1/2 lb) \$5.75**



 **ROMANO 14:** 54 days. Known for its distinctive flavor. This bush version of the *Romano Pole Bean* (Italian Pole Bean) is suitable for canning, freezing, and fresh eating. Has fairly straight, thick pods (3/4 x 6") free of strings. Plants are low and spreading. Has excellent resistance to rust which makes this



variety high yielding in Fall plantings. **#13105 Pkt. \$2.30; #13105F (1/4 lb) \$3.75; #13105G (1/2 lb) \$5.50**

 **TOPCROP:** 49 days. [AAS Gold Medal winner 1950.] *A choice variety for fresh eating, freezing, and canning.* Topcrop combines earliness, productivity, and disease-resistance into a compact plant. Bushy plants are 16" tall bearing 6" medium-green, straight to slightly curved pods containing brown seeds with buff mottling. Pods are tender, meaty, fiberless, and stringless. Resistant to common bean mosaic, NY strain 15 bean mosaic, and pod mosaic virus. **#13107 Pkt. \$2.30; #13107F (1/4 lb) \$3.75; #13107G (1/2 lb) \$5.50**



 **WHITE HALF-RUNNER (MISSISSIPPI SKIP BEAN):** 60 days. *A Southern favorite.* *White Half-Runner* is known for its excellent flavor and outstanding ability to withstand heat and drought. Heavy-yielding plants are bushy at the base with short runners ranging from 24 to 36" and bearing fleshy 4" pods. Used traditionally as a shell bean for winter baking, or as a stringless snap bean when harvested young for fresh, frozen, or canned use. **#13106 Pkt. \$2.25; #13106F (1/4 lb) \$3.75; #13106G (1/2 lb) \$5.50**

PURPLE- & YELLOW-PODDED BUSH BEANS

  **ROYALTY PURPLE POD:** 52 days. *Has a natural blanching indicator.* [Introduced 1957.] When prepared for freezing, the purple pods blanch to green after 2 minutes of boiling. Produces purple-podded snap beans that are easily visible against the green foliage. Plants have short runners and need either wide row spacing or a fence for climbing. The 5" pods are round and slightly curved. Makes a very meaty and flavorful snap bean; especially well suited as a main ingredient in vegetable soup. The buff-colored seeds germinate well in cool soil. **#13351 Pkt. \$2.30; #13351F (1/4 lb) \$3.95; #13351G (1/2 lb) \$5.75; #13351H (1 lb) \$7.50**


  **PENCIL POD BLACK WAX:** 52 days. *Widely adapted.* [Introduced in 1900. Developed from a cross of *Improved Black Wax* and *Black Eyed Wax*.] Stringless, curved, round pods, 5-1/2 to 6" long. Pods snap easily and are excellent for fresh eating or canning. This black-seeded wax bean comes in early and produces for a long time. It is not as productive as modern wax beans but is dependable under high heat. **#13301 Pkt. \$2.30; #13301F (1/4 lb) \$3.75; #13301G (1/2 lb) \$5.50**


BUSH SHELL BEANS

  **TAYLOR'S DWARF HORTICULTURAL (SHELLY, WREN'S EGG):** 60 days. *Popular shell bean for years.* [Dates back to the early 1800's when it may have been brought to the U.S. from Italy.] Plants are semi-runner (14 to 18"), producing cream-colored pods splashed with red streaks. Can be used as snaps early in the season, but pods quickly become stringy and fibrous. Seeds are medium large, pink-buff splashed with carmine. Adapted from the north to the deep south. Often used in succotash. **#13403 Pkt. \$2.35; #13403F (1/4 lb) \$3.85; #13403G (1/2 lb) \$5.45**

SOUP BEANS, POLE BEANS

DRY BEANS (SOUP & BAKED BEANS)


 **JACOB'S CATTLE (TROUT):** 86 days. [A popular heirloom in northern areas, though it was likely developed in Virginia by Jacob Trout.] *Known for its beautiful and distinctive seed color pattern.* The large, kidney-shaped beans are spotted with maroon markings on a white coat. Excellent for baking and soups. **#13402 Pkt. \$2.45; #13402F (1/4 lb) \$4.00; #13402G (1/2 lb) \$6.00; #13402H (1 lb) \$8.50**


 **SULPHUR (GOLDEN CRANBERRY, CHINA YELLOW):** 55 days. [Introduced about 1839. First known as *China Yellow*.] *Sulphur* bean is known for its short cooking time, distinctive flavor and its ability to form a thick gravy when baked or boiled. Though this heirloom is not very productive, it is an old favorite, highly respected and much in demand by the mountain folks of North Carolina, Virginia, and Tennessee. Plants are well branched and spreading with phlox-pink colored flowers. Pods are 5" long, containing 5 beans per pod. Seeds are light tan sulphur in color with a faint brown eye ring. **#13451 Seed Saver Packet™ (14g, 38 seeds) \$3.00**


POLE BEANS AND CORNFIELD BEANS

CULTURE: Pole beans usually bear later than bush beans and generally give higher yields. Poles or other means of support should be at least 8' high. Sow 6 to 8 seeds, 1" deep around the base of each pole. Corn plants may be used as bean poles. We recommend using 'Hickory King' corn. Note: Only certain varieties of beans are shade tolerant and adapted to growing in corn. **PACKET:** 2 oz or 57 g, unless stated (about 125 to 225 seeds depending on variety, average 150 seeds) sows 25 to 45 poles.

GREEN-PODDED POLE BEANS


 **BLACK-SEEDED KENTUCKY WONDER:** *Germinates well in cool soil.* 84 days. [Heirloom from central Ohio. Original seed from Tom Knoche's Aunt Marge who kept this variety alive for 60 years.] *Good flavor and texture.* *Kentucky Wonder* type pods are large, long, stringless, fleshy, and fiberless. Pods range from 6 to 8" long, containing 8 to 10 seeds per pod. **#13511 Seed Saver Packet™ (14g, 41 seeds) \$2.60**


 **GENUINE CORNFIELD (SCOTIA, STRIPED CREASEBACK):** 70 days. *Shade-tolerant and the best variety for growing with corn.* [Possibly of pre-Columbian origin, this variety is one of the oldest beans cultivated by the Iroquois who used it as a corn soup bean and bread bean. In the Cayuga Iroquois dialect, its name means "wampum bean".] Straight pods are 5 to 7", containing grayish buff-brown seeds with brown mottles and stripes. Best harvested before seeds fill the pods. Use for snap or green shell. Produces very well under conditions of high heat. A valuable variety for keeping the nitrogen in your corn patch. **#13501 Pkt. \$2.30; #13501F (1/4 lb) \$3.75; #13501G (1/2 lb) \$5.50; #13501H (1lb) \$7.50**

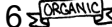
 **GREASY POD CUTSHORT:** 85 days. *Greasy Pod* beans are esteemed by many southern gardeners. [Heirloom string bean from Asheville, NC. Introduced 1999 by SESE.] The


greasy pod characteristic (absence of fine hairs on the pod) gives the pod a bright shiny, glossy look and retards wilting. The beans are also crowded in the pod causing the beans to appear as though the ends had been cut short. The pod has strings that need to be removed prior to eating. Pods average 4 to 5" long, are slightly curved and are filled with oval white beans. Has a unique, sweet buttery bean flavor.


#13601 Seed Saver Packet™ (10g, 56 seeds) \$3.10

 **KENTUCKY WONDER (OLD HOMESTEAD):** 65 days. *An old favorite.* [Introduced before 1864, then known as *Texas Pole*.] *Kentucky Wonder* has been a popular variety since its introduction, though it has undergone some change over the years. Resistant to bean rust. Pods are about 8" long, stringless and tender when small. Use fresh, for canning, freezing, or as a dry bean. **#13503 Pkt. \$2.25; #13503F (1/4 lb) \$3.95; #13503G (1/2 lb) \$5.75; #13503H (1 lb) \$7.50**


 **McCASLAN:** 61 days. *Highly respected southern favorite with delicious flavor.* [Introduced in 1912, though it was grown well before 1900 by the McCasland family in Georgia.] Has versatile uses as a stringless snap bean, and as a green or dry shell (white-seeded) bean. The productive vines bear slightly flattened dark-green pods, 7" long. Pods are finely-grained, fleshy, and brittle. Drought tolerant vines produce all season if closely picked. **#13505 Pkt. (28g, 71 seeds) \$2.25**

 **POTOMAC:** 67 days. *Germinates well in cool soil and yields well in cool season areas.* [Introduced in 1990 by SESE. Dates from the Virginia side of the Potomac river before 1860.] After the Civil War it was carried west by the Barley family to Tehama County, California, where it has been grown for over 125 years. *Potomac* is a vigorous climber and heavy producer of 6-1/2" long, slightly curved, stringless snap beans containing an average of 8 seeds per pod. The snap beans are of excellent quality. The dried 5/8" long seeds are somewhat flattened in shape and dry to a dark purple-black color. The large trifoliate leaves range from 6 to 10" across. **#13507 Seed Saver Packet™ (12g, 32 seeds) \$2.10**


 **RATTLESNAKE:** 73 days. *Especially good for sandy soil.* *Rattlesnake* is a heavy producer in the hot, humid areas of the coastal Mid-Atlantic and South coastal areas where sandy soil prevails. Steamed snaps are sweet, rich, and full flavored. Stringless when pods are small to medium size. Vines are vigorous climbers which bear 7" round pods containing buff-colored seeds splashed with brown. **#13508 Pkt. \$2.50**


 **RUTH BIBLE:** *Drought-resistant cornfield bean.* [Introduced in 1984 by SESE. Family heirloom from the Buoys family in Kentucky since 1832.] Vines are long and bear heavily. Pods are about 3-1/2" long and contain brownish-tan seeds. Large pods may have slight strings. Best picked when tender and small. **#13509 Seed Saver Packet™ (14g, 55 seeds) \$2.95**

POLE BEANS, LIMA BEANS


 **TURKEY CRAW:** *Stringless, and excellent fresh flavor.* [Heirloom from Virginia, North Carolina, and Tennessee.] According to folklore, this variety was cultivated after a hunter shot a turkey and removed a bean from the craw, the bean was later planted and saved, hence the derivation of the name *Turkey Craw*. Often used as a cornfield bean. Good canned. Similar to other beans for freezing and drying quality ("leather britches on a shuck"). Pods grow 3-1/2 to 4" long and cling to the vines. Seeds are buff, frosted with brown on one end.
#13510 Pkt. (14g) \$3.50

PURPLE-PODDED POLE BEANS

 **BLUE COCO:** 59 days. *Distinctive flavor and color.* [Pre-1775 French heirloom.] The name *Blue Coco* refers to the bluish-purple color of the pods and the chocolate (coco) color of the seeds. Leaves are green, tinged with purple. The fleshy, slightly curved flattened pods range from 6 to 7-1/2" long, and have a nice meaty flavor. Outstanding characteristics of this variety are color and ability to produce under hot dry conditions.
#13752 Seed Saver Packet™ (14g, 37 seeds) \$3.65


 **LOUISIANA PURPLE POD:** 67 days. *Beautiful southern heirloom.* Vines are prolific and drought-resistant. The entire plant has a purple-green color with textured leaves, and bright purple stems and flowers. Pods are bright purple, approx. 7" long, and turn green when cooked (blanch indicator). Flavor is very good, especially when minimally cooked and used in a cold marinade. Harvest when young and stringless. Seeds are light to medium brown. Can be grown in the north.
#13753 Seed Saver Packet™ (12g, 43 seeds) \$2.85


YELLOW PODDED POLE BEANS

 **GRANDMA NELLIE'S YELLOW MUSHROOM BEAN:** Supplied to us from seed saver Marge Mozelsky, this bean (given to her by her grandmother) has the unusual characteristic of tasting somewhat like mushrooms when cooked. Tender when picked at 5", this high-yielding bean is a true treasure. Heavy yielder of light yellow pods.
#13512 Seed Saver Packet™ (12g) \$2.05

BUSH LIMAS


CULTURE: Limas need a warmer soil than snap beans. Plant seeds 4 to 6" apart at least 2 weeks after the last frost-free date. 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. **PACKET:** Seed size varies considerably: 2 oz or 57 g (36 to 260 seeds depending on variety, average 109 seeds) sows 14 to 28 poles. **SEED SAVERS:** Isolate lima bean varieties by 125'.


 **FORDHOOK 242:** 72 days. *The most productive of the Fordhook varieties.* [Introduced by the USDA/Beltsville in 1945. AAS winner.] *Fordhook 242* has become the standard lima for middle and northern latitudes where it bears well in warm years. Plants have dense foliage and are heat- and drought-resistant. Thick 4" pods contain 3 to 5 large, flat greenish-white seeds with a nut-like flavor. **#14102 Pkt. \$2.25; #14102F (1/4 lb) \$3.75; #14102G (1/2 lb) \$5.50**

 **JACKSON WONDER BUTTERBEAN:** 66 days. *Standard southern variety.* [Introduced 1888. Originated by Georgia farmer, Thomas Jackson]. This popular heirloom variety yields well under hot, dry conditions. Contains 3 to 5 seeds per pod. Seeds are buff-colored with purple-black mottling. Good especially as a fresh or dried butterbean. Also does well in northern areas. **#14101 Pkt. \$2.25; #14101F (1/4 lb) \$3.75; #14101G (1/2 lb) \$5.50**


POLE LIMAS


(*Phaseolus lunatus*)

 **CHRISTMAS (LARGE SPECKLED CALICO):** 84 days. *Dependable, flavorful, heat-resistant.* Seeds are about the size of a quarter in pods 5 to 6" long. The full-flavored seed is attractive cream color with irregular red stripes. Use fresh or dry. *Christmas* is a high yielder under hot, humid conditions. **#14502 Pkt. \$1.95; #14502F (1/4 lb) \$3.10; #14502G (1/2 lb) \$5.50**



 **FLORIDA BUTTER (CALICO POLE, FLORIDA SPECKLED):** 82 days. *Excellent tolerance for hot, humid weather.* Seed coat is buff-colored with maroon speckles or irregular stripes. Pods are about 3 1/2" long and contain 3 to 4 beans per pod. Use fresh, frozen, or canned. **#14504 Pkt. \$2.50; #14504F (1/4 lb) \$3.75; #14504G (1/2 lb) \$5.80**

KING OF THE GARDEN: 88 days. *The most widely grown heirloom lima.* [Introduced in 1883 by Frank Platt after selecting 5- and 6-seeded pods of *Large White* pole lima.] Produces 4 to 7" long by 1-1/4" wide pods, containing 4 to 6 large creamy-white seeds with honey-like flavor. Vines grow to 9-1/2' and bear heavily over an extended season. An old favorite of excellent quality. **#14506 Pkt. \$2.45; #14506F (1/4 lb) \$3.95; #14506G (1/2 lb) \$6.00**

 **WHITE CHRISTMAS:** 80 days. [Derived from an accidental cross of *Christmas* and *Sieva*, the original seed came from Brian Heatherington in GA. Introduced in 2000 by SESE.]. It produces a beautiful, large seeded ivory-white bean with a purplish blush on one corner; that looks like it has been air-brushed with purple. *White Christmas* yields heavily, is easy to shell, and is a reliable producer in hot, humid areas.
#14510 Pkt. (28g; 24 seeds) \$2.60

 **WILLOW-LEAF WHITE:** 86 days. *Noted for its exceptional heat and drought resistance.* [Introduced 1891. This is the original 'Willow-Leaf' lima.] This small, white-seeded lima is a heavy producer in southern states and warm season coastal areas. It can be grown in northern areas with reduced production and a maturity date of approximately 100 days. Its willow-shaped leaves may account for its drought and heat resistance. Has dark green pods 3" long, containing 3 chalky white seeds. Vines are luxuriant, heavily productive, and are sometimes grown for their ornamental value as well.
#14508 Seed Saver Packet™ (14g, 36 seeds) \$3.15

LIMA BEANS, BEETS, BROCCOLI



  **WORCHESTER INDIAN RED POLE:** *The hardest lima we offer.* [Introduced in 1990 by SESE. Reported to be of Native American origin, pre-1868.] Produces medium-sized limas on heat- and drought-resistant plants and is a prolific producer under adverse conditions. Seeds range in color from dull red to dull maroon-red. This variety still exhibits a wild trait: a few pods spring open (shatter) when the pods are completely dry. **#14507 Seed Saver Packet™ (14g, 25 seeds) \$2.95**

BEETS

(*Beta vulgaris*)



HISTORY: Until the 1800's, 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 to 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 fine-quality roots. In dry, hot weather beets can become tough and stringy and must be harvested at an earlier stage. Sow seeds 1/2" deep directly in the garden from March through mid-May and again during the latter half of August. Late spring and early fall sowings should be 3/4" deep. Thin to 8 to 12 plants per foot for fresh beets, 6 plants per foot for beets used for winter storage. **SEED SAVERS:** Plants are biennial. Grow only one variety for seed. Isolate by 1/4 mile. For pure seed isolate by a minimum of 1/2 to 1 mile. Crosses with chard. **PACKET:** Seed size varies considerably: 5 g (unless noted, average 385 seeds) sows 31'.

EARLY SEASON SPECIALTY BEETS

  **CHIOGGIA (DOLCE DI CHIOGGIA):** 52 days. [Pre-1840 heirloom.] *Chioggia* is a beautiful bicolored scarlet red garden beet with interior rings of reddish-pink and white. This specialty Italian variety is notable for its earliness, attractive color, relative absence of bleeding, and its ability to compete with weeds. **#31101 Pkt. (3g) \$2.65**

  **EARLY WONDER TALL TOP:** 50 days. [Introduced 1911.] Used for early spring sowings, this versatile beet has choice tall tops for greens and dark red roots for salads, pickles, borscht, or sliced for cooking. Grows rapidly, producing uniform roots. Plant spring or fall. **#31104 Pkt. \$2.05;**
#31104E (28g) \$5.50



MAIN CROP RED BEETS

  **CROSBY EGYPTIAN (EARLY CROSBY EGYPTIAN):** 60 days. [Introduced 1880. The parent strain of the Egyptian beet was introduced from Germany in 1865. *Crosby Egyptian* became commercially available in 1880 after seedsman James Gregory purchased this beet from market gardener Josiah Crosby.] This variety has been selected and refined over the years. Roots grow 3 to 5", are very flattened in shape, and grow virtually on the surface of the soil. The roots have a dull red skin and dark red interior. **#31102 Pkt. \$2.25**

  **DETROIT DARK RED:** 60 days. [Introduced 1892.] Developed from the popular 19th century *Early Blood*

Turnip. Widely adapted, very popular dark red beet with dark green foliage and some red coloration. Use fresh or canned. Resistant to downy mildew. Excellent flavor.
#31103 Pkt. \$1.99; #31103E (28g) \$5.50



WINTER STORAGE BEET

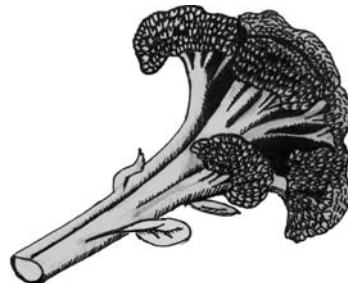
  **LUTZ GREEN LEAF (WINTER KEEPER):** 76 days. This old-fashioned variety is one of the sweeter varieties available. It is an excellent keeper, a beet developed before the days of refrigerators. Retains its sweetness and texture even when large. Spring sown beets are harvested in the fall. Fall leaves are tender enough to be used in salads. An all-purpose beet for fresh use and the best for Fall harvest and Winter storage.
#31105 Pkt. \$2.25



BROCCOLI

Sprouting broccoli: *B. oleracea* var. *italica*
Heading broccoli: *B. oleracea* var. *botrytis*


CULTURE: Culture of broccoli is similar to cabbage, but broccoli is more sensitive to hot weather. See Cabbage section for detailed cultural notes. In the Mid-Atlantic region, transplants should be set out early in the spring: approximately March 15 for coastal areas, April 1 for inland plains, and April 15 for mountainous regions. Transplants should be well developed with several sets of leaves. Most broccoli is tolerant to a low temperature of 10°F (-12°C) but may "button" when cold injured. A temperature of 40°F (4°C) is required for growth. For fall crops start seed 10 to 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 14 to 16" 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, 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' direct seeded or 350' as transplants. Hybrids, 0.3 g (about 58 seeds).


  **CALABRESE (ITALIAN GREEN SPROUTING):** 58 days. [Brought to U.S. by Italian gardeners and introduced to seed trade during 1914-1918.] Produces central head (3 to 6" diameter) plus many side shoots. **#21101 Pkt. \$1.95**





  **DE CICCIO:** 49 days. [Introduced about 1890.] Produces a 3 to 6" diameter central head and side sprouts which extend the harvest period. Use the young leaves like collard greens once the head is 1/4 developed. Plants are light green and of medium height. May be planted in the early spring, late summer, or early fall. **#21102 Pkt. \$1.95**

BROCCOLI, BRUSSELS SPROUTS, CARROTS

 **GREEN GOLIATH:** 55 days. Produces a large central head and numerous side shoots after the first harvest. Developed for home gardens, it matures over a three-week period. The blue-green central head has tight buds. Plant for spring or fall use. Good fresh or frozen. **#21106 Pkt. (1g) \$2.25**

 **WALTHAM 29:** 74 days. [Introduced 1954.] A widely adapted, drought-tolerant variety for fall planting. Developed to mature in cold weather. Produces a head 4 to 8" diameter which holds for a long time. Also produces lateral buds for 6 to 8 weeks after harvest of the main head. Leaves are borne on a low, compact plant having a distinctive slate-green color. Good variety for freezing. **#21105 Pkt. \$1.95**

 **PREMIUM CROP - hybrid:** 62 days. [Introduced 1975. AAS winner.] Produces a large compact head, 6 to 9" in diameter. This reliable performer is resistant to heat and fusarium wilt. Often planted as a spring crop but best as a fall crop. When planted as a fall crop it often produces side shoots. **#21901 Pkt. (0.3g) \$2.30**

 **GREEN COMET - hybrid:** 40 days. [AAS Gold Medal winner.] An early-maturing, easily grown variety recommended especially for beginning gardeners or those who have difficulty maturing spring broccoli. Produces large, uniform, deep green heads, 6 to 7" in diameter. Tight flower buds of excellent quality. **#21902 Pkt. (0.3g) \$2.30**

BRUSSELS SPROUTS



(*Brassica oleracea* var. *gemnifera*)

CULTURE: Culture of brussels sprouts is similar to cabbage. (See Cabbage section.) Sow seed 1/4 to 1/2" deep in flats or pots in July. 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 3/4" in diameter. For a non-uniform extended harvest, remove the leaf at the base of each sprout as soon it reaches 3/8" to 1/2" in diameter. Brussels sprouts are cold-hardy to 0°F (-18°C) 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. **SEED SAVERS:** See Broccoli section. **PACKET:** 2 g (about 625 seeds) sows 50' direct seeded or 290' as transplants.



 **CATSKILL (LONG ISLAND IMPROVED):** 90 days. [Introduced 1941.] Still the best garden variety for sustained production. Compact plants, about 20" tall. Produces large sprouts: 1 1/4 to 1 1/2" diameter, closely packed on the stem. Widely adapted variety. **#20101 Pkt. \$2.05**



CARROTS

(*Daucus carota*)


  **CHANTENAY RED CORE:** 65 days. [Introduced from France in the late 1800's.] Blocky, broad-shouldered variety with blunt tip, about 5-1/2" long and 2-1/2" at the shoulder. Deep-orange interior. Adaptable to clay and a wide range of soils. **#35101 Pkt. (3g) \$2.05; #35101E (28g) \$5.50**


CULTURE: For best results, carrots need a loose sandy loam free of rocks. Clay soils require loosening and lightening to a depth of 9" 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. Keep soil slightly acid, in the range of pH 5.5 to 7.0. Maintain high levels of phosphorus and potassium. Plant seed 1/4" deep, 3 seeds per inch, and thin to 3" apart in rows 12" 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 2 to 3 weeks to germinate. 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. **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 to 2 reduces carrot fly damage by 70%. **HARVEST:** Best quality roots are no larger than 1" in diameter. **STORAGE:** Cut off tops and do not wash the roots. Store in the refrigerator or overwinter the roots in the garden by covering with a thick, loose mulch such as straw. **SEED SAVERS:** Isolate from other carrot varieties and Queen Anne's lace by a distance of 330' for home use. For pure seed, isolate by 1/8 to 1/4 mile. **PACKET:** Packet size noted in variety description. 1 g (about 500 to 650 seeds, depending on variety) sows 28 to 37'.

  **DANVERS 126:** 75 days. [Introduced 1947.] Widely adapted, productive, and heat-tolerant, this Danvers type produces dark-orange roots 6 to 7" long, 2" at the shoulder and tapering to a blunt point. The roots of *Danvers 126* are especially suited to growing in clay soil and the strong tops aid harvesting. **#35103 Pkt. (3g) \$2.00; #35103E (28g) \$5.50**

  **DANVERS HALF LONG:** 75 days. [Introduced 1871.] Blunt tapered variety, about 6 1/2" long, 1 1/2" at the shoulder. Nearly coreless. Long a favorite main crop variety, especially because of its wide adaptability and suitability for clay soil. High carotene content. **#35102 Pkt. (3g) \$2.00**



IMPERATOR (TENDERSWEET): 74 days. [AAS winner.] Sweet flavored, crisp, and free of fiber, the roots range from 7 to 9" long. Orange-red roots are coreless, have semi-blunt ends and narrow shoulders. Requires a loose soil, deeply worked with organic matter to achieve its full potential. **#35108 Pkt. (3g) \$1.99**

 **INGOT - hybrid:** 66 days. *Ingot* is a Nantes type carrot with more than double the amount of carotene compared to most other varieties. One average-sized carrot has enough beta-carotene to meet the Recommended Daily Allowance of vitamin A. Roots are dark orange, 6 to 8" long. Has fine eating quality and full-flavored, sweet taste. **#35901 Pkt. (3g) \$2.80**

 **LONG ORANGE IMPROVED:** 85 days. [Introduced in 1620 by Dutch breeders and brought to North America by early settlers. This improved version continues a tradition of nearly four centuries.] A long tapering carrot with small neck. Roots measure 12" x 2" when fully mature. Plant in loose soil and harvest before roots reach mature size. **#35104 Pkt. (2g) \$3.65**

CARROTS, CAULIFLOWER, CELERIAC, CELERY, DENT CORN

 **MINICOR (AMSTERDAM MINICOR):** 54 days. A gourmet carrot from Holland grown for tender baby carrots 3 to 4" long, or 6 to 7" long when grown to full size. The roots are sweet, fine-grained, deep orange, and uniform in size and shape. An excellent canning variety or for table use. **#35105 Pkt. (3g) \$2.25**

  **SCARLET NANTES (CORELESS, NANTES HALF LONG):** 70 days. [Introduced 1870.] A favorite garden variety appreciated for its fine texture, mild flavor, and very small core. Carrots average 6-1/2" long, 1 to 1-1/2" at the shoulder. Cylindrical rather than tapered. Can be grown for winter storage but best flavor is from spring-grown carrots. This strain exhibits more vigor, disease-resistance, and uniformity than the commonly available commercial strain. **#35106 Pkt. (3g) \$2.25**

CAULIFLOWER

(*Brassica oleracea* var. *botrytis*)


CULTURE: Culture of cauliflower is similar to broccoli and cabbage. (See cabbage section especially.) **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. **HARVEST:** Harvest while the curd is in the tight bud stage. **MATURITY DATES:** Days to maturity are from transplant date. Add 25 days if direct seeded. **SEED SAVERS:** See Broccoli section. **PACKET:** Packet size noted in variety description. 1 g (about 300 seeds) sows 36' direct-seeded or 180' as transplants.

FALL CAULIFLOWER

SNOWBALL SELF-BLANCHING: 68 days.

[Developed by Dr. Homna at MSU.] A work-saving variety with self-wrapping leaves which 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 diameter. During hot weather growth slows until cooler weather arrives, thus preventing formation of undersized heads. **#23102 Pkt. (1g) \$1.99**

SPRING CAULIFLOWER

 **EARLY SNOWBALL:** 50 days. Highly recommended for the Mid-Atlantic. The best performer in our trials, and our grower's trials of spring-planted cauliflower. May also be used for fall planting. Good coverage of the curd by wrapper leaves. Head is denser than other early snowball varieties. Plants are compact. **#23101 Pkt. (1g) \$1.99**

CELERY & CELERIAC (ROOT CELERY)

Celery (*Apium graveolens* var. *dulce*)
Celeriac (*Apium graveolens* var. *rapaceum*)


LARGE SMOOTH PRAGUE CELERIAC: 110 days. [Pre-1870.] Also called "turnip-rooted celery", celeriac is grown for its globe-shaped roots. Flavor is starchier and sweeter than celery with overtones of parsley flavor. Harvest roots when 2 to 4" in diameter and use in vegetable soups, stews, boiled and served in cheese dishes or mashed with potatoes, fried in butter until almost brown, or grate or peel into salads. To make peeling easier, cut into quarters. Culture is the same as for celery though the leaves are not eaten. Roots may be stored as a winter vegetable. **#36501 Pkt. (0.25g) \$2.35**

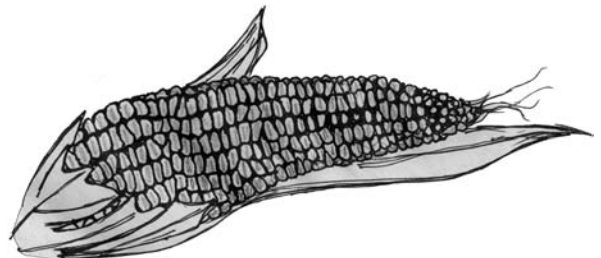
CULTURE: Celery and celeriac are moisture-loving, cool-season crops that have similar cultural requirements. They do well in muck soils and well-drained soils high in organic matter. Both crops do best in areas free of temperature extremes. Virginia temperatures are often too hot to grow celery and celeriac, though advanced gardeners have had some success. Roots of celery rarely extend more than 8" in any direction and therefore it 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. **SOWING INSTRUCTIONS:** Sow seed no more than 1/8" deep in sterile seed starting mix. Keep temperature between 70 and 75°F. Transplant when plants are 2 1/2 to 3" tall. Germination is slow, typically 14 to 21 days at 65 to 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 1 to June 1. **PREMATURE BOLTING:** If plants are exposed to night temperatures below 55°F for more than 8 to 10 days the plants will go to seed. **SPACING:** Space 8" apart in rows 2-1/2' apart. **MATURITY DATE:** Celery and celeriac reach usable size 85 to 110 days from transplant. **PACKET:** Celery, 0.5 g (about 1230 seeds); celeriac, 0.25 g (about 660 seeds).

GOLDEN SELF-BLANCHING CELERY: 85 days from transplant. [Introduced in 1886.] Compact celery with thick, tender, stringless stalks blanching to yellow. Hearts are thick and of good quality. **#36101 Pkt. \$2.15**

DENT CORN

CULTURE: Dent corns are generally best adapted to the Southeast and Midwest and are used primarily for roasting ears, corn bread, and hominy. Some old timers actually prefer eating the starchy dent corns in the same manner as sweet corns. Perhaps this practice may be attributed to the insect resistance of the tight husks of many dent corns. Two maturity dates may be given for dent corn; the first is number of days to maturity for use as roasting ears. The second date is the number of days for use as meal, grits, or hominy. **PACKET:** 2 oz or 57 g (128 to 186 seeds, depending on variety) sows 40 to 60'.


 **BLOODY BUTCHER:** 120 days. [Introduced about 1845. Originally from Virginia. Seed stock courtesy of the USDA.] This is the original 'Bloody Butcher'. Stalks grow 10 to 12' tall producing 2 ears per stalk. Kernels are blood-red with darker red stripes, and occasional white or blue kernels. Use for flour, cereal, or roasting ears. **#41302 Pkt. \$4.65; #41302F (1/4 lb) \$5.00; #41302G (1/2 lb) \$7.00**





BLUE CORN MEAL


Blue corn has a nuttier flavor than yellow or white corn, and can be substituted in any recipe calling for corn meal. Because it is denser, use only 3/4 cup when the recipe calls for 1 cup corn meal. Make up the difference with 1/4 cup of wheat flour. Most blue corns (especially Native American corns) are more nutritious than other flour corns, typically containing 21% more protein and 7% less fat.


DENT CORN, POPCORN

 **BLUE CLARAGE (OHIO BLUE CLARAGE):** 100 days. [Developed west of the Appalachian Mountains in the Ohio and West Virginia area between 1830 and 1850.] *Blue Clarage* is a highly uniform, semi-dent corn. This corn grows 7' tall, maturing one ear per stalk. A distinctive feature of this variety is its solid-blue medium-sized ears. *Blue Clarage* was developed as a meal and feed corn. It has a higher sugar content than most dent corns and may be used as a table corn when harvested in the milk stage. When used for corn meal it has a sweet nutty 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. *Blue Clarage* resists lodging, and tolerates crowding and smut better than many other open-pollinated corns. **#41303 Pkt. \$3.65**


 **NEW! CHEROKEE WHITE EAGLE:** 110 days. A beautiful white and blue corn with a red cob. Occasionally there will be an all-blue ear. Some people can see the image of a white eagle in the kernels! Plants grow 8 to 10' tall. **#41314 Pkt. (28g) \$2.75**

 **HICKORY KING:** 85/110 days. [Pre-1875.] In the hills and hollows of Virginia this corn is still appreciated as a roasting and hominy corn. It is 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 (the old fashioned way of eating corn on the cob). 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. This variety grows extremely tall. Our stalks reach 12'. Some people use this variety for providing support for pole beans. Produces about 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. \$2.75; #41304F (1/4 lb) \$4.65; #41304G (1/2 lb) \$6.50; #41304H (1 lb) \$9.50**

 **MCCORMACK'S BLUE GIANT:** 85/100 days. [Introduced in 1994 by SESE. Developed by Dr. Jeff McCormack from a cross between *Hickory King* and an unnamed heirloom blue dent.] A variety especially suited to the eastern U.S. *McCormack's Blue Giant* is especially suited for clay soils and drought-prone areas. Because the 10 to 12' stalks are so tall, it is not recommended for loose soils or high wind areas. Stalks produce one to two 7 to 8 1/2" long ears containing large, wide, smoky blue kernels. When ground for meal or flour it produces a light blue flour. It is especially suited for making blue tortillas and blue corn chips. Though it is a meal corn it is excellent when eaten fresh as a roasting ear corn (the old fashioned way of eating corn on the cob). Has good tolerance to leaf blights. **#41307 Pkt. \$3.95**


 **REID'S YELLOW DENT:** 85/110 days. [Dates back to the 1840's, when it originated as a cross between *Gordon*


Hopkins, a late, light-red variety, and an early yellow flint variety.] The cross was accidental: Robert Reid had a poor stand of *Gordon Hopkins* one year and replanted the missing hills with the early yellow flint corn. He grew the hybrid until it stabilized. *Reid's Yellow Dent* is one of the most productive, hardy corns ever developed, and was a prize winner at the 1893 World's Fair and progenitor of a number of yellow dent lines. 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. Stalks to 7' with 9" double ears well filled with 16 rows of deep, close-set, moderately flat seed. Average analysis is 9.9% protein and 0.31% lysine. **#41308 Pkt. \$2.60; #41308F (1/4 lb) \$4.55; #41308G (1/2 lb) \$6.30**

 **TENNESSEE RED COB:** 120 days. [Introduced prior to 1900. The date is uncertain since Tennessee farmers referred to several red cob, white dent corns as *Tennessee Red Cob*; however, this seed came from the University of Tennessee. Seed was generously supplied by Virginia extension agent Harold Jerrell.] The stalks are tall and sturdy and often used to support pole beans. Medium-large ears are borne two per stalk. Mr. Jerrell reported that in 1995 *Tennessee Red Cob* produced a good crop on only 2" 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. *Tennessee Red Cob* produces an excellent-flavored corn bread and makes an attractive corn-cob pipe. **#41311 Pkt. \$2.65; #41311F (1/4 lb) \$4.65; #41311G (1/2 lb) \$6.45**

POPCORN


We tend to think of popcorns for popping only, but some Native Americans also grind popcorn to make bread. Popcorn is grown and dried in the same manner as dent corn or flint corn. All the popcorns and most flint corns are resistant to ear damage by birds. **PACKET:** 1 oz or 28 g (about 460 to 565 seeds, depending on variety) sows 125'. See Corn for cultural informa-


 **BLACK:** (maroon-black) 80 days. *Makes beautiful black and white popped corn.* [Mennonite heirloom.] Good flavor and it pops well. The popped kernels are crunchy and are bright white with black accents. The decorative 4 to 5" ears are mostly black, while some are dark maroon. Stalks average 6' and bear two ears per stalk. **#41604 Pkt. (28g) \$3.15**

 **CHEROKEE LONG EAR:** Small-kernelled variety makes surprisingly large pops, yielding for a low hull/corn ratio. Highly ornamental ears have many shiny colors including red, blue, orange, white, and yellow. Perfect for use as an ornamental corn. **#41609 Pkt. \$2.95; #41609F (1/4 lb) \$5.25**

CHOCOLATE CHERRY: (reddish brown) 120 days. *Dark cherry-colored ears.* [Introduced in 1998 by SESE as a selection from *Chocolate Pop* which it replaces.] *Chocolate Cherry* is a decorative and edible popping corn with bright pink silks and deep reddish-brown ears. Stalks average 5 1/2 to 6' and produce two 6" ears per stalk containing 16 to 18 rows of kernels. Tastes like a good flavored yellow popcorn, but the hulls are more tender. Has sturdy stalks and good resistance to drought and earworms. **#41608 Pkt. \$2.95**


POPCORN, GOURDSEED CORN, SWEET CORN

 **PENNSYLVANIA BUTTER-FLAVORED:** (white) 102 days. *Flavor is superior to commercial popcorn.* [Pre-1885 heirloom popcorn maintained by the Pennsylvania Dutch. Introduced in 1988 by SESE.] Produces white-kerneled ears, averaging 2 per 8-foot stalk. Ears contain 26 to 28 rows of kernels. Length ranges from 4 to 6", measuring 1-1/2 to 1-3/4" at the butt, and tapering to 1" at the tip. **#41602 Pkt. \$2.15;** **#41602F (1/4 lb) \$3.75;** **#41602G (1/2 lb) \$5.10**

 **STRAWBERRY:** (red) 98 days. *One of the best poppers of the ornamental types.* Popular ornamental variety with ears shaped like very large, dark red strawberries. Kernels are rich mahogany-red color. Ears are 2" long by 1-1/2" wide, averaging 3 per stalk on 4' plants. Use for decoration or popping. Has high resistance to corn earworm due to "maysin", a naturally occurring antifeedant. **#41603 Pkt. \$2.50**



GOURDSEED CORN

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 1960's, 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 for this disease-resistant variety. **PACKET:** 1 oz or 28 g (about 100 seeds) sows 50'.



 **TEXAS GOURDSEED:** (white) 120 days. [Reintroduced in 1987 by SESE.] Originally brought to south Texas by German farmers who migrated from Virginia, Kentucky, and Tennessee during the late 19th century. Descendants of these farmers maintain flocks of turkeys, and the corn is harvested by the flocks in the fields. Ears can be shelled almost with the flick of a finger. Stalks of *Texas Gourdseed* average 8' tall, yielding 2 ears per stalk, containing 18 to 22 rows of cream-colored, narrow kernels, compactly united from the cob to the surface. Although it is susceptible to smut, it is resistant to other diseases, withstands drought, and does well in clay soil. This gourdseed variety closely approximates original gourdseed characteristics. In south Texas, this is considered to be the best choice for tortilla flour. **#41501 Pkt. \$4.75**


OPEN-POLLINATED SWEET CORN

(*Zea mays*)


  **ASHWORTH:** (yellow) 69 days. An early maturing, widely adapted sweet corn with good flavor and dependability. Stalks average 5' with 1 or 2 ears (6 to 7" long) containing 12 rows of yellow kernels per ear. **#41101 Pkt. \$3.55**


CULTURE: Sweet corn seed requires a soil temperature of 65°F (18°C) 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. Succession plantings can then be made 2 to 3 weeks apart. Sow seed 1" deep in rows 24 to 36" apart and thin to 9 to 14" 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 to 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 re-infect your corn for several years. **SEED SAVERS:** Corn is wind pollinated. Separate varieties by 600' for home use, or 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 or 28 g (about 115 to 210 seeds, depending on variety, sows 30 to 45 feet.


  **COUNTRY GENTLEMAN (SHOEPEG):** (white) 93 days. [Introduced in 1891 by Peter Henderson Co.] Ears 8" long with tightly packed, round kernels, arranged in irregular fashion instead of rows. The deep kernels are sweet, white, and milky. Remains in the milk stage longer than many other varieties. A favorite for freezing and cream-style corn. Very flavorful. Well known throughout the Hudson Valley of New York. Adapted to northern Mid-Atlantic region. Has better resistance to corn smut than earlier, smaller varieties of sweet corn. **#41104 Pkt. \$2.95**

 **BLACK MEXICAN (MEXICAN SWEET, BLACK IROQUOIS):** (white at edible stage) 76 days. [Introduced in 1864.] *Black Mexican* is a time-honored New England sweet corn. Despite its name, it appears to have originated in upper New York State, and was probably derived from Iroquois *Black Puckers* sweet corn. *Black Mexican* arose from a northern black flint corn by mutation from the starchy to sugary condition (perhaps causing the kernels to have a puckered appearance, hence the name *Black Puckers*). The name *Black Mexican* may have been given by a seed company attempting to provide novelty to its seed offerings, a practice not uncommon in the late 1800's. *Black Mexican* has some characteristics of *Northern Flint*, especially its tillering characteristics and kernel row count of 8 to 12. *Black Mexican* probably fell out of favor because of color preferences that are faddish in vegetables. The kernels, white at milk stage, soon change to bluish-black in the late milk stage, but the flavor is exceptional. Plants are medium-tall, about 5-1/2', with pale green foliage and pale green silks. Ears average 7-1/2" x 1-1/2", typically with 8 rows of kernels. Make successive plantings and harvest several days before kernels show color to several days afterwards. Although adapted to New England, it does well as a second early variety in the south. **#41103 Pkt. (28g) \$4.90**

SWEET CORN, COTTON

 **LUTHER HILL:** 82 days. [Developed in 1902 in Andover township, New Jersey by Rutgers Univ. Horticulturist, Luther Hill.] Produces two 6" ears on 5-1/2' stalks with some suckers. *Luther Hill* is a home garden variety of white sweet corn adapted to the Appalachian foothills. Can be grown as far north as southern Ontario. Flavor is unsurpassed compared to other open-pollinated corns we've eaten. Surprisingly, *Luther Hill* is one of the parental lines of the very successful *Silver Queen* hybrid sweet corn. It is still used by breeders to impart exceptional flavor to hybrid sweet corn. Fresh ears of this sweet corn sell for \$3/dozen in New Jersey. Does best on a well-drained ridge, not soggy bottom. We recommend pre-sprouting the kernels and sowing in warm soil at 12" spacing in the row. Once established it needs lots of water and fertilizer. When grown for seed in a humid climate it must be watched very carefully to produce quality seed. **#41109 Pkt. \$3.30**


 **GOLDEN BANTAM 8 ROW:** (yellow) 78 days. [Introduced 1902 by Burpee. Originated in Massachusetts.] Five- to six-foot stalks can be planted more closely than other varieties. Ears 6-1/2" long with 8 rows of golden-yellow kernels. The milk stage is short, and the ears must be picked without delay. **#41105 Pkt. \$2.75**

 **STOWELL'S EVERGREEN:** (white) 98 days. [Introduced by Thoburn and Co. in 1856.] *Stowell's Evergreen* is one of the oldest white sweet corns, tracing back to American Indian stock. It was developed by Nathan Stowell of New Jersey in 1848 as a cross between *Menomony Soft Corn* and *Northern Sugar Corn*. Ears are large, 8 to 9", with deep, wide kernels in 16 to 18 rows. Remains in the milk stage a long time, hence the name "evergreen". Adapted to the Mid-Atlantic region, where it is a dependable variety. Stalks reach 8 feet. **#41107 Pkt. \$2.95**


WHICH IS BETTER: OPEN-POLLINATED SWEET CORN OR HYBRID SWEET CORN?


The answer to this question depends on what is important to you. Old-fashioned, open-pollinated corn is not as uniform in size and maturity as hybrid corn, but uniformity is not necessarily an advantage for the home gardener who wants an extended harvest of table fresh corn. Hybrid corn tends to mature all at once which is an advantage primarily to 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 true corn flavor. It is a fact that 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 to 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.

HYBRID SWEET CORN

 **BREEDER'S CHOICE - "sugary enhanced" hybrid:** (yellow) 68 days. *Tight husk is an asset for organic growers.* Delicate kernels are high in sugar, holding their sweetness several days without loss of eating quality. The 6 to 7' stalks bear two

8" ears. Seedling vigor is high compared to other hybrids with the SE gene. *Breeder's Choice* is one of the few hybrid sweet corns with a tight husk that provides both insect and bird resistance. **#41903 Pkt. \$2.65**

 **EARLY SUNGLOW - "normal sugary" hybrid:** (yellow) 64 days. *The best extra early hybrid corn.* This widely adapted early variety is noted for exceptional resistance to cold and frost. One customer reported that *Early Sunglow* survived 28°F when coated with ice from a sprinkler left on during the night. Stalks, 4 1/2' tall bear 7" ears with 12 rows of yellow kernels. An early planting helps avoid earworm damage. **#41902 Pkt. \$2.55**


 **SILVER QUEEN - "normal sugary" hybrid:** (white) 90 days. *One of the most popular and dependable hybrid sweet corns developed.* Ears are 8-1/2" long, filled with 14 to 16 rows of sweet white kernels. Stalks average about 7-1/2'. Tolerant of the majority 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. \$2.55**

COTTON, NATURAL COLORS

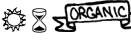
(*Gossypium hirsutum*)

HISTORY: Naturally colored cottons were grown by the 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. Since naturally colored cottons are 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 the plantation 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. It does best on fertile soil with plenty of moisture. In zones 8 through 10 it can be sown directly after the last frost. In zones 5 through 7, start seed indoors and transplant out after the last frost. Seed germinates in 7 to 21 days at 70°F. Plants take about 150 days to mature a crop of bolls and grows to a height of 48 to 60". Virginia gardeners must acquire a permit to grow cotton. For more information, contact your nearest extension agent.

 **ERLENE'S GREEN:** [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 a light olive green and can be spun off the seed. Harvest the bolls of green cotton shortly after they open so that the fiber does not fade in the sunlight. Once it is spun and washed it turns a yellowish green. **#72202 Pkt. (16 to 20 seeds) \$5.00 Cannot ship to GA or CA**


COTTON, CUCUMBERS


 **NANKEEN:** [Pre-1860 heirloom. Seed and history generously supplied by John House III of the Mansfield State Commemorative Area, Mansfield, LA. Introduced 1997 by SESE.] *Nankeen* is a short fiber, naturally brown cotton that has been grown since the Civil War. The lint is a non-fading attractive dark copper color that actually becomes brighter as it is washed. The seed retains the lint, making it easy to spin off the seed. Branches of the plant are longer and thinner and leaves more finely divided than other cotton. Unlike modern hybrids, its blooming cycle is longer, it grows well in poor dry soil, is hardier than modern breeds, and appears to have slightly better insect-resistance. *Nankeen* is planted as an ornamental in some parts of Louisiana. This variety also makes a fine addition to flower arrangements. The white and pink-red blooms start in mid-summer and run until late fall. We include additional fascinating history of the story of the *Nankeen* shirt with each packet of seed. **#72201 Pkt. (16 to 20 seeds) \$4.80**


CUCUMBERS (*Cucumis sativus*)

CULTURE: Cucumbers require a rich, well-drained soil in pH range 6 to 7. Water availability is important in the early seedling stage and in the fruiting stage. Seeds require a temperature of at least 68°F (20°C) to germinate. **DIRECT SEEDING:** Sow seeds 1/2 to 3/4" deep. Final spacing should be 6" apart in rows 3 to 5' apart. **TRANSPLANTS:** Sow seeds 1/2" deep, 2 to 3 seeds per pot. Cut off weak seedlings at the base. Seeds germinate best at 85 to 90°F (29 to 32°C). Maintain seedlings at 75°F (24°C) or better. Harden plants before setting out, and take care not to disturb roots when transplanting. **HARVEST:** To maintain good production, harvest fruit daily. **SOLAR 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:** Bacterial wilt is carried by spotted and striped cucumber beetles which infect the plants while they are feeding. Control cucumber beetles with chickens and an Amaranth trap crop. Reemay cloth will keep beetles from vines. Remove Reemay when female flowers open. **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 to 78 seeds, depending on variety) sows 20'.

PICKLING VARIETIES

 **NEW! BOSTON PICKLING:** 58 days. {cmv} This classic dates from 1880. Medium-green, black-spined, blunt-shaped fruit are crisp and mild, and just the right size for pickling. Not as rampant-growing as some, but still very productive. **#51506 Pkt. (2g) \$2.25**

 **EDMONSON:** 70 days. {als, an, cmv, scab} [Family heirloom from Kansas since 1913. Introduced by SESE 1987.] This is one of the hardiest cucumbers we have grown. Has good resistance to disease, insects, and drought. Flavor is buttery and texture is crisp and tender even when past prime. Fruits are whitish-green, about 4" long. Best for pickles and used for slicing too. **#51502 Pkt. (2g) \$2.50**

 **LEMON** 67 days {an, cub} Seven foot vines are covered with crunchy round yellow cucumbers. Best harvested at 1 1/2" for pickling, 2" for salads. Excellent, never-bitter old-fashioned cucumber flavor with a hint of nuttiness. **#51505 Pkt. \$2.25**

LITTLE LEAF H-19: {als, an, bw, cmv, dm, pm, scab} 55 days. [Developed and released by the Univ. of Arkansas in 1991.] This white-spined pickler has multiple disease-resistance and a number of useful features. The compact vines have multiple branch points and will climb a fence or trellis with ease. The smaller leaf size allows for fruit visibility under the foliage, and the parthenocarpic flowers produce fruit under stress and without pollinators. Medium-sized, blocky fruits can be used for slicing and pickling. **#51503 Pkt. \$2.25**

KEY TO CUCUMBER DISEASE AND 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 to specific insects is only partial.

als = Angular Leaf Spot	dm = Downy Mildew
an = Anthracnose	pm = Powdery Mildew
bw = Bacterial Wilt	scab = Cucumber Scab
cmv = Cucumber Mosaic Virus	spm = Spider mites
cub = Cucumber beetles	tls = Target Leaf Spot

HOMEMADE PICKLES: 55 days. Vigorous plants with good disease resistance, especially developed for home gardeners. Medium green fruits with small white spines are solid and crisp. Harvest small cukes at 1-1/2" or larger, up to 6" long. Makes robust bite-sized pickles, slices, or large spears. **#51504 Pkt. \$2.25**

SLICING CUCUMBERS


ASHLEY: {als, dm, pm} 66 days. [Introduced 1956 by Clemson/AES.] Recommended for hot, humid areas where disease resistance is important. Productive vines produce 7 to 8" dark-green fruits, tapered on the stem end. *Ashley* is a popular variety in the Southeast. **#51101 Pkt. \$2.25**

 **MARKETMORE 76:** {cmv, pm, dm, als, an} A great high-yielding 8" bitter-resistant cucumber. Grows well in the Central Atlantic region as well as the North. A good dependable market variety. Dark green fruits are white-spined. **#51108 Pkt. \$1.99; #51108E (28g) \$5.50**

CUCUMBERS, EGGPLANT



MARKETMORE 80: {cmv, dm, pm, scab, cub} 61 days. [Developed by Dr. Munger of Cornell.] Rare variety. Fruits are bitter-free, dark green, and average 8 to 9" long and 2-1/4" 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. (2g) \$2.35


 **POINSETT 76:** {als, an, dm, pm, spm} 67 days. [Developed cooperatively by Clemson and Cornell.] An improved version of *Poinsett* having multiple disease-tolerance. Produces dark green cukes about 7 to 8" long and 2-1/2" in diameter. The best open-pollinated variety for the Southeast and Mid-Atlantic coastal areas as a disease-resistant main crop garden variety.

#51103 Pkt. \$2.25

SPACEMASTER: {cmv, scab} 60 days. [Developed by Dr. Munger at Cornell.] Bush-type plant with 2- to 3-foot vines and full-sized cukes, about 7-1/2" long. Use for salads or pickles. Regular picking will help the plant produce well-shaped attractive cukes through the season. Widely adapted. Plant early in the season to avoid late-season diseases. Ideal for containers and small gardens. **#51104 Pkt. (1.5g) \$2.25**

  **STRAIGHT EIGHTS:** {als, an, dm, pm, spm} 57 days. Highly dependable, high-yielding cucumber. Very uniform deep green 8" fruits about 2-1/2" in diameter with an exceptional flavor. **#51107 Pkt. \$2.35; #51107E (28g) \$5.50**

  **SUYO LONG:** {pm} 61 days. Widely adapted and tolerant of hot weather this is a sweet-flavored, "burpless" cucumber from China. Use for pickling or slicing. Repeated trials of this variety have shown it to be exceptionally hardy, productive, and fine-flavored even under adverse conditions. Recommended as an early, main season, and late season variety for the Southeast. Widely adapted and very dependable in hot, humid climates. **#51701 Pkt. \$2.85**

 **WHITE WONDER:** 58 days. [Southern heirloom, pre-1925?] *White Wonder* may be used for pickles or slicing. The 7 x 2-1/2" fruits are ivory-white even when mature for edible harvest. Productive in hot weather. **#51106 Pkt. \$2.25**



YAMATO: 60 days. An Asian white-spined cucumber similar to *Suyo Long* but superior in performance and flavor. Fruits range from 1" to 1-1/2" in diameter to 12 to 16" long and are green with narrow yellow stripes. *Yamato* is a very hardy, reliable variety in the hot, humid Southeast. Flesh is sweet, somewhat buttery, crisp, and succulent. **#51702 Pkt. (1g, 38 seeds) \$2.85**


EGGPLANT



Common eggplant: *Solanum melongena*
Scarlet eggplant: *Solanum integrifolium*


CULTURE: Culture of eggplant is similar to peppers. (See Pepper section.) Start seeds 8 to 10 weeks before setting outside, one to two weeks after your last frost-free date. Don't rush the season because cold-shock can stunt the seedlings. Plants are spaced 24" in equidistant spacing, or 20" apart in rows 36" apart. **FRUIT-SET:** Eggplants will not set fruit when the temperature falls below 70°F, but give good fruit-set under high heat. **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. **PESTS:** Control of flea beetles on young seedlings is essential. Pyrethrum and rotenone are effective chemical controls, or use the following non-chemical method: Harden off seedlings on a table at least 3' 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 a spun-bonded fabric (Reemay cloth) for three to four weeks. **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' for home use. For pure seed isolate a minimum of 1/8 mile. **PACKET:** 0.25 g (about 54 to 88 seeds, depending on variety) sows 60 to 100' of transplants.

PURPLE-FRUITED

  **BLACK BEAUTY:** 74 days. [Introduced in 1902.] A dependable producer for decades. Fruits are dark purple, high-quality, and of fine flavor. Well adapted to the Mid-Atlantic area and southern states. Produces about up to 15 fruits per plant. May do well in northern areas with longer seasons. Fruits are 6-1/2" long by 5" diameter and may weigh up to 3 lbs., but best harvested when smaller. Excellent flavor. **#45101 Pkt. \$2.35; #45101B (3g) \$4.50**


 **EARLY BLACK EGG:** 65 days. An early Japanese variety of fine flavor with small, tender, egg-shaped fruits about 5" long. Sets well in the Mid-Atlantic, including cool, short-season areas. Seedlings are very vigorous and become established quickly. More tolerant of flea beetles than other varieties. Foliage is green with purple veins. **#45102 Pkt. \$2.65**

  **LONG PURPLE:** 75 days. Fruits of *Long Purple* are long and slender (2"x10") and slightly bulbous on the blossom end. Best harvested when 1" in diameter. The dark-purple fruits can be sliced like a cucumber. **#45103 Pkt. \$2.35; #45103B (3g) \$4.50**


 **PING TUNG LONG** 62 days Originally from Taiwan. Deep shiny lavender fruits often grow to 1 1/2" x 18" and sometimes longer. If plants are kept upright the fruits can be kept straight for over 3/4 of the length, making for impressive filets. This disease-resistant variety is high yielding, producing over 20 fruits per plant in our garden. Has an excellent flavor. **#45104 Pkt. \$2.20**


EGGPLANT, FLOWERS


RED, GREEN, AND BI-COLOR EGGPLANT


 **TURKISH ITALIAN ORANGE** (*S. integrifolium*): [Introduced 1990 by SESE. Heirloom originally from Turkey and more recently from Italy.] Miniature orange-red fruits (2 oz.) look like tomatoes. The tall (4') plants are spineless and are very attractive laden with fruit. Harvest before fruits turn red, otherwise the skins will be bitter. At edible harvest, the fruits are green-striped and sweet flavored. Bite-sized, may simply be cut in half for cooking. **#45601 Pkt. (0.13g) \$2.80**

APPLEGREEN: 62 days. [Introduced 1964 by the Univ. of NH/AES.] Early-maturing, apple-green fruits with tender skin, doesn't require peeling. Choice variety for cool-season areas. Fruits are apple-sized, 4 oz. average weight, 3" long by 2-1/2" diameter. **#45303 Pkt. \$2.35**


 **THAI LONG GREEN (THAI GREEN):** 80 days. [Heirloom from Thailand.] An unusual eggplant with light green, elongated 2-1/2 oz. fruits (1-1/2" x 10") of good quality. Short 2' plants are mostly spineless or soft-spined. Flowers are deep lavender with green soft spineless calyxes. Withstands light frosts. **#45302 Pkt. \$2.75**

 **LOUISIANA LONG GREEN (GREEN BANANA):** 100 days. Attractive 7" banana-shaped fruits average 6 oz. each. At edible harvest the fruits are light green with creamy-green stripes at the blossom end. Spineless plants average 3-1/2' tall, withstand light frost. **#45301 Pkt. (0.25g) \$2.85**

 **LISTADA DE GANDIA:** 75 days. [Heirloom from France about 1850.] This egg-shaped Italian beauty has 5 to 6" long fruits, purple with irregular white stripes. A unique eggplant pleasing to both the eye and the palate. Drought-tolerant and sets fruit well under high heat. Does best in areas with a long warm growing season. The thin skin of *Listada de Gandia* does not need to be peeled for cooking. **#45401 Pkt. \$2.80**

 **ROSA BIANCA:** 83 days. *Rosa Bianca* was the hands-down winner in our 1999 flavor tests of 7 eggplant varieties. It also commanded a loyal following at the local farmer's market. A beautiful Italian heirloom, somewhat similar to *Listada de Gandia* with creamy white base color and pink-purple irregular stripes radiating from the top. **#45402 Pkt. \$3.65**

WHITE EGGPLANT

 **WHITE BEAUTY:** 70 days. This variety does well in hot, humid areas. The fruits average 5 to 6" in diameter, are slightly oval in shape. Fruits have good flavor. Hardy and productive in southern areas. **#45201 Pkt. \$3.50**

FLOWERS

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 exchange policy also applies to family heirloom flowers and with your help we all may be able to enjoy the fragrance and simplicity of old-fashioned flowers in modern gardens.


See key to cultural notes on page two

EVERLASTINGS: FOR YEAR-ROUND BLOOMS

Chinese Lantern Plant

(*Physalis franchetii*)


Culture: Perennial/70°F/L/21-30 days/sun/direct sow or transplant/space 24" apart.

 **FRANCHETTI:** Reddish-orange lanterns are nice in bouquets or as ornaments. Ht. 18". **#01601 Pkt. (0.1g, 62 seeds) \$2.85**

Globe Amaranth (Gomphrena)

(*Gomphrena globosa*)

Culture: Annual/70°F/D/20 days/sow indoors in March, transplant in May/space 9-12" apart.

 **GLOBE AMARANTH MIXED COLORS:** Mixture of colors includes purple, red, and white clover-like flowers. Drought tolerant. Ht. 24". Clean seed. **#01602 Pkt. (0.15g, 29 seeds) \$2.20**

Love-in-a-Mist

(*Nigella damascena*)


Culture: Annual/60°F/LD/21 days/sun/direct sow after frost since it does not transplant easily/space 9" apart/75 days. Self sows readily.

 **LOVE-IN-A-MIST MIXED COLORS:** An old-fashioned flower from southern Europe sometimes called *Fennel Flower* because of the nutmeg-flavored seeds that can be used for flavoring. Mixed flower colors in shades of blue, pink, white, and purple, averaging 1-1/2" in diameter. **#01605 Pkt. (0.2g, 77 seeds) \$2.25**

Statice (Sea Lavender)

(*Limonium sinuatum*)

Culture: Annual/60°F/LD/18 days/sun/sow indoors in March and transplant after last frost to good loam/space 9-12" apart. Ht. 30".


 **STATICE MIXED COLORS:** Pleasing blend of colors: blue, purple, rose, yellow, and white. Clean seed. **#01607 Pkt. (0.15g, 67 seeds) \$2.25**

Strawflower (Helichrysum)

(*Helichrysum bracteatum*)

Culture: Annual/60°F/L/10 days/sun/sow indoors in March, transplant after frost/space 9-12" apart.

FLOWERS, ORNAMENTAL WHEAT

 **STRAWFLOWER FINEST MIXED COLORS:** Standard tall strawflower with mixed colors: yellow, bronze, crimson, white, and shades of rose. **#01608 Pkt. (0.20g, 318 seeds) \$2.35**

ORNAMENTAL WHEAT

A new 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" apart.

BLACK EAGLE (*Triticum aestivum*) [24-36"] Mostly black ornamental spring wheat with black awns and black/white glumes. **#01611 Pkt. (5g, 125 seeds) \$2.35**

BLACK TIP (*Triticum durum*) [24-36"] Attractive enough to display alone as well as in combination with dried flowers. Distinctive wheat with black awns and white glumes. **#01606 Pkt. (7g, 120 seeds) \$2.35**


SILVER TIP (*Triticale*) [36-48"] An ornamental wheat-rye cross with long seed heads. White glumes and awns contrast pleasingly with black-headed wheats in arrangements. **#01610 Pkt. (5g, 123 seeds) \$2.35**


FRESH FLOWERS

Asters

(*Callistephus chinensis*)

Culture: Annual/70°F/LD/9 days/sun/direct sow or transplant/space 6-12" apart/85 days.

 **CREGO GIANT MIXED COLORS:** Very popular old favorite with large showy blooms in a mix of six colors. Tall plants up to 3'. Excellent cut flowers. **#01101 Pkt. (0.1g, 46 seeds) \$1.99**

 **POWDER PUFF MIXED COLORS:** Double blooms in 7 colors: white, pink, rose, peach, crimson red, sky blue, and medium blue on 3 foot tall plants. Excellent cut flowers for bouquets. **#01133 Pkt. (0.1g, 50 seeds) \$1.99**

Baby's Breath

(*Gypsophila muralis*)



Culture: Perennial/60°F max/LD/14-21 days/sun/direct sow mid-April/space 18" apart.



ELEGANS ALBA GRANDIFLORA: A pure white, large flowered strain of *Covent Garden*, 18" tall. **#01102 Pkt. (0.4g, 352 seeds) \$2.35**


Culture: Annual/60°F/D/14 days/sun/direct sow in April/space 12-16" apart.

Bachelor Button (Cornflower)

(*Centaurea cyanus*)

  **BLUE BOY:** An old favorite for cut or dried deep-blue flowers. Plants are 30" tall and are especially suited for backs of borders. **#01103 Pkt. (0.5g, 106 seeds) \$1.99**



  **POLKA DOT:** *Polka Dot* is a mixture of red, rose, blue, and lavender shades. Compact plants are 16" tall and flower more profusely than taller varieties. **#01104 Pkt. (0.5g, 106 seeds) \$1.99**

 **CASTOR BEAN** (*Ricinus zanzibarensus*) A vigorous-growing 5' ornamental. Can be grown perennially in tropical areas. Large deep-red palmate leaves with 5-11 lobes often grow past 12". Red flowers in panicles and bright red fruit 1" in diameter covered with soft spines. Native to Africa. All parts of the plant, particularly the beans, are poisonous to humans and livestock. Will help keep furry pests and insects out of your garden. Extremely toxic, keep out of the reach of children. **#01144 Pkt. (12g) \$3.45**

Cleome (Spider Flower)

(*Cleome spinosa*)


Culture: Annual/60-80°F/LD/14 days/sun/Pre-chill moist seeds at 40°F for 2-4 days, direct sow late April/space 16-20" apart/70 days.



  **QUEEN:** Pink, rose, and purple flowers with many side blooms following flowering of main stalk. Attractive to bumblebees and hummingbirds. Blooms all summer. Ht. 48" **#01105 Pkt. (0.25g, 114 seeds) \$2.50**



Cosmos




(*Cosmos bipinnatus* unless indicated)

Culture: Annual/70°F/LD/14 days/sun/sow indoors in April, or transplant in May to low-nitrogen soil, or direct sow after last frost/space 9-12" apart/65-85 days.


 **BRIGHT LIGHTS:** Shades of red, yellow, and orange in bright, clear colors. For tall borders. Ht. 30". **#01134 Pkt. (0.5g, 56 seeds) \$1.99**

  **EARLY SENSATION MIXED COLORS:** Large single flowers in a mixture of crimson, pink, and white. Popular old favorite. Plants are 48" tall. **#01106 Pkt. (0.5g, 110 seeds) \$1.99**

  **MEMORIES OF MONA** (*Cosmos sp.*): [Introduced 1998 by SESE. A red selection of *Mona's Orange* developed by Dr. Jeff McCormack as a tribute to Mona Spangler.] A mixture of orange and red flowers, ranging from solid deep red to bright orange, many with red borders and red streaks. Flowers are 2 to 2-1/2" wide. An early-flowering, extremely hardy, drought-resistant, brightly colored cosmos. **#01141 Pkt. (1g, 105 seeds) \$2.85**


   **MONA'S ORANGE:** (*Cosmos sp.*): [Introduced in 1990 by SESE. Family heirloom from southern California.] Radiant orange, mostly single-petalled blooms, 2 to 2-1/2" across on 36-48" plants. Approximately 10% of the blooms have red-bordered petals with some interior red streaks. Flowers appear early in the season, make a nice border, and bloom all summer. Very hardy. **#01107 Pkt. (1g, 105 seeds) \$2.65**

FLOWERS

 **PICOTEE:** A beautiful bicolored early cosmos 2-1/2 to 3" flowers. Petals are white with pink-magenta petal margins. Nice for cut flower arrangements. Ht. 48".
#01135 Pkt. (0.5g, 75 seeds) \$2.45

Four O'Clocks *(Mirabilis jalapa)*


Culture: Annual/70°F/LD/ 14 days/sun/direct sow in May or June/space 12-18" apart.

 **DON PEDROS MIXED COLORS:** [Introduced in 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 magenta and yellow, just like the old fashioned Four O'Clocks. Flowers open at about 4 o'clock in the afternoon and in the evening are pollinated by large hawkmoths and sphinx moths. Ht. 18"
#01108 Pkt. (2g, 20 seeds) \$2.95

FOUR O'CLOCK, MARVEL OF PERU: This beautiful Four O'Clock produces many red, rose, yellow, white, and pink flowers. Excellent as a cut flower.
#01146 Pkt. (0.5g, 75 seeds) \$2.25


Evening Scented Primrose *(Oenothera glazioviana)*

Culture: Biennial/65-75°F/LD/14-21 days/sun/sow May through July in pots or flats; transplant after several true leaves have developed/space 16-18" apart. Ht. 36"


 **TINA JAMES' MAGIC:** [Introduced in 1987 by SESE.] Produces large fragrant blooms. At dusk they suddenly burst open displaying crisp, yellow, showy four-petaled flowers. The flowers circle a spire of reddish, swollen buds. Blooms are 2/3 open within 10 seconds or less, and fully open within 1 to 2 minutes! Blooming lasts five to six 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 to 4' yellow spires the second year. Very hardy. We were so amazed at the speed of blooming that we hosted a "primrose party" so that friends could enjoy the time-lapse effect. 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. (0.05g, 110 seeds) \$3.85**

Hollyhock *(Alcea species)*

Culture: Biennial/60°F/14-21 days/sun/direct sow or transplant. Ht. 6'. Grows best in cool season areas sheltered from the wind/space 12-24" apart.

 **BLACK:** (*A. rosea nigra*) [Pre-1830 heirloom.] Magnificent spikes of satiny blue-black single flowers form the

second year from first-year leafy 18" leaf rosettes. Flowers may be used for tea. **#01109 Pkt. (0.25g, 25 seeds) \$2.15**

 **OUTHOUSE HOLLYHOCK:** (*A Rosea*) Mixed colored hollyhock can grow up to 9' tall. Single pink, white, red and bur-gundy flowers. Traditionally grown near outhouses.
#01145 Pkt. (1g, 90 seeds) \$2.35


Johnny-Jump-Up *(Viola tricolor)*

Culture: Perennial/70°F/D/12 days/sun/direct sow or transplant after frost/space 9" apart. Ht. 7".

HELEN MOUNT: Old-fashioned favorite. Tricolor blooms of purple, blue, and yellow.
#01111 Pkt. (0.08g, 121 seeds) \$2.35


Larkspur *(Consolida ambigua)*

Culture: Annual/60°F/D/21 days/sun/direct sow as soon as soil can be worked/space 8-16" apart. Ht. 36"-48".

 **GIANT IMPERIAL MIXED COLORS:** Flowers may be used for arrangements, either fresh or dried. For tall borders in a rainbow of colors and shades of reds, white, and blue.
#01112 Pkt. (0.3g, 85 seeds) \$2.35


Love in a Puff (Balloon Vine) *(Cardiospermum halicacabum)*


Culture: Annual/70°F/LD/21 days/sun/direct sow/space 12" apart.


 **LOVE IN A PUFF:** Fast-growing vine with lacy graceful foliage, fine tendrils, and small white flowers. Valued for its inflated 1" diameter seed pods which resemble green balloons. Pods contain several large black seeds, each bearing a perfectly shaped white heart, hence the name "Love in a Puff". Makes a nice gift for a gardening friend.
#01137 Pkt. (1.5g) \$2.95

French Marigold *(Tagetes patula)*

Culture: Annual/70°F/LD/7 days/sun/direct sow or transplant after last frost/space 8-16" apart/45-55 days.

 **LEMON DROP:** Popular old favorite. Dwarf marigold with large, yellow, double blooms. Flowers from July until frost. Ht. 8". **#01114 Pkt. (0.5g 197 seeds) \$1.95**

 **SPANISH BROCADE:** Yellow and gold petals splashed with red flecks. An old favorite of the Brocade class. Ht. 12".
#01138 Pkt. (0.5g, 165 seeds) \$1.99

 **TASHKENT #1:** [Found outside an old Muslim school in Tashkent, Uzbekistan in 1992. This marigold is a favorite of flower seed collector, Bob Bell. Introduced in 1999 by SESE.] The plants are 12 to 16" tall, with a deep green dense foliage that has a sweet marigold fragrance. It lacks the common astringent odor of other marigolds. The plants are so fragrant they sweeten the air on a hot summer day. *Tashkent #1* bears

FLOWERS

numerous 1-1/2 to 2" single petalled flowers that have yellow centers and velvet mahogany petals, with a fine orange border. As the petals mature they change from mahogany red to orange red. This is the finest marigold that we have grown.

#01142 Pkt. (0.5g) \$4.20 1 Packet limit



Morning Glory

(Ipomea purpurea)

Culture: Annual/70°F/ LD/14 days/sun/soak seeds 2 days, direct sow or transplant after frost/space 8" apart/65 days. **Cannot ship to AR, AZ, KS, NE, NM, TX, OK, LA, and NC**

HEAVENLY BLUE: Tall-climbing, fast-growing vine with bright 4" sky-blue flowers. Popular old favorite.

#01115 Pkt. (1g, 27 seeds) \$1.99

SCARLET O'HARA: [AAS Winner] Vigorous vine with large crimson-red blooms, 3" wide.

#01139 Pkt. (1g, 19 seeds) \$1.99

Nicotiana (Flowering Tobacco)

(Nicotiana glauca)

Culture: Annual/75°F/L/14 days/sun/transplant/space 9-12" apart.

OLD FASHIONED MIX: Flowering cascades of blooms in shades of white, pink, fuschia, maroon, and purple. Sweetly fragrant 2" flowers with 3" tubes. Ht. 36".

#01140 Pkt. (0.05g, 440 seeds) \$2.75

Nasturtium (Indian Cress)

(Tropaeolum majus)

Culture: Annual/65°F/LD/14 days/direct sow in April or May/space 6-12" apart.

JEWEL MIXED COLORS: Upright, bushy growth in a mixture 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 flowers and leaves in salads.

#01116 Pkt. (4g, 20 seeds) \$2.25; #01116D (14g) \$5.50

Petunia

(Petunia species)

Culture: Annual/70°F/L/10 days/sun/direct sow in flats or pots in March or April; transplant after frost/space 12" apart.

OLD FASHIONED VINING PETUNIA: Grandma Jean, our first regular staff member, recalls this heirloom petunia from her grandmother's garden. *Old Fashioned Vining* dates back to the early 1900's, well before *Grandma Jean* was born. Ever-blooming and much hardier than modern varieties this old favorite blooms into the fall when other annuals have faded and gone. Two flowers of mixed colors ranging from white to various

shades of lavender and purple. Ht. 18-24". Sweet fragrance, reminiscent of Lily-of-the-Valley.

#01131 Pkt. (0.05g, 475 seeds) \$2.75 1 Packet limit

Rudbeckia (Gloriosa Daisy)

(Rudbeckia species)

Culture: Perennial/70°F/D/21 days/sun/transplant or direct sow after frost/space 15-24" apart. Ht. 14-20".

GOLDSTRUM: (*R. fulgida*) Sometimes called Black-Eyed Susan. Attractive, gold-colored 3-4" flowers with chocolate-colored centers. Self-sows and naturalizes aggressively. Very hardy. Nice for cut flowers. **#01119 Pkt. (0.2g) \$1.95**

Sweet Pea

(Lathyrus odoratus)

Culture: Annual/55°F/D/15 days/sun/soak seed 24 hours, direct sow in fertile soil (pH 6.0 to 7.5) as soon as soil can be worked. Space 6-12" apart. Does best in cooler temperatures.

ROYAL FAMILY MIXED COLORS: Strongly fragrant, long-lasting, heat-resistant, and large-flowered. Fine also for cut flowers and indoor fragrance.

#01121 Pkt. (4 g, 31 seeds) \$2.35

Tithonia (Mexican Sunflower)

(Tithonia rotundifolia)

Culture: Annual/68-86°F/LD/8 days/sun/direct sow or sow indoors 3-4 weeks before transplanting after the last frost/spacing 24" apart/80 days.. Ht. 5'. Do not over-fertilize; plants may grow to 6-8'.

RED TORCH: A member of the sunflower family. Flowers are 3" orange discs surrounded by red petals. Highly branched. Attracts butterflies. Spectacular in mass plantings. **#01122 Pkt. (0.5g, 38 seeds) \$2.45**

YELLOW TORCH: A color breakthrough, the first yellow flowered Tithonia. Flowers are 3" orange discs surrounded by yellow petals. **#01123 Pkt. (0.4g, 43 seeds) \$2.45**

Zinnia

(Zinnia species)


Culture: Annual/70°F/LD/7 days/sun/direct sow or sow indoors 3-4 weeks before transplanting after the last frost/space 12-24" apart depending on plant height. Easy to grow.

PERUVIANA RED: (*Z. peruviana*) [Pre-dates 1700's. Introduced in 1992 by SESE.] Flowers of uncluttered simplicity and antique elegance. Single blooms, 1-1/2" 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". **#01124 Pkt. (0.50g, 76 seeds) \$2.95**


PERUVIANA YELLOW: (*Z. peruviana*) [Pre-dates 1700's. Introduced 1994 by SESE.] Single blooms, 1-1/2" diameter, are yellow changing to light yellow. Appropriate for historical gardens, mass plantings, rockeries, or natural settings. Ht. 18-24". **#01125 Pkt. (0.50g, 125 seeds) \$2.85**

FLOWERS, SUNFLOWERS

 **STATE FAIR MIXED COLORS:** (*Z. elegans*) Large 5" double and semi-double in mixed colors on 30" tall plants. Tolerant to alternaria and mildew. Popular variety. **#01126 Pkt. (1g, 105 seeds) \$2.25; #01126D (14g) \$5.50**

 **THUMBELINA:** (*Z. elegans*) Dwarf 6-8" tall zinnia with bright-colored 1-1/4 to 2" flowers. Full range of zinnia colors for front of borders. **#01127 Pkt. (1g, 212 seeds) \$2.25**

CONFECTIONERY SUNFLOWERS

 **MAMMOTH GREY STRIPE (GIANT GREY STRIPE):** (*H. annuus*) 85 days. Stalks average 9' tall and may reach a height of 12' or more depending on growing conditions. Heads average 12" across, with some reaching 15" or more when plants are well grown. The broad-shaped seeds are white with grey stripes. Space plants 18" apart. **#05103 Pkt. (7g, 44 seeds) \$2.35; #05103E (28g) \$5.50**


MAMMOTH RUSSIAN: (*H. annuus*) 80 days. 110 days for seed. [Introduced prior to 1871.] Mammoth Russian is an old favorite, a large-headed sunflower with stalks averaging 9' tall often reaching 12' or more. Produces a large single head averaging 10 to 12" in diameter or larger. Seeds are medium-large, thin-shelled, and gray-black with thin white stripes. Makes an excellent bird feed. Space plants 18" apart. **#05104 Pkt. (7g, 60 seeds) \$2.75**


DYE SEED SUNFLOWER

HOPi DYE: 75 days. 95 days for seed. The purple-black seeds are used by the Hopis as a natural dye source, especially for coloring baskets. Seed may also be used for food or feed, and is the best variety for dehulling. Grows to 6' or taller with 5" heads and smaller side heads. The yellow petals of the ray flowers surround attractive purple-green disk flowers, and the purple coloration also appears on the stem below the seed leaves. Adapted to cool, high desert regions, but can be grown in other regions. If grown for seed, plan to mature seed in driest part of the growing season. Mounding of soil around base of stalks helps keep plants upright. **#05401 Pkt. (4g, 60 seeds) \$3.75**


ORNAMENTAL SUNFLOWERS


(*Helianthus annuus*)


 **AUTUMN BEAUTY:** Bright fall colors ranging from yellow to copper-red to reddish-purple; some with bicolored halos. Flowers are large (averaging 7" across) with many secondary and tertiary blooms. The 5-1/2' 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. (1g, 101 seeds) \$2.35**


 **COLOR FASHION MIX:** (*H. annuus*) A sunny blend of yellow, red, and purple. Single blooms are 4" to 5" across and are very attractive in cut flower arrangements. Stalks up to 6' make an attractive screen or background. **#05302 Pkt. (1g, 62 seeds) \$2.35**


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.


 **EVENING SUN:** Shades of autumn colors ranging from red, mahogany-red, burgundy, russet-bronze, and vivid gold, all in bicolor blends. Plants grow 6' to 8' tall with a number of secondary blooms. Adds an autumnal accent to any fall bouquet. **#05309 Pkt. (1g, 25 seeds) \$2.25**

 **ITALIAN WHITE:** (*H. debilis*) Cream-colored ray flowers accent the dark-brown disk flowers. Numerous 4" blooms are produced on highly branched 4 to 6' plants. Blooms over a long period. Plant as a tall ornamental hedge. **#05304 Pkt. (0.5g, 75 seeds) \$2.45**

 **SELMA SUNS:** This beautiful sunflower is supplied in generous packets of approximately 300 seeds. Tall sturdy plants support between 6 and 30 heads with many striking earth tone colors including red, orange, brown, green, and yellow. Heads range from 2 to 6 inches and store well as cut flowers. **#05313 Pkt. \$2.00**

 **SONJA:** Abundant producer of 3 to 4" wide blooms notable for their unique tangerine color and long holding quality. *Sonja* is especially appealing as a cut flower. Plant is highly branched with sturdy side branches. Ht. 3-1/2'. **#05310 Pkt. (1g, 67 seeds) \$2.65**

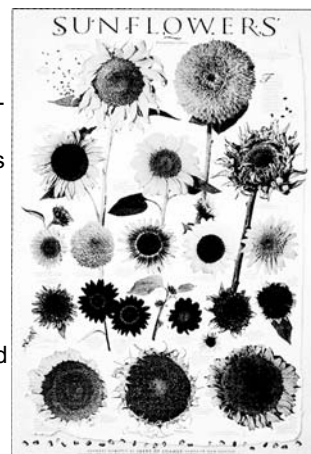
 **TEDDY BEAR:** An attractive double-flowered ornamental with 5" yellow blooms on compact 3' to 4' plants. Use especially for tall borders. **#05306 Pkt. (1g, 57 seeds) \$2.25**

 **VELVET QUEEN:** Deep-red velvet rays surround a dark chocolate brown center. Some flowers have a darker halo at the base of the rays. Well-branched, sturdy plants. Use for cut flowers and tall borders. Ht. 5'. **#05311 Pkt. (1g, 47 seeds) \$2.50; #05311D (14g) \$5.50**

DWARF SUNFLOWER

 **SUNSPOT^{PVP}:** A dwarf sunflower only two feet tall. Produces a single large flower head 10-12" 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. (1g) \$2.35**

SUNFLOWERS POSTER: A sunny selection of ornamental and edible sunflowers in assorted sizes, colors, and blooming sequence. Includes variety names and brief descriptions of 19 sunflowers. Poster produced by Barbara Flores. **#81706 \$19.75**



GARLIC


GARLIC


Softneck garlic: (*Allium sativum* var. *sativum*)


Hardneck garlic: (*A. sativum* var. *ophioscorodon*)


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 to 1, but 5 or 8 to 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 to 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 to 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. The guide may be purchased separately for \$1.25.


BRAIDABLE (SOFTNECK) VARIETIES

 **INCHELIUM RED:** (Artichoke type) [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 diameter under good conditions. **#65102 STARTER PACKAGE: (8 oz) \$10.00**

 **NEW! LOIACONO:** Originally from Sam Loiacono of New York whose father brought it from Europe. Produces large, easy-to-peel cloves with excellent flavor. Good storage. **#65108 STARTER PACKAGE: (8 oz) \$10.00**

 **MILD FRENCH SILVERSKIN:** (Silverskin type) We recommend this variety for our southern customers, especially those in hot dry areas. This is the best Silverskin type for clove size, heat tolerance, and flavor. Silverskin bulbs are easy to clean and are popular for braiding. Cloves are in layers averaging 14 cloves per bulb. Excellent keeper. Best used in cooking, where its flavor excels. **#65104 STARTER PACKAGE: (8 oz) \$10.50**

 **POLISH WHITE (NEW YORK WHITE):** (Artichoke type) An increasingly popular garlic especially with northern customers who have come to appreciate its dependability, high yield potential and flavor. Bulbs average 10 cloves arranged in layers with notable absence of small cloves. **#65107 STARTER PACKAGE: (8 oz) \$10.00**

 **RED TOCH:** (Artichoke type) [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: (8 oz) \$10.00**

THE ZēFX GARLIC CRUSHER




An easy-to-use garlic crusher that can crush large amounts of garlic. Unused garlic is stored in the crusher under refrigeration. Fresh garlic is available any time at a twist of the handle. The rubber base serves as a stand and as a cap to seal in fresh flavor and aroma. Can also be used to crush onions and shallots. Measures 6" x 2" and is dishwasher safe. Storage chamber is transparent for ease of viewing. Nice gift item. **#81302 \$14.25**

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 of elephant garlic 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 to 1 under good conditions. Includes informative growing guide. **#65801 STARTER PACKAGE: (16 oz) \$13.25; #65801A (40 oz) \$25.00**

PLEASE READ BEFORE ORDERING GARLIC


Be sure to read the ordering and shipping information on page 70 before you place your garlic order.


Please note that certified organic garlic is only available while supplies last; orders placed late may receive garlic produced by philosophically organic growers who have chosen to forgo certification.


**ROCAMBOLE
(HARDNECK OR TOPSETTING GARLIC)**

(Allium sativum var. ophioscorodon)


CULTURE: Cultural instructions are included with your shipment of bulbs. **CULINARY NOTES:** Rocambole garlies 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 garlies. **CHARACTERISTICS:** Rocambole garlies do not yield as heavily as softneck garlies 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, rocambole 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 two 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 to 1 to a high of 8 to 1 depending on growing conditions. For highest yields, remove the bulblet stalk (“seed stalk”) at the junction of the highest leaf as soon as the stalk has uncoiled from its 360° turn. Each week the bulb stalk remains after this stage, there will be 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 to 8 green leaves remain. Most varieties store well for 3 to 6 months. **HARDINESS ZONES:** Widely adapted varieties are recommended for zones 3 to 8, otherwise zones 3 to 6. **STARTER PACKAGE:** Rocambole garlic is 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. The guide may be purchased separately for \$1.25.


 **DE VIVO:** [Introduced in 1991 by SESE. Heirloom from Dr. Gilbert McCollum at the USDA.] This is a choice variety for the Mid-Atlantic region. It often produces large bulbs and large, easily peeled cloves, ranging from 4 to 6 per bulb. Hot and spicy with a good lingering aftertaste. We like it on pizza. **#65310 STARTER PACKAGE: (8 oz) \$10.00**

 **KASKASKIA RED:** Very large cloves with an excellent sharp flavor. This fine-keeping garlic is a welcome addition to our catalog. Initial stock provided by Merlin Niedens. Highest yielding hard-neck we offer, bulbs average 7 cloves per. Wonderful for market growers. **#65313 STARTER PACKAGE: (8 oz) \$10.00**


 **SPANISH ROJA (SPANISH RED):** [Introduced in the late 1800’s and a popular old garden variety.] *Spanish Roja* has thick blue-green stalks with moderately spreading, thick leaves. Bulbs are generally 1-1/2 to 2-1/2” in diameter, larger when well-grown. Cloves usually number 6 to 11 per bulb and peel easily. *Spanish Roja* is quickly becoming a popular gourmet garlic in high demand. It is recommended primarily for mild and cold-winter areas, but not for hot climates without a cold winter. **#65301 STARTER PACKAGE: (8 oz) \$11.00**


ROCAMBOLE (PORCELAIN TYPE)


 **GERMAN PORCELAIN (NORTHERN WHITE):** The largest rocambole we offer, the bulbs can reach half the size of Elephant Garlic. The easy-to-peel cloves have a vigorous flavor and the large clove size makes it a choice variety for baking. Used in the New York restaurant trade, it is exceptionally hardy in the far north. It sizes up well in the Mid-Atlantic where it is more difficult to grow large garlic without proper attention to variety selection. The bright white bulb wrappers enclose red-tinged cloves, ranging from 5 to 7 per bulb. **#65311 STARTER PACKAGE: (8 oz) \$10.00**

 **NEW! MUSIC:** Extremely large cloves, about 4 to 6 per bulb, sized over 2”. *Music* is vigorous and productive, with a nice rich, pungent flavor. **#65314 STARTER PACKAGE: (8 oz) \$10.00**

ROCAMBOLE (PURPLE STRIPED TYPE)

 **BROWN TEMPEST:** (*Allium longicuspis*) (Purple stripe type) [Collected by John Swenson and Phil Simon in the 80’s, as the largest of wild garlies.] The cloves of *Brown Tempest* are brown with a rose blush tint. Averaging 6 per bulb, the cloves are nicely shaped, of desirable size and are uniformly shaped. Excellent keeping quality. The flavor of raw garlic starts hot and intense, then simmers to a warm pleasant garlicky finish. **#65303 STARTER PACKAGE: (8 oz) \$10.00**

 **CHESNOK RED:** [Originates from the 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: (8 oz) \$10.00**


 **NEW! GERMAN EXTRA-HARDY:** Very winter-hardy. Large cloves with a purplish blush, 6 to 8 per bulb, having when raw a very strong flavor, which mellows when cooked. Easy to prepare and stores well. **#65307 STARTER PACKAGE: (8 oz) \$10.00**

GOURDS

CULTURAL AND HANDLING NOTES: See Cultural Notes for winter squash. 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” of stem attached. Wash fruits gently with soapy water, and dry in well-ventilated area. Turn often for 3 to 4 weeks, scrub off discolored areas, then wax and shine to a luster.

EDIBLE GOURDS


(Luffa species)

 **LUFFA (CHINESE VINING OKRA, VEGETABLE SPONGE, DISHCLOTH GOURD):** The young gourds are edible and are eaten like okra, especially throughout parts of the South. If left to mature the fruits look like huge angular okra pods. These 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. **#54501 Pkt. (3g, 20 seeds) \$2.85**


GOURDS, ARUGULA, CABBAGE

ORNAMENTAL GOURDS

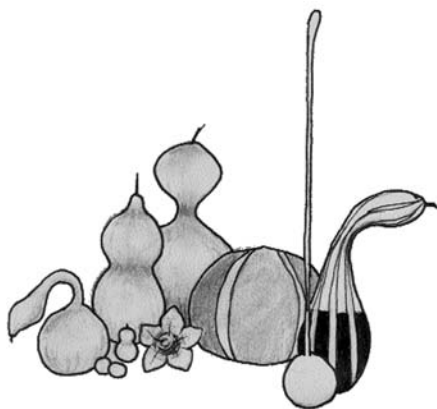
(*Ovifera* species and *Lagenaria* species)


 **APPLE GOURD:** These unusual apple-shaped gourds are popular at farmers markets and roadside stands. The lush vine growth provides excellent foliage coverage for the fruit. The four-pound fruit is medium green with darker green specks. Very attractive for fall decorating, and popular dried and painted. They look just like giant apples. **#54108 Pkt. (2g) \$2.75**


BIRDHOUSE GOURD: 95 days. This long-handled ball-shaped gourd can be hollowed out to make attractive birdhouses, or it can be used as a dipper gourd. **#54101 Pkt. (2g, 13 seeds) \$2.25**

 **BUSHEL GOURD:** 130 days. Largest gourd we offer. It is not unusual for them to grow to over the size of one bushel, especially if you trim them to 1 fruit per plant. Slate gray gourds make excellent baskets when dried, as their shells are stronger than other gourds tend to be. **#54107 Pkt. (3g) \$2.95**

CORSICA FLAT: 130 days. [Introduced 1992 by SESE.] Used in Peru for carving decorative bowls, *Corsica Flat* produces attractive, round-flattened gourds 3-1/2 to 5" deep and 6 to 12" in diameter. Gourds are pleasingly proportioned and decorative in themselves, especially when dried with an attached curvilinear stem. **#54102 Pkt. (2g, 10 seeds) \$2.50**



 **ORNAMENTAL GOURDS, LARGE MIXED:** Attractive and useful mixture of large gourds separately grown, then blended to include varieties such as *Bottle*, *Powder Horn*, *Long-Handled Dipper*, *Hercules Club*, and *Italian Edible*. **#54302 Pkt. (3g, 18 seeds) \$2.40**

 **ORNAMENTAL GOURDS, SMALL MIXED:** 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. (3g, 57 seeds) \$2.40**


SMALL SPOON: Make decorative spoons from this attractive gourd. Fruits have long neck with a small ball on the end. **#54105 Pkt. (2g, 60 seeds) \$2.35**

GREENS

ARUGULA (ROQUETTE)

(*Eruca sativa*)

CULTURE: Arugula is a cool-weather crop that requires loose, rich, moist soil during the growing period. Sow seeds in the spring as soon as the soil can be worked, with successive sowings 2 to 3 weeks apart. Sow 1/4" deep in rows, 1" apart in rows 12 to 16" apart. Thin plants to 4 to 6" apart. **PACKET:** 1.5 g (about 750 seeds, sows 30').


 **ARUGULA:** 40 days. Distinctive, sharp, peppery leaves are best harvested when 2 to 3" 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. \$2.45; #64101C (7g) \$5.50; #64101E (28g) \$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 late-season 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. A thick layer of organic mulch will conserve moisture and reduce the tendency to bolt in hot weather. Tendency to bolt is affected more by root temperature than air temperature. **EARLY CROPS:** Use early varieties, and start seed 4 to 6 weeks before transplanting to the garden. Sow seed 1/4" deep in 2-1/2 to 3" pots, 2 to 3 seeds per pot. After seedlings emerge, choose the most vigorous seedling and cut the others off at the soil line. Seedlings need a soil temperature of 75°F (24°C), and strong, direct light. Soil temperature can be reduced to 60°F (16°C) once the seeds have germinated. Maintain good air circulation around plants during all growth stages. Harden plants before transplanting in late March or early April. Space plants 18" apart. **LATE CROPS:** For fall planting, cabbage is transplanted, or direct-seeded, 4 to 6 seeds/ft at a depth of 1/4 to 1/2". Maintain adequate soil moisture during the germination period. Once the plants have become properly hardened they can stand a temperature as low as 15-20°F (-9 to -7°C). **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 mid-season 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 caused by fungi, bacteria, and viruses 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 Dipel, flea beetles with pyrethrum, cutworms with paper cylinders around seedlings, and aphids with insecticidal soap. Introducing ladybugs helps control aphids in greenhouses, but they "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' direct seeded or 350' as transplants.


EARLY CABBAGE

 **EARLY JERSEY WAKEFIELD:** 64 days. [Introduced about 1840.] *Early Jersey Wakefield* has resistance to frost and cabbage yellows. Makes dark-green, sweet conical heads averaging 5" in diameter and weighing 2 to 3 lbs. Has a small core and good wrapper leaves. Use for home, storage, or fresh-market. **#22102 Pkt. \$2.05**


CABBAGE, CHICORY, RADICCHIO, CHINESE CABBAGE, COLLARDS

LATE AND WINTER CABBAGE


 **EARLY FLAT DUTCH:** 85 days. [Pre-1875, possibly pre-1855.] Does well in southern and coastal areas because of its heat resistance. Excellent variety for sauerkraut and the best variety for storage. Heads are large and flat, weighing 6 to 10 lbs., averaging 11" diameter with medium core and few outside leaves. **#22101 Pkt. \$1.99**

 **PREMIUM LATE FLAT DUTCH:** 100 days. [Introduced by German immigrants about 1840.] In Virginia in the early 1900's, gardeners used to sow seeds of this variety and use it as a source of cut greens while the heads were forming. Large, broad, flat heads, weigh 10 to 15 lbs. and measure 7 x 14". The low-growing heads have a short core and excellent wrapper leaves. May grow poorly in hot weather but revives quickly with onset of cool, wet weather. Has very good keeping quality. **#22103 Pkt. \$1.99**

RED CABBAGE

 **RED ACRE:** 76 days. Small, compact plants on short stems produce round, reddish-purple heads ranging from 5" to 7" in diameter, weighing about 3 lbs. *Red Acre* adds a festive color to cole slaw. An excellent storage variety with resistance to cabbage yellows. **#22104 Pkt. \$1.99**


SAVOY CABBAGE

 **CHIEFTAIN SAVOY:** 83 days. [Introduced 1938. AAS winner.] Long a favorite variety, *Chieftain Savoy* is well adapted to temperature extremes. Tolerates frost and summer heat. Flattened, round heads, weighing 6 to 8 lbs. are white inside, wrapped on the outside with well-savoyed, blue-green leaves. **#22105 Pkt. \$2.05; #22105E (28g) \$5.50**


CHICORY

(*Cichorium intybus*)

LEAF CHICORY

 **DANDY RED:** This Italian dandelion has distinctly serrated leaves like common dandelion, but with deep dark red mid-ribs that make the leaf stand out in a salad. *Dandy Red* adds pleasant chicory spiciness to a salad. Unlike the more common red varieties from Italy, this variety has less leaf hairs and toothiness. More stable than other commercially available varieties. **#61502 Pkt. \$2.20**

RADICCHIO (HEADING CHICORY)

 **NEW! VERONA RED:** 85 days. Forms beautiful red leaves with white stalks when mature. Verona Red is named for the region in Italy where it originated. Zesty flavor develops best in cool weather. Normally planted in mid-summer for fall harvest, it can also withstand light frosts. **#61602 Pkt. (1g) \$2.25**

Radicchio, or red leaf chicory, originates from Italy. An attractive gourmet vegetable, the leaves have a bitter though distinctive flavor that is excellent in salads. The leaves of most young radicchio plants produce green outer leaves and then, as the heads mature, the hearts turn red. Radicchio requires cool weather for best development of flavor and color. **VARIABILITY:** Because radicchio is still under development as a food crop, expect some variability in color, flavor, and growth habit. **CULTURE:** Radicchio is grown like lettuce (See Cultural Notes for lettuce.) For best results it is best to sow seed directly in the garden. Most varieties are planted in July/August for harvest in the Fall in the same manner as fall lettuce. Spring crops can be started indoors, or in a cold frame in December or January for setting out in the Spring. Young plants will withstand light frosts. Mature plants can be wintered over in many areas of the country, especially if a mulch is applied. **PREPARATION AND USES:** Radicchio is usually eaten fresh in a green salad, but it can also be braised or roasted, or used to add color to an antipasto dish. **PACKET:** 1g (about 400 to 500 seeds depending on variety, sows 40").


CHINESE CABBAGE

(*Brassica rapa* var. *chinensis*) and (*Brassica rapa* var. *pekinensis*)


CULTURE: Chinese cabbage is best planted as a fall crop, otherwise it may bolt prematurely. See cultural notes for cabbage. **PACKET:** 2g (about 630 seeds).

BOK CHOI: 50 days. [From China where it is commonly grown and used in Chow Mein.] A non-heading Chinese cabbage, *Bok Choi* is used for its white, succulent midribs and inner leaves that have a mild cabbage flavor. Plant in spring or fall, though fall planting is preferable. **#22501 Pkt. \$1.99**

MICHIHILI: 73 days. [Introduced 1948.] *Michihili* is a popular variety of Chinese cabbage with large, upright, well-blanching heads (4 x 18") wrapped with dark-green leaves. Flavor is sweet and mild. Sow in early July for fall harvest. **#22502 Pkt. \$1.99**


 **TATSOI:** (*Brassica rapa narinosa*) 43 days. Rosettes of dark, thick green, oval-shaped leaves. Very attractive, easy to grow, and long-lasting. Excellent for stir-fry or salads. **#22601 Pkt. (1g) \$2.15; #22601E (28g) \$5.50**



 **WONG BOK:** 75 days. [Heirloom Mandarin variety.] An old Chinese variety that produces an upright broad head, averaging 9" high by 6-1/2" in diameter. Heads are shorter and more compact than *Michihili* with a slight mustard flavor. Keeps well. Leaves are light-green with a white heart. Sow in July for fall harvest. Makes a good cole slaw. **#22503 Pkt. \$1.99**

COLLARDS

(*Brassica oleracea* var. *acephala*)

 **CHAMPION:** 75 days. [Developed by the VA/AES.] A *Vates* type collard with increased bolt-resistance, darker blue-green foliage, and enhanced winter hardiness. Non-heading and productive. **#24105 Pkt. \$1.99; #24105E (28g) \$5.50**

COLLARDS, ENDIVE, KALE


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 winter-hardy from Virginia southward. Kale is best grown as a spring, fall, or winter vegetable. The taste of both kale and collards is enhanced by frosts and cool temperatures. Kale is best when cooked. Collards can be either eaten in salads or cooked. **SOLAR GREENHOUSE NOTES:** Collards are well suited for year-round production, but kale is best grown outside of the greenhouse because it requires cool temperatures and frost to bring out its fine flavor. **HARVEST:** Clip individual leaves before they are 12" long. Old leaves become tough and stringy. **DISEASES AND PESTS:** Cabbage worms can be controlled with Dipel. **SEED SAVERS:** See Broccoli section. **PACKET:** 2 g (about 625 seeds) sows 55' direct seeded or 230' as transplants.

GEORGIA GREEN (GEORGIA SOUTHERN, CREOLE):


[An old favorite introduced before 1880.] *Georgia Green* is especially valuable 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, loose heads are best harvested after frost when they are sweet and tender. Plants are 36" tall. **#24101 Pkt. \$1.99**


GREEN GLAZE, MCCORMACK'S™: 75 days.

[Introduced in 2000 by Dr. Jeff McCormack.] Similar to *Green Glaze* but selected for 8 years for improved cold tolerance and uniform bright green glossy leaves. Has survived to 0° F without freezing. Leaves have a bright green glossy appearance. Superior resistance to cabbage worm and cabbage looper. Recommended especially for southern and warm coastal states. **#24107 Pkt. \$3.70**

 **GREEN GLAZE:** 79 days. [Introduced 1820 by David Landreth.] An old fashioned and unique garden variety with bright green, smooth leaves. Green Glaze is heat and frost resistant, is slow-bolting and non-heading. The upright plants are 30 to 34" tall. A valuable feature of this variety is its excellent resistance to cabbage worm and cabbage looper. Recommended especially for southern and warm coastal states. All commercial sources of seed that we have grown have off-type plants with dull leaves. **#24102 Pkt. \$2.25**

MORRIS HEADING: 70 days. Produces loose heavy heads with dark green, slightly savoyed leaves. Slow-bolting plants range from 18 to 24". An old favorite with excellent flavor. **#24103 Pkt. \$1.99**



 **VARIEGATED:** 80 days. [Florida family heirloom since about 1910. Seed originally from a family friend of SESE grower Walt Childs. Introduced in 1999 by SESE.] More tender than *Green Glaze*, this is an excellent collard. An unusual feature of this variety is that in about half the plants, the green leaves become variegated when the plants begin to flower. The plants then turn green again as the seeds mature. The variegated plants grow more slowly once the variegation appears. In southern states where the winter temperatures remain above 20°F, plants may live five years or more and develop stems 3" in diameter. **#24106 Pkt. (1g) \$2.85**

 **VATES:** 68 days. [Developed by the VA/AES.] *Vates* is a popular non-heading, slow-bolting collard with large blue-green leaves on 32" tall plants. Produces high-quality frost-resistant greens especially suited to the Mid-Atlantic region and southern areas. **#24104 Pkt. \$1.99**

ENDIVE (ESCAROLE)

(*Cichorium endiva*)

Endive is a native to the East Indies and it has a long history of culture in Egypt and Greece where it is used as a salad herb. **CULTURE:** Endive is grown like lettuce and is sensitive to hot weather (See Cultural Notes for lettuce.) Thin plants to 8 to 12" apart in rows 18" 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 Fall harvest, dig plants with root ball intact and store at about 50°F (10°C) in a root cellar.


  **BROAD-LEAVED BATAVIAN (FULL HEART ESCAROLE):** 90 days. [Introduced 1934. AAS winner.] Large, broad, outer dark-green leaves enclose round, deep heads (12 to 16" diameter) which are well-blanched, creamy-white, and buttery. **#61101 Pkt. (1g) \$2.15**


KALE



(*Brassica oleracea* var. *acephala*)

CULTURE: Kale is a member of the cabbage family and has similar cultural requirements to collards and cabbage. (See collards section). Kale is best grown as a spring, fall, or winter vegetable. Flavor is enhanced by frosts and cool temperatures. Kale is best when cooked. **PACKET:** 2 g (about 625 seeds) sows 55' direct seeded or 230' as transplants.


 **HANOVER SALAD (SPRING):** 30 days. An extra early, fast-growing Siberian variety with large smooth leaves. When used fresh this variety has a strong but good flavor, mild when steamed. Harvest leaves when small and tender. Best for early spring salads before other varieties mature. **#25104 Pkt. \$2.50**

 **PREMIER:** 60 days. Replaces *Smooth Long Standing*. When over-wintered, the plants remain compact while developing new growing points on the main stem. This results in a higher production of foliage for spring harvest. Plants resist bolting 3 to 4 weeks longer. A vigorous-growing, smooth-leaved variety with deep green foliage and scalloped edges. **#25105 Pkt. \$1.99**

 **RED RUSSIAN:** 40 days. *Red Russian* is an unusual and beautiful variety that grows 2' tall. Leaves are bitter-free, very tender, and are intersected by purple-pink veins lightly tinged with purple on the margins. In cold weather the leaves turn reddish-purple and are very attractive. *Red Russian* produces an early crop of very tender leaves. **#25102 Pkt. \$2.35; #25102E (28g) \$4.50**

  **SQUIRE:** A selection from *Vates* which is more unit-form. *Squire* has curly leaves and short stems. Color holds well in hot weather and is slow to bolt in the spring. **#25103 Pkt. (2g) \$2.35**

KALE, MUSTARD GREENS, ORACH, PARSLEY, SPINACH

 **VATES:** 55 days. [Selected from *Dwarf Blue Curled Scotch* by the VA/AES.] Planted in spring or fall. Overwinters well in the Mid-Atlantic region. *Vates* is resistant to yellowing due to frost or heat. This is our most flavorful variety of kale, best when steamed, and good fresh as a garnish or salad ingredient. **#25101 Pkt. \$1.99**

MUSTARD GREENS

(*Brassica juncea*)


CULTURE: This cool weather nutritious crop shares cultural requirements with members of the cabbage family. (See Cabbage section.) Direct sow 1/4" deep in spring and late summer/early fall. Thin to 8" apart in rows 18" apart. Keep well watered. **SEED SAVERS:** Isolate from mustard and Chinese cabbage a minimum of 600' to 1/8 mile for home use. For pure seed isolate varieties by 1/4 to 1/2 mile. **PACKET:** 2 g (1050 seeds) sows 90'.


 **EARLY MIZUNA:** 37 days.

Extremely mild, yet definitely a mustard flavor. Tastes great in salads even for those that dislike the spiciness often associated with raw mustards. Also an excellent cooking green. **#27104 Pkt. \$1.99; #27104E (28g) \$5.50**

  **OLD FASHIONED RAGGED**


EDGE: 42 days. An old favorite that produces the finest 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. \$2.35**

 **RED GIANT:** 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 mustard flavor. More insect-resistant than other varieties. **#27102 Pkt. (0.5g) \$2.45; #27102E (28g) \$5.50**

 **SOUTHERN GIANT CURLED:** 45 days. [Pre-1880.] An old southern favorite. Leaves are large, bright green, with attractively curled leaf edges. This variety used for late sowings, has cold tolerance, and good bolting resistance. **#27103 Pkt. \$1.99**

ORACH

CULTURE: (*Atriplex hortensis*) Direct seed at 2" spacing in spring for summer and fall harvest. Thin to 9", eating thinnings.


 **MAGENTA MAGIC:** This is the deepest, darkest red of all the orach varieties available. It has true magenta red coloration that makes it a lively addition to any salad. Picked young it is tender and some salad mix growers are finding it to be an indispensable item in their market mix. This slightly spicy upright growing plant holds its flavor even as the plants mature. Miners would traditionally eat secondary orach leaves in salads even as the plants went to seed. Holds its flavor well through summer heat. **#59101 Pkt. (0.5g) \$2.20**

PARSLEY

(*Petroselinum crispum*)

CULTURE: Parsley seed germinates very slowly, requiring 3 to 4 weeks. Sow seeds in early spring directly into garden, 1/4" deep, and thin to 4 to 6". 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 to 24 hours. Remove from freezer and keep moist until seed begins to germinate. Requires full sun. **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 (approx. 900 to 1350 seeds, depending on variety) sows 35 to 70'.


 **DARK GREEN ITALIAN (PLAIN LEAF):** (*P. crispum* var. *neapolitanum*): 78 days. [Introduced by 1807.] Plain in appearance but fancy in taste, this celery-leaf variety is the best-flavored variety. Excellent for dried parsley. If grown in the greenhouse, aphid control is easier due to its wide straight leaves. **#37101 Pkt. \$1.99; #37101E (28g) \$5.50**



 **FOREST GREEN:** 75 days. Leaves are deeply and closely curled. Flavor is better than most curled varieties. Upright foliage helps keep leaves clean. Bunches well. Holds well in heat and drought without discoloration. Use for garnishes and flavoring. Excellent for garden or market. **#37102 Pkt. \$1.99**


SPINACH

(*Spinacea oleracea*)

CULTURE: Spinach does well with a combination of cool weather, short day lengths, high soil fertility, ample water, and neutral pH (6.5 to 7.5). Sprinkle some limestone in the row as you plant if you think the soil might be too acid. Temperatures above 60°F (16°C) for the first 6 weeks of growth may increase the tendency to bolt. Mulch the soil to reduce bolting by keeping the roots cool. Fall plantings give a more sustained harvest than spring plantings. Sow seed 1/2" deep directly into the garden as soon as the ground can be worked, and thin to stand 4 to 6" apart. Succession plantings can be made every two weeks. Some varieties tolerate 0°F and over-winter to produce excellent spring crops. **SEED SAVERS:** Grow only one variety or isolate by 1/4 mile for home use. For pure seed isolate by 1/2 to 1 mile. **PACKET:** 5 g (about 475 seeds) sows 60'.

 **NEW! BLOOMSDALE:** 47 days. [Pre-1908.] One of the most popular spinach varieties, favored by chefs. Crinkled glossy dark-green leaves. Withstands heat or cold and is slow to bolt. **#67105 Pkt. (5g) \$2.20; #67105E (28g) \$4.60**

  **LONG STANDING BLOOMSDALE:** 45 days. [Pre-1915.] A fully-savoyed or crinkled variety with dark green leaves. Most heat-tolerant variety we offer, very dependable, and the most full-flavored variety for salad use. Has withstood winter lows to 0°F. **#67102 Pkt. \$2.10; #67102E (1 oz) \$4.40**

 **WINTER BLOOMSDALE:** 47 days. Adapted for late summer/early fall plantings and over-wintering. Slow-bolting plants are resistant to blue mold, blight, and mosaic. Dark green, well-savoyed leaves. **#67103 Pkt. \$2.35**




MIZUNA

SPINACH, SWISS CHARD, TURNIP GREENS, HERBS

SUMMER SPINACH

(*Tetragonia expansa*)



 **6 NEW ZEALAND:** 62 days. [Introduced from New Zealand in 1772.] A heat- and drought-tolerant cooked spinach substitute with soil requirements similar to spinach. Seed should be soaked from 4 to 24 hours before planting to speed germination. **#68601 Pkt. (4g, 44 seeds) \$1.99**



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 and should be planted from early to late spring or again in the fall. **CULTURE:** Sow seeds 1/2 to 3/4" deep and thin to 4" apart. **HARVEST:** Clip off leaves near the base of the plant. **PREPARATION:** Excellent when stir-fried, or used in creamed soups or quiche. Freezes well. **SOLAR GREENHOUSE NOTES:** Swiss chard is an ideal plant for solar greenhouses, where it may be grown as a perennial. **SEED SAVERS:** Isolate varieties by a minimum of 1/4 mile for home use. For pure seed isolate by 1/2 to 1 mile. Will cross readily with beets. **PACKET:** 4 g (about 200 seeds) sows 25'.



  **RAINBOW (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. \$2.45; #32951E (28g) \$5.50**

  **LUCULLUS:** 50 days. [Introduced about 1914. Named after the Roman general Lucius Lucullus (pronounced "lu-kul-us") who was renowned for his splendid banquets.] A good source of greens for much of the growing season. In mild winters a mulch placed around the base of the plants may allow plants to overwinter. Foliage is pale green with heavily crumpled leaves. **#32101 Pkt. \$1.99**



  **RUBY RED (RHUBARB CHARD):** 55 days. A beautiful addition to any garden. Worth growing for the color alone. Foliage is dark green on ruby-red stalks. This strain exhibits more vigor, disease resistance, and uniformity than the commonly available commercial strain. **#32102 Pkt. \$2.05; #32102E (28g) \$4.50**


TURNIP GREENS (SALAD TURNIPS)


(*Brassica rapa* var. *rapifera*)

  **SEVEN TOP (SOUTHERN PRIZE, FOLIAGE TURNIP):** 45 days. [Pre-1880.] Popular southern variety used as a winter annual. This variety is grown exclusively for greens, not the roots which are woody. Leaves grow 18 to 22" tall, but should be harvested when young and tender. **#29201 Pkt. \$1.99**

HERBS

  **ANISE:** (*Pimpinella anisum*): 75 days. [A/70°F/LD/14/tpALF/sun/24"/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. (0.75g, 145 seeds) \$1.99**

 **ANISE-HYSSOP:** (*Agastache foeniculum*): [P/70°F/LD/7/ ds/sun, part shade/12"] Beautiful decorative herb used for potpourri and to make a superb aromatic herb tea. 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. (0.05g) \$2.10**

 **ASTRAGALUS (CHINESE MILK VETCH):** (*Astragalus membranaceus*): [P/scarify seed/D/7-12/Sp,Fall/tp,ds/sun/24"] 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 chi. Is said to be a deep immune system activator. **#71283 Pkt. (0.1g, 70 seeds) \$2.65 Cannot ship to HI**

BASIL, SWEET & FANCY TYPES


(*Ocimum basilicum*, unless noted)

Culture: A/70°F/D/7-14/tp,ds,ALF/sun/18"

ANISE-SCENTED BASIL: For a different taste try this rare basil with anise fragrance and flavor. Use for salads, sauces, and herb vinegars. **#71101 Pkt. (0.25g, 141 seeds) \$1.99**

CINNAMON BASIL: Has a spicy cinnamon fragrance. Use as a tea or potpourri. **#71102 Pkt. (0.25g, 88 seeds) \$1.99**

DARK OPAL BASIL: (*O. basilicum* var. *purpureum*) [Introduced by Univ. of Connecticut, about 1950.] Ornamental dark purple basil used like common basil for seasoning. May have a few green leaves. Beautiful on salads. **#71103 Pkt. (0.15g, 111 seeds) \$1.99**

 **HOLY BASIL:** (*O. sanctum*) [A/55°F night, 70°F day/D/14/tp,ds/18"] Rare basil with a spicy scent of clove, lemon, and cinnamon. Grown outside holy sanctuaries in India. **#71104 Pkt. (0.12g, 211 seeds) \$2.10**


● **Cultural and germination notes for herbs:** There are many different types of herbs and each type has specific growing requirements. Please see our book section for additional information on the culture of herbs and their 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 for self-treatment.

● **Germination of herb seed:** Please remember that many herbs naturally vary greatly in their germination. Some are as high as, or higher than, 80% while others are as low as 20% or lower. Our seeds are germination tested and we make every effort to supply quality seed. Also please note that some herbs have special germination requirements.

See key to cultural notes on page two

HERBS


 **LEMON BASIL:** (*O. citriodora*) Rare basil with deep lemon fragrance. Use for fish dishes, herb vinegars, and tea. #71105 Pkt. (0.12g, 89 seeds) \$1.99

LIME BASIL: (*O. americanum*) Similar to *Lemon Basil* but with darker green leaves and a lime fragrance. Accent for soups, salads, and fish. #71288 Pkt. (0.12g, 85 seeds) \$1.99


LETTUCE LEAF BASIL (*O. basilicum* var. *Crispum*): 85 days. The most productive of the basil, this large Italian variety is excellent for pesto and basil in oil. #71106 Pkt. (0.25g, 158 seeds) \$2.10

MAMMOTH BASIL: Huge, wide, shiny green leaves, twice as large as other Italian basil. A few leaves make a harvest. Add it to salads or make a fine-flavored pesto. #71290 Pkt. (0.12g, 101 seeds) \$2.10

PURPLE RUFFLES BASIL: (*O. basilicum* var. *purpurascens*) [AAS winner.] Very attractive in salads or vinegars. Use like common basil for seasoning. #71109 Pkt. (0.15g, 104 seeds) \$2.10

 **RED RUBIN BASIL:** A purple version of *Italian Large Leaf* basil. Leaves are larger and more uniformly colored than *Dark Opal* basil. Sweet aroma and flavor. #71289 Pkt. (0.12g, 93 seeds) \$1.95

SPICY BUSH BASIL: (*O. basilicum* var. *minimum*) [Height 10"] Very aromatic miniature (8 to 12") bush basil. One of the prettiest basil with small shiny leaves on highly branched stems. #71108 Pkt. (0.15g, 127 seeds) \$2.10

 **SWEET GENOVESE BASIL:** 85 days. A select strain of large-leaf basil. Use fresh or dried for flavoring sauces, soups, dressings, and pesto. **Medicinal:** Basil has been used as a carminative. Research indicates that it may inhibit gastric acid secretion. #71107 Pkt. (0.45g, 254 seeds) \$2.10

BERGAMOT (BEE BALM)

(*Monarda* species)


Culture: P4/70°F/LD/14-21/sun, part shade/36"


LEMON BERGAMOT: (*M. citriodora*) Native to the Appalachians. Some individual variation in blossom color and citrus odor. Use dried leaves for lemon scented herb tea or for flavoring meat or fish dishes. Harvest the leaves before flowers appear. #71203 Pkt. (0.15g, 270 seeds) \$2.25


WILD BERGAMOT: (*M. fistulosa*) A favorite of hummingbirds and bees. Flowers of varying shades of lavender may be added to salads. Use strongly fragrant dried leaves for tea and potpourris. **Medicinal:** Used by several Native American tribes as a carminative. #71204 Pkt. (0.1g, 197 seeds) \$1.99


BLACK COHOSH: (*Cimicifuga racemosa*) [P/keep moist 3 mos. at 70°F; stratify 5 to 8 weeks at 40°F; transfer to 70°F/D/tp, ds/light shade/3-5'/24" apart] Bushy herbaceous perennial with showy racemes of small white flowers held above the foliage. **Medicinal:** The roots (rhizomes) of mature plants are harvested and tinctured in October. Traditionally used as an emmenagogue (for menopausal and menstrual disorders). Its other values as an anti-inflammatory, expectorant, and alterative are sometimes overlooked. #71286 Pkt. (0.5g, 95 seeds) \$2.45



 **BORAGE:** (*Borago officinalis*) 80 days. [A/70°F/L/10/ds/sun/ 24"-36"] Borage is a bushy herb with bright blue 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. **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. (1g, 56 seeds) \$2.10

 **BONESET:** (*Eupatorium perfoliatum*) [P/stratify 6-8 weeks at 40°F, transfer to 70°F/L/tp,ds/Sp,Fall/sun, part shade/36-48"/2' apart.] This common and familiar herb, also called Thoroughwort, is native to low meadows and damp ground. In August through September the terminal stem bears a large, domed cluster of white flowers. Leaves are large and opposite, completely surrounding the stem. **Medicinal:** The name *Boneset* derives from the treatment of a type of influenza called "Break-Bone Fever" (dengue) for which this herb was used. Long used as a popular remedy in the U.S. Acts slowly and persistently as a febrifuge, diaphoretic, and to relieve bronchial congestion. #71291 Pkt. (0.05g, 352 seeds) \$1.99

 **CARAWAY:** (*Carum carvi*) 70 days. [B4/70°F/L/14/ds/ sun/24"] Use dried seeds for flavoring breads, leaves for salads, and roots as a vegetable (raw or cooked). Used especially to flavor cabbage dishes. **Medicinal:** Highly regarded as a carminative. Also has anti-spasmodic and anti-microbial properties. #71208 Pkt. (0.4g, 162 seeds) \$1.99

 **CALENDULA (POT MARIGOLD):** *Pacific Beauty* (*Calendula officinalis*) [A/55°-65°F/D/14/tp,ds/sun/18"/ 85 days.] Yellow-orange, 3" flowers. Flowers are used as a food color, natural dye, and substitute for saffron. **Medicinal:** Traditionally used as an anti-inflammatory herb for localized skin problems. Reported to activate cellular defense mechanisms. #71207 Pkt. (0.5g, 92 seeds) \$1.99

HERBS

CARDOON: (*Cynara cardunculus*) [A/70°F/LD/tp/sun/48-72"] Cultivated for at least 30,000 years! Cardoon is the ancestor of the globe artichoke. It has 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. Harvest stalks when plants are 12 to 24" tall. Taller plants require blanching. Wrap outer leaves and then wrap with old grocery bags to exclude light and use twine to hold the wrap tight. Harvest the blanched plants in a month. Prepare stalks by boiling in salted water with a twist of lemon to prevent discoloration. Serve as a vegetable or use in stews or soups. Also good pickled or dipped in batter and fried. **#71209 Pkt. (0.5g, 14 seeds) \$2.10**

ORGANIC **CATNIP:** (*Nepeta cataria*) [P4/70°F/L/7-21/tp/sun/24-30"] Use this mint for teas, or for amusing your cat. Note that only about two out of three 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. (0.45g, 650 seeds) \$1.99**

ORGANIC **CHAMOMILE, GERMAN:** (*Matricaria recutita*) [A/55-60°F/ L/tp/sun/24"-30"] 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 gastric mucous membranes. It is also anti-spasmodic, and anti-microbial. Used as a nasal wash to treat sinusitis. **#71212 Pkt. (0.35g, 3360 seeds) \$1.99**

CHERVIL, BRUSSELS WINTER: (*Anthriscus cerefolium*) [A/55°F /L/7-21/tp,ds/ part shade/24"] Fresh chervil is an excellent flavoring for peas, potatoes, carrots, eggs, and fish. Chervil loses its flavor when dried, but the flavor can be preserved in chervil butter. Chervil of the best quality comes from plants grown in partial shade in successive sowings. **Medicinal:** Traditionally used as a diaphoretic to treat fevers. **#71213 Pkt. (1g, 440 seeds) \$1.99**

CHIVES

(*Allium species*)

Culture: P3/60 °F -70°F/D/tp, ds/sun, part shade/12"

ORGANIC **CHIVES:** (*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. (0.2g, 183 seeds) \$1.99; #71214D (14g) \$7.50**

ORGANIC **GARLIC CHIVES (CHINESE LEEKS, CHINESE CHIVES)** (*A. tuberosum*): 80 days. Leaves are larger and flatter than chive leaves. Garlic flavor for salads and seasoning. **#71215 Pkt. (0.7g, 173 seeds) \$1.99; #71215D (14g) \$7.50**

CRESS

CREASY GREENS (UPLAND CRESS, WINTER CRESS): (*Barbarea verna*) [P/60°F/LD/7/ds/sun/] *Creasy greens* are an old favorite which are as easy to grow as spinach indoors or out. **#71217 Pkt. (2g, 1250 seeds) \$2.10**

CURLY CRESS (GARDEN CRESS, PEPPERGRASS): (*Lepidium sativum*) [A/60°F/L/4-10/ds/sun/3-12"] Use the young leaves of this member of the mustard family as a garnish for adding some zing to salads. **#71218 Pkt. (2g, 1334 seeds) \$2.20**

WATERCRESS: (*Nasturtium officinale*) [B4/50-70°F/L/4-14/ ds/sun, part shade] Watercress is a fresh-water-loving member of the mustard family, rich in vitamins, and used in salads to impart a 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 pots placed in trays with just enough water to float the crowns. **#71219 Pkt. (0.5g, 2736 seeds) \$2.10**

ORGANIC **CORIANDER (seed)/CILANTRO (leaf): 'Long Standing'** (*Coriander sativum*) [A zones 6-10/60°F/D/7-21/ds/sun/30"] The seeds of coriander are used in many Chinese and Mexican dishes, and diverse uses in breads, pastries, fruit, and meat sauces. The leaves of cilantro (also called Chinese parsley) are used as an ingredient in Mexican, Indian, and Chinese dishes. Especially used for rice dishes, soups, and curries. **Medicinal:** Known in Chinese medicine as "yuan-xu-zi" (Chinese parsley), the seeds are used as a diaphoretic and appetite stimulant. **#71216 Pkt. (1g, 90 seeds) \$2.10; #71216D (14g) \$5.50**

CUMIN: (*Cuminum cyminum*) [A4/70°F/tp/sun/12"] Long warm growing season required. Used for flavoring chili and dishes spiced with hot peppers. **#71220 Pkt. (0.5g, 194 seeds) \$1.99**

DILL

(*Anethum graveolens*)

Culture: A/70°F/L/7-21/ds/sun/36"-48"

ORGANIC **BOUQUET DILL:** Similar to Long Island Mammoth but shorter plants with larger flower/seed heads and larger leaves. A choice popular variety for pickling. **#71221 Pkt. (0.75g, 576 seeds) \$1.99**

DUKAT DILL: A European selection from Mammoth bred for high essential oil content which gives this variety a delicate aromatic fragrance and flavor. **#71263 Pkt. (0.75g, 515 seeds) \$1.99**

FERNLEAF DILL:^{PVP} [AAS Winner 1982] An attractive, early, compact dill variety, 18" tall with finely divided fern-like dark-green leaves. *Fernleaf* is a slow-bolting, space-saving variety especially suitable for containers. **#71222 Pkt. (0.75g, 528 seeds) \$2.10**

LONG ISLAND MAMMOTH DILL: (*Anethum graveolens*) 70 days. The standard heirloom variety for flavoring pickles, soups, breads, stews, salads, and sauces.
#71223 Pkt. (0.75g, 576 seeds) \$1.99

ECHINACEA (CONEFLOWER)

(*Echinacea* species)

Culture: P3-9/stratify at 40° F if needed/LD/tp.ds/Sp/sun/24"-36" 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 to 4 months depending on the species.

As little as three weeks stratification will give some germination.

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.

ORGANIC **ECHINACEA AUGUSTIFOLIA (Narrow-leaved Coneflower):** [stratify 90-120 days] The plants of *E. augustifolia* are the smallest of the echinaceas (8-18") and the spreading pink ray petals are the shortest (3/4"-1-3/8" long). Narrow-leaved coneflower is native to the dry prairies of the central U.S. The leaves are long and narrow as is characteristic of many drought-tolerant species. This species has a long history of medicinal use starting with the Native American tribes of the Great Plains. **#71264 Pkt. (0.2g, 52 seeds) \$2.15**

ORGANIC **ECHINACEA PALLIDA (Pale Purple Coneflower):** [stratify 60 days] The drooping flower petals are 1-1/2"- 3-1/2" long and may range in color from pink, purple, or white, but are typically rosy purple. The flower disk is purple-brown. Leaves are long and narrow. Height 18"-36". Medicinal, drought tolerant plant, native to open woods and rocky prairies from northeast Texas to central Illinois. **#71265 Pkt. (0.2g, 45 seeds) \$2.15**

ORGANIC **ECHINACEA PARADOXA (Yellow Coneflower):** [stratify 60 days] The most exceptional of the echinaceas because the petals are yellow rather than purple, hence the name *E. paradoxa*. Leaves are long and narrow. Height 24"-48". Native to open woods, balds, and rocky prairies especially common to the Arkansas Ozarks and Missouri. Deserves a place in both medicinal and ornamental gardens. **#71266 Pkt. (0.2g, 52 seeds) \$2.35**

ORGANIC **ECHINACEA PURPUREA (Purple Coneflower):** A very popular ornamental and the most common species, widely used as a medicinal plant. The flowers are 3 to 4" 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. (0.2g, 45 seeds) \$1.99**



ECHINACEA PURPUREA (White Swan): *White Swan* was selected from naturally occurring white-petalled variants of Purple Coneflower. It has been selected for ray flowers that are more spreading than drooping. The 4" wide blooms are borne on well-branched plants. An excellent variety for cut flowers. Like other Echinaceas it is drought tolerant, hardy, ornamental, and medicinal. No stratification required.
#71267 Pkt. (0.2g, 45 seeds) \$2.45

ORGANIC **EPAZOTE (*Chenopodium ambrosioides*) (Mexican Tea, American Wormseed):** [A/70 degrees F/LD/21/tp/sun/24-48"] 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. **#71225 Pkt. (0.1g) \$2.10**

FENNEL

(*Foeniculum vulgare dulce*)

Culture: B2-5,P6-10/70° F/D/7-14/ds/ sun/36"-60" **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.

ORGANIC **FENNEL, BRONZE:** (var. *rubrum*) This decorative fennel has beautiful lacy bronze leaves. Useful as an ornamental as well as a culinary sweet fennel.
#71226 Pkt. (0.2g, 70 seeds) \$2.40

ORGANIC **FENNEL, FLORENCE:** (var. *azoricum*) 90 days. Also known by Italian gardeners as **Finocchio**. Celery shaped leaves have a distinctively licorice flavor. Can be blanched and used as a cooked vegetable. **#71227 Pkt. (1g, 250 seeds) \$1.99**

ORGANIC **FEVERFEW:** (*Chrysanthemum parthenium*) [P4-10/70° F/L/10-14/sun/30"] remove flower heads before seed forms, otherwise the plant will grow as an annual] Small daisy-like blooms on light green foliage. **Medicinal:** Feverfew acts as a vasodilator and anti-inflammatory. Studies published in the British medical journal *Lancet* reported that 2 to 3 fresh leaves of feverfew eaten daily over a period of time reduced the severity and frequency of migraine headaches. Feverfew has potential value in relief from arthritis symptoms as well. Contraindicated during pregnancy. **#71228 Pkt. (0.1g, 616 seeds) \$2.15**

HERBS

ORGANIC **GINSENG SEED:** (*Panax quinquefolium*) Grows 1' to 2' with toothed leaves, small green/white flowers and bright red berries in early summer. Plant in raised beds 6" apart. Requires 75% shade – either forest or artificial. Likes humus-rich soil with good drainage. Fertilize and mulch well. Sustainably grown seeds. See page 35 for medicinal information. Seed stratified for 1 year and shipped in fall ready to plant. Note this seed will not be shipped until fall! **#71293 Pkt. (2g, 20 seeds) \$3.75**

HOREHOUND, WHITE: (*Marrubium vulgare*) [P4/60°F/D/tp,ds/sun/18"-24"] This member of the mint family has a pleasant fragrance and a menthol-like flavor. Use as a tea and a flavoring for Horehound candies. **Medicinal:** Contains substances which stimulate secretions of the bronchial mucosa, soothes coughs and breaks up mucus. **#71229 Pkt. (0.15g, 127 seeds) \$1.99**

ORGANIC **HYSSOP:** (*Hyssopus officinalis*) [P4/65°F/D/tp/ sun/24"] Hyssop is an ornamental shrubby herb used to season poultry. **Medicinal:** Active constituents of hyssop include volatile oils with a camphor-like odor and strong flavor. Hyssop tea, flavored with honey is used as an expectorant. Collect the flowering tops in August and dry in the sun. **#71230 Pkt. (0.1g, 102 seeds) \$1.99**

LAVENDER, ENGLISH (Munstead): (*Lavandula vera* var. *Munstead*) [P5/70°Fmin/LtD/30/tp/sun/18"/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. (0.25g, 246 seeds) \$2.15**

ORGANIC **LEMON BALM:** (*Mentha officinalis*) [P4/70°F/L/ 10/tp/sun/30"] Use for hot and refreshing cold teas as a lemon substitute. Leaves may be added to salads. 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. (0.19g, 375 seeds) \$2.10**

LICORICE, CHINESE: (*Glycyrrhiza uralensis*) [P/soak seeds in cold water 12-24 hr, dip in 160°F water for 10 min., or scarify by rubbing between sandpaper, or stratify/D/14+, erratic germination/seedlings develop slowly/ Sp/tp,ds/sun, part shade/slightly alkaline, moist, rich sandy loam is best/18-60"] Slightly woody herb with compound leaves with oil glands. Flowers white to violet-blue. Roots may be harvested the 3rd or 4th year. Root contains up to 24% glycyrrhizin, a substance 50 times sweeter than sugar. **Medicinal:** Corticosteroid action, anti-inflammatory, anti-microbial, expectorant, demulcent. May cause hypertension if overused. **#71273 Pkt. (0.45g, 45 seeds) \$2.55**

LOVAGE: (*Levisticum officinale*) [P3/65°F/D/14/ tp/sun, part shade/ 60"] 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. (0.25g, 75 seeds) \$1.99**

ORGANIC **MARJORAM, SWEET:** (*Origanum hortensis*) 70 days. [P10/60°F/LD/21/tp/sun/12"/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 studies. **#71234 Pkt. (0.18g, 1075 seeds) \$1.99**

ORGANIC **MILK THISTLE:** (*Silybum marianum*) [A or B/L/7-14/Sp, Fall/ds/sun/48-60"] 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 of chemicals that help stabilize and regenerate liver cells. **#71274 Pkt. (1g, 28 seeds) \$1.99 Cannot ship to TX**

ORGANIC **MOTHERWORT:** (*Leonurus cardiaca*) [P/D/1421/ Sp, Fall/tp,ds/sun/24-78"] Upright stems with pungent leaves shaped like a lion's tail. Used as a source of green dye for wool. **Medicinal:** Traditionally used for menstrual and uterine conditions as well as a cardiac tonic. Contraindicated in pregnancy. **#71275 Pkt. (0.10g, 112 seeds) \$2.10**

OREGANO, GREEK: (*Origanum species*) [P5/60°F/ D/14-21/tp/sun/12"] Oregano is an essential spice of pizza as well as tomato, cheese, and meat dishes. This is the flavorful Greek Oregano, not the flavorless oregano (*O. vulgare*) commonly available. **Medicinal:** Mildly carminative and anti-spasmodic. **#71237 Pkt. (0.05g, 530 seeds) \$1.99**

ORGANIC **PENNYROYAL, ENGLISH** (*Mentha pulegium*): [P5/70°F /L/14/tp/sun/12"] Used in the same manner as American pennyroyal. **Medicinal:** The dried leaves can be used to prepare a tea to be used as a carminative, diaphoretic, and to promote menstruation, but is probably best avoided. Warning: Pennyroyal oil has historically been used as an abortifacient, but often with toxic consequences. Pennyroyal leaves or oil can be used as an insect repellent, but the oil should be applied to the clothing, not the skin. **#71238 Pkt. (0.1g, 387 seeds) \$2.30**

ORGANIC **MINT:** (*Mentha species*) [P5/70°F/L/14 /tp/sun/ 18"] Mint grown from seed does not come true and produces plants which vary in flavor from spearmint to menthol mint to peppermint. For culinary use select your best plants for mint sauce, jelly, or tea. **Medicinal:** A cooling herb used for external inflammation. Internally it has spasmolytic, carminative, and expectorant actions. **#71235 Pkt. (0.05g, 616 seeds) \$1.99**

HERBS

PERILLA

(*Perilla frutescens*)

RED-LEAVED PERILLA (RED SHISO): (*P. frutescens*) [A/70°F/L/10/ds/sun/18"] Use fresh in salads, soups, and as a garnish for fish. Used in Japan to make tempura and to color pickled plums. Its purple-red leaves are attractive in the herb garden. Aggressively self-sows. **#71244 Pkt. (0.15g, 177 seeds) \$2.10**

POPPY, BREAD SEED 'Przemko': (*Papaver somniferum*) [A/60°F/D/6-10/sun/ds/36-48"] 'Przemko' is Polish for "prize" or "premium". Large plants produce 4" blooms in various shades of deep red to purple. Seed pods produce abundant amounts of poppy seed for use in bread baking. Stake seed stalks to prevent loss of seed. Does best in cool climates. **#71282 Pkt. (0.25g, 275 seeds) \$2.30**

PURSLANE, SUMMER 'Goldberg': (*Portulaca oleracea sativa*) [A/70°F/7-10/LD/ds/SpALF/sun/12-18"] 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 properties reported. **#71285 Pkt. (0.15g, 350 seeds) \$2.10**

ROSEMARY: (*Rosemarinus officinalis*) [P8/55°F night, 70°F day/L/14-30/tp/sun/24"-72"] 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 seasoning 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. (0.1g, 86 seeds) \$2.20**

ST. JOHNSWORT: (*Hypericum perforatum*) [P/stratify/7-30/Sp,Fall/tp,dS/sun/12-24"] 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. (0.05g, 516 seeds) \$1.99**
Cannot ship to CA, CO, ID, HI, MT, NV, OR, or WA

SAGE, BROADLEAF: (*Salvia officinalis*) 75 days. [P4/70°F/D/ 7-21/tp,dS/sun/24"-30"] 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. (0.33g, 46 seeds) \$1.99**

SCULLCAP: (*Scutellaria lateriflora*) [P/stratify 4-6 weeks/D/14-21/Sp/tp,dS/sun or light shade/12-24"] Also called **Virginian Scullcap** or **Mad-Dog Scullcap**. The latter name refers to its historical use in treating rabies. Small purple-blue flowers are borne in slender one-sided racemes in the leaf axils.

Leaves are oval-shaped leaves with serrated edges. Medicinal: Nervine tonic, sedative, and anti-spasmodic used to revivify, calm, and nourish the nervous system. Harvest aerial parts during August and September. **#71292 Pkt. (0.1g, 59 seeds) \$2.35**

SOAPWORT: (*Saponaria officinalis*) [P3/70°F/LD/ 10-21 days/tp,dS/sun, part shade/12-24"] 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. (0.15g, 82 seeds) \$1.99**

SORREL, GARDEN: (*Rumex acetosa*) [P4/70°F/L/3-14/ds/sun/36"] Used sparingly as a salad green for its lemon-like flavor. Sorrel is best used in soups, where it excels. **#71246 Pkt. (0.4g, 479 seeds) \$1.99**

SUMMER SAVORY: 60 days. [A/70°F min./L/7-21/tp,dS/sun/12"] 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 diverse flavors. Medicinal: Reportedly the fresh leaves may be rubbed on insect stings to relieve pain. **#71242 Pkt. (0.25g, 453 seeds) \$1.99**

TOBACCO, MIDEWIWAN SACRED: (*Nicotiana rustica*) [A/70°F/LD/tp/sun] Midewiwan Sacred tobacco (wild tobacco) is used ceremonially by Native Americans. The dried leaves are used as an insecticide for greenhouse insects such as aphids, mites, and whiteflies. **Warning:** The active ingredient is nicotine sulfate, a powerful poison. **#71248 Pkt. (0.12g, 7729 seeds) \$3.25**

THYME

(*Thymus serpyllum*):

Culture: P4/55-60°F/LD/14- 30/ds

CREeping THYME: (*T. serpyllum*) [Plant in full sun in the north, part shade in the south/4"] 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. (0.2g, 799 seeds) \$2.60**

GERMAN WINTER THYME: (*T. vulgaris*) 85 days. [Ht. 8", space 12" 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. (0.2g, 683 seeds) \$2.10**

HERBS OF CHOICE: The therapeutic use of phytomedicinals.

Pharmacognosist Varro Taylor discusses the safety and effectiveness of over 100 different herbs. Each herb is examined in relation to diseases of 10 body systems. A required reference for any herbalist.


#91138 \$19.95


HERBS, KOHLRABI


VALERIAN

(*Valeriana officinalis*):

Culture: P4/65°F/LD/21-30/tp/sun, part shade/48"-60"


 **VALERIAN:** 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. (0.1g, 133 seeds) \$1.99**


 **VERVAIN, BLUE:** (*Verbena hastata*): [P/40°F 6 wks, 70°F/L/7-14/TP/sun/12-24"] Requires a moist cold treatment for germination. Sow seed on the surface of sterile soil and place in refrigerator for 4 to 8 weeks then transfer to 70°F. Transplant to a moist area. Medicinal: Used traditionally as a calming herb and for insomnia. Leaves are collected and dried quickly before the flowers open. **#71252 Pkt. (0.15g, 528 seeds) \$2.10**

 **WOAD:** (*Isatis tinctoria*) [B5/60°F/LD/10/ds/ sun/36-60"] Used as a dye plant for over 2000 years, woad leaves produce a natural blue dye. An attractive plant with blue-green leaves and yellow flowers in May. **#71253 Pkt. (0.25g, 49 seeds) \$2.85 Cannot ship to ID, MT, OR, UT, or WY**

WORMWOOD (ARTEMISIA)

(*Artemisia* species)

 **WORMWOOD:** (*A. absinthium*): [P4/55°F/LD/7-10/tp,ds/ sun, part shade/24"-36"] 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. (0.1g, 674 seeds) \$1.99**

 **WORMWOOD, SWEET (SWEET ANNIE):** (*A. annua*) [A/ 70°F/LD/ds/sun/72"] Self-sows readily.] Grown mostly for its sweetly scented foliage, its ornamental value, its use in wreath-making, 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. (0.05g, 1408 seeds) \$2.45**

AT-RISK MEDICINAL HERBS

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 North America. Whenever we plant these native plants in our woodlands we take steps towards ensuring their long-term survival. Order these items through September 1, 2005, but note they will not ship until later in the fall! Planting instructions included.

GINSENG ROOT: (*Panax quinquefolium*) Grows 1 to 2' with toothed leaves, small green/white flowers and bright red berries in early summer. 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. Sustainably grown roots. **#71601 3 roots (2 years old) \$11.00; #71601Y 10 roots (2 years old) \$25.00**

GOLDENSEAL RHIZOMES: (*Hydrastis canadensis*) Grows up to 16" 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 and Minnesota. Medicinal: Well known to contain powerful antibacterial properties and has been used to treat inflamed mucous membranes. **#71602 10 rhizomes \$14.00**

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" deep to be thinned to 5" apart in rows 12" apart. **HARVEST:** When roots are 2" in diameter or smaller. **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. **INSECTS AND DISEASE:** Fairly resistant to insects and disease. Cabbage worms can be controlled with Dipel. **SEED SAVERS:** See Broccoli section. **PACKET:** 4 g unless stated (about 1275 seeds) sows 135'.

EARLY SEASON KOHLRABI



EARLY PURPLE VIENNA: 60 days. [Introduced prior to 1860 (from Austria?).] Similar to *White Vienna* except for purplish skin and leaves, and slightly larger size. We consider this variety to be more flavorful than *White Vienna* and our garden trials have shown it to be slightly more resistant to the cabbage worm. **#26101 Pkt. \$1.99**

LATE SEASON OR WINTER KOHLRABI




GIGANT WINTER:


62 days from transplant. [Czechoslovakian heirloom reselected by E.M. Meader at UNH. Introduced in 1989 by SESE.] Excellent for winter storage. In mild-season areas it can remain in the garden all winter, especially if protected with mulch. *Gigant Winter* is free from the weaknesses of early season kohlrabi and it represents a breakthrough in kohlrabi quality. It is free of woody fibers and typically grows 8" to 10" in diameter, yet it remains fine-grained and is of good quality throughout. *Gigant Winter* has often been grown to a weight of 27 lbs. (average of 15 to 20 lbs.). It can be used fresh or cooked at any size from small to large. The leaves of large plants can be eaten like kale. It is resistant to root maggots that are a pesky problem with many root crops. Long time customer Ernest Kouba grew the world-record-tying 36-pounder pictured here from the seeds he bought from us! **#26201 Pkt. (0.25g) \$2.95**


POTATOES, LEEKS

POTATOES


POTATO CULTURE: Cut potatoes into pieces no smaller than an egg with no fewer than 3 eyes. Plant at 12-inch spacing in very rich soil with lots of extra compost. Kill Colorado Potato Beetles as soon as they appear. When plants are 6" 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 inches. 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 30th. **WARNING:** After eating some home grown potatoes, you may never be able to eat commercial potatoes again.

 **NEW! BUTTE:** 120 days. Our grower's favorite russet. Produces handsome late-season bakers high in vitamin C and protein. Equally great baked, mashed, or fried. Suggested in-row spacing of 16 to 18".
#39601 (2 1/2 lb) \$11.95; #39601T (20 lb) \$49.00

 **CARIBE':** 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. Certified Organic seed potatoes 2.5 lb bag includes detailed planting instructions and photo card. #39201 \$11.95; #39201T (20 lb) \$49.00

 **CAROLA:** 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. Certified Organic seed potatoes 2.5 lb bag includes planting instructions, recipes, and a photo card. #39302 \$11.95; #39302T (20 lb) \$49.00

 **CRANBERRY RED:** Considered the best of the red-skinned, red-fleshed varieties. Excellent for potato salad because of its low starch content. Smooth texture and high yields. Early to mid season. Certified Organic seed potatoes. 2.5 lb bag includes planting instructions, recipes, and photo card. #39501 \$11.95; #39501T (20 lb) \$49.00

 **REDDALE:** Great tasting, bright red tubers with pure white flesh. Delicious boiled, baked, or au gratin. High resistance to verticillium wilt and medium dormancy makes it a good choice for a fall planting in more southern areas. Potatoes are large and mature early from a spring planting. Certified Organic seed potatoes. 2.5 lb bag includes planting instructions, recipes, and photo card. #39502 \$11.95; #39502T (20 lb) \$49.00

 **ROSE FINN APPLE FINGERLING:** Heirloom, a favorite among fingerling fans. Beautiful rose color with moderately dry yellow flesh. Reliable and high yield. Since the seed potatoes are smaller, the one-lb. bag will plant about the same rowfeet as a 2.5 lb of the other varieties. Certified Organic seed potatoes. 1-lb bag includes planting directions, recipes, and photo card. #39701 (1 lb) \$11.95

 **ROSE GOLD:** Rosy red skin with a creamy delicious deep yellow flesh. Dry flesh is perfect baked or steamed. Disease resistant. Mid-season Certified Organic seed potatoes 2.5 lb bag includes detailed planting instructions, recipes, and photo card. #39401 \$11.95; #39401T (20 lb) \$49.00

 **YUKON GOLD:** 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. Yellow flesh looks buttered. Good yields and an excellent keeper. Very early maturing. Certified Organic seed potatoes. 2.5 lb bag includes detailed planting instructions and photo card. #39301 \$11.95; #39301T (20 lb) \$49.00

 **BEST SELLING POTATO MIX:** Try the four most popular potatoes and save \$12.00. Assortment includes a 2.5 lb bag each of *Yukon Gold*, *Rose Gold*, *Caribe'*, and *Reddale*. Shipped in a sturdy box with planting instructions, recipes, and variety photo cards. Certified Organic seed potatoes. 4 different 2.5 lb bags. #39801 \$35.00

 **RARE POTATO MIX:** Everybody loves potatoes! This sampler includes four different taste tempting varieties for the adventurous cooks' garden. You'll love *Cranberry Red*, *Carola*, *Reddale*, and *Rose Finn Apple Fingerling*. One bag of each variety packed in a sturdy box with planting instructions, recipes, and variety photo card. Certified Organic seed potatoes. Save \$12.00 off the individual bag price. #39802 \$35.00

 **FULL POTATO MIX:** Try all eight of our selected potato varieties and save \$30.00 off the per bag price. You get one bag each of *Yukon Gold*, *Rose Gold*, *Caribe'*, *Butte*, *Cranberry Red*, *Carola*, *Reddale*, and *Rose Finn Apple Fingerling*. All shipped in a sturdy box with planting instructions, recipes, and variety photo cards. #39803 \$65.00

LEEKs

(*Allium ampeloprasum*)

Leeks are biennial members of the onion family that are grown for their delicate onion flavor in soups and salads. **CULTURAL NOTES:** Culture of leeks is similar to that of onions. (See cultural notes for onions.) Sow seed indoors in flats 10 to 12 weeks before setting out transplants 6" apart in rows 18" apart. Leeks require loose, fertile soil kept well watered through the growing season. The stalks can be blanched by hilling up the soil around the stalks. **PACKET:** 3 g (about 1100 seeds) sows 25'.

 **AMERICAN FLAG (BROAD LONDON):** 130 days. *American Flag* is the standard variety for home gardens. Stems average 1-1/2" in diameter by 8 to 10" high, well-blanching from the base upward. Has a delicate onion flavor. #66401 Pkt. \$2.10

LETTUCE

LETTUCE

(*Lactuca sativa*)

CULTURE: Lettuce is a cool-weather crop that thrives in the temperature range 60-65°F (16-18°C), and if thoroughly hardened, most varieties survive temperatures as low as 20°F (-6°C). Cold-adapted varieties survive much lower temperatures. Seed germinates best at about 75°F (24°C). Lettuce seed will germinate at a temperature as low as 40°F (4°C). Early spring plantings should be made as hardened transplants from seed started one month before setting outdoors. Late spring plantings should be direct-seeded. Sow seed 1/4" deep and thin to 10 to 16" 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 the late spring germination period. **GERMINATION**


NOTES: If the temperature exceeds 80°F (27°C) lettuce will often fail to germinate. Lettuce can be planted during late summer or early fall while the days are still hot provided that the seeds are germinated in the refrigerator for 4 to 6 days. Another method is to soak seed in 10% bleach for 2 hours at 40 to 60°F (4 to 16°C) followed by 4 water rinses. This method enhances both the speed and amount of germination. **BOLT RESISTANCE:** Resistance to bolting is highest with loose-leaf lettuce, followed in order by romaine, butterhead, and bibb, and crisphead.


Lettuce bolts more readily if exposed to temperatures below 50°F during the one- to three-leaf stage (the first three weeks after germination). Thus, spring lettuce is best started indoors and transplanted out at least three weeks after sowing. Before the days become hot, mulch the plants to keep the root temperature cool. **HARVEST AND FLAVOR NOTES:** The glucose content of lettuce harvested in the morning may be 2-1/2 times greater than lettuce harvested in the early afternoon. For best quality and maximum sweetness harvest by 7 or 8 am. **GREENHOUSE NOTES:**


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 to 20 days for dates from transplanting. **SEED SAVERS:** Isolate varieties by a minimum of 12' for home use. For pure seed isolate varieties a minimum of 25 to 50'. **PACKET:** 0.5 g unless stated (about 400 to 625 seeds, depending on variety) sows 30 to 90' direct-seeded or 175' as transplants.

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.


 **CORSAIR:** 57 days. Shiny deep green leaves on medium sized compact heads. Leaves are thick, crunchy, and juicy with full sweet flavor on bolt resistant plants that retain their quality late into the season. **#62703 Pkt. \$2.65**

 **FORELLENSCHLUSS:** 58 days. Literally translates to "Speckled Trout", this Austrian lettuce has gorgeous green leaves with maroon markings throughout. Leaves are very crispy with thick midribs. Grows quickly in cold weather but will bolt in heat. Holds its excellent flavor even after it starts to bolt. **#62705 Pkt. \$2.75**

 **PARRIS ISLAND COS:** 68 days. [Named after Parris Island, SC. Developed by the USDA and Clemson in 1952.] *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. Forms 10 to 12" heads of slightly savoyed leaves with a creamy white heart. **#62702 Pkt. \$2.10; #62702C (7g) \$5.50**



 **ROMULUS^{PVP}:** Sweet, hearty, and refreshing, *Romulus* was a standout for flavor and sweetness in our 1996 trials. Heads are medium green and upright like *Parris Island*. Texture is crunchy yet smooth on the palate. **#62704 Pkt. \$2.65**


 **SWEET VALENTINE** 55 days. This the sweetest-flavored lettuce we offer. The heads hold long into the heat without bolting. The extremely deep-red leaves are slightly smaller than other Cos varieties. **#62112 Pkt. \$2.75**


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:** 54 days. Beautiful, light yellow-green leaves grow rapidly to form large crinkled leaves on plants, 12 to 16" in diameter. *Australian Yellow* produces large yields in a short time. Bolt resistance is moderate. Tender texture with slightly sweet, good flavor. Highly recommended spring lettuce. **#62101 Pkt. \$2.85**


  **BLACK-SEEDED SIMPSON:** 49 days. [Introduced about 1850.] An old standard and one of the earliest loose-leaf types available. Good for early spring planting for the first lettuce of the season but quality declines in heat or late plantings. Still a popular variety. **#62102 Pkt. \$2.00; #62102C (7g) \$5.50**

 **DEER TONGUE (MATCHLESS):** 54 days. This unusual, fine quality lettuce is formerly a popular garden variety, now rare. Brought back by request. Forms an upright, loose head of excellent sweet flavor and crisp texture. Has slightly savoyed, triangular, round-tipped leaves with a succulent mid-rib. Moderate bolt resistance. One of our favorites. This strain exhibits more vigor, disease resistance, and uniformity than the commonly available commercial strain. **#62103 Pkt. \$2.35**


 **OAKLEAF:** 45 days. [Introduced about 1771, at one point known as *American Oak Leaved*.] Forms tight cluster of oakleaf-shaped leaves. Bolt-resistant and bitter-free longer than many other varieties. This old standard is often undervalued but is a proven performer and essential in the summer lettuce patch. **#62106 Pkt. \$1.99; #62106K Bulk (3g) \$4.15; #62106C (7g) \$5.50**


 **PABLO BATAVIAN:** 60 days. Wine red lettuce with slight hints of deep green. Grows loose heads beautiful enough to use an ornamental plant. The large round wavy leaves have toothed edges with sweet, mild flavor. **#62111 Pkt. \$2.35**


LETTUCE

 **RED DEER TONGUE:** 58 days. Fine *Deer Tongue* quality with red-tinged leaves. #62104 Pkt. \$2.95; #62104C (7g) \$5.50

RED SAILS^{PVP}: 45 days. [Introduced 1985. AAS winner.] *Red Sails* is an early, fancy, red-leaf lettuce. Slow to develop bitterness when compared to ruby varieties but average compared to green varieties. Leaves are crinkled and of a maroon-red color that intensifies as the lettuce matures. Has 6 times more vitamin A and 3 times more vitamin C than other varieties. For garden, restaurant, and market. #62107 Pkt. \$1.99; #62107C (7g) \$5.50

 **SALAD BOWL:** 40 days. [Introduced in 1952. AAS winner.] Large, loose-leaf lettuce with long frilly leaves arranged in a rosette. Tolerant to heat and tip-burn. One head makes a salad. #62502 Pkt. \$2.10; #62502C (7g) \$5.50


 **SIMPSON ELITE^{PVP}:** 48 days. [Introduced in 1993 as an improved *Black-Seeded Simpson*.] *Simpson Elite* holds up to 30 days longer without bolting and with less tendency to develop bitterness at the end of the harvest season. #62108 Pkt. \$2.15


 **SLO-BOLT:** 48 days. [Introduced 1946.] *Grand Rapids* type of lettuce with good heat tolerance. Excellent choice for southern gardens or greenhouse use where heat may halt lettuce production. Leaves are bright green and ruffled. #62109 Pkt. \$2.75

BIBB (BUTTERHEAD) LETTUCE


Bibb lettuce is more tolerant of hot weather than crisphead lettuce. As a group 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:** 55 days. [Introduced 1963. AAS winner developed by Cornell.] This versatile heat-tolerant lettuce has proven itself to be a reliable variety for garden, market, and greenhouse use. Dark green leaves and compact heads. Holds well under stress and has good bolt resistance. #62302 Pkt. \$2.10; #62302C (7g) \$5.50


 **CAPITAN:** 62 days. This Dutch greenhouse lettuce is adapted equally well to greenhouse or garden. *Capitan* was judged the best Boston-type lettuce in the 1983 Rodale Research Center variety trials. Excellent heat and cold tolerance plus resistance to lettuce mosaic virus. The 5 oz. loose heads have a light green color, excellent taste, appearance, and yield. Nice buttery flavor. Recommended with consistent high praise from our customers, and one of our personal favorites. #62303 Pkt. (0.25g) \$2.80

 **SCHWEITZER'S MESCHER BIBB** 50 days. [Dates back to the 1700's. Introduced 1986 by SESE. This strain was brought to the U.S. from Austria in the early 1900's and has been maintained as a Schweitzer family heirloom.] Best grown in cool weather, *Mescher Bibb* forms small tight crisp heads of green

leaves ringed with red. Although the heads are small its flavor and appearance are excellent. #62305 Pkt. \$2.80

 **SPECKLED BIBB:** 43 days. An excellent-tasting lettuce for any season. It holds longer in the heat than Slobolt or Buttercrunch Bibb, yet still grows quickly in cool weather. The attractive light green leaves are spotted with 1/4" red dots. Crispy heads often self-blanch in the center. This variety sells well in farmers markets. #62309 Pkt. \$2.85


 **SUSAN'S RED BIBB:** 60 days. Selected as the most attractive variety in our heirloom lettuce trials, *Susan's Red Bibb* is a ruffled, bitter-free red bibb with regular, attractive shape, large tender leaves with rosy-red margins, and strong eye-appeal. Color is beautiful in salads. #62306 Pkt. \$2.80

 **TOM THUMB:** 48 days. [Pre-1850.] Space-saving miniature butterhead of delicate texture. Apple-sized head can be used whole in individual salads. Leaves are medium-green and crumpled. Popular in restaurants. #62307 Pkt. \$2.45

 **YUGOSLAVIAN RED BUTTERHEAD:** 58 days. [Heirloom from a peasant family in Marburg, Yugoslavia. Introduced in 1987 by SESE.] Red-tinged leaves form heads 10" across. The interior leaves are quite pretty: creamy yellow-green dappled with red. Succulent with a buttery flavor. A decorative and tasty lettuce, ideal for garnishes. #62308 Pkt. \$2.85


BUTTERCOS LETTUCE

Buttercos lettuce has the characteristics of both butterhead and cos.

 **WINTER DENSITY:** 58 days. [From England.] *Winter Density* has the combined characteristics of butterhead and romaine lettuce. The heads are compact, dense, upright, and tall (8"). *Winter Density* is a high-quality salad lettuce with excellent cold and heat tolerance. Does well for us in greenhouse or garden. Endures summer heat. #62802 Pkt. \$2.35; #62802K Bulk (3g) \$5.90

CRISPHEAD & BATAVIAN LETTUCE

Crisphead lettuce is the most popular type, appreciated for its tightly folded blanched crisp leaves, though 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:** 50 days. [Introduced 1987. Developed at the U. of Hawaii.] *Anuenue* is the Hawaiian name for "rainbow" (pronounced "ah-nu-ee-nu-ee"). A valuable feature of this variety is the ability of the seed to germinate at higher soil temperatures (above 80°F). It resembles a crisphead lettuce with bright glossy green leaves. Heat-tolerant and bolt-resistant. Recommended for all lettuce growing seasons. #62506 Pkt. \$2.85

LETTUCE, MUSKMELON

☀️ **SIERRA^{PVP}**: 54 days. An open-headed batavian crisp-head lettuce with excellent resistance to bottom rot and tip-burn. Leaves are glossy green with reddish veins. It grows in open fashion at first, forming a compact head at maturity. Very tasty, crisp, and juicy. Holds well under high heat and is highly bolt-resistant. **#62503 Pkt. \$2.50**

SLUG CONTROL:

For a simple effective method to deal with slugs, try placing crushed egg shells around the base of the plants. Don't crush them too much, just a little. Slugs will cut themselves on the shards and will die.

Also, try placing an inch of beer in a tuna tin on the soil near the plants. Slugs will crawl in for a drink and not crawl out.

☀️ **SUMMERTIME**: 75 days. [Introduced in 1989 by the Oregon and Washington A.E.S.] *Summertime* was developed for high-temperature growing conditions, especially in the Northwest and other areas where lettuce is grown during the summer. Heads are compact, low-growing, averaging 6" wide by 5" deep, weighing approximately 1-1/4 lbs. when trimmed. Grows to a good size before bolting. Leaves have distinctive swirled, fringed leaves ("flame-leaf") appearance. Responds best to loose well-watered fertile soil. **#62504 Pkt. \$1.99**

🕒 **ORGANIC** **TENNIS BALL**: 55 days. [Pre-1804. Grown by Thomas Jefferson at Monticello.] This reintroduced black-seeded lettuce produces medium-sized Boston-type heads with light green leaves, yellow-green at the base. Best grown as a spring lettuce. **#62505 Pkt. \$2.85**

EXTEND YOUR LETTUCE SEASON: Extend your harvest of spring lettuce into the early summer with this technique. Plant tall vegetables in north-south rows and plant heat-resistant lettuce underneath the leaf canopy so that it is shaded during the hottest portion of the day. Tomatoes with lower leaves removed, corn planted with rows 4 feet apart, or pole beans on a fence or trellis, are ideal for giving shade. Inter-planting of lettuce with bush squash also gives good results. Mulch the lettuce well because cool root temperatures prevent bolting. Keep well watered and enjoy!

MUSKMELON

Muskmelon: *Cucumis melo* var. *reticulatus*)



Muskmelons include the green-fleshed and orange-fleshed melons. We currently offer no true cantaloupes, often confused with muskmelons. **CULTURE:** Melons require a loose, warm, sandy loam of pH 7 to reach their full potential. They will not thrive on soil that is 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. The root system of melons should be disturbed as little as possible; therefore, start seed in pots, not flats. Sow 2 or 3 seeds per pot, 1/2" deep, and thin by cutting off at the base, not by pulling seedlings. Seeds germinate best at 85-90°F (29 to 32°C). During the seedling stage maintain soil temperature at 75°F (24°C) or above, and keep the soil moist but not soggy. Harden the young plants before transplanting and do not set out into the garden until the soil is warm. Space plants approximately 18" apart. Direct seeding: Once the soil temperature averages 70°F (21°C) sow seeds 1/2 to 3/4" deep. **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, and an ivory-yellow coloring. **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:** One of the most difficult problems in growing melons is controlling or preventing disease. This 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:** Control of cucumber beetles may be necessary to prevent the beetles from introducing bacterial wilt. Control cucumber beetles with an Amaranth trap crop. **SOLAR 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 (about 50 to 90 seeds, depending on variety) sows 50".


☀️ **DELICIOUS 51:** (Salmon-orange flesh) 77 days. [Developed by Dr. Munger at Cornell as an early strain of *Bender's Surprise*] Tolerant to fusarium wilt (race 1). Fruits are round-oval, about 6 to 7" in diameter, weigh 3 to 4 lbs, and are medium to lightly netted with medium ribs. Pick on full slip. A flavorful and productive variety for the home garden. **#52101 Pkt. \$2.35**


🕒 **ORGANIC** **EDEN GEM (ROCKY FORD):** (Green flesh) 89 days. [Introduced 1881. Derived from *Netted Gem* which came from a chance seedling of *Nutmeg*] *Rocky Ford* is well known for its fine-grained texture and sweet-flavored green flesh. Fruits average 5-1/2" X 5" in diameter, weigh 2 to 3 lbs, are heavily netted and slightly ribbed. Highly resistant to rust, holds well, and is suited for garden or market. **#52109 Pkt. \$2.50; #52109E (28g) \$5.50**


☀️ **EDISTO 47:** (Salmon-orange flesh) 88 days. [Introduced 1965 by Clemson/AES.] One of the more disease-resistant varieties available. 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. Recommended where disease is a problem. Rind is heavily netted and well ribbed. Fruits are round-oval, about 6 to 7" in diameter. Keeps well. Pick on full slip. **#52102 Pkt. \$2.35**


MUSKMELON, OKRA

GOLDEN JENNY: 85 days. [Developed by SESE grower Merlyn Niedens. Introduced 1997.] Retains many of the characteristics of *Jenny Lind* but is more vigorous, compact, productive, and fruits have better insect resistance. Merlyn's *Golden Jenny* produced over 40 fruits from just two hills in one of his gardens in Illinois. Fruits weigh up to 3/4 pound and have a sweet orange flesh. **#52105 Pkt. (2g) \$2.35**

 **HALES BEST:** (Salmon-orange flesh) 86 days. [Introduced in 1924 and improved in 1936.] Produces 4 to 5 lb. fruits measuring 5-1/2 x 7". Fruits are heavily netted and lightly ribbed. Drought-resistant variety with sweet flavor. Resists powdery mildew. **#52104 Pkt. \$2.35**

 **ICE CREAM MELON (Green Machine):** 79 days. [Introduced 1998.] Because of its high productivity, this green-fleshed melon was dubbed *Green Machine* by SESE grower and seed developer, Merlyn Niedens. *Green Machine* was developed from a cross of *Jenny Lind* and *Kansas* and the progeny were selected for green-fleshed melons with productive compact vines and sweet-fleshed fruit. Fruits weigh up to 2 lbs. In 2003, Merlyn renamed this variety *Ice Cream Melon* because the fruits make a perfect bowl for a scoop of ice cream. After trying them and eating them this way, we agree! **#52113 Pkt. \$2.60**

 **KANSAS:** (Orange flesh) 90 days. An heirloom muskmelon with excellent flavor. The ridged, oval-shaped fruits are moderately netted, average 4 lbs., and ripen close to the rind. Outstanding features of this variety are flavor, fine texture, and hardiness. Has good resistance to sap beetles that destroy fruit of other varieties. **#52106 Pkt. \$2.50**

 **OLD TIME TENNESSEE:** (Salmon flesh) 95 days. Large fruits, averaging 12 lbs. are elliptical in shape, ranging up to 12 to 16" long. Must be harvested exactly at peak ripeness and not a good keeper, but flavor is outstanding. Some gardeners say there is no better melon for flavor if you harvest at the right time. One gardener reports that the melons are so fragrant he can find them in the dark! **#52107 Pkt. (1g) \$2.85**

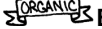



SLEEPING BEAUTY: 85 days. [Developed by SESE grower Merlyn Niedens. Introduced 1997.] Sweet yellow-orange fruit on compact vines. Excellent choice for small garden areas. The name *Sleeping Beauty* refers to the tendency of the fruits to nestle together in groups in the compact vines. Ripe fruits (1/2 lb.) are smooth and round with a light green color before ripening. **#52112 Pkt. \$2.35**


OKRA


(*Abelmoschus esculentus*)

CULTURE: Okra originated in northeast Africa and reportedly grows wild in the upper watershed of the Nile. It was brought to the U.S. in the late 1660's by way of the slave trade or via Europe where it may have been cultivated. The word okra is derived from "nkru" in the Ashanti language of West Africa. The word gumbo is derived from "ngombo" from the Bantu language of southern Africa. **FOLK USES:** The dried pods of okra have been 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 used to make rough cloth or cordage. The raw pods of okra can be applied to the forehead or nose to make a quick Halloween mask. **CULTURE:** Okra does best on a fertile, loamy soil with lots of added humus. An excess of nitrogen will favor leaf production at the expense of pod production. Start seed in pots 4 weeks before transplanting outside, or plant directly in the garden once the soil temperature averages 65°F (18°C). Sow seed 3/4" to 1" deep and thin to 12 to 18" depending on variety size. May be direct-seeded from late May to mid-July. Okra seed may be slow to germinate. To speed germination, soak seed overnight in water, or abrade the seed lightly with sandpaper to break down the hard seed coat. **PEST NOTES:** Old varieties of okra tend to have deeper root systems and are more tolerant of root-knot nematode. **HARVEST:** Harvest only immature pods, when 2 to 3" long. **SEED SAVERS:** Isolate varieties by 1/8 mile for home use, or 1/4 to 1/2 mile or greater for pure seed. **PACKET:** 5 g (about 80 to 108 seeds, depending on variety) sows 42 to 65'.


 **BURGUNDY:** 49 days. [Introduced 1988. AAS winner.] Stems, leaf veins, and pods are deep red-maroon in color. Plants average 4' high, bearing narrow 5/8" spineless pods that remain tender nearly to their mature length of 7-1/2". Other red okras bear longer and handle disease better but *Burgundy* is earlier, attractive, and of fine quality. **#69101 Pkt. \$2.10**

 **BURMESE:** 58 days. [Heirloom okra from Burma sent by organic market grower Hap Heilman. Now a favorite in some local restaurants.] *Burmese* okra bears when plants are 18" tall and continues to bear until frost. The leaves are huge, typically 16" across. The slightly curved, virtually spineless pods range from 9 to 12" long. Pods mature from light green to creamy yellow-green. At 10" inches long, they are tender, sweet, and spineless enough to be eaten raw or added to salads. Pods are less goey than other okra, a quality that gives this variety a greater appeal. **#69109 Pkt. \$3.95**

 **CAJUN JEWEL:** 53 days. [Introduced 1989 by SESE. A local favorite in Cajun country since the 1950's.] Dwarf-type, spineless plants, 3 to 4' tall, produce an early crop of tender 1"-diameter pods up to 7" long. Good flavor. **#69102 Pkt. \$2.85; #69102E (28g) \$5.50**


 **CLEMSON SPINELESS:** 56 days. [Introduced 1939 by Clemson/SC. AAS winner.] Plants with few side-branches reach a height of 4 to 5' and produce medium-sized, ribbed pods (1-1/4 x 8"). Harvest when pods are 3" or smaller. Spineless characteristic makes this popular variety easy to pick. **#69103 Pkt. \$2.15**



OKRA, ONIONS

 **COW HORN:** 55 days. [Pre-1865 heirloom.] A heavy yielder of 8 to 14" pods on plants that may reach 7 to 8 feet tall. Although the large pods remain spineless and tender up to 10", the best quality pods are picked when 5 to 6" long. This is a heavy yielder with many side branches, and it can be depended upon to make a superb crop. An impressive plant. **#69110 Pkt. \$2.45; #69110E (28g) \$5.50**

EVERTENDER: 50 days. This unbranched, spineless variety from India averages 5-1/2' tall and produces mature pods to 7" long. *Evertender* has good eating quality similar to, if not better than, *Clemson Spineless*. Easy to harvest, and pods remain tender for long period. **#69104 Pkt. \$3.50**


  **HILL COUNTRY HEIRLOOM RED:** 70 days. (Texas Heirloom) Very colorful red and green 4' plants produce abundant 3" green pods with reddish tips and ribs and great flavor. Hill Country is drought tolerant and produces exceptionally well when picked small, perfect for pickled okra. **#69111 Pkt. (5g) \$2.85**



 **JADE:** 55 days. [Developed by Univ. of Arkansas and released for introduction to SESE in 1991.] *Jade* is an early maturing, tender-podded, high-yielding okra. Compared to *Clemson Spineless*, *Jade* has darker green pods, fewer side branches, higher average yields, and better ability to mature in late plantings. Plants average 4-1/2' tall and the straight, dark-green pods remain tender to 6". Recommended especially for home gardens, farmer's markets, and late plantings. **#69106 Pkt. \$2.85**


  **STAR OF DAVID:** 61 days. [Introduced 1987 by SESE. Initial seed courtesy of Carol D. Gibbs, which he maintained since 1957; also known as Old Fashioned Okra] This variety has a distinctive strong flavor and is recommended for okra lovers who would like to try something different. Stalks may grow 8 to 10 feet with few side branches. Pods left to mature average 6" in length (range 5 to 9") and 1-1/4 to 1-1/2" diameter with medium spines. Purple coloration on top of leaf petioles and major leaf veins. Harvest pods when small and keep well picked. Highly productive throughout the season and tolerant of root-knot nematode. **#69108 Pkt. \$3.65**

BUNCHING ONIONS (SEED)

Bunching onions are perennial onions which divide at ground level in the same manner as multiplier onions. Unlike multiplier 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 bulb onions from seed. 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 gm (about 450 seeds) sows 25'.

 **DEEP PURPLE:** 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. \$2.50**

  **EVERGREEN HARDY WHITE:** 60 days. This hardy white bunching onion is highly resistant to freezing and may be left in the ground year-round. Has resistance to thrips, smut, and pink root. This is a first-class perennial onion which needs only occasional division of clumps once established. **#66501 Pkt. \$2.10**



 **WHITE SPEAR:** 60 days. This is the largest, most attractive variety of bunching onion. Produces thick white, cylindrical stalks 5 to 6" long, topped by 6" of blue-green leaves. Less winter-hardy than *Evergreen*, though perennial as far north as USDA zones 4 to 5. **#66502 Pkt. \$1.99**

PREVENTATIVE MEDICINAL EFFECTS OF ONIONS:


Onions are a rich source of quercetin, a natural substance which suppresses the proliferation of some types of malignant cells. Red and yellow varieties of onion may contain up to 10% of their dry weight as quercetin and enthusiastic onion eaters have a lower rate for certain types of cancers. White varieties of onion contain little or no quercetin.


DRY BULB ONIONS (SEED)


CULTURE: Onions require a light, fertile, well-drained soil with lots of organic matter. Maintain soil pH in range of 6 to 7. Soil that is too acid or alkaline will cause slow growth and late maturity. Sow seeds in the spring as soon as the soil can be worked. Sow 1/4" deep, 1 to 2 seeds per inch, in rows 12 to 16" apart. Thin to 3 or 4" apart depending on the bulb size of the variety. Onions are heavy feeders requiring an abundance of 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 two 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, 1/4" deep in flats in mid-February through mid-March and transplant outdoors 4" apart. Do not prune the tops because the harvest will be significantly decreased. **HARVEST:** When most of the tops have fallen over, pull onions, cure in partial shade for 2 to 3 weeks until necks have thoroughly dried. Clip tops to within 1" 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:** Varieties are designated as LD or SD. LD types begin to form bulbs when day length is longer than 15 to 16 hours. Plant LD types in the spring from Virginia northward. SD types begin to form bulbs when day lengths are longer than 11 or 12 hours. SD types are spring or fall-planted in Virginia, and fall-planted in the South. **SEED SAVERS:** Isolate varieties by a minimum of 150'. For pure seed, cage plants or isolate by 1/4 to 1/2 mile. **PACKET:** Open-pollinated varieties, 3 g (about 700 seeds) sows 50' direct seeded or 245' as transplants. Hybrids, 1 g (about 225 seeds) sows 15' direct seeded or 75' as transplants.

  **EARLY YELLOW GLOBE:** (long day) 100 days. [Introduced about 1930.] An early-maturing, medium-sized (2-1/2 to 3") light-yellow onion of medium firmness, and flattened globe shape. *Early Yellow Globe* is mildly pungent, and suitable for winter storage and cooking. Resists pink root. For Mid-Atlantic and North. **#66101 Pkt. \$1.99**

ONIONS, SHALLOTS

 **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. (1g) \$2.55**

 **YELLOW SWEET SPANISH:** (long day) 110 days. Large, dark yellow, globe-shaped bulbs. Flesh is creamy-white and mild-flavored. Thick necks should dry well before harvest. Use for bunching when young. Tolerates mildew and thrips. **#66103 Pkt. \$1.99**

 **YELLOW EBENEZER (JAPANESE):** (long day) 100 days. [Introduced 1906 from Japan.] Early-maturing, medium-sized (2-1/2 to 3" diameter), yellow onions of medium-pungent flavor and good keeping quality. Bulbs are slightly flat-ended with brown bulb scales and yellow-white flesh. Good variety for sets. For Mid-Atlantic and North. **#66102 Pkt. \$2.30**

MULTIPLIER ONIONS: POTATO ONIONS AND SHALLOTS

(Allium cepa var. aggregatum)



ORDERING AND SHIPPING INFORMATION for MULTIPLIER and TOPSET ONIONS:

Be sure to read the ordering and shipping information on page 70 before you place your bulb order.


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.

  **EGYPTIAN WALKING ONIONS (Tree Onions):**



Supplied by SESE grower Greg Wingate in Weldon, Canada. 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 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: (1 oz) \$7.50**

  **JAPANESE MULTIPLIER ONION:** Supplied by SESE grower Tim Miller in Kyle, TX. A yellow-skinned bulb. Transplanted in early fall, this variety will produce 8-20 green onion stalks. If left in the ground until summer, they will die back and sprout naturally in the fall. Grown by Tim Miller for sale at Whole Foods Market.

#66602 STARTER PACKAGE: (1/4 lb) \$8.00

 **YELLOW POTATO ONION (YELLOW MULTIPLIER, HILL ONION, MOTHER ONION, PREGNANT ONION):** [A 1982 SESE reintroduction of an heirloom strain dating prior to 1790.] Produces onions up to 4" in diameter under good conditions, and 3" 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 to 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: (12 oz) \$10.00


  **WHITE MULTIPLIER ONION:** Supplied by SESE grower Tim Miller in Kyle, TX. A white-skinned bulb the size of a thumb that will produce 6-14 green onion sprouts. Larger than the Japanese multiplier. Will sprout naturally in the fall. **#66603 STARTER PACKAGE: (1/4 lb) \$8.00**

MULTIPLIER ONION STARTER PACKAGES: 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. The guide may be purchased separately for \$1.25.

SHALLOTS

(Allium cepa var. aggregatum)

Shallots are planted and harvested in essentially the same manner as potato onions. (See description for Multiplier 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:** These shallots have reddish-pink bulb scales and a pale, purple-pink flesh. The size of mature bulbs ranges from 1 to 2" in diameter. Note: This should not 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: (12 oz) \$10.00;**
#66701A (24 oz) \$17.20

GARDEN PACKAGES

FALL MESCLUN MIX



This mix is specially selected for both fall and winter harvest. Includes one packet of *Parris Island Cos Lettuce, Deer Tongue Lettuce, Red Deer Tongue Lettuce, Speckled Bibb Lettuce, Salad Bowl Lettuce, Tatsoi, Mizuna Mustard, Bloomsdale Spinach, and Dandy Red Chicory.*
#92003 \$17.00; #92003A (includes Reemay Blanket) \$34.00

EDIBLE WINTER COVER CROP MIX

Try planting this beautiful cover crop in August to build organic matter and provide healthy meals all winter long. If you are in the Central Atlantic region, cover with Reemay or cold-frame if winter harvest is your goal, otherwise the crop will die back and come back in early spring. Includes one packet of *Seven Top Turnip, Premier Kale, Red Russian Kale, Old Fashioned Ragged Edge Mustard, and Red Giant Mustard.*
#92005 \$7.50; #92005A (includes Reemay Blanket) \$24.50

SPRING MESCLUN MIX



A wonderful blend of spring salad greens. Includes one packet of *Winter Bloomsdale Spinach, Australian Yellow Lettuce, Deer Tongue Lettuce, Red Deer Tongue Lettuce, Speckled Bibb Lettuce, Bok Choi, and Mizuna Mustard.*
#92006 \$13.00

SUMMER MESCLUN MIX



These heat resistant greens should provide great salads all summer long. Includes one packet of *Tatsoi, Magenta Magic Orach, Parris Island Cos Lettuce, Buttercrunch Lettuce, Speckled Bibb Lettuce, Tatsoi, and Salad Bowl Lettuce.*
#92002 \$11.00

THREE SISTERS GARDEN PACKAGE



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 and make it directly available for the corn roots. This is important because corn needs a lot of nitrogen to grow well. The squash serves to provide a living mulch, suppressing weeds and keeping the hot summer sun from baking the earth dry.

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 heirloom corn, beans, and squash seeds to plant a 25 foot circular Three Sisters garden and our planting guide. **#92001 \$12.00**

PARSNIP

(Pastinaca sativa)

Parsnips were once a common vegetable at the dinner table and they deserve to come back in style. This hardy root vegetable develops a sweet, nut-like flavor after it has been heavily frosted. **CULTURE:** Sow seed in spring as soon as soil can be worked. Plant 1/2" deep in raised beds and thin to 4 to 6" each way, or plant in rows 18" apart with plants thinned to 4". Soil should be well drained and not too rich in nutrients. Seeds may take 3 weeks to germinate and soil must not dry out. Radishes may be used to prevent crusting and to mark the location. **HARVEST:** A heavy frost may be 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. **PREPARATION:** Boil, fry, or stir fry. **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:** 4 g (about 1690 seeds) sows 125'.

HOLLOW CROWN (SUGAR): 105 days. [A vintage variety grown throughout the country well before 1850.] In the 1800's parsnips were often used to make marmalade. Sometimes they were used to make wine. Wedge-shaped roots, 8 to 12" long, 2-3/4" at the shoulder. Excellent storage variety.
#38101 Pkt. \$1.99

PEAS

(Pisum sativum)

CULTURE: Peas are a fast-maturing cool-weather crop. In the Mid-Atlantic region spring-planted peas produce a better quality crop than fall-planted peas. Spring planting is also better because the vines are more resistant to freezing than are 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 to 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" deep, 2 to 3" apart in double rows, 4" apart. Single or double rows should be planted 2' apart for dwarf varieties and 2-1/2 to 3' 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 five-year rotation. **SEED SAVERS:** Isolate varieties by a minimum of 50' for home use. For pure seed isolate by 150'. **PACKET:** 2 oz or 57 g (about 250 seeds, but may range from 180 to 440 seeds, depending on variety) sows 25 to 40'.

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 Chinese and other Asian dishes. For best quality, pods should be harvested at least twice a week.


MAMMOTH MELTING SUGAR: 70 Days. Wilt-resistant vines grow to 5 ft. High-yielding peas have a sweet flavor. A 35-foot row can yield as much as a bushel. The creamy-white-seeded pods have an excellent flavor and hold their quality even when picked a little bit late. **#15301 Pkt. \$2.25; #15301F (1/4 lb) \$3.80; #15301G (1/2 lb) \$5.50; #15301H (1 lb) \$7.50**


PEAS

SNAP PEAS

This new 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 (though edible-podded peas can be found in old seed catalogs). Snap peas have many desirable qualities: excellent disease resistance, thick pods that snap like snap beans and remain sweet and tender when mature. Snap peas more than double the amount of food produced by a crop of peas. **CULTURE:** Same as other green peas. **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. To cook snap peas, steam or stir-fry about 3 minutes or until pods appear dark green or water-soaked. Snap peas freeze well, but should be thawed before heating, or eaten as is. Thawed snap peas are heated to serving temperature, but are not cooked. The major problem with snap peas is that they are so good that most of them are eaten in the garden, leaving few to bring to the kitchen table. **PACKET:** 2 oz or 57 g (about 250 seeds) sows 25 to 40'.


 **AMISH SNAP:** 62 Days. Tall vines have excellent quality and very sweet flavor. Vigorous vines yield many medium-sized deep-green pods. **#15502 Pkt. (28g) \$2.95; #15502N** (Special on remaining non-organic stock) **(57g) \$2.50**

 **SUGAR BON^{PVP}:** 56 days. The earliest, short-vined snap pea. Dwarf 18 to 24" plants produce an early crop of 2 to 3" pods on compact plants that need little or no support. A good choice for small gardens or for climates where hot weather comes early in the spring. Tolerant to Powdery Mildew. Use also as a fall crop. **#15504 Pkt. \$2.40; #15504F (1/4 lb) \$4.10; #15504G (1/2 lb) \$5.50; #15504H (1 lb) \$7.50**

 **SUGAR SNAP^{PVP}:** 70 days. [Introduced 1979. AAS winner.] Tall vines grow 6 to 8' and need support. Pods are about 3" long, and 1/2" in cross section. *Sugar Snap* is tolerant of pea wilt but not Powdery Mildew. Highly recommended. The best flavored of all the snap peas. **#15501 Pkt. \$2.25; #15501F (1/4 lb) \$3.75; #15501G (1/2 lb) \$5.75; #15501H (1 lb) \$7.50**


SOUTHERN PEAS (COWPEAS)


Southern peas, cowpeas, field peas: (*Vigna unguiculata*)
Black-eyed peas: (*Vigna unguiculata unguiculata*)

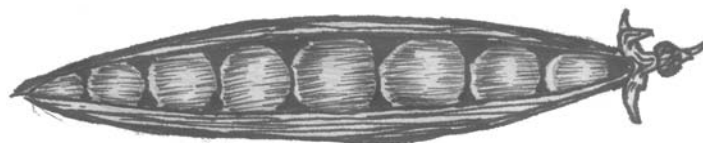
 **BIG RED RIPPER (MANDY):** 70 days. *Large number of peas per pod.* [Heirloom from Virginia and North Carolina.] A good-flavored table pea with 10" long pods containing as many as 18 large peas per pod! The reddish-green pods are borne high and are easy to see in the foliage. The vines are resistant to very hot, dry summers. Use green shelled or dry. Very popular with our Texas customers. **#16107 Seed Saver Packet™ (28g) \$2.25**


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 where both days and nights are warm for a period of 60 to 90 days. **CULTURE:** Sow seed 1" deep, 3" to 6" apart in rows 18 to 42" apart. Southern peas have cultural requirements similar to beans. They need full sun and a warm growing season. For best results provide a well-drained soil, with pH in the range of 5.5 to 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, and they are relatively free of insects and disease in our area. **HARVEST:** Harvest when seeds have filled the green pods, but before seeds have hardened.


PREPARATION AND USE: 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. **INSECT PESTS:** Weevils sometimes infest dried seed. To kill weevils, freeze thoroughly-dried seed for 24 hours. **SEED SAVERS:** Isolate from southern peas and asparagus beans by a minimum of 50' for home use. For pure seed isolate a minimum of 150'. **PACKET:** 2 oz or 57 g unless stated (about 285 to 500 seeds, depending on variety) sows 60 to 100'.


 **CALICO CROWDER (HEREFORD PEA, POLECAT PEA):** *Excellent flavor.* 79 days. One of the more flavorful southern peas, and one of our favorites. Dried peas are buff-colored with maroon splashes, especially around the eye. Recommended for the Mid-Atlantic from Virginia southward and westward (south of latitude 39°). **#16101 Pkt. (14g) \$2.25**

 **MISSISSIPPI SILVER:** 64 days. *Widely adapted.* [Developed by the Mississippi/AES.] Widely adapted and an excellent performer in hot humid climates, especially the Mid-Atlantic and South. Does well in northern areas with longer seasons. Pods average 6-1/2" long, and are silver-colored, occasionally streaked with rose. Easy to shell. **#16102 Pkt. \$2.25; #16102F (1/4 lb) \$3.75; #16102G (1/2 lb) \$5.75**



 **QUEEN ANN BLACK EYE PEA:** 68 days. *compact plants.* [Developed by the Virginia/AES.] *Queen Anne* is a very dependable and heavy producer. Yields 8 to 12 seeds per 7 to 9" pod. Plants are compact, 26" tall with no runners. Highly recommended for green shell or dry use, freezing, or canning. Can be grown in most northern states. **#16103 Pkt. \$2.25**

 **PINKEYE PURPLE HULL:** 65 days. An early, heavy yielding, semi-bush variety with good disease resistance. Can be double-cropped in the Mid-Atlantic and South. Pods contain elongated white peas with purple or pink eyes. Use for canning, freezing, or fresh eating. **#16108 Seed Saver Packet (28g) \$2.25**

 **WHITE ACRE:** 62 days. This Mid Atlantic heirloom southern pea has a vigorous growth habit and superior flavor. The dense compact plants yield heavy crops of peas. Their

PEAS, PEANUTS, PEPPERS

quick early growth habit and dense foliage eliminates much of the need for weeding. The peas themselves are small compared to other southern peas. Average 18-25 peas per pod.


#16109 Seed Saver Packet (12g) \$2.25

WRINKLE-SEEDED (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.

 **LITTLE MARVEL (IMPROVED AMERICAN WONDER):**

62 days. [Introduced 1908.] Dwarf, 16" vines produce double-borne pods, each 3-1/2" pod containing 6 to 7 peas per pod. Resistant to fusarium wilt. An old dependable variety. **#15201 Pkt. \$2.35; #15201F (1/4 lb) \$3.90; #15201G (1/2 lb) \$5.75**


 **WANDO:** 68 days. [Introduced 1943 by the SC Veg. Breeding Lab from a cross of *Laxton's Progress* and *Perfection*] *Wando* has been a consistently popular variety since its' introduction. It is heat- and cold-resistant and is the most productive pea for late sowings where heat is a problem. Recommended especially for southern and coastal regions. Vines are 24 to 30" tall, bearing 3-1/2" pods filled with 7 to 8 dark-green, medium-sized peas. Use fresh or frozen. **#15202 Pkt. \$2.15; #15202F (1/4 lb) \$3.75; #15202G (1/2 lb) \$5.55**



PEANUTS


(*Arachis hypogaea*)

HISTORY: Originally from Brazil, peanuts were brought to France and Africa, and then later introduced into the U.S. during the 1700's. The first commercial growth of peanuts occurred near Wilmington, NC about 1800.

CULTURE: Shell out the nuts and sow 2" deep and 10 to 12" apart in rows 30 to 36" apart. If planting in hills, plant 3 nuts per hill, 10 to 12" apart in hills 2 to 3' apart. Loose, well-drained soil is important for good germination, and a soil pH of 5 to 6 will give the best results. Plant about the time of the last frost. Peanuts require 120 to 140 days of hot weather and ample rainfall to yield a good crop. When plants are 12" high, hill them up with loose soil as you would with potatoes, and mulch between the rows. **HARVEST:** Harvest in mid to late October or after a light frost. Wash and sun-dry for 3 days and cure indoors for 2 to 3 weeks before storing. **PACKET:** Peanuts are sold in the shell. See variety descriptions for packet weights.

 **VIRGINIA JUMBO:** 120 days. Fast-growing variety that produces large, rich-flavored nuts, 2 to 3 per shell. Prefers loose, sandy soil. **#17102 Pkt. (28g, sows 25') \$3.35**
Cannot ship to CA or Canada.

  **CARWILE'S VIRGINIA:** 130 days. [Introduced 1989 by SESE.] Family heirloom from southwest 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. Pods contain 2 to 4 nuts per pod. Plants have average disease resistance but excellent resistance to drought. Seed is rare and not offered every year. **#17101 Pkt. (14g, sows 10') \$4.45**
Cannot ship to CA or Canada.


 **CAROLINA BLACK:** 110 days. A rare heirloom black-skinned peanut from North Carolina. Introduced in 1999 by SESE from seed sent by Derek Morris. One of the varieties grown during the 1800's was the *African* peanut (also known as the *North Carolina* peanut). It may have been a black peanut, possibly the same as the variety we call *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 North Carolina climate won't support black Bambarra, but the black peanut will grow there without difficulty. *Carolina Black* produces sweet-tasting, black-skinned peanuts that are slightly larger than Spanish peanuts. Averages two peanuts per shell.

#17103 Pkt. (14g, sows 10') \$4.95 **Cannot ship to CA or Canada**

  **TENNESSEE RED VALENCIA PEANUT (Valencia**

Tennessee Red): 110 days. One of the finest large varieties, each shell contains 2 to 5 red-skinned peanuts. Mild, sweet flavor. Extremely productive. Pre-1930 heirloom variety. Rich, sweet, red-coated kernels. Easy to grow in different types of soils. An early variety for those who have trouble maturing Virginia-type peanuts. **#17104 Pkt. (10g) \$4.95** **Cannot ship to CA or Canada.**

 **NEW! WHOPPER:** 120 days. [This variety was originally found as a sport (spontaneous mutation) in a peanut field, and was briefly available for purchase about 40 years ago. Since that time it has been preserved by seed savers.] Another winner from grower Merlyn Niedens. Remarkably large—they make Virginia Jumbo look average!—and tasty peanuts coming 2 to 3 per shell. The seeds were provided by a northern seed saver who thought they deserved preserving by gardeners in a more hospitable climate. We think you'll agree!


#17105 Pkt. (28g) \$4.95


PEPPERS

(*Capsicum annuum*, *Capsicum chinense*, and *Capsicum baccatum*)

See cultural notes next page


HOT PEPPERS


 **AMMAZZO (JOE'S ROUND)** 65 days (green) to 90 days (ripe) (green>red) [Seed sent by Dr. Carolyn Male. Original seed from Italy.] Small Italian cherry peppers called *Ammazzo* that translates as "nosegay" or "small bunch of flowers". An unusual, tall, ornamental hot pepper with an attractive growth habit. Individual fruits measure 1/2" high x 3/4" wide and are borne in clusters of 8 to 15. The clusters of fruit resemble red marbles in a green bowl. **#46514 Pkt. (0.5g) \$2.75**

 **ANAHEIM CHILI:** 77 days. (green > deep red) A versatile medium-hot pepper used fresh, canned, fried, or dried. Pendant fruits are borne abundantly on productive, vigorous plants. **#46501 Pkt. (0.5g) \$2.10**


PEPPERS


CULTURE: Sow seeds 8 to 10 weeks before the last frost date for your area. Plant seeds 1/4 inch deep in well-drained soil in shallow flats. Maintain soil temperature at least 75°-85°F (24°-29°C) for good germination. Germination of pepper seed can take 2 to 3 weeks, or sometimes even 4 weeks depending on variety and soil temperature. Wet and cool conditions will cause poor germination and damping off. Transplant to 3" pots as soon as several leaves have developed. Maintain day temperature 75°-80°F (24-27°C), and night temperature at least 65°F (18°C). Water plants with warm water. Transplant again to 5-inch pots if the seedlings become too large. Peppers need to have an uncrowded root system, otherwise 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 (18°C) or above. Space plants 18" apart in rows or blocks. Wait to mulch peppers until July 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 (27°C) or below 65°F (18°C). 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 may be necessary to prevent large-fruited varieties from falling over. **FLAVOR:** Peppers are fully ripe when orange or red. Although all peppers may be eaten in the green stage, ripening to red or orange increases flavor and nearly doubles the vitamin C content. **EXTENDED HARVEST:** 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. Mosaic 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 that have sparse foliage. Blossom-end rot is less common in peppers than tomatoes, 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 sweet varieties by 150', and hot and sweet varieties by 300'. **NOTE:** Days to maturity are days after transplanting. **PACKET:** 0.5 g (about 60 to 100 seeds, depending on variety) sows 35 to 100' of transplants. **SEEDS/OZ:** 3,500 to 5,000 depending on variety.


 **AURORA:** 75 days. (green > lavender > orange > red) *This beautiful and well-named pepper was a standout beauty in a large trial of hot peppers.* Small upright peppers rise above the foliage of compact 18" plants giving a colorful display. The bright color of the ripening fruits is a sight to behold. Use it for borders or a very hot and very colorful pepper vinegar. Fruits measure 3/4" x 1-1/2". **#46502 Pkt. (0.25g) \$2.75**



 **BELLINGRATH GARDENS PURPLE:** 85 days. (purple > red) [Introduced 1995 by SESE. Original seed sent by Carolyn Male.] A strikingly beautiful, ornamental hot pepper plant. Leaves and stems are purple-green with a satin sheen. Young foliage and growing tips are variegated with colors of green, purple, and creamy white. Leaves are small (1" to 2-1/2" long), and the undersides are green with purple venation. Plants are sturdy, hardy, and well branched, and may reach a height of 5 feet when well grown. Flowers are purple with greenish-purple stamens. The pendant fruits ripen from greenish-purple to purple-orange to red, and provide a colorful accent to the purple



foliage. Fruits are small (3/8" x 7/8"), abundant, and hot, and because they separate readily from the plant they are easy to harvest. Compared to *Royal Black*, *Bellingrath Gardens Purple* is more variegated. Recommended enthusiastically for ornamental gardens, colorful hot pepper vinegars, and spicy cuisine. **#46503 Pkt. (0.25g) \$2.75**



 **CAYENNE, LONG RED:** 72 days. [Introduced before 1827.] A choice, fiery-red hot seasoning pepper. Use fresh or dried, especially in salsa or chili. Pendant fruits are 3/4" wide by 5 to 6" long. **#46504 Pkt. (0.5g) \$2.10; #46504B (3g) \$5.50**


 **CHILE LOMBAK:** 90 days. (green > orange > red) (*C. annuum*) [Heirloom from a food market in Lombok, Indonesia.] An excellent hot drying pepper with a great taste and rich color. Fruits measure 1" at the shoulder and taper to 5 to 6" long. The lower third of the fruit is without heat and may be eaten like a sweet pepper. The best of our dried pepper trials. **#46515 Pkt. (0.5g) \$2.75**

 **HABANERO:** (*Capsicum chinense*) 95 days. (green > orange-red) *Very hot.* [Cultivated in the Yucatan, Trinidad, and West Indies.] A very aromatic, flavorful, powerful pepper used in Caribbean curries and jerk sauces. Slow germinating and requires a warm growing season. **#46506 Pkt. (0.25g) \$2.20**


  **CZECHOSLOVAKIAN BLACK:** 58 days. (green > black > red) [Heirloom from Czechoslovakia.] *Best combination of flavor, heat and color.* A highly ornamental and culinary hot pepper that combines the qualities of earliness, adaptability, flavor, and color. Has green foliage accented by purple veins and white-streaked lavender flowers. Pendant fruits (1 x 2-1/2") are blunt conical shape and are medium-hot when red. Plants are tall (3') with upright branches. Showy: red fruit at the base, purple black fruit at the top contrasts with purple green leaves. **#46505 Pkt. (0.5g) \$2.85**

  **HUNGARIAN WAX (HOT BANANA):** 60 days. (pale green > yellow > crimson red) Long, banana-shaped, medium-hot, spicy peppers, 6 to 7" long x 1-1/2" at the shoulder. *Hungarian Wax* is a very reliable and productive variety adapted to the cool North as well as the deep South. Use fresh, canned, or with pickles. **#46507 Pkt. (0.5g) \$2.20**


  **JALAPENO:** 72 days. (green > red) This small, thick-walled pepper has excellent flavor and is used as a seasoning. Best harvested in the mature green stage before turning red. A teaspoon of *Jalapeno* vinegar makes an excellent seasoning for bean soups. Use also for salads in a vinegar and oil dressing. **#46508 Pkt. (0.5g) \$1.99; #46508B (3g) \$5.50**



 **LOUISIANA HOTS:** 69 days. (yellow green > scarlet red > deep red) [Southern heirloom.] *Productive.* Deep red, conical fruits (1-1/2 x 3") are borne upright against a background of contrasting green foliage. Easy to harvest. Flavorful and hot. **#46509 Pkt. (0.5g) \$2.65**

PEPPERS

 **PRETTY HOT PURPLE:** (green > lavender > red) *Ornamental and flavorful.* Fruits are 1-1/2" long by 3/4" diameter on 24" tall plants. Foliage, stems, flowers, and fruit have attractive purple coloration. Harvest the purple and red fruits to make a colorful hot pepper vinegar or hot pickles.

#46510 Pkt. (0.25g) \$2.75

 **SERRANO:** 75 days. (glossy green > orange > red-orange) Attractive 30" plants with pendant, thin-walled fruit (2" x 1/2"). This flavorful pepper is ideal for chili sauce, salsa, hot pepper vinegar, and for pickling. Very hot weather green or red. Dries easily. **#46512 Pkt. (0.25g) \$2.10**




  **ROYAL BLACK:** 88 days. (purple > red with purple-black stripes) *Tasty, hot, and elegant.* [Introduced in 1995 by SESE. Original seed sent by Carolyn Male.] *Royal Black* makes a beautiful backdrop for a bed of flowers. For culinary use, the red fruits make a convincing and long lasting impression on the palate—definitely on the dark side of the force! We use the fruits (both purple and red) for colorful hot vinegars. The foliage and stems are dark-purple, almost black with an occasional variegated growing tip of green, purple, and creamy white. The undersides of the leaves are green with purple venation. The red fruits add a further accent, appearing like crown jewels on a botanical tapestry of deep purple. Bullet-shaped fruits measuring 1/2" wide by 1-1/4" high, are borne upright on 3-foot well-branched plants. Foliage has an Asian quality.

#46511 Pkt. (0.25g) \$2.95


HOT PEPPER VINEGAR RECIPE:

Hot pepper vinegars make excellent seasonings for stews and soups. Each variety of hot pepper adds a unique flavor. Add 1 to 2 cups of hot peppers to one quart of cider vinegar. Age for approximately one month and pour off the vinegar.

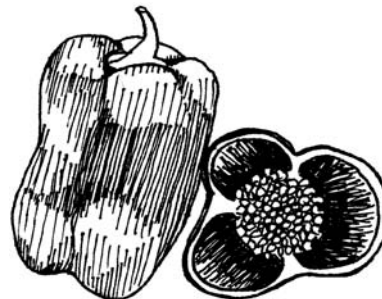
SPICE PEPPERS

   **AJI DULCE:** 111 days. (green > orange-red > red) (*C. chinense*) [Heirloom from Venezuela. Seed source from Donna Hudson in Tennessee.] *For those who like the flavor and aroma of Habanero peppers but find them too hot.* *Aji Dulce* has the same shape, size, color and aroma of *Habanero*, but is sweet, spicy, and delicious, with only a trace of heat. The fruits are highly aromatic and the flavor is unusual and complex, with overtones of black pepper and coriander, and undertones of other spicy flavors. *Aji Dulce* is an excellent choice for sautéed vegetables, rice and bean dishes, paprika, or herbal vinegars. The thin-walled pendant fruits are 2" long and 1" wide, tapering at both the stem and blossom end.


Plants have good foliage cover and bear at 18" high. Seedlings are slow growing at first, but grow rapidly later in the season. **#46601 Pkt. \$2.50**

 **HUNGARIAN PAPRIKA:** 70 days. (green > red) Our seed stock of this variety originally came from Hungary, where the paprika pepper has been developed to its finest quality. This strain has excellent color and sweet, spicy flavor. Plants average

18" high, producing an abundance of peppers averaging 1 x 5". Though the fruit shows some susceptibility to sunscald and blossom-end rot, it is otherwise an excellent variety. The sweet, very dry flesh is ideal for drying. Grind dried fruits for a superb paprika seasoning. **#46117 Pkt. \$2.70**






SWEET PEPPERS CHOCOLATE BELL PEPPERS

 **SWEET CHOCOLATE (CHOCO):** 86 days. (green > chocolate brown) *Very Sweet flavor.* Fruits are medium sized, shiny, blocky-shaped chocolate-cherry-colored bells, 3 or 4




lobed. Adds an unusual color to salads. Has no "grassy" or "green" taste typical of peppers if harvested in the green stage. Unusual dark maroon interior fruit color. Extremely productive and disease resistant, this one of the easiest medium sweet bells to grow to full ripeness. This is our favorite sweet pepper.


#46103 Pkt. \$2.85

SWEET PEPPERS FOR DRYING


   **JIMMY NARDELLO'S ITALIAN:** 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 should have offered it years ago! This variety is one of the more productive, disease-resistant, and most widely adapted heirloom sweet peppers we have grown. It does well in the North as well as the deep South. The fruits are multi-dimensionally sweet and intensely flavored. *Jimmy Nardello's Italian* is a multi-use heirloom banana-shaped pepper excellent for drying, frying, freezing, relishes, or salad use. Fruits are long, tapering, thin-walled, and slightly curved, 3/4" to 1-1/4" at the shoulder and 5 to 8" long. **#46122 Pkt. \$2.75; #46122B (3g) \$5.50**


EARLY SEASON BELLS & PEPPERS FOR STIR FRY

   **DOE HILL GOLDEN BELL:** Produces small bell peppers before the larger ones come into season. (green > orange) [Pre-1900 family heirloom from the Doe Hill area in Highland county, VA] It produces 4 to 6-lobed bright orange, flat shaped bells, 2-1/4" high and 1" wide. The 24" plants are high yielding, are widely adapted and disease resistant. The flavor is sweet with a fruity, multidimensional quality. A nice salad pepper for adding color, zip and extra vitamin C to early summer salads. **#46126 Pkt. \$1.99**

 **GAMBO:** *Best variety for stir-fry.* 62 days. (green > red) *Gambo* excels as a frying or stuffing pepper. Very thick, meaty flesh holds up well and sweetens during cooking. Our favorite for sweet, stir-fried peppers, this variety is a flattened bell, 3 to 3-1/2" in diameter and 1-1/2 to 2" deep with rich, deep-red color. **#46116 Pkt. \$2.75**



EXTRA-EARLY SWEET PEPPERS


 **EARLY HUNGARIAN SWEET ('TH 122')**: Recommended for northern gardens and early yields. 55 days for creamy white fruits. 75 days for red fruit. [Seed from Dr. Terry Berke at the Asian Vegetable Research Center. Introduced by SESE in 1999.] An extra-early large wax, Hungarian sweet pepper. Very similar to *Feherozon* except that plants are taller 14 to 18", and fruits are slightly longer (2-1/2" x 4"). #46125 Pkt. \$3.60

 **FEHEROZON**: Excellent variety for container gardens, early crops, and northern gardens. 55 days for creamy white fruits. 75 days for red fruit. [Seed from Dr. Terry Berke at the Asian Vegetable Research Center. Introduced by SESE in 1999.] An extra-early, large wax, Hungarian sweet pepper with compact growth and concentrated fruit set. Dwarf determinate plants are only 12 to 15" tall, yet produce an early yield of 7 fruits per plant on the first harvest. Fruits have a pointed bell shape and ripen from creamy white to orange to red. The thick-walled fruits measure 2-1/2" wide x 3-1/2" long. #46124 Pkt. \$2.65


NEMATODE-RESISTANT SWEET RED BELL PEPPERS

The first nematode-resistant bell peppers were introduced by Southern Exposure Seed Exchange. 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 nematode problems. Previously they had to sterilize their soil or find alternative growing sites. The new nematode-resistant varieties now make it easy for organic growers and home gardeners to grow bell peppers. **Note:** Because these varieties may be in short supply, we reserve the right to accept orders only from customers in nematode-infested areas.


  **CAROLINA WONDER**: 75 days. The best nematode-resistant bell for home gardeners. (green > red) [Introduced by SESE in 1999.] The foliage, fruit, and yield of *Carolina Wonder* are very similar to *California Wonder*. This variety is also a potentially valuable line for developing other nematode-resistant bell peppers. It is also less prone to developing fungus in the seed cavity. Produces premium-grade fruits ripening from green to bright red. Typically 4-lobed, the fruits weigh 1/4 to 1/3 pound, 3" wide x 3.3" long. #46123 Pkt. (0.25g) \$3.50


 **CHARLESTON BELLE**: 67 days. (green > red) A gardening breakthrough: the first nematode-resistant bell pepper. [Introduced by SESE in 1998.] Plants have a compact growth habit and reach a height of 18". Fruits are virtually identical to *Keystone Resistant Giant*, weigh approximately 1/4 lb and measure 3-1/4" wide by 3" long. #46121 Pkt. (0.25g) \$2.95


SWEET NON-BELL PEPPERS


 **PERFECTION (TRUE HEART)**: 80 days. (green > crimson red) Flavorful thick flesh. A tall-growing pepper (30") which bears thick-walled, smooth-skinned, heart-shaped fruits (3" x 2-1/2") underneath open foliage. One of the more flavorful of

the sweet peppers. Use fresh or roasted, peeled, and canned. Especially well suited for salads, Spanish omelets, or eating out of hand like an apple. #46114 Pkt. \$2.15


 **RED CHERRY (CHERRY SWEET)**: 70 days. (green > red) [Introduced before 1860.] Shaped like bonbons, these little cherry peppers are a good size for lunch box treats, and they are great for pickling, canning, and stuffing. Bushy 20" plants bear dark crimson-red 1"x 1-1/2" fruits. #46112 Pkt. \$2.25



 **SUPER SHEPHERD**: 66 days. (green > red-brown > red) This Italian sweet pepper is our most productive and versatile variety. Produces an early yield of high quality, defect-free fruits. Flesh is thick, juicy, and is good fresh, fried, or pickled. Heavy foliage cover protects fruit from sunscald. Three to four lobed fruits average 3" wide at the shoulder to 5 to 7" long. Fruit set is concentrated at the base of the plant. #46119 Pkt. \$2.70



 **SWEET BANANA (LONG SWEET HUNGARIAN)**: 70 days. (pale green > yellow > orange > crimson red) Very dependable. [Introduced 1941.] Heavy yields of attractive, sweet peppers pointed in shape, 6" long, 1-1/2" wide. Eaten at any ripeness stage, but sweetest at the crimson stage. Great for colorful salads, frying, and freezing. A joy to grow because of its dependable high yields and ornamental value. Excellent choice for Mid-Atlantic region. #46111 Pkt. \$2.15

 **TEQUILA SUNRISE**: 77 days. (green > orange) Sweet and ornamental, the thick-fleshed fruits average 5" long x 1" wide and are borne upright on the plant. Use fresh in salads or cooked. Produces good yields of attractive peppers. #46115 Pkt. \$2.65

RED BELL PEPPERS


 **KEYSTONE RESISTANT GIANT**: 79 days. (green > red) A *California Wonder* type of pepper with large, blocky, pendant fruit (4" x 4-3/4"). Mosaic resistant. Heavy foliage reduces susceptibility to sunscald. Thick stems are breakage-resistant under heavy fruit load. Widely adapted and well suited to the Mid-Atlantic region. #46106 Pkt. \$2.25

  **BULL NOSE (LARGE SWEET SPANISH)**: 58 days. (green > scarlet red) [Introduced in 1759 from India. Prior to 1900 this variety was often stuffed with cabbage and pickled.] An early-maturing, uniform-ripening, bell pepper. An unusual characteristic of this variety is the 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 is very subtle or absent and may depend on growing conditions. Fruits are 4-lobed, measuring 3-1/2" x 4" long, borne on small, erect, prolific plants. #46101 Pkt. \$2.70


  **CALIFORNIA WONDER**: 75 days. (green > red) Widely adapted standard variety. [Introduced 1928.] A tobacco mosaic-resistant selection of *California Wonder* pepper, well-known, and preferred by many market growers and gardeners. A


PEPPERS, RADISHES, SALSIFY


smooth, blocky bell, mostly 4-lobed, with thick walls. Fruits average 6 oz., and measure 4" x 4-3/4". Foliage provides good cover for fruits. **#46102 Pkt. \$2.35; #46102B (3g) \$5.50**

 **WORLD BEATER (RUBY GIANT):** 72 days. (green > red) [Introduced before 1912.] Developed from a cross combining the size and production of *Chinese Giant* with the shape and color of *Ruby King*. Tall plants produce very large, blocky, non-tapering fruits averaging 5" in length and 3-1/2" in width. Fruit is thick-fleshed, and very sweet after turning from green to red. **#46108 Pkt. \$3.15**

YELLOW & ORANGE BELL PEPPERS

 **CORONA:** 68 days. (green > golden orange) *Tasty orange salad pepper*. Introduced 1991.] Fancy, flavorful, very sweet, bell pepper from Holland often featured in gourmet produce markets. Medium-sized fruits (3-1/2" across) are 3- to 4-lobed, averaging 6 to 7 oz each. Fruit stem separates easily from plant for trouble-free harvest. Choice variety for salad use, but not for frying or cooking. Good foliage cover of fruits. Mosaic resistant. **#46104 Pkt. \$4.50**

 **ORANGE BELL:** 100 days. (green > orange) [Seed from Dr. Craig LeHoullier in North Carolina.] Large, thick-walled, sweet bells. Though later-maturing and lower-yielding, the quality and flavor is the best of any orange bell we've grown. Fruits are large, blocky bells, 3-1/2" wide by 4" long. An outstanding variety. **#46120 Pkt. \$2.10**

 **GOLDEN CALWONDER:** 72 days. (green > gold) Widely adapted and similar to *California Wonder*. The thick-walled, golden ripe fruits average 4" across and 5" long. Does well in the Mid-Atlantic. **#46105 Pkt. \$2.35**

YELLOW BELLE: 65 days. (yellow > yellow-orange > crimson red) A *California Wonder* type of bell pepper, mostly four-lobed, thick flesh, borne erect on the plant. Heavy foliage, compact growth, and very attractive. In southern areas fully ripe peppers may develop fungus in the seed cavity during hot weather. This is a first class salad pepper, very reliable and heavily productive. **#46109 Pkt. \$2.85**


RADISH

(*Raphanus sativus*)

CULTURE: Sow seed in the spring as soon as the soil can be worked. Successive sowings can be made through May, and again after mid-August. Hot, dry weather hastens bolting and causes the roots to become strong-flavored and woody. Sow seeds, 3/4" apart, 1/2" deep in rows 6 to 12" apart and thin to 1-1/2". Maintain adequate soil moisture. **HARVEST:** Harvest when small, when roots are about the same diameter as a nickel. **STORAGE:** Store in plastic bags or containers in the refrigerator. **SEED SAVERS:** Isolate a minimum of 1/8 mile for home use. For pure seed isolate from wild and cultivated radish by a minimum of 1/4 to 1/2 mile. **PACKET:** 7 g (about 625 seeds), sows 25'.

ASIAN RADISHES

(*Raphanus sativus* var. *longipinnatus*)

 **DAIKON:** 65 days. [Originating from the Asia, daikon (pronounced "dye-con") is the Japanese word for radish and usually refers to the spherical or cylindrical forms. The Chinese prefer the short oblong form called loh bok choi.] *Daikon* radishes are juicy and flavorful and can be used fresh in salads, cooked in vegetable dishes, pickled, or grated and mixed with ginger and soy sauce to make a dip. *Daikon* radish is usually harvested when 12" long and 2 to 3" diameter, though it will grow much larger. Fall planting gives the best results. **#28201 Pkt. \$2.20**

SPRING-FALL RADISHES


 **CHERRY BELLE:** 24 days. [Introduced 1949. AAS winner.] Round roots, bright red color, and firm white flesh. *Cherry Belle* is somewhat less susceptible to developing pithiness, compared to other varieties. **#28103 Pkt. \$1.99; #28103E (28g) \$4.50**


 **SPARKLER WHITE TIP:** 24 days. Roots are bicolored globes, bright scarlet on the upper portion, and white on the lower third. Medium tops and sweet, white flesh. Harvest at 1" diameter. **#28108 Pkt. \$1.99**

SUMMER RADISHES

 **WHITE ICICLE (LADY FINGER):** 29 days. [Pre-1865] A mild-flavored, white variety with carrot-shaped roots that reach a length of 4 to 5". Best harvested when small but remains milder than other varieties when harvested large. Stands heat well. One of our favorite varieties. Gardeners who grow this for the first time are often pleasantly surprised by this good variety. **#28106 Pkt. \$1.99; #28106E (28g) \$5.50**


WINTER STORAGE RADISHES

 **BLACK SPANISH ROUND:** 53 days [Pre-1824] Grows 3 to 4" or larger in diameter with a firm, white flesh and nearly-black, thin skin. Very hardy, and an excellent winter keeper. Flesh is crisp and pungent. Sow from late July to mid-August. **#28102 Pkt. \$1.99**

 **CHINA ROSE (ROSE COLORED CHINESE, SCARLET CHINA WINTER):** 55 days. [Introduced about 1850 from Europe, having been brought there from China by Jesuit missionaries.] Plant in early to mid-August. Harvest in late fall before frost and store. White flesh, rose skin, about 5" long. **#28104 Pkt. \$2.25**

SALSIFY

(*Tragopogon porrifolius*)

 **SANDWICH ISLAND MAMMOTH:** 120 days. [Pre-1900.] Easy-to-grow roots, 1 to 1-1/2" in diameter, are 8" long, and have an oyster-like flavor. Best harvested after frost, *Sandwich Island Mammoth* is an excellent keeper. Use stewed, baked, or in a cream sauce. **#63101 Pkt. (3g, 185 seeds) \$2.15**


SQUASH

SQUASH AND PUMPKINS


(*Cucurbita* species)



CULTURE: Culture of squash and pumpkins is similar to that of cantaloupe and cucumber, also members of the squash family. Squash and pumpkins require warm days and warm nights to mature properly. Sow seeds 1/2 to 1" deep. Bush varieties should be spaced 18 to 30" apart in rows 4' apart or 6 to 8 seeds per hill, in hills 4' equidistant. Vining varieties are planted in rows or hills 6 to 8' apart. Keep soil moisture high by mulching, but do not apply organic mulch until the days are warm. **HARVESTING SUMMER SQUASH:** Harvest crooknecks and zucchini when 6 to 8" long. Zucchini will grow large enough to become "attack zucchinis" if you don't keep them harvested. **HARVESTING WINTER SQUASH:** Winter squash is ready for harvest when the rind loses its shiny luster, becomes duller, and can no longer be dented by a fingernail. After fruits have matured 10 to 15 days past the ripe stage, harvest by cutting stems 1" above the fruit. Do not allow fruits to become frosted. Store at 45-60°F (7-16°C) and maintain good air circulation. **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:** 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. For non-resistant varieties of squash a succession of plantings may be required. Use resistant varieties where possible. **SEED SAVERS:** There are four species of pumpkins and squash. The species name is usually indicated 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:** 2 to 4 g (about 25 to 59 seeds, average 35 seeds) **WINTER SQUASH PACKET:** 3 to 5 g (about 22 to 47 seeds, average 31 seeds).


SUMMER SQUASH: BUSH VARIETIES



 **BENNING'S GREEN TINT** (*C. pepo*): 52 days. [Introduced about 1914.] This is one of the most beautiful varieties of Patty Pan squash. Uniform saucer-shaped fruits with scalloped edges and pale-green, fine-textured flesh of good flavor. Harvest when small. **#53115 Pkt. (4g) \$2.25**



  **COCOZELLE ITALIAN** (*C. pepo*): 59 days. [Pre-1934 heirloom.] 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 to 12" long and become yellow when mature. Best quality fruits are harvested when 6 to 8" long. **#53116 Pkt. (4g) \$2.20**


 **COSTATA ROMANESCA** (*C. pepo*): 62 days. This Italian heirloom zucchini is favored by most for flavor. Fruits remain tender even after growing to 18"; best picked at 12". Heavily ribbed fruits are striped with alternating light and dark green shades. Vines grow larger than other summer squash varieties. **#53120 Pkt. (3g) \$3.25**


  **EARLY PROLIFIC STRAIGHTNECK** (*C. pepo*): 48 days. [Introduced 1938. AAS winner.] Fruits are straight, lemon-yellow, and slightly club-shaped. Harvest when small, when 3" to 7" long. Quality of the flesh is excellent. Plants are very vigorous, hardy, and productive. **#53101 Pkt. (4g) \$2.35; #53101E (28g) \$5.50**


 **EARLY WHITE BUSH SCALLOP (WHITE PATTY PAN)** (*C. pepo*): 54 days. [Pre-1722.] White-fleshed fruits are whitish-green ripening to white. Size averages 6 to 7" in diameter by 3" deep. Very productive. **#53103 Pkt. (4g) \$2.20**

  **GOLDEN BUSH SCALLOP** (*C. pepo*): 68 days. Golden-yellow, plump, Patty-Pan-type fruits on space-saving bush plants. Prolific and hardy, the plants bear continuously over a long season. Harvest fruits when 4 to 5" across. Use boiled, fried or stir-fried. Matures 2 weeks later than other varieties, but flavor is superior. **#53104 Pkt. (1g) \$2.55**


  **YELLOW CROOKNECK** (*C. pepo*): 55 days. [Introduced about 1700.] Yields yellow, bulb-shaped fruit with a narrow, curved neck. Skin becomes bumpy and warted on large fruits. Best eaten when fruits are no longer than 6". A consistently popular variety. **#53102 Pkt. (4g) \$2.35; #53102E (28g) \$5.50**

 **ZUCCHINI, BLACK BEAUTY** (*C. pepo*): 48 days. [Introduced 1957.] 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 hand-picking squash bugs. **#53105 Pkt. (4g) \$2.35**

 **ZUCCHINI, DARK GREEN** (*C. pepo*): 50 days. Fruits are dark-green mottled with pale green flesh. A vigorous, productive bush variety with yield concentrated in time. **#53106 Pkt. (4g) \$2.35; #53106E (28g) \$5.50**


 **ZUCCHINI, GREY** (*C. pepo*): 42 days. Small to medium-sized zucchini with gray-green mottled skin. Small-seeded variety with extended keeping quality. Fruit production is extended over time, rather than concentrated at once. **#53107 Pkt. (3g) \$2.20**


WINTER SQUASH: BUSH VARIETIES


 **TABLE QUEEN BUSH (ACORN)** (*C. pepo*): 80 days. [Introduced 1948.] Space-saving version of *Table Queen* (See description below). Averages 5 fruits per plant. **#53108 Pkt. (2g) \$2.35; #53108E (28g) \$5.50**


SQUASH, PUMPKIN SQUASH


WINTER SQUASH: VINING VARIETIES


 **BUTTERCUP, BURGESS** (*C. maxima*): 100 days. [Introduced in 1932 by the ND/AES.] This Burgess strain of *Buttercup* is noted for its thick, fine-grained flesh and excellent flavor. Fruits are flattened turbans, approximately 4-1/2" x 6-1/2", weighing 4 to 5 lbs. Rinds are dark green with slight ribs and a "button" on the blossom end. **#53301 Pkt. (5g) \$2.35; #53301E (28g) \$5.50**


 **DELICATA** (Sweet Dumpling) (*C. pepo*): 97 days. Surprisingly sweet for a pepo, this is one of the sweetest winter squashes we offer. The cream-colored skin has dark-green stripes in the ribs. 2-lb potato shaped fruits grow 10" X 3". Semi-bush vines yield up to 8 fruits per plant. **#53117 (4g) \$2.20**

 **GREEN-STRIPED CUSHAW (STRIPED CROOK-NECK)** (*C. mixta*): 110 days. [Introduced before 1893, possibly pre-1860, then known as *Improved Cushaw*. Cushaws came from the West Indies, earlier than 1700.] This bulb-shaped pumpkin/winter squash is a reliable producer and the most popular of its class. Large, vigorous vines are resistant to squash vine borer. Fruits average 10 to 12 lbs., about 18" long, and 10" wide at the bowl. Skin is whitish-green with mottled green stripes. The light yellow flesh is slightly sweet, thick, medium-coarse, and fibrous. Fine for pies and baking. **#53501 Pkt. (5g) \$2.35**

 **NAVAJO HUBBARD** (*C. maxima*): 105 days. Striking rounded squash with slate-green and deep-orange splotches. The hard-shelled waxy fruits will keep well. Has a nice flavored light yellow flesh and thick plump seeds. Seeds are the best roasters we offer. 5-16 lb. Will grow well in cooler weather where season length permits. **#53306 Pkt. (4g) \$2.75**

 **SPAGHETTI SQUASH (VEGETABLE SPAGHETTI)** (*C. pepo*): 90 days. Fruits average 9" long, and turn from buff to pale yellow when mature. Keeps well. Flesh is pale yellow and breaks up into spaghetti-like strands. Boil fruit for 20 to 30 minutes and remove flesh with a fork. Flesh is tasty and may be used like spaghetti, topped with your favorite sauce. **#53110 Pkt. (5g) \$2.20**

 **SWEET MEAT SQUASH** (*C. maxima*): This excellent 12-15 lb. squash has a slate green skin and orange flesh. Heavy-yielding plants will aggressively push the borders you plant them in. Flesh has a dry texture and a buttery flavor that sweetens with age. This squash is an excellent keeper. Because of its tender dry texture, it can be used in place of summer squash in cooked foods. **#53606 Pkt. \$2.50**

 **TABLE QUEEN VINE (ACORN)** (*C. pepo*): 85 days. [Introduced 1913. The precursor of this variety was cultivated previously by the Arikara Indian tribe in the early 1800's.] Acorn-shaped fruit averages 6" long. Dark-green rind, fine textured, golden-yellow flesh. *Table Queen* is an excellent baking squash. Immature fruits can also be used as a summer squash. **#53109 Pkt. (4g) \$2.20**


SESE'S GUIDE TO THE CULINARY AND CULTURAL QUALITIES OF SQUASH SPECIES


C. pepo: Pepo squash are usually eaten in the immature stage as summer squash because most varieties are not good keepers. Flesh is often mild flavored and usually prepared by boiling, baking, frying, or stir-frying. Quality of the flesh declines in storage and most varieties are best eaten within a month of harvest. Bush varieties of pepo are susceptible to vine borers and are best planted in succession.

C. maxima: Many members of this group grow quite large. They keep fairly well in storage, from a few months to a year or more, depending on the variety. The flesh has fine texture and very good flavor. Unfortunately, maxima plants are generally tender and sensitive to wilts, vine borers, and other insects.


C. moschata: Most moschatas are excellent keepers. Their flesh is usually orange in color, flavorful, sweet, and often fragrant. Moschatas are well-suited for pies and cakes, though they are often just baked or boiled. This group has good resistance to vine borers and cucumber beetles once the plants are beyond the seedling stage. During the growing season, moschatas need warm night temperatures above 60°F (16°C) to grow well.

C. mixta: Most mixtas have a long tradition of being grown in the south, though they are less popular than they were in former years. Flesh color is typically pale-yellow or cream-colored, somewhat coarse and they are not as sweet or flavorful as maximas and moschatas. They are often cooked with sweeteners such as brown sugar or baked with stuffing mixtures. South of the border, most mixtas are grown mainly for their flavorful large seeds that make great snacks. Like moschatas they have good resistance to vine borers and cucumber beetles. As a group they have the best drought tolerance.


 **THELMA SANDERS' SWEET POTATO** (*C. pepo*): 96 days. [Family heirloom from Thelma Sanders in Adair County, Missouri. Introduced 1988 by SESE.] The acorn-shaped fruits grow up to 6" long, and have pronounced ridges from stem to blossom end. Ripens from a cream color to a light gold. Flesh is thick for the size of the fruit and is golden yellow. Excellent, fine-textured fruits with superb flavor. **#53111 Seedsaver Pkt. (2g) \$2.30**

 **WALTHAM BUTTERNUT** (*C. moschata*): 95 days. [Introduced 1970 by the Massachusetts/AES. AAS winner.] A popular winter storage squash of excellent quality. Stores very well. Can be harvested when small and used like a summer squash. Excellent resistance to vine borers. Fruits average 8 to 9" long, 3 to 4 lbs., and have buff-colored skin, and fine-textured, sweet, orange flesh. Very vigorous and dependable variety. **#53601 Pkt. (4g) \$2.35; #53601E (28g) \$5.50**


PUMPKIN SQUASH


 **NEW! BABY PAM** (*C. pepo*): 100 days. The dry sweet flesh of this "sugar pie" pumpkin makes for delicious pumpkin pie. Also excellent for decoration. This vigorous plant produces four or five small, deep-orange fruits per vine, each about 4 lb. **#53151 Pkt. (5g) \$2.35; #53151E (28g) \$5.50**

PUMPKIN SQUASH, TOMATOES


 **BIG MAX** (*C. maxima*): 115 days. Extra large pumpkin often grown for county fairs and Halloween. Weighs up to 100 lbs. or more when well grown. Fruits are bright orange with orange flesh good for pies. **#53303 Pkt. (6g) \$2.35**


BABY BEAR^{PVP} (*C. pepo*) 100 days. [Introduced in 1992 as a cross between *New England Pie* and a small naked seeded pumpkin. AAS winner.] *Baby Bear* is an excellent pie pumpkin with good seeds for eating. Fruits average 6" x 4", weighing just under 2 lbs, and average 10 pumpkins per plant. Vines are tolerant to fusarium and gummy stem blight. Storage life is 3 to 4 months. **#53112 Pkt. (3g) \$2.45**


 **CONNECTICUT FIELD (BIG TOM, YANKEE COW PUMPKIN)** (*C. pepo*): 110 days. [Pre-1700 cultivar of Native Americans origin.] *Connecticut Field* is still the most popular variety of large Halloween pumpkins. Fruits range from 15 to 20 lbs., are bright orange, slightly ribbed, and non uniform in shape and size. Good for canning, baking, and pies. **#53113 Pkt. (5g) \$2.20**

 **OLD-FASHIONED TENNESSEE VINING PUMPKIN** (*C. moschata*): [Introduced 1988 by SESE.] Oval-shaped, pumpkin squash averaging 12 to 15 lbs., ripening to a tan color. Flesh is deep orange. Vines are resistant to squash vine borer. **#53603 Pkt. (4g) \$2.55**

 **ROUGE VIF D'ETAMPES (CINDERELLA)** (*C. maxima*): 120 days. First available in the US in 1883, this beautiful rich orange pumpkin grows with deep ribs in a flattened shape. Rouge Vif is French for deep red. Extremely ornamental and good for pies. 12-35 lb fruits grow 6" x 19". **#53305 Pkt. (4g) \$2.35**

 **SEMINOLE** (*C. moschata*): 95 days. [Cultivated in Florida by the Seminole Indians in the 1500's.] Keeps up to 1 year at room temperature! Fruits are sweeter than *Butternut* and have a firm, deep orange colored flesh. Large vines bear bell-shaped buff colored fruits averaging 7" in diameter. Resistant to vine borers. A good choice for hot, humid, disease-prone areas. Give it ample moisture and room to roam. A choice variety for flavor and color. **#53604 Pkt. (2g) \$3.25**

 **SMALL SUGAR (NEW ENGLAND PIE, SUGAR PUMPKIN)** (*C. pepo*): 100 days. [Pre-1860.] *Small Sugar* is a traditional favorite of home gardeners. Its dry sweet flesh is high in solids and low in stringiness. Orange fruits are round and weigh 6 to 8 lbs. **#53114 Pkt. (5g) \$2.35; #53114E (28g) \$5.50**


 **TAN CHEESE** (*C. moschata*): 110 days. [Pre-1824 heirloom, one of the oldest varieties cultivated.] Cheese pumpkins are a group of pumpkins that are hardy, productive, and superior to most field pumpkins. They have a unique smooth tan skin, moderately deep ribs, and sweet, deep-orange flesh, and they are good keepers. Fruits are medium-large, about 6 to 8" high and weigh 6-12 lbs. **#53605 Pkt. (5g) \$2.65**


TOMATOES

(Common tomato: *Lycopersicon lycopersicum*)
(Currant tomato: *Lycopersicon pimpinellifolium*)

CULTURE: Sow seeds 6 weeks before the last frost date for your area. Plant seed 1/4-inch deep in shallow flats and maintain soil temperature in the range of 75-85°F (24-29°C) for good germination. When the seedlings have produced several leaves, transplant to 3" pots to promote root growth. After transplanting, keep seedlings at a lower temperature at night, 50-60°F (10-13°C), to promote earlier flowering in some varieties. Day temperatures should rise to 75-85°F (24-29°C) 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 (16-18°C). **SPACING:** Staked plants should be spaced about 18 to 24" apart. Caged plants should be spaced about 24 to 36" 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 three-year rotation. 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 six-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. **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 (10°C). **SEED SAVERS:** Isolate varieties of *L. lycopersicon* by a minimum of 35' for home use and 75' to 150' for pure seed. Isolate varieties of *L. pimpinellifolium* species from all other tomato species by a minimum of 150'. **MATURATION DATES:** Days to maturity are the number of days after transplanting. **PACKET:** Seed size varies considerably, 0.08 to 0.16 g (about 40 to 83 seeds, depending on variety, average 64 seeds) sows 100'. **SEEDS/OZ:** 7000 to 15,000 seeds/oz. (average 11,500) sows 3/4 to 1-1/2 acres of transplants at 18" spacing in rows 4' apart.


BICOLORED TOMATOES



 **BIG RAINBOW:** 90 days. (ab, asc) (Indeterminate) [Introduced in 1990 by SESE Heirloom from Polk Co., Minn.] This is the most visually spectacular tomato we have grown. As fruits ripen they resemble a rainbow; with green on the shoulder, yellow in the middle, and red on the blossom end. When fully ripe, the fruits are gold on the stem end and red on the blossom end. Early fruits weigh over 2 lbs. with little catfacing or deformities. *Big Rainbow* has very good resistance to foliar disease and continues to bear until frost. **#49103 Pkt. \$2.25**

 **GREEN ZEBRA:** (Indeterminate) 86 days. [Developed in 1985 by heirloom tomato breeder Tom Wagner of Tater Mater Seeds.] *Green Zebra* is an unusual and exquisite tomato chosen

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by Alice Waters for the famous California restaurant, Chez Panisse. Fruits ripen to yellow-gold with alternating dark-green zebra-like stripes. Flesh is an emerald color and of good flavor. A choice tomato for colorful salads or as a slicing tomato. Vines are well branched, provide good foliage cover, and have some resistance to septoria leaf spot. Fruits are slightly elongated globes, some slightly ridged at the shoulder and average approximately 3 oz. **#49119 Pkt. \$2.50**

 **GEORGIA STREAK:** 91 days. (Indeterminate) [Heirloom from Georgia. Introduced in 1990 by SESE] A bicolored beefsteak with eye-appealing yellow and red color inside and out. Color is predominately yellow with a red blush and red core on the blossom end. *Similar to Old German. Georgia Streak* is especially eye-appealing in salads. **#49114 Pkt. \$2.85**

  **OLD GERMAN:** (Indeterminate) [Introduced in 1985 by SESE. Mennonite family heirloom from the Shenandoah Valley of Virginia.] *Old German* is a large, very 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. *Old German* is not a heavy producer, nor does it tolerate drought, but its flavor and color are outstanding. An attractive addition to salads. Fruits often weigh over a pound. Should be staked or caged. **#49131 Pkt. \$2.95**


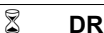
DISEASE-RESISTANT TOMATOES

KEY TO TOMATO DISEASE TOLERANCE



Known disease tolerance or resistance is indicated in brackets after the variety name. 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.


Disease resistance abbreviations



ab = Alternaria (early blight)	fw2 = Fusarium wilt, race 2
asc = Alternaria stem canker	gw = Gray wall
an = Anthracnose	gls = Gray leaf spot
ber = Blossom end rot	lb = Late blight
bw = Bacteria wilt	nhr = Nail head rust
cf = Cat facing	rkn = Root knot nematode
clm = Cladosporium leaf mold	st = Stemphylium spot
cr = Crack resistance	sun = Sun scald
cs = Crease stem	tmv = Tobacco mosaic virus
fw1 = Fusarium wilt, race 1	vw = Verticillium wilt



  **DRUZBA:** (ab, ber, cf, cr) 75 days. (Indeterminate) [Bulgarian heirloom. Introduced in 1995 by SESE. Original seed sent to SESE by Dr. Carolyn Male.] *Druzba* is a productive variety with excellent juicy sweet flavor. Fruits are borne 2 to 4 to a cluster, weigh an average of 5 oz. and measure 2" high by 3" wide. 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 farmer's markets. **#49157 Pkt. \$2.50**

DETERMINATE AND INDETERMINATE VARIETIES: Determinate varieties are short-vined plants that seldom need staking. Blossoms and fruit develop about the same time. 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. Starting at the end of June, apply a deep mulch around plants to conserve moisture 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 increases earliness to 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 2' wide by 5' tall are recommended for indeterminate varieties.


  **EVA PURPLE BALL:** (ab, lb, ber, cr, cf) 78 days. (Indeterminate) [Late 1800's heirloom from the Black Forest region of Germany from Joe Bratka's grandfather. Seed courtesy of Carolyn Male and Craig LeHoullier. Introduced in 1994 by SESE] An outstanding performer in hot, humid areas with excellent resistance to foliar and fruit diseases. This is one of the most blemish free tomatoes we have grown. Unlike other crack-resistant varieties it has a soft tender texture. Produces smooth, round, attractive pink-purple fruits weighing 4 to 5 oz. Evenly ripening fruits are easy to harvest, some dropping from the vine at peak ripeness. *Eva Purple Ball* is great in salads, sandwiches, and sauces (the skin peels easily). A wonderful all-purpose tomato with excellent flavor. **#49112 Pkt. \$2.50; #49112B (3g) \$5.50**


 **HOMESTEAD 24:** (asc, cf, cr, fw1) 80 days. (Semi-determinate) [Introduced 1966.] *Homestead 24* was developed for hot humid coastal areas, especially Florida. It is often grown in the Mid Atlantic region as well, where it reliably sets fruit at high temperatures. Fruits ripen to red 8 oz. slightly flattened globes. **#49121 Pkt. \$2.30**


  **MARGLOBE VF (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* was first developed in 1917 from a cross between *Marvel* and *Globe*.] *Marglobe* has been in demand for several generations while many other varieties have come and gone. This selection has been improved for disease-resistance. Fruits are red, medium-sized, 5 to 8 oz. with firm walls and good flavor. Plants are stocky, vigorous, and have excellent disease-tolerance. Vine growth is uniform and provides good protection from sunscald. **#49126 Pkt. \$2.35**


  **MORTGAGE LIFTER VFN (RED MORTGAGE LIFTER):** 83 days. (ab, asc, vw, fw1, rkn) (Indeterminate) An improved version of *Radiator Charlie's Mortgage Lifter™* which has added disease-resistance, more uniform fruit, ripening to red rather than pink-red. Fruit is large, 10 to 14 oz., not as large as the original *Mortgage Lifter*, but is much more productive. It still deserves the *Mortgage Lifter* reputation and is one of our most productive and reliable tomatoes. Continues to bear until frost. **#49129 Pkt. \$2.50; #49129P (0.5g) \$5.25; #49129B (3g) \$5.50**


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 **MULE TEAM:** 86 days. (Indeterminate)
[Introduced in 1997 by SESE. Heirloom from Joe Bratka. Seed sent by Dr. Carolyn Male.] *Aptly named workhorse of a tomato which delivers well and long into the season. Mule Team is notable for its uniform red fruit, weighting 8 to 12 oz. borne on disease-resistant vines that bear continuously until frost. Fruits are slightly ovate with slightly dented shoulders and are defect-free resulting in a continuous yield with a very high percentage of usable fruit. The fruit is sweet with a slight amount of tang. Mule Team is among our favorites.* #49187 Pkt. \$2.75


 **NEPTUNE:** (vw1, fw1, fw2, bw, gls) 67 days. (Determinate) [Developed and released to SESE in 1999 by Dr. J.W. Scott at the Gulf Coast Research and Education Center at the University of Florida.] An early to mid-season fresh market tomato specifically bred for combined heat tolerance and resistance to bacteria wilt which is prevalent in the southeast and Florida. Recommended for gardeners and fresh market growers in hot, humid, rainy growing regions where it is difficult to grow tomatoes. Fruits are borne in clusters of 2 to 4 on 2-1/2' to 3' vines. Suitable either for ground or cage culture. The vines provide good cover and produce a high percentage of marketable one-quarter-pound fruits that hold well and ripen to a uniform red color. #49195 Pkt. \$2.75

 **PERON SPRAYLESS:** 70 days. (Indeterminate)
[Introduced in 1951 by Gleckler's from Argentina.] A main-crop variety notable for its tasty red tomatoes produced on disease-resistant vines. Produces a high percentage of uniform, defect-free fruits, averaging 3" to 4" in diameter. Flavor is sweet with some intricacy. Reliable, flavorful, and a garden mainstay. #49184 Pkt. \$2.35

 **OZARK PINK VF:** (fw1, vw, ber, cr) 65 days. (Indeterminate) [Introduced 1991 by SESE Released exclusively to SESE by the Univ. of Arkansas Dept. of Horticulture.] *Ozark Pink* is adapted for growing on stakes for vine-ripe harvest for home gardens and farmer's markets. Plants reach a height of 5 feet, bearing 7-oz. flattened-globe fruits with few defects, and uniform-ripening shoulders. Developed from a complex pedigree involving *Bradley*, *Arkansas Traveler 76*, *Heinz 1439*, and *Campbell 1327*, 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. \$2.95


 **TROPIC VFN:** (vw, fw1, asc, rkn, ab, clm, gw, st, tmv1, tmv4, sun, cr) 80 days. (Indeterminate) [Developed by the Univ. of Florida.] This exceptionally disease-resistant variety has excellent versatility as a garden, greenhouse, or market tomato. The fruit averages 8 to 9 oz., is thick-walled, and tends to sit high on the vine under a protective cover of foliage. The sweet flavored fruits ripen to red with slight green shoulders. Recommended highly for the Mid Atlantic and hot, humid, disease-prone areas, especially where blight is a problem. #49145 Pkt. \$2.85; #49145B (3g) \$5.50


 **RUTGERS VF (RUTGERS IMPROVED):** (vw, fw1, asc, gw) 73 days. (Determinate) [*Rutgers* was developed by the Campbell Soup Company in 1928 from a cross of *Marglobe* and *J.T.D.* The variety was later refined by Rutgers University in 1943.] *Rutgers* rapidly gained acceptance as a quality tomato shortly after its introduction, and it remains well known for its excellent flavor and reliability, especially as a canning variety. *Rutgers Improved* is a *Rutgers*-type tomato with additional disease resistance. Plants are compact. Fruits are red with good interior color, 6 oz. or larger and with thick walls. Widely adapted. #49139 Pkt. \$2.35


 **TAPPY'S HERITAGE:** 85 days. (Indeterminate)
[Selected by Merlyn Niedens from cross of SESE's pink-fruited *Tappy's Finest* and a red-fruited tomato.] *The best features of Tappy's Finest' have been combined with more uniformity and red color.* Fruits are medium-sized, weighing 6 oz. or more, and are borne in clusters of 2 to 4. Fruits ripen from pink, to orange-red, to deep red on the bottom with orange-red shoulders. *Tappy's Heritage* has excellent sweet full flavor and a meaty texture. Vines have better than average insect and disease resistance. This is a mainstay garden variety that should have appeal to fresh market growers as well. #49185 Pkt. \$2.95

EARLY RUSSIAN TOMATOES


In 1995 we arranged for collection of over fifty seed varieties from a region 60 kilometers south of Moscow. The intent of the collection trip was to obtain seed of ethnic Russian varieties that were not widespread in cultivation. The following Russian varieties were introduced in 1999.

 **BELII NALIV:** 55 days. (Short indeterminate) An early-bearing red-fruited variety bearing sweet and tangy tomatoes. Like some other ethnic varieties, the fruits are somewhat variable in size and flavor. Fruits average 1-1/2" tall by 2" wide and are crackresistant. The vines are short (42") and are suitable for short stakes or ground culture. #49192 Pkt. \$2.95

 **VIKTORINA:** 60 days. (Short indeterminate) *Viktorina* is an excellent early tomato for home use. The medium-sized red fruit is quite tasty, a combination of sweetness and tang. Plants are very productive and the fruits hold well due to a thicker skin and resistance to fruit diseases. Bears longer than other Russian varieties. #49194 Pkt. \$2.95


 **ZARNITSA:** 60 days. (Short indeterminate) *Zarnitsa* translates from Cyrillic as summer lightning. An early bearing, productive, red-fruited variety with fruit averaging 2" high x 2-1/2" wide. Vines are short and suited for staking or ground culture. An outstanding feature of this variety is its flavor which is well-balanced, sweet, buttery, and smooth. Resists cracking. #49193 Pkt. \$2.95

EXTRA-EARLY TOMATOES



 **GLACIER:** 58 days. (Determinate) *Glacier*, unlike other extra-early varieties, produces both an early crop and continues to bear the entire season. Flavor is one of the best we offer, especially for an early variety. Bright red fruits average 1-



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1/4" in diameter. We have had yields of 3/4 bushel per plant. Very cold-tolerant and may survive a light frost. **#49196 Pkt. \$2.35**


 **SOPHIE'S CHOICE:** 55 days. (Determinate) [Heirloom from Edmonton, Canada, sent to SESE from Dr. Male. Introduced 1997.] *The best choice for an extra-early tomato—highly productive, flavorful and large-fruited.* By far the earliest variety we offer, *Sophie's Choice* ripens ahead of all other extra-early varieties in our trials. Unlike other extra-early varieties, the fruits are flavorful and large, averaging 6 to 8 ounces and weighing up to 12 ounces. *Sophie's Choice* has an orange-red exterior and deep-red interior. Produces large fruit on a small plant only 18 to 24" tall. Quality is best in cool climates. Does not handle heat or drought well. **#49188 Pkt. \$3.25**

PINK AND PINK/RED-FRUITED TOMATOES


  **ARKANSAS TRAVELER:** 89 days. (Indeterminate) [Pre-1900 heirloom grown throughout the South from northwest Arkansas to North Carolina.] *Arkansas Traveler* is an old Southern heirloom much esteemed for its ability to produce flavorful tomatoes under conditions of drought and high heat where many other varieties fail. Medium-sized fruits are pink and of wonderful flavor. Keeps well. **#49102 Pkt. \$2.25**



  **BRANDYWINE:** 74 days. (Indeterminate) [Introduced in 1889 by Johnson and Stokes.] Prized for its distinctively flavorful fruit, and highly rated in our taste trials. *Brandywine* has achieved a national reputation as the flavor standard for tomatoes. Fruits are dark reddish-pink, average 10 to 12 oz., and are borne on vines with potato leaf foliage. Vines are not disease-resistant but the flavor of the tomatoes is of gourmet quality. Use for slices, salads, and sandwiches. **#49104 Pkt. \$2.50;**
#49104B (3g) \$5.50



 **BRIMMER (PINK BRIMMER):** 82 days. (Indeterminate) [This old Virginia variety won Grand Prize for size and quality at the Jamestown Exposition held in 1907 at Sewell's Point, VA, now the site of the Norfolk Naval Base.] Seed was obtained from the Exposition and introduced commercially by Wood and Sons of Richmond, VA, and later carried in their catalog with high acclaim for approximately 60 years. Possibly derived from *Ponderosa*, 1889.] Fruits are pink/purple, large, meaty, and often 2-1/2 pounds or more when well grown. It was often preferred by gardeners wanting large, "low acid" pink tomatoes that have a high sugar content. *Brimmer* has a thick skin, a useful quality in a canning tomato, and a characteristic that offers some protection against fruit worm. Not recommended for northern areas where it is late-maturing. **#49105 Pkt. \$2.85**

 **GERMAN JOHNSON:** 76 days. (Indeterminate) [Popular heirloom tomato from Virginia and North Carolina.] This is one of the four parent lines of the *Mortgage Lifter* tomato. It is very similar in flavor. Pink-red fruits average 3/4 to 1-1/2 lbs. with generally smooth tops. Good for slicing or canning. Fruits


have few seeds. Plants are very productive and fairly resistant to disease. **#49115 Pkt. \$2.75**

 **JUNE PINK (PINK EARLIANA):** 68 days. (Indeterminate) [*Earliana* was developed as a result of intense competition among turn-of-the-century growers attempting to bring the earliest tomato to market. It was first offered commercially in 1900 by Johnson and Stokes, and may be derived from a sport of *Stone*.] *June Pink* is virtually identical to *Earliana* except for the unusual rose-pink color and longer production. Bears clusters of 4 to 6 very attractive rose-pink tomatoes. We like it for flavor and color, and consider it among our garden favorites. Fruit is relatively free of defects and vines bear a long time. **#49124 Pkt. \$2.85**

  **TAPPY'S FINEST:** 77 days. (Indeterminate) [West Virginia family heirloom before 1948, originally from Italian seed stock. Named and introduced by SESE in 1983 in honor of "Tappy" who selected for regular shape, small cores, few seeds, and fine flavor. This exclusive was the first heirloom we introduced.] *Tappy's Finest* was selected in the mountains of West Virginia and it performs best where summers are moderate to cool. Fruits are pink-red and large; they average 14 to 16 oz., sometimes up to 2 lbs., and are very meaty. The slightly irregular fruits are somewhat flattened with indentations prominent at the shoulders. An excellent tomato for processing or for use in salads or sandwiches. Also makes a delicious tomato juice. Like all sweet, good-flavored tomatoes, it is not a heavy producer, but it has won several independent flavor trials. **#49142 Pkt. \$2.65**

  **MORTGAGE LIFTER, RADIATOR CHARLIE'S:** (vw, fw1) 79 days (Indeterminate) [Developed by M.C. Byles in the 1930's and released to SESE as an exclusive variety in 1985 with all rights reserved. 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 1930's while in Logan, WV. Mr. Byles is affectionately known as "Radiator 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 \$1.00 each (in the 1940's) 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 2-1/2 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. \$2.95;**
#49128B (3g) \$5.50


TOMATOES


 **OMAR'S LEBANESE:** 80 days. (Indeterminate) [Heirloom from farmers in a Lebanese hill town. The best of Dr. Carolyn Male's extensive 1995 heirloom tomato trials.] A huge pink beefsteak tomato: fruits typically weigh 1 to 1-1/2 pounds, or even larger when grown well. This is a good choice for a gardener's boast or county fair entry. Size not withstanding, it has a multidimensional sweet flavor, that seems to be expressed best in northern areas. In southern areas the quality is more variable. Better than average resistance to foliage disease. **#49190 Pkt. \$2.85**

TOMATO POSTER


Life-size tomatoes, heirloom and traditional, in a rainbow of colors and assortment of sizes, 25 varieties in all. Varieties selected by Alice Waters of the Chez Panisse Restaurant in Berkeley, California. If that isn't enough, these tomatoes are displayed on a tan background of handmade tomato seed paper. "I often wonder who saw the first heirloom tomato that I'm now growing. When and where was it first seen? Through whose hands did the seed pass? And sometimes I wonder if each variety has within it the spirit of each person who grew it. I wonder." — Dr. Carolyn Male, heirloom tomato enthusiast. **#81701 \$19.75**




 **OXHEART:** 88 days. (Indeterminate) [The oxheart shape is the result of a single gene mutation, about 1925. Oxheart tomatoes are somewhat similar to meaty ponderosa types, except for the distinctive shape.] Heavy yielding vines produce extra large, pink, oxheart-shaped tomatoes weighing 1 to 2 lbs. Flesh is firm and meaty with few seeds and mild flavor. **#49116 Pkt. \$2.65**


 **WINS ALL:** 80 days. (Indeterminate) [Introduced in 1924 as *Number 400* by Peter Henderson and Co. Renamed *Wins All* in 1925 following a contest for a name.] A flavorful old variety bearing large pink, slightly flattened fruits containing few seeds. The outstanding feature of *Wins All* is its flavor that makes it worth growing despite its lower-than-average yields. *Wins All* was one of the most frequently requested varieties in the seed swap section of a national gardening magazine. **#49151 Pkt. \$2.85**


PROCESSING/PASTE TOMATOES


 **AMISH PASTE.** This is the largest paste tomato we offer and is primarily known for producing a sauce with a superior flavor. Coreless fruits often weigh as much as 12 oz. Indeterminate plants yield well. Growth habit is somewhat droopy, so they need more attention to trellising than other varieties do. **#49197 Pkt. \$2.95**


 **HEINZ 1350 VF:** (vw, fw1, asc, cr) 75 days. (Determinate.) [Introduced 1963. Developed by the H. J. Heinz Co.] Fruits average 6 to 8 oz., are uniform-ripening, and have good crack-resistance. *Heinz 1350* is a productive garden variety with concentrated fruit set and excellent qualities as a processing tomato for canning or cooking. Widely adapted, multi-purpose variety suitable for salad use too. **#49120 Pkt. \$2.25**

 **HUNGARIAN ITALIAN PASTE:** 79 days. (Determinate) Highly productive pear-shaped paste tomato with good disease resistance and good holding quality. Fruits weigh 2 to 3 oz. and are borne in clusters of 4. Bears until frost. This is our favorite red paste tomato because of its high yields and healthy vines. Plus the fruits make an excellent flavored sauce. **#49123 Pkt. \$2.95**


 **PITTMAN VALLEY PLUM:** 88 days. (Indeterminate) [German heirloom from a farmer in the Pittman Valley, PA. Original seed sent to SESE by Merlyn Niedens.] An unusual, elongated paste tomato. The pink-red fruits range from 1-1/4 to 1-1/2" in diameter by 4 to 5" long. Produces high yields of 3 to 4 oz. fruits. The nearly seedless tomatoes make a good-tasting sauce. Should be caged or staked for best results. Has a tendency to drop some ripe fruit, but fruit is rarely damaged and often holds for at least 2 weeks. **#49164 Pkt. \$2.50**

 **PRINCIPE BORGHESE** 78 days. Italian heirloom bred for sun-drying, this low-moisture variety maintains more flavor when dried than do other varieties. 2" fruits are round with small points on the end. 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. \$2.20**

 **ROMA VF:** (vw, fw1, asc) 75 days. (Determinate) A very popular, pear-shaped paste tomato. Widely adapted. Fruit ripens uniformly. Productive cropper best suited to ground culture. Good resistance to disease and fruitworm. **#49138 Pkt. \$2.45; #49138P (0.5g) \$5.50; #49138B (3g) \$5.50**

 **YELLOW BELL:** 60 days. (Indeterminate) [Introduced in 1986 by SESE. Family heirloom from Tennessee.] This yellow paste tomato can be used in salads or for making tomato paste, juice, preserves, and yellow catsup! Heavy-yielding plants produce 5 to 12 fruits per cluster. Fruit shape is similar to *Roma*, averaging 3" in length and 1-1/2" in diameter. Survives cool wet conditions better than other paste tomatoes. Ripens from green to creamy yellow to yellow. Flavor is outstanding, both sweet and rich. Excellent paste tomato for those who prefer yellow tomatoes. **#49152 Pkt. \$2.75**

PURPLE-FRUITED TOMATOES


 **BLACK PRINCE:** 69 days. (Indeterminate) [A local garden jewel from Irkutsk, Siberia.] *Black Prince* produces medium-sized fruits that are a deep reddish-brown color, grading to


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dark brown or black on the shoulders. Interior fruit color varies from dark red to a translucent chestnut brown. Juicy, tender texture with appealing fruity flavor. Fruits average 2-1/2" in diameter and are slightly pear-shaped. **#49180 Pkt. \$2.25**

 **CHEROKEE PURPLE:** (lb) 85 days.


(Indeterminate) *Disease-resistant, good for the South.* [Pre-1890 Tennessee heirloom, reportedly of Cherokee Indian origin. Introduced 1993 by SESE. Seed courtesy of Craig LeHoullier.] Large fruits (10 to 12 oz.) are smooth 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. **#49106 Pkt. \$2.50; #49106B (3g) \$5.50**

 **PAUL ROBESON:** 74 days. (Indeterminate)
[Russian heirloom. Original seed sent to SESE by Marina Danilenko, a Moscow seedswoman. The tomato was named after Paul Robeson, author of *Old Man River* and operatic vocal 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.] *Paul Robeson* is a black tomato. Like other so-called black tomatoes the fruit is more of a dusky dark red with dark green dusky shoulders. Fruits weigh an average of 6 oz. and measure 2" tall by 3-1/4" wide. Borne 2 to a cluster, flavor is excellent. **#49161 Pkt. \$2.85**


 **EVA PURPLE BALL:** (ab, lb, ber, cr, cf) 78 days. See description on page 53.


RED-FRUITED TOMATOES


ABRAHAM LINCOLN (EARLY ABRAHAM LINCOLN): 70 days. (ab, asc) (Indeterminate) [The original *Abraham Lincoln* was a late-maturing variety introduced about 1923. This early season introduction (circa 1975) ripens 10 to 12 days earlier, has smaller fruit, and does not have the bronze-green foliage characteristic of the original.] Flavor is slightly acidic but distinctive. Plants have excellent resistance to foliage disease. The red, medium-sized fruits are uniform and free of defects. Highly recommended where foliage disease is a problem. **#49101 Pkt. \$2.35**


 **COSTOLUTO GENOVESE:** 80 days. (Determinate)
An old Italian variety. Produces 5 oz., bright-red, flattened globes with heavily scalloped edges. Fruit shape is variable from nearly smooth to heavily scalloped and convoluted. 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 in flavor. Scalloped fruits are very ornamental. **#49108 Pkt. \$2.85**


DELICIOUS: 77 days. (cr) (Indeterminate) [Introduced by Burpee after years of selection from *Beefsteak*.] Large, meaty beefsteak type tomatoes, most in the range of 1 to 2 lbs. average, but tomatoes over 3 lbs. are not uncommon when grown well. Relatively free of defects for a large-fruited tomato. Flesh is red and meaty with small seed cavities. **#49110 Pkt. \$2.25**

 **GERMAN RED STRAWBERRY:** 80 days.
(Indeterminate) *Distinctive in appearance, excels in flavor.* [Introduced by SESE in 1995 from seed generously supplied by Dr. Carolyn Male.] This German heirloom resembles a strawberry in color and shape, though much larger! *German Red Strawberry* is excellent in salads and is the quintessential sandwich tomato. It is meaty with a scant amount of seed and juice, and the spectrum of flavor components runs broad and deep. Fruits average 10 oz. in weight, 3" wide by 3-1/2" long, somewhat variable in size but fairly uniform in shape. Shoulders smooth to slightly ribbed and slower to ripen. Plants average 5-1/2' at maturity with open growth habit and light foliage cover, producing an average of 2 fruits per cluster. **#49158 Pkt. \$2.85**


 **ILLINI STAR:** 65 days. (Indeterminate) This new open-pollinated tomato was developed by Merlyn Niedens. It produces heavy crops of 6-8 oz. Deep red tomatoes have an excellent flavor with strong disease- and split-resistance. This tomato is strongly recommended to market growers and home gardeners alike. **#49199 Pkt. \$2.25**


 **NEW! LARGE MENNONITE HERITAGE:** 90 days.
(Indeterminate) Attractive plump red tomatoes with a slight green shoulder. The fruits ripen over a long period. This seed was supplied to us by Jackie Patru, who uses the large meaty fruits for canning, sauces, and salsas as well as for slicing. **#49203 Pkt. (0.16g) \$2.25**


 **LARGE RED:** 85 days. (Indeterminate) [Original seed from the USDA. Historical notes and seed production 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 that: "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." The deep-red fruits of *Large Red* are heavily ribbed or lobed and flattened in shape and quite distinguished from modern tomatoes. Fruits typically measure 2" high x 4" wide. Flavor is 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 to find that during our 1996 trials it became a favorite of a chef in a Charlottesville, VA, restaurant. **#49183 Pkt. \$2.65**

 **NEW! MARTIAN GIANT SLICER:** 95 days. (Semi-determinate) Originally developed for organic market gardeners by Seeds of Change and further selected by Bill Reynolds of Eel River Produce. A juicy red slicing or beefsteak tomato with a 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 for our grower's Saturday market stall. **#49202 Pkt. (0.16g) \$2.25**

TOMATOES


 **OTV BRANDYWINE:** 72 days. (Indeterminate) [Named and released by Dr. Carolyn Male and Craig LeHoullier, editors of *Off the Vine* (OTV), the newsletter of heirloom tomato enthusiasts.] *The best strain of Brandywine, set apart from the others by its 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 3/4 lb. up to 1 lb. Foliage cover is excellent due to the vigorous vine growth and the extraordinarily large leaflets. The terminal leaflets are 4" across, almost as large as a hand!. This is the most productive and heat-tolerant *Brandywine*. A must for every tomato-lover.
#49189 Pkt. \$3.70

 **STONE:** 78 days. (ab, fw1) (Indeterminate) [Introduced by The Livingston Seed Co. in 1889. The original plant was found by Mr. Nichols between rows of *Favorite* and *Beauty*.] Fruits are slightly flattened globes weighing about 5 to 7 oz. with uniform ripening and attractive bright color. A good all-purpose tomato with good keeping quality, especially recommended for canning. Vines are vigorous, highly branched, and provide good protection of the fruit. 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. \$2.65**


 **STUPEICE:** 62 days. (Indeterminate) *A garden mainstay.* [Czechoslovakian origin.] *Stupeice* is early bearing, productive, disease-tolerant, and flavorful. It usually produces until frost. Fruits have a depth of flavor with a wonderful balance of sweetness and tartness. Juicy 2 oz. fruits are produced in clusters of 6 to 8 with a concentrated fruit set near the base of the plant. Fruit ripens to red (with an orange undertone) with some tendency for green shoulders later in the season. A great salad tomato. **#49141 Pkt. \$2.65**


SMALL-FRUITED/CHERRY TOMATOES


IN VARIOUS COLORS: RED, PINK, ORANGE, YELLOW, and GREEN


 **DR. CAROLYN:** 65 days. (Indeterminate) [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 have grown.* It has an excellent balance of sugar, tartness and depth of flavor. The pale yellow, cherry-sized fruits are typically borne 6 to a cluster with fruits of uniform size measuring 1-1/4" x 1-1/4". The large vines are extremely vigorous and well branched, and provide excellent cover.
#49182 Pkt. \$2.50


100 Heirloom Tomatoes for the American Garden (Dr. Carolyn J. Male) Carolyn Male's name is synonymous with American heirloom tomatoes. This beautifully photographed book is loaded with techniques for tomato growing, seed saving, and breeding. As the title suggests, it features 100 outstanding heirloom tomato varieties. **#91157 \$17.95**

 **AMY'S SUGAR GEM.** (Indeterminate, open-pollinated) This tomato was developed by Dr. Jeff McCormack by crossing the small-fruited *Red Cherry* with the larger fruited heirloom *Tappy's Finest*. *Amy's Sugar Gem* is noteworthy especially for its texture, meatiness, small core, and sweet, full flavor. This versatile tomato is excellent in salads, sandwiches, and sauces. Fruits are small to medium, averaging less than 2 oz., typically measuring 1-1/2" wide by 1-3/4" high. Vines are tall, vigorous, and productive throughout the growing season. This introduction is of interest to home gardeners as well as fresh market growers. *Amy's Sugar Gem* is named in appreciation of Amy Boor Hereford whose grandmother Tappy introduced Jeff to heirloom tomatoes in 1982. The *Sugar Gem* portion of the name refers to the sweet flavor and the tiny light gold sparkles in the red skin.
#49198 Pkt. \$2.85


 **GARDEN PEACH TOMATO:** 73 Days. This tomato truly resembles a peach. The fruits have a peach-like fuzz and are yellow, often with a hint of pink blush when fully ripe. The flavor is outstanding. A good storage tomato if picked green right before frost. Highly split-resistant.
#49201 Pkt. \$2.25



 **GREEN GRAPE:** 78 days. (Semi-determinate) [Developed and released in 1986 by Tater Mater Seed.] *Green Grape* was selected from a cross of two or more heirloom varieties.] Ripe fruits are yellow-green: green at the shoulder, green with yellow veins at mid-section, and translucent yellow-green at the blossom end (resembling large Muscat grapes). Flesh and juice are green. Fruits average 1-3/8" in diameter and are borne in clusters of 4 to 12. Its flavor is in the top 5% of the varieties we have grown. **#49118 Pkt. \$2.35**


 **LOLLIPOP:** 79 days. (Indeterminate) *Fruits look like lollipops and have a lemony flavor.* [Original seed sent to SESE by Merlyn Niedens.] Distinctive in three ways: the fruits hang on the plants like lollipops, color is creamy yellow, and the flavor is sweet and lemon-like. Fruits average 6 per cluster, occasionally as many as 10 per cluster, each fruit measuring 1-1/4" by 1-1/4". Foliage is narrow leaved on well-branched plants. Highly productive, even under continuous high temperatures, day and night. Vines have good resistance to foliage diseases and plants are suitable for ground culture if desired. Widely adapted, excellent garden variety, also well received at farmer's markets.
#49172 Pkt. \$2.55


 **MINI ORANGE:** 66 days. (Indeterminate) Medium-length vines produce an abundance of miniature orange tomatoes, 1-1/2" in diameter. A distinctive feature of *Mini Orange* is its bright orange color. Mix this variety with red, yellow and green cherry tomatoes to make attractive salads. Flavor is mild and slightly tangy. Firm fruits offer good resistance to fruit worm. Ripens from green to yellow to orange. Recommended especially for the hot southern areas where night temperatures above 70°F shut down fruit set in large-fruited varieties.
#49127 Pkt. \$2.50

TOMATOES


 **RED CHERRY (OLD FASHIONED RED CHERRY):** 72 days. (Indeterminate) [Introduced before 1840.] This is the small *Red Cherry*, not the *Large Red Cherry* commonly used as a salad tomato. Very dependable, full-flavored salad tomato. Grows so vigorously that it tends to outgrow some diseases. Resistant to fruitworm and high temperatures. **#49136 Pkt. \$2.35**

  **RIESENTRAUBE:** 70 days. (Indeterminate) [German heirloom introduced 1993 by SESE from seed sent to us by tomato collector Dr. Carolyn Male. Originally from East Germany, it also may have been grown by the Pennsylvania Dutch as early as 1855.] *Riesentraube* translates from the German as "giant bunch of grapes". One of *Riesentraube's* outstanding features is the large number of flowers produced per cluster up to 350 flowers! Flower clusters appear as compact floral sprays giving rise to large bunches of 20 to 40 fruits. *Riesentraube* is the most unusual tomato we have grown. The cherry-sized tomatoes weigh approximately 3/4 oz. and measure 1-1/2 x 1-1/4". Distinctive red fruits have a rounded pear shape with sharp pointed end. Vine growth is compact, highly branched, with good foliage cover for developing fruits. The red fruits have excellent, full flavor similar to that found in flavorful beefsteak tomatoes. An excellent salad tomato, great for snacks. **#49137 Pkt. \$2.50**

 **WICKLINE CHERRY:** (lb) 85 days approx. (Indeterminate) *Beefsteak tomato flavor in a cherry-sized fruit.* [Introduced 1991 by SESE. Heirloom from Pennsylvania.] *Wickline Cherry* is a gourmet cherry tomato. Borne in clusters of four, the pinkish-red, egg-shaped fruits measure 1 x 1-1/2". Plants are tall, well branched, productive, and tolerant of cool wet conditions. Fruits are meaty with a well-balanced mixture of flavor components. Good especially for salads and the restaurant trade. **#49150 Pkt. \$2.95**

 **YELLOW PEAR:** (asc, fw1) 75 days. (Indeterminate) [First described in 1805 by Persoon.] Pear-shaped yellow tomatoes about 1-1/2 x 3/4" with mild flavor. Very productive, and heat-resistant. Excellent for popping in your mouth or for preserves. **#49154 Pkt. \$2.45**


WHITE-FRUITED TOMATO

 **WHITE WONDER:** 84 days. (Indeterminate) [Possibly derived from *White Apple*, pre-1860.] *White Wonder* is one of the varieties chosen for Alice Waters' famous Chez Panisse restaurant. It has a creamy white color and a sweet flavor. 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. \$2.85**


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 (32°C), and night temperatures should drop below 70°F (21°C), but not lower than 55°F (13°C). Optimum night temperature is 59°-68°F (15-20°C). At 40°F (5°C) 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.

WINTER STORAGE TOMATO


 **LONG KEEPER:** 78 days. (Semi-determinate) Due to the slow-ripening characteristic of this variety, fruits become ripe 1-1/2 to 3 months after harvest, ensuring a supply of fresh tomatoes into the winter. Some customers report storing *Long Keeper* 4 to 6 months. Though the quality doesn't match that of a fresh garden tomato, flavor and texture is superior to most winter supermarket tomatoes. Unblemished tomatoes are harvested before frost and allowed to ripen at room temperature. Store at room temperature so fruits are not touching, and check for ripeness and rotting weekly. Used apple boxes with their fruit separators are convenient for this. Fruits are mature for harvest when they have a pale pink blush. The 4 to 7 oz. fruits ripen in storage to a satiny, red-orange color. Flesh ripens to medium-red. Best planted in late spring or early summer for fall harvest, start seeds in early May. *Long Keeper* is often grown as a supplement to the main crop. **#49125 Pkt. \$2.65**


YELLOW/GOLD TOMATOES


 **DAD'S SUNSET:** 75 days. (Indeterminate) *Fruits ripen to a uniform golden orange like the setting sun.* Very attractive, regular, round-shaped, small-cored fruit with zesty sweet flavor. Fruits are uniform in shape with very few defects, thick-walled, yet tender. Vines provide medium foliage cover and bear 12 oz. fruits singly or in clusters of two. Fruits measure 2-3/4" high by 3-1/4" wide. An excellent mainstay garden variety, recommended also for fresh market use because of the high percentage of marketable fruit with strong visual appeal and excellent flavor. **#49163 Pkt. \$2.75**



 **DJENA LEE'S GOLDEN GIRL:** 80 days. (Indeterminate) [Family heirloom of Djena Lee since the early 1920's. *Djena Lee's* tomato later won first prize at the Chicago Fair 10 years in a row! Introduced by SESE in 1987. Djena (pronounced "Zshena") was part Indian and granddaughter of Minnesota financier Jim Lee. She grew this tomato in Minnesota and on moving to Illinois in 1929 gave started plants to Reverend Morrow (then 15 years old) who has since nurtured this variety and kept it alive.] *Djena Lee's Golden Girl* has a beautiful golden-orange color, one the most appetizing golden tomatoes we have grown. Fruits are medium-sized. Flavor is delicious, a rich balance of sweetness and tanginess. **#49111 Pkt. \$2.95**



TOMATOES


 **EARL OF EDGEcombe:** 73 days. (Indeterminate) [Heirloom from New Zealand. When the 6th Earl of Edgcombe died in the 1960's, the heir to the title of 7th Earl was a relative in New Zealand, a sheep farmer at the time. When he traveled to England to claim the title, he brought this tomato with him. Our seed source was Dr. Carolyn Male who found it the best of her extensive 1996 tomato trials.] Fruits are attractive orange globes, typically borne in clusters of two or more. Uniformly ripening fruits are smooth and regular in shape, defect-free, and notably resistant to cracking, blossom end rot, and fruit diseases. Vines are well branched, of medium length, and provide dense foliage cover for the developing fruits. Fruits have a smooth texture, hold well, and are sweet and tangy, though somewhat inconsistent in flavor under our growing conditions. It seems to develop its best flavor in the northern tier of states. **#49191 Pkt. \$2.85**



 **GOLDEN PONDEROSA, C & O (SESE select strain):** 78 days. [West Virginia heirloom traded by employees of the C & O Railroad since the turn of the century. The first *Ponderosa* variety was introduced in 1891 by Peter Henderson and Co.] Produces somewhat rough, large-cored, yellow-gold fruits weighing over a pound. Although not very tolerant of foliage diseases, it is a good producer and a showy variety with mild-flavored, sub-acid fruits. Our select strain has larger, more uniform fruits. **#49117 Pkt. \$2.25**


 **HUGHS:** 89 days. (Indeterminate) [Introduced in 1990 by SESE. Heirloom from Madison Co., Indiana, since 1940.] *Hughs* has gained a local reputation for its meaty fruit and sweet delicious flavor. It was rated as one of the better-flavored of 250 tomatoes grown during the summer of 1988. Though it is a late-maturing variety, it is a heavy producer with some disease-resistance. This pale yellow heirloom beefsteak rivals the flavor of the best heirloom red tomatoes. **#49122 Pkt. \$2.85**

  **MANYEL:** 78 days. (Indeterminate) [The name *Manyel* means "many moons". An heirloom reportedly of recent Native American origin. Original seed sent to SESE by Carolyn Male.] Fruits look like yellow moons amidst the sparse green foliage. Creamy yellow tomatoes with a characteristic lemon-like flavor. Smooth-shouldered fruits are thin-walled with some concentric cracking. Average fruit weight is 6 oz., measuring 2" high by 2-1/4" wide. Fruits are borne in clusters of 2 to 4 on vines providing light foliage cover. The sweet and lemony flavor of this variety is distinctive and adds another dimension to salads and tomato dishes. **#49162 Pkt. \$2.95**

  **PERSIMMON:** 88 days. (Indeterminate) [Introduced about 1982.] *Beautiful persimmon-colored, rose-orange fruits* range between 12 and 16 oz., though early fruits can weigh up to 2 lbs. Ripens from the blossom end to the softly dented light green shoulders, gradually acquiring a rose-orange hue. Vines are vigorous, well branched and produce 1 to 2 fruits per flower cluster. *Persimmon* is one of our personal favorites for inviting color and rewarding flavor. **#49133 Pkt. \$2.50**

 **VERNA ORANGE:** 84 days. (Indeterminate) [Indiana heirloom introduced in 1990 by SESE.] *Huge, orange oxheart-shaped fruits are of superb flavor.* Fruits are among the meatiest and most seedless of tomatoes. Similar to *Yellow Oxheart* except that the fruits ripen to orange, shoulders slightly ribbed, milder flavor, and plants more vigorous. In hot climates, seed cavities tend to be semi-hollow. *Verna Orange* is one our highest-yielding tomatoes in spite of late-season susceptibility to foliage diseases. **#49146 Pkt. \$2.85**

  **YELLOW BRANDYWINE:** 76 days. (Indeterminate) [Illinois heirloom from the Seed Savers Exchange.] *Has the same great flavor as the popular pink-fruited Brandywine.* Fruits are large, slightly ribbed beefsteaks with sweet, tangy, delicious flavor. We rate it in the top 10% for flavor. Extremes of temperature may sometimes cause some fruit shape irregularities. Large potato-leaf foliage provides medium fruit cover. **#49186 Pkt. \$2.50**



 **YELLOW OXHEART:** 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, Virginia. Reintroduced in 1989 by SESE.] *Yellow Oxheart* rates in the top 5% of all yellow and golden tomatoes in our trials, and was the top performer in its class at every trial location in the Mid-Atlantic and Northeast. The sweet fruits have a small core and a distinctive, rich, full, and exceptionally well-balanced flavor. Use *Yellow Oxheart* for salads, slicing, or processing, or eating off the vine. Low tolerance to disease and drought and poor seedling vigor are characteristic of this variety, but in most other respects it is a superb tomato. Foliage has thin, lacy, finely divided leaves. Fruits are bright yellow, meaty, oxheart-shaped, and weigh close to a pound. **#49153 Pkt. \$2.75**



CURRENT TOMATOES

(Lycopersicon pimpinellifolium)

Current tomatoes are essentially wild tomatoes, little changed by domestication. Vines are long indeterminate with an open growth habit and generally good disease resistance. Fruits are the size of a berry, 1/2" to 3/4" in diameter. Flavor is intense, sweet and piquant. They are specially suited as salad accents and for the specialty restaurant trade. Seeds are small.

PACKET: 0.05 g to 0.09 g depending on variety.

  **RED CURRANT:** 62 days. (Indeterminate) [Wild South American tomato.] Intensely flavored, berry-sized, red fruits in clusters of 16 to 20. **#49803 Pkt. (0.05g) \$2.35**

  **SUGAR CHERRY:** 76 days. (Indeterminate) [SESE introduction, 1994.] Excellent production of sweet-tasting fruit. *Sugar Cherry* is a large currant-type tomato with 3/4" orange-red fruits borne in clusters of 12. The berry-sized fruits are larger than true currant tomatoes and are intensely flavored and sweet. *Sugar Cherry* is especially suited for salads and is of special interest to specialty growers and the restaurant trade. **#49801 Pkt. (0.09g) \$2.85**

GROUND CHERRIES, TOMATILLOS, TURNIPS, RUTABAGA

HUSK TOMATOES

(*Physalis* species)

CLASSIFICATION AND HISTORICAL NOTES: Husk tomatoes are distinguished from tomatoes by the light-brown, papery husk (calyx) which enlarges and covers the maturing berries. There are a number of cultivated species, the two most common are the ground cherry (*Physalis pruinosa*) and the tomatillo (*Physalis ixocarpa*). Both have been cultivated in Central and South America for centuries, even before tomatoes. Ground cherries are so named because the cherry-sized berries are borne near the ground. The leaves of ground cherries are hairy or fuzzy and the plants grow 1 to 2' tall with lateral spreading growth. Ground cherries self-sow readily. Tomatillos are larger-fruited, typically 1 to 2" diameter, and the plants grow 1 to 3' tall with smooth leaves. Some varieties may grow 8' or more with a ground-skinning growth habit. The Spanish name tomatillo is derived from the Indian name "tomat". **CULTURE:** Culture of husk tomatoes is similar to tomatoes. (See Tomato section.) **HARVEST:** Husk tomatoes usually do not ripen fully until after falling from the plant. Ground cherries ripen from green to yellow-gold. Tomatillos ripen from green to yellow-green to pale yellow. **FRUIT SET:** 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. **FLAVOR:** The fruit of ground cherries and tomatillos vary considerably in flavor, color, size, firmness, ripening time, and keeping quality, depending on the cultivar. **PREPARATION AND USES:** Ground cherries are eaten out-of-hand, or are used in desserts, sauces, preserves, fruit toppings, pies and salads. Tomatillos are usually cooked to bring out full flavor: simmer for 5 to 10 minutes in a pot of water; then use in chili rellenos, salsa verde, guacamole, or other sauces or dips. **SEED SAVERS:** Isolate varieties by 150' for pure seed. **PACKET:** 0.06 to 0.1 g (90 to 140 seeds).

GROUND CHERRIES



COSSACK PINEAPPLE (*P. pruinosa*): 60 days.

The 1/2" diameter berries of *Cossack Pineapple* have a delicious flavor reminiscent of pineapple. These bite-sized berries are so tasty that they may never make it into the kitchen, especially if you have children. They are excellent for preserves, hot dessert toppings, salads or mock pineapple yogurt. Plants are short (12" to 18") but with bushy spreading lateral branches which choke out weeds. Fruits ripen to a pineapple yellow.

#47101 Pkt. (0.06g) \$2.75



GOLDIE (*P. pruinosa*): 75 days. *Goldie* is a late

variety with larger berries, averaging 3/4" in diameter. Use these sweet berries fresh in salads, pies, dessert toppings or preserves. **#47102 Pkt. (0.06g) \$2.25**

TOMATILLOS



PURPLE DE MILPA (*P. ixocarpa*): This vigorous variety produces small purple-tinged berries about 5/8" in diameter. Self-sows readily. Has a stronger, sharper flavor than other tomatillos and is a preferred variety for some Mexican dishes.

#48101 Pkt. (0.09g) \$2.85



TOMATE VERDE (*P. ixocarpa*): 95 days. Tall, 6 to 8'

plants are best staked, caged, or pruned. Vines can be allowed to skim the ground if desired. Berries average 1-1/2" in diameter and are pale yellow green when ripe. Husks are easy to remove

and fruits are excellent quality. *Tomate Verde* adds a unique sweet-sour flavor to Mexican dishes.

#48102 Pkt. (0.09g) \$2.55

TURNIP GREENS (SALAD TURNIPS)



SEVEN TOP (SOUTHERN PRIZE, FOLIAGE

TURNIP): 45 days. [Pre-1880.] Popular southern variety used as a winter annual. This variety is grown exclusively for greens and not the roots, which are woody. Leaves grow 18 to 22" tall, but should be harvested when young and tender.

#29201 Pkt. \$1.99; #29201D (14g) \$3.75

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 to 1/2" deep and thin to 5" apart, in a hexagonal pattern in block plantings. **HARVEST:** Best-quality roots are 2 to 3" in diameter. Both roots and leaves may be eaten raw or cooked. **PESTS:** Flea beetles can be controlled with rotenone. **SEED SAVERS:** Isolate a minimum of 600' for home use. For pure seed isolate at least 1/4 to 1 mile from turnips, mustard, and Chinese cabbage. **PACKET:** 3 g (about 1350 seeds) sows 68'

FALL TURNIPS

AMBER GLOBE (YELLOW GLOBE): 63 days.

[Introduced prior to 1840.] Best planted in the fall. Roots are smooth and globe-shaped roots, 6" in diameter. Harvest at 3 to 4". The fine-grained flesh is creamy yellow in color.

#29104 Pkt. \$1.99

SPRING & FALL TURNIPS



PURPLE TOP WHITE GLOBE: 50 days. [Pre-1880.] A round, white turnip, 5" in diameter, with bright purple color around the top where exposed to sunlight. Harvest at 3" diameter. A favorite garden variety. **#29102 Pkt. \$1.99**



WHITE EGG: 48 days. Fast-growing turnip popular in southern areas. Egg-shaped roots, 3-1/2" x 2-1/2", grow partly above ground. Crowns are green-tinted. Flesh is white, fine-grained, and mild-flavored. Good bunching variety.

#29103 Pkt. \$1.99

SWEDISH TURNIPS (RUTABAGA)

(*Brassica napus* var. *napobrassica*)



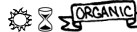
AMERICAN PURPLE TOP YELLOW: 90 days. [Introduced before 1920 as an improved strain of *Purple Top Yellow* (pre-1850) selected for a smaller top, shorter neck, globular shape, and sweetness.] *American Purple Top Yellow* is a Swedish turnip of American origin. It has long been the standard for home and market use. Roots should be harvested when 4 to 6" in diameter. Flesh is mild, yellow, fine-grained, and firm.

#29501 Pkt. (3g) \$1.99

WATERMELONS

WATERMELON

(*Citrullus lanatus*)



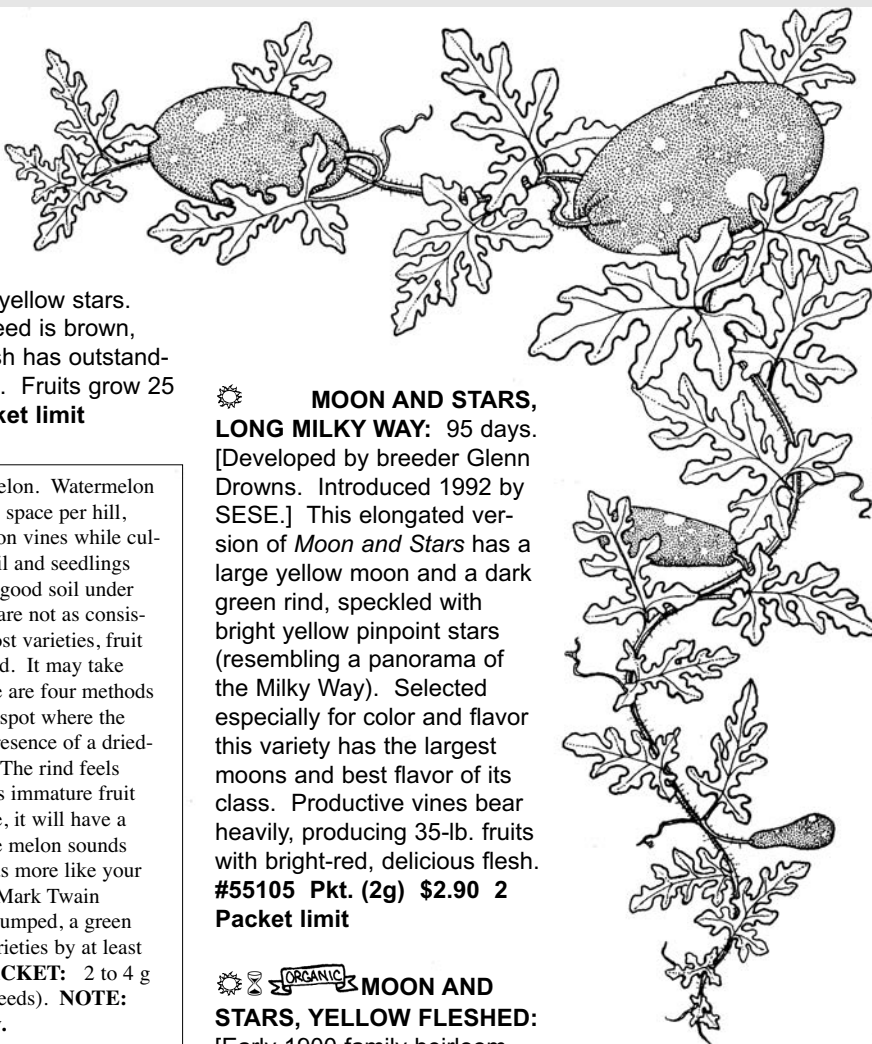
AMISH MOON AND STARS:

[Re-introduced 1987 by SESE. This Amish heirloom is possibly a variant of 'Sun, Moon, and Stars' introduced by Peter Henderson and Co. in 1920] Fruits have large yellow moons and small stars on a dark green oblong rind. Foliage is covered with yellow stars. This strain has a smooth, slightly ridged rind. Seed is brown, slightly mottled with beige. The reddish-pink flesh has outstanding flavor and is sweeter than most watermelons. Fruits grow 25 to 30 pounds. **#55103 Pkt. (2g) \$2.90 2 Packet limit**

CULTURE: Culture of watermelon is similar to Muskmelon. Watermelon vines require anywhere from 36 to 100 square feet of vine space per hill, depending on variety. Be careful not to disturb watermelon vines while cultivating around them. Watermelons are planted in cool soil and seedlings emerge over a period of several weeks. When planted in good soil under good environmental conditions, melons will do well, but are not as consistent producers as some other crops. **HARVEST:** For most varieties, fruit is mature and most desirable during a 10- to 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 has a dull, opaque appearance, whereas immature fruit 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'". **SEED SAVERS:** Isolate varieties by at least 1/8 mile for home use, or 1/2 to 1 mile for pure seed. **PACKET:** 2 to 4 g (about 20 to 77 seeds, depending on variety, average 39 seeds). **NOTE:** All watermelons are limited to two packets per variety.

BLACK TAIL MOUNTAIN: 73 days. [Developed by Glenn Drowns in 1977.] *Small fruited, earliest of all.* An excellent small fruited, fast maturing, highly productive watermelon that can be successfully grown in northern, cool short season areas or southern hot, humid, areas. *Black Tail Mountain* was the earliest of 114 varieties that developer Glenn Drowns grew in 1994. The perfectly round fruits have a dark-green rind, patterned with narrow, darker-green stripes. The flesh is orange-red, of fine texture, with sweet rich flavor. The small brown seeds appear to have a black tail. This is a widely adapted, dependable variety, especially suited for small gardens. **#55113 Pkt. (1g) \$2.90 2 Packet limit**

CRIMSON SWEET: 85 days. [Introduced 1964. AAS winner.] Medium-sized, striped melon with tolerance to anthracnose (race 1 and 3) and Fusarium (race 1 and 2). Melons are typically 10" x 12", weighing in the range of 23 to 27 lbs. Requires more space but has advantage of disease tolerance where disease is a problem. A reliable variety for the Southeast. A unique feature of this variety is its ability to promote beneficial soil fungi that inhibit fusarium wilt. **#55101 Pkt. (3g) \$2.35 2 Packet limit**





MOON AND STARS, LONG MILKY WAY: 95 days. [Developed by breeder Glenn Drowns. Introduced 1992 by SESE.] This elongated version of *Moon and Stars* has a large yellow moon and a dark green rind, speckled with bright yellow pinpoint stars (resembling a panorama of the Milky Way). Selected especially for color and flavor this variety has the largest moons and best flavor of its class. Productive vines bear heavily, producing 35-lb. fruits with bright-red, delicious flesh. **#55105 Pkt. (2g) \$2.90 2 Packet limit**

MOON AND STARS, YELLOW FLESHED: [Early 1900 family heirloom from Georgia. Introduced 1987 by SESE. Years ago, a melon of this description was routinely shipped from Bermuda to some southern states around Christmas time.] This rare white-seeded, yellow-fleshed variety has good flavor though it is not quite as sweet as other melons of the *Moon and Stars* type. Appears to have some tolerance to disease and drought. Fruit rinds have 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. (3g) \$2.90**


STRAWBERRY: 85 days. [Selected from a Florida heirloom by Walt Childs and introduced by SESE in 1989.] *Strawberry* is an excellent garden variety watermelon with intensely colored, strawberry-red flesh which ripens to within 1/2" of the rind. The texture is delicate and the sweet flavor is outstanding, distinctive, and the best we offer. The melons are long (8 x 20"), dark green, with darker green stripes. Fruits have fewer seeds and range between 15 and 25 lbs. Disease resistance is very good. **#55110 Pkt. (2g) \$3.25 2 Packet limit**

WATERMELONS, GRAINS AND COVER CROPS

 **SUGAR BABY:** 77 days. *Space-saving variety.* [Introduced 1959.] Produces icebox sized, 6 to 8" melons with a hard rind which turns green-black when ripe. Handles drought well. Fruits range from 6 to 10 lbs. with red flesh and small seeds. *Sugar Baby* is a consistently reliable and widely adapted icebox melon. **#55111 Pkt. (3g) \$2.35 2 Packet limit**


 **QUETZALI**^{PVP}: 83 days. This new watermelon topped our 1999 taste trials. The fruits have a pleasing texture and are very sweet. The rind is unusually thick, so loss to splitting tends to be low. Fruits are covered with alternating dark and light green stripes. Produces small 7- to 13-lb. fruits. **#55115 Pkt. (2g) \$2.65 2 Packet limit**

BUCKWHEAT (*Fagopyron esculentum*)

 **BUCKWHEAT - Variety unspecified:** 30 to 45 days as a green manure crop. 80 days for grain. Wait until grain heads form if you want the crop to re-seed itself. May also be used as a nutritious cereal grain or pancake flour. 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. Use as a green manure crop at the rate of 1 lb/400 sq. ft. For a late fall/winter cover crop we recommend sowing buckwheat as a nurse crop for crimson clover. In the fall, the buckwheat is killed by frost. Four lbs. sows 1600 sq. ft. **#73101 Pkg. (4 lb) \$11.50**

DRAGON'S CLAW MILLET (*Eleusine coracana*)


HISTORY: This annual grass cultivated since 3000 B.C. is a major food crop in India, Africa, Asia and Indonesia. **CULTURE:** Culture is similar to sorghum. Highly productive and easy to grow, it yields 2000 lbs./acre.


 **RAGI** 95 days. A highly productive variety that is very ornamental, especially as a border. Annual plants, 3' high, produce a seed head that resembles the five claws of a dragon's foot. Used as flour or cereal. Has a good flavor. **#72651 Pkt. (1.5g) \$2.75**

GRAIN AMARANTH (*Amaranthus species*)

PEST CONTROL NOTE

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 cucurbites planted nearby.


 **GOLDEN AMARANTH:** (*A. hypochondriacus*) 80 days. A high-quality Aztec grain amaranth. Stalks and leaves are golden yellow with bronze-gold seed heads. Stalks average 6' tall. Can be used as a dry land/irrigated amaranth. In the far north areas long days may delay flowering of Aztec grain types. **#72101 Pkt. \$2.30**


 **MAYO INDIAN:** (*A. cruentus*) 90 days. *Beautiful maroon-flowered, black-seeded variety.* [From Sonora, Mexico] This black-seeded amaranth is a very vigorous variety with sturdy stalks. Primarily used for grain or to make pinole and atole. The


Amaranth has been grown as a staple crop for at least 8,000 years by cultures in Central America. Amaranth has many valuable qualities: (1) a high content of lysine-rich protein, (2) high mineral and vitamin content, and (3) an ability to adapt to high temperatures when many other crops become unproductive. **CULTURE:** Amaranth is planted at about the same time as corn. Two weeks after the last frost date sow seed 1/4" to 3/8" deep, 1" apart in rows 2' to 3' apart, depending on variety, and in-row spacing. Thin to 4" to 10" apart, once seedlings are well-established. The seeds are quite small (approx. 1/16") 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. If nitrogen is used, use only organic nitrogen because amaranth is a nitrate accumulator. Plant height is very dependent on soil fertility and moisture content. **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 "massaging" 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 winnow the seed. Freshly harvested seed may 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' for pure seed. **PACKET:** 2g (about 1700 seeds) sows 65 to 130'.

leaves may also be used like spinach. The stalks, leaf veins, and large seed heads are colored a beautiful maroon red, providing a bright contrast to the green foliage. Makes a nice ornamental as well. **#72103 Pkt. \$2.80**


LEGUME & GRASS COVER CROPS

 **HAIRY VETCH (annual)** (*Vicia villosa*): Sow Aug. 1 to Nov. 1 as a winter cover crop. Highly efficient nitrogen fixer. Mow it in the Spring and transplant tomatoes or other large transplants directly into the vetch, or till under. Sow at rate of 1 lb. per 1000 sq. ft. Best sown with annual rye in a ratio of 2 lbs. vetch to 1 lb. of ryegrass. **#73203 Pkt. (1/2 lb) \$4.95**

 **RED CLOVER (biennial)** (*Trifolium pratense*): Rapid-growing green manure crop sown in the spring or fall for turn-down to incorporate organic nitrogen into the soil. If sown in summer use buckwheat as a nurse crop to aid germination of clover in summer heat. The clover will grow slowly under the buckwheat until fall frost kills the buckwheat allowing the clover to establish quickly. This method eliminates fall tilling. One-half pound sows 1000 sq. ft. **#73201 Pkt. (1/4 lb) \$3.95**

 **WHITE DUTCH CLOVER (perennial):** (*Trifolium repens*): A low-growing clover sometimes used in grass seed mixtures. Can be sown between garden rows to add nitrogen and to smother out weeds. One-fourth pound sows 1000 sq. ft. **#73202 Pkt. (1/4 lb) \$4.85**


HULLESS OATS (*Avena sativa*)


 **HULLESS (PENNUDA):** Growing your own oats is easy with *Pennuda*. Sow in early spring as soon as the ground can be worked. Harvest in mid to late summer, thresh, and winnow. *Pennuda* lacks the indigestible husk of common oats. Grind into oat flour or crack in a grain mill to make oatmeal. One pound sows 350 to 500 sq. ft. **#72552 Pkt. (1/2 lb.) \$3.80**

SORGHUM AND 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 a crop of grain where corn may fail. **CULTURE:** Sorghum is planted in the same fashion as corn with similar spacing. (See corn section.) Sow seeds 1/2 to 3/4" deep. **HARVEST FOR SEED:** 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. **HARVEST FOR SYRUP:** 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 chewed like candy. **SEED SAVERS:** Isolate 1/2 mile from other sorghum, broom corn, grass and sudan grass. **PACKET:** 7 gm (about 350 seeds) sows 50'.

 **HUNGARIAN BLACK SEEDED BROOM CORN:** 115 days. Heirloom broom corn traditionally used for making brooms. Grows 8 to 12 feet tall, producing long seed heads heavily laden with shiny black seeds. Important historical variety. **#72602 Pkt. \$2.55**


 **BLACK AMBER CANE:** 99 days. [Heirloom sent to us from R.C. Mauldin of the Southwestern Seed Service Lab in Waco, Texas. Reintroduced by SESE in 1997.] *Black Amber Cane was one of the earliest sweet canes introduced to American agriculture.* It was supplanted by *Redtop* which has a higher yield. Used primarily as a syrup sorghum. As a silage crop it has the hay and wild game quality of *Merit*. Makes a good intercrop with beans and peas. Stalks range from 6 to 8' bearing large shiny black seeds. **#72606 Pkt. \$2.75; #72606F (1/4 lb) \$8.75**

SWEET SORGHUM: Production and Processing
[George Kuepper] A simple guide to small-scale, 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**

 **MENNONITE:** [Mennonite heirloom from Jamesport, Missouri region.] This old fashioned cane sorghum is used for making a light-colored syrup on pancakes or waffles. Stalks are tall and thick. The red-hulled seed may be ground to make flour, especially for pancakes. **#72604 Pkt. \$2.50; #72604F (1/4 lb.) \$10.50**



HEIRLOOM WINTER WHEAT

 **MEDITERRANEAN:** A soft red winter bearded variety common in the mid 1800's. Among the varieties of its day it was famous for being a fly-proof wheat that ripened early, a characteristic that also helped it escape rust and insect damage. Adapted to the high rainfall and mild weather of the east, which was formerly the breadbasket of the U.S. Used to make an all-purpose flour for baking. **#72553 Pkt. (14g) \$3.80**

BOOKS

AGRICULTURAL CALENDAR

THE KIMBERTON HILLS AGRICULTURAL 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" x 12". Includes space for garden notes. Current edition. **#91131 \$14.95**

GARDEN CRAFTS

HOW TO MAKE ROMANTIC BENTWOOD TRELLISES [Jim Long] Step-by-step directions for making full-sized garden trellis-

es, miniatures for the deck planter, gates, arbors, and decorative fences as well. Information is included for finding and choosing trellis wood, descriptions of the best kind of wood to use, along with recommended tools and source lists. Softcover, 30 pp. **#91136 \$5.95**

GROWING GUIDES & COMPANIONS

BUILDING AND USING COLD FRAMES [Charles Siegchrist] This handy booklet gives easy-to-follow instructions for the use and construction of cold frames. Softcover, 32 pp. **#91103 \$3.95**

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, diagnosis and correction of problems, requirements of vegetable crops, pollination, selection, seed saving, and seed storage. Contains numerous informative tables and sources of information for supplies. Readable reference for all gardeners. Softcover, 363 pp. **#91118 \$17.95**

100 HEIRLOOM TOMATOES FOR THE AMERICAN GARDEN [Carolyn J. Male] Carolyn Male's name is synonymous with American heirloom tomatoes. Tomatoes have always been the most popular plant in the vegetable garden, and today the class act among tomatoes is the heirloom varieties. This thorough how-to and stunningly photographed field guide covers every facet of growing heirlooms, from selecting the right varieties for your zone and type of garden to timing and planting of seeds, transplanting, hardening off, staking vs. caging, seed saving, and more. Softcover 246 pp. **#91157 \$22.00**

HEIRLOOM VEGETABLE GARDENING CLASSICS & HISTORY

FIELD AND GARDEN VEGETABLES OF AMERICA, Third edition [Fearing Burr, Jr. 1865] Recently reprinted, this quality reproduction is an essential reference for plant collectors, seed savers, vegetable historians, and heirloom gardeners. Contains descriptions of nearly 1100 species and varieties of vegetable plants, medicinal plants, and rare crop plants. Includes cultural directions, variety synonyms, and fine woodcut illustrations. Burr's outstanding literary and horticultural work in variety description gives gardeners a rare look at the varieties available in the 1860's. Until this book was reprinted, individual copies were rarely available, and only at a premium price. A collector's item, printed on acid-free paper. Quality softcover, 704 pp. **#91107 \$29.95**

GROWING HERBS FOR MARKET

AMERICAN GINSENG—GREEN GOLD [W. Scott Persons] This book details the three basic methods that the author developed for growing ginseng: artificial-shade, wild-simulated, and woods-cultivated. Also lists resources. Softcover, 172 pp. **#91160 \$18.00**

MEDICINAL HERBS in the Garden, Field & Marketplace [Lee Sturdivant and Tim Blakley] In the first half of this book Lee Sturdivant gives a thorough overview of the market for medicinal herbs. She outlines and elucidates the many business possibilities for growers large and small. Lee tells you how and where to sell your medicinal herbs, what companies to contact, and what they expect. In the second part, Tim Blakley covers in detail how to grow, harvest, and dry 75 important medicinal herbs. You'll also learn what supplies, equipment, soil, fertilizers, and land are recommended. Complete details on propagation, cultivation, harvesting, drying, processing and current selling price, and comments about sales potential. A step-by-step guide written by two of the most experienced people in the herb industry. Softcover, 324 pp. **#91146 \$24.95**

HERBS AND HERBAL MEDICINE

ECHINACEA: NATURE'S IMMUNE ENHANCER Author, Steven Foster, is the most knowledgeable person in the U.S. on Echinacea. This is the best standard reference on this herb. Covers all the species of Echinacea, their characteristics, cultivation and uses. Soft cover, 150 pp. **#91127 \$9.95**

THE HERBAL MEDICINE-MAKER'S HANDBOOK An indispensable guide for anyone who wants to make their own herbal medicines. [James Green] The author is a practicing herbalist and medicine-maker who teaches at the California School of Herbal Studies. This is one of the texts used in his course. It 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. Large paperback, 40 pp. **#91137 \$13.95**

WILD ROOTS [Doug Elliot] An illustrated forager's guide to the edible and medicinal roots, tubers, corms and rhizomes of North America. Over 55 plants are covered as edibles, teas, medicines, toothpaste, shampoo, and dyes. This is an in-depth book with a focus on the often unseen underground portion of edible and medicinal plants. Softcover, 128 pp. **#91135 \$16.95**

MARKET GARDENING

GARDENING FOR PROFIT [Peter Henderson, 1867] A guide to the successful cultivation of the market and family garden. This reprint of Peter Henderson's classic reveals his 30 years experience as a market gardener, commercial florist, seed merchant, and author who shaped and reshaped 19th-century horticulture. This practical guide has better advice than a bookshelf of modern day gardening books. Henderson had a gift for simplifying complexities while concentrating on the essential and pragmatic. An essential reference book for any modern market grower. Printed in a limited edition on acid-free paper in a sewn binding. Quality softcover, 496 pp. **#91110 \$23.95**

GROWING GREAT GARLIC [Ron Engeland] This is 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 garlic strains. Softcover, 226 pp. **#91111 \$15.50**

NATIVE AMERICAN GARDENING

NATIVE AMERICAN GARDENING: Stories, Projects, and Recipes for Families [Michael J. Caduto and Joseph Bruchac] Combines the magical world of Native American stories with the nurturing experience of gardening. Learn how 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 \$17.95**

SEED SAVING

GROWING AND PROPAGATING WILD FLOWERS [Harry Phillips] Grow your own wildflowers from seed collected in the wild! Specific instructions for propagation, preservation, and culture of over 100 genera of wildflowers, carnivorous plants, and ferns. Includes directions for collecting, storing, and germinating seed, and raising plants from cuttings, seeds, and divisions. Information on use of native plants in the home landscape. Illustrated softcover, 330 pp. **#91130 \$23.00**

SEED TO SEED: SAVING OUR VEGETABLE HERITAGE [Suzanne Ashworth] This is the first thorough and comprehensive book on seed saving intended for both new and experienced seed savers. It 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**

WEEDS AND PLANT DISEASE

IDENTIFYING DISEASES OF VEGETABLES [MacNab, Sherf, and Springer] Superbly illustrated, descriptive manual covering the common diseases of most vegetables. Indispensable and very readable. The excellent photographs and concise descriptions make this the best reference for disease identification. Large format softcover, 62 pp. **#91133 \$17.95**

WEEDS AND WHAT THEY TELL, 2ND EDITION [E. Pfeiffer] 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, 96 pp. **#91123 \$8.50**

WEEDS: CONTROL WITHOUT POISON [Charles Walters] This is an exciting study of the art of maximizing crop production while minimizing weed impact through soil management. It provides an excellent lesson in some of the finer points of soil science with a detailed perspective on pH management. Large paperback. **#91156 \$25.00**

SUPPLIES

CORN SHELLERS

CORN SHELLER Hand-held aluminum sheller makes quick work of shelling corn. **#85111 \$10.00**

POPCORN SHELLER Like the corn sheller, but smaller to handle ears of popcorn and small-eared corn. **#85112 \$10.00**

DETERRENTS AND REPELLENTS

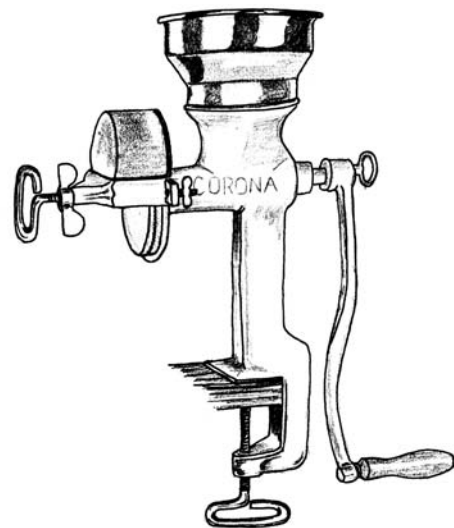
"BIRD SCARE FLASH TAPE"

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. 250' roll, 7/16" wide. **#81501 \$4.95**

GRAIN PROCESSING

"CORONA" GRAIN AND CORN MILL

Enjoy the flavor and freshness of your own homemade cornmeal, cereal or flour. This hand-cranked mill uses rotating steel burrs to crack and grind corn, beans, grains, nuts, and seeds. It can also be adapted to hull rice and wheat by replacing the stationary disk with a neoprene rubber disk, or order the de-huller attachment below.) Unlike a stone mill that grinds only cereal grains, this versatile mill will handle oily nuts and seeds. Quickly and easily adjustable from coarse to fine grind, three passes through the mill give a flour as fine as a stone mill. Constructed of cast iron with a non-toxic tin finish, the Corona Grain and Corn Mill is easy to use and clean. Simply clamp or bolt to a table or counter. **#81601 "Corona" mill \$72.00**



#81601W "Corona" mill shipped west of Mississippi \$79.00
#81601N "Corona" mill shipped to Canada \$95.00
#81602 Set of 2 replacement steel burr plates \$10.00

LABELS, MARKERS AND TAGS

ALL-WEATHER MARKING PEN Permanent, xylene-free, quick-drying ink writes on all materials, even when surfaces are cold or wet. An ultra-violet filter in the ink dramatically reduces fading. **#81403 \$2.80**

FLUORESCENT TAGGING TAPE Weather-resistant fluorescent tape contrasts with foliage for marking selections, pollinations, and on-site data recording. Supplied as 1-13/16" x 150' rolls. **#85114 \$3.95**

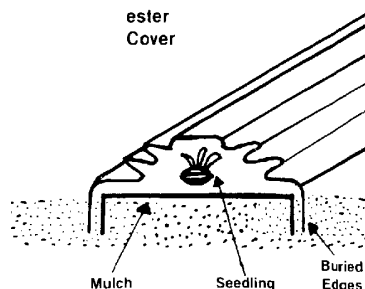
PLASTIC POT LABELS (for pots and garden rows) Labels measuring 5" x 5/8" last one or two seasons depending on the amount of sunlight exposure. Can also be fastened directly to plants by using a hole punch and a twist tie. **#81406 50 for \$2.65**

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" tall x 7/8" wide x 1/8" thick. **#81408 25 for \$5.95; #81408A 100 for \$11.95; #81408B 250 for \$22.95; #81408C 500 for \$39.00**

HORTICULTURAL LIGHTING

PROFESSIONAL HIGH INTENSITY HORTICULTURAL LIGHT
*A High Intensity Discharge (H.I.D.) full-spectrum white light for professional growers. This is the best supplemental light source available for its size and cost. Produces 17,000 lumens of light, enough to illuminate a 6' x10' area! Illuminates a 15 sq. ft. area at 1133 foot candles, or 30 sq. ft. at 566 foot candles, or 60 square feet at 283 foot candles. Many agricultural crops require at least 1000 foot candles of illumination for saturation of photosynthesis and maximum growth. H.I.D. lights are far superior to fluorescent lamps, and the light spectrum is ideal for agricultural crops. This H.I.D. light is designed to be suspended above the plants on 2 small chains and "S" hooks. It may be mounted as low as 48" above the plants. Illumination can be further enhanced by use of foil-covered cardboard reflectors. Lamp life is rated for 24,000 hours (equivalent to 3 years at 24 hrs/day). Replacement lamps can be ordered from us, and are also available at most electrical supply stores. The fixture is drip-protected and is U.L.-rated for humid, wet environments as in a greenhouse application. It is also ideal for indoor use as in a basement. The light color is easy on the eye and the unit is quiet and easy to live with. Comes complete with lamp, adjustable reflector, mounting plate, 10' cord, and 3-prong grounded plug. Rated at 120v/400w/3.3 amps. Quality all-aluminum construction. Five year manufacturer's warranty on the fixture. Shipped direct from the manufacturer to the continental U.S. only. Allow 2 to 3 weeks delivery. **#81605 Hort light with 10' cord \$245.00***

ROW COVER / SEASON EXTENDER



REEMAY® GARDEN BLANKET *Extend your gardening season while controlling insects.* Reemay is a spun-bonded, reusable polyester material that can be placed directly over row crops without use of support hoops. Under normal use it should last 1 to 2 growing seasons. Crops grown

under Reemay produce earlier and higher quality harvests. Frost protection ranges from 2 to 7°F (1- 4°C). Use to protect crops from wind and destructive insects, or use in combination with black plastic mulch to control weeds. 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). **#81617 Reemay 67" x 50' (279 sq. ft.) \$17.95**

ROW COVER STAPLES (anchors Reemay to the soil) Heavy gauge 1" x 6" "U" shaped metal staples with pointed ends. Fabric staples are pushed through the edges of row cover to anchor it to the soil. **#81629 20 for \$5.25**

SEED STORAGE

HEAT-SEALABLE BARRIER POUCHES

Barrier pouches serve as ideal seed containers for long-term seed storage. They are durable, reusable, space-saving, and water-proof. Constructed of laminated foil, paper, and plastic they are supplied as open-ended pouches that may be cut to any size or shape and sealed with most heat sealers, or a clothes iron set on the "wool". Using barrier pouches, seed vigor is maintained up to five times normal viability. Offered in two sizes:
#85101 Small barrier pouches (3"x5") 50 for \$10.00
#85102 Large barrier pouches (4"x8") 50 for \$14.50

MOISTURE-PROOF SEED SAVER VIALS™

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 high-density 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 medium-term seed storage to long-term seed storage. Supplied in four sizes.

SEED SAVER VIAL™ #12 Our #12 space-saving vial is ideal for storing small amounts of seed. Measuring 5/8" in diameter by

2" tall, it holds a volume of 12 ml of seed. **#86012 25 for \$8.25; #86012A 50 for \$10.90; #86012B 100 for \$18.95; #86012C 500 for \$85.00**

SEED SAVER VIAL™ #14 Our #14 vial is a tall vial, measuring 5/8" in diameter x 3fl" tall. Holds 15 to 30 seeds of most beans, peas, and corn, or much larger amounts of small seed. **#86014 25 for \$8.50; #86014A 50 for \$11.25; #86014B 100 for \$19.50**

SEED SAVER VIAL™ #57 Our #57 vial measures 1-1/8" diameter x 3" tall. Holds up to 1.2 oz. of peas, bean, corn or other large seed. **#86057 25 for \$10.50; #86057A 50 for \$14.95; #86057B 100 for \$21.00; #86057C 500 for \$94.00**

SAFETY SEAL SEED SAVER VIAL™ #114-SSLP Our #114 safety seal measures 2fl" in diameter x 2" tall. Its lowprofile design allows for easy stacking of vials. The lid has a hinged safety latch to provide added sealing protection. Holds up to 3.7 oz. of peas, bean, corn or other large seed. **#86114 25 for \$12.50; #86114A 50 for \$20.00**

SEALING & GRAFTING FILM

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' long, 4" wide roll. **#85108 \$2.95 per roll**

SEED PACKETS & LOCKING POLY BAGS

SELF-SEAL SEED PACKETS White kraft with double-sealed seams, top and bottom sift-proof 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 2-3/4" x 4-1/8". **#85110 50 for \$4.65; #85110A 200 for \$14.85; #85110B 500 for \$31.25; #85110C 1000 for \$59.00**

LIGHT WEIGHT ZIP-LOCK BAGS, 2"x2" Re-sealable 2-mil polyethylene bags with single-locking seal for short-term storage of small seed samples. **#85115 100 for \$4.15; #85115A 200 for \$7.15**

HEAVY DUTY ZIP-LOCK BAGS, 3"x5" 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 50 for \$5.95**

SOIL TESTING



NO-WAIT™ SOIL TEST KIT (Formerly called LaMotte's) *A quality kit providing reliable results at an affordable price.* Soil condition is critical to gardening success. Perform up to 40 tests, 10 each for pH, nitrogen, phosphorous, and potassium. Simply collect and prepare the soil sample, perform the test, and compare the results to

the enclosed color chart. A plant preference guide provides information on the ideal pH and NPK levels for over 100 plants. Test reagents are safe and easy to store and prepare. Includes diagrammed instructions, one-step tablet reagents and plastic test tubes with color-coded tops. **#81619 \$13.95**

TOOLS AND EQUIPMENT

THE ORIGINAL FELCO PRUNER This is the original FELCO design, and has remained unchanged for over forty years. Imitated the world over, this popular model continues the tradition of workmanship. Solid-forged metal alloy handles are complemented by a Swiss precision-made hardened cutting blade and an anvil blade with a snap groove. A hardened bolt and nut ensure exact adjustment of both the cutting and anvil blades. A rubber cushion and shock absorber provide smooth working and soft closing of this pruner. **#81642 \$36.95**

QUALITY GARDEN SHEARS *These are high-caliber garden shears that won't wear out. To prove it we'll give you a lifetime guarantee!* Stays shiny, rust-free, and sharp. One blade is serrated to prevent slippage of wet or dry material, and the other has a straight edge for easy cutting. We have used a pair of these shears for twenty years and have yet to wear them out. Use to cut flowers, seed heads, or to remove old growth. Handy in the kitchen too. **#81641 \$19.95**

PERMA-NEST PLANT TRAYS Attractive and sturdy, heavy duty plant trays. Use these polystyrene plant trays to hold peat pots or small plastic seedling pots. One 8 x 12" tray holds 15 pots (2 1/2" diameter). If desired, drill holes in the bottom for drainage and use as seedling flats. Use also for collecting and drying seed. Trays nest inside each other for storage. Supplied in three sizes, all 2-1/2" deep: **#81607 (small) 4 X 8", 6 \$9.50; #81608 (medium) 8 X 8", 6 \$13.50; #81609 (large) 8 X 12", 6 \$15.50**

3" PLASTIC SEEDLING POTS The perfect size pots for starting seeds and seedlings. Round green pots with smooth non-stick surface and excellent drainage. They stack and de-nest easily. **#81611 12 for \$5.30; #81611A 24 for \$8.15; #81611B 48 for \$12.45**

SUPPLIES, GIFT CERTIFICATES

SPROUTING LIDS WITH STAINLESS STEEL SCREENS Grow your own sprouts—the freshest food without soil, all year long. These economical, non-rusting sprouting lids turn an ordinary canning jar into a sprouter. The sprouting lids consist of a small mesh stainless steel screen and a green threaded plastic ring that holds the screen on the top of most wide mouth jars. Use for sprouting alfalfa, radish, fenugreek, clover, sunflower, soy, mung, or garbanzo beans. You can grow your own alfalfa sprouts at one-tenth the cost of buying them in the supermarket—and they will have garden fresh flavor. Easy to use, you can grow your own sprouts in less than five minutes a day. Sprouting instructions included. **#81620A 2 for \$5.95; #81620B 6 for \$12.50; #81620C 12 for \$19.00**

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 fl" hose thread. **#81102 \$7.65**



FOGG-IT NOZZLE Provides a fine mist (1 gallon per minute flow) for watering delicate seedlings and misting cuttings. Bronze construction. Fits standard fl" hose thread. **#81103 \$8.50**



QUARTER-TURN SHUT-OFF REGULATOR Finger-tip control regulates or shuts off water flow. Solid brass construction with O-ring pressure seals. Use in combination with Water Breaker or Fogg-It Nozzle. **#81101 \$10.95**

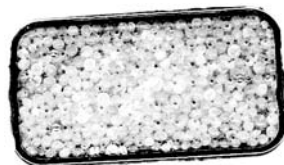


COLOR-INDICATOR SILICA GEL

INDICATOR SILICA GEL (BULK PACK)

Use silica gel to dry seed for long-term storage or for drying flowers. When used as directed, silica gel dries seed from 12% typical moisture content to a desired 3 to 5% moisture content. Note: legumes should not be dried below 6% moisture content. Color-indicating silica gel is deep blue when completely dry, changing to pink as it picks up moisture. To dry seed, place equal weights of seed and silica gel together in an airtight jar for 7 days. Remove with a rubber gasket lid. Used over and over, silica gel can be re-dried rapidly in the oven or microwave. Instructions are included. **Silica gel (bulk)**

#85113A (1 oz) \$3.15; packed in Seed Saver Vial™ #57
#85113B (3 oz) \$5.40; packed in Seed Saver Vial™ #114
#85113C (1 lb) \$13.75
#85113D (5 lbs) \$47.00
#85113W (5 lbs) \$49.00 shipped west of the Mississippi
#85113N (5 lbs) \$57.00 shipped to Canada



SILICA GEL CANISTER WITH INDICATOR An easy and convenient way to use silica gel. Reusable desiccating canister is ideal for seed savers who dry small amounts of seed. This canister will dry 40 gms (approx. 1.4 oz) of seed. It can also be used to dry the air in all types of moisture-resistant containers (up to 3 cubic feet of air/canister). Use also for foodstuffs, cameras, tools, shoes, clothing, historical artifacts, display cases, and electronic instruments. Protects valuable items from mold, mildew, rust, and corrosion. The see-through, microwave-safe, plastic canister of silica gel can be regenerated in about 8 to 12 minutes. Heating converts the inactive pink silica gel to active blue silica gel. Use over and over. Contents are chemically inert, non-corrosive, non-toxic, and odorless. **#85120 Silica gel canister \$11.95**

POLLINATION, SEED, & SPICE BAGS

CORN EAR SHOOT BAGS Weather-resistant bags, measuring 2" x 1" x 7" used to cover ear shoots when hand pollinating corn. **#85104 200 for \$10.00; #85104A 500 for \$19.95**

CORN TASSEL BAGS Weather-resistant bags, measuring 5.75" x 4" x 14.5". Used to cover tassels. **#85106 50 for \$10.00; #85106 100 for \$15.00; #85106N 100 for \$15.50, shipped to Canada**

DRAWSTRING MUSLIN BAGS (SPICE BAGS) 3"x4" These cloth drawstring bags are ideal for bagging flowers to exclude pollinators while allowing normal flower development, or to use for holding silica gel during seed drying. Also use to bag spices for cooking soups and stews. **#85103 20 for \$4.35**



		GIFT CERTIFICATE	
A Gift For _____		Worth _____ \$ Dollars <input type="text"/>	
From _____		Date _____ No. _____	
SOUTHERN EXPOSURE SEED EXCHANGE P.O. Box 460 Mineral, VA 23117 www.southernexposure.com		Authorized signature _____	

GIFT CERTIFICATES

We offer gift certificates in any whole dollar amount. Simply send us the name and full address of the recipient along with payment. We will send a gift certificate and a catalog and (if you wish) your personal message to the recipient.

ORDERING INFORMATION

HOW TO ORDER

ONLINE: Please visit our secure site at www.southernexposure.com. The entire contents of this catalog are available there. From time to time we will also offer special discounts and items of which we have limited quantities. All current members (your member number is on the back of your catalog) will receive a 5% discount for online orders.

BY FAX: Fax your order to (540) 894-9481 anytime, 24 hours a day. This is faster and more economical than phone ordering. *Please use our order form.* See Avoiding Delays below.

BY MAIL: Send the enclosed order form to Southern Exposure Seed Exchange, PO Box 460, Mineral VA 23117. Please keep a dated copy of your order. See Avoiding Delays below.

BY PHONE: Call (540) 894-9480. Our phone is staffed during the peak season, from January 1 to April 15, Monday to Friday from 11:00 a.m. to 3:00 p.m. Eastern Standard Time. Our staff will be happy to assist you in placing your order during peak season. To help us serve you better *please fill in your order blank completely*, be ready to give the catalog number, quantity, item name, and price of each item ordered, and have your credit card on hand before you call.

BY ANSWERING MACHINE: *From April 15 through December 31 we rarely answer the phone, so please be prepared to leave a message.* We are often outside tending seed crops or processing seed at this time of year. Your order will be recorded on our answering machine (24 hours/day). Please speak slowly and clearly when giving your name, address, and zip code. Please spell your last name. The following information is required at the beginning of your order: (1) your member number, (2) credit card number and expiration date, and (3) a daytime phone number where we can reach you in case of questions about your order. Substitutions will not be made for phone orders without your stated approval. *Avoid delay of your order by completing your order form before calling.*

AVOIDING DELAYS

Incompletely filled-out orders may be delayed up to several days. Please write clearly and legibly. Be sure to include your full name, address including zip code, and a daytime phone number in case of questions about your order. Include catalog number, quantity, item description, price, and order total. Please include your credit card number and expiration date.

QUESTION ABOUT YOUR ORDER?

If you have a question about your order, you can send an e-mail to gardens@southernexposure.com, write, call, or leave a message on our answering machine: (540) 894-9480. To locate your order we will need the date of your order, your member number, and your complete mailing address, including your zip code.

PAYMENT

We accept personal checks, money orders, and VISA, MasterCard, Discover, and American Express. Your credit card is charged the day your order is shipped, including backordered items and seasonal items reserved for later shipment. **Accredited institutions and government agencies:** Purchase orders must include payment with order.

PACKING, SHIPPING AND HANDLING:

For merchandise totals

up to \$10.00, add \$3.00

\$10.01 to \$30.00, add \$4.00

\$30.01 to \$50.00, add \$5.00

\$50.01 to \$120.00, add \$6.00

over \$120.00, add 5% to merchandise total

VIRGINIA SALES TAX: There is a 5% state sales tax on orders shipped to Virginia addresses, unless accompanied by a signed exemption certificate.

PRIORITY HANDLING SERVICE: Priority Handling guarantees that your order will be shipped by Priority Mail within 48 hours of receipt of your order (Saturday, Sunday and USPS holidays excluded). *The fee for this service is in addition to the regular shipping and handling charge.* A daytime phone number is required. Available only to customers within the U.S. Rates are as follows: for merchandise up to \$25, add \$5.00; up to \$50, add \$7.50; up to \$100 add \$10.00. Priority handling on larger orders is subject to approval. Fall bulbs are excluded from priority handling.

DELIVERY

SUBSTITUTIONS AND BACKORDERS: Some seed may be in short supply or out of stock after our catalog goes to press. Let us know if substitutions are acceptable and we will supply a similar variety if available. Backorders are held up to a maximum of 45 days, unless other arrangements are made. In the event an item is sold out, we issue a refund. Credit card orders are credited to your credit card account.

DELIVERY TIME: Orders are shipped in the sequence in which they are received. During peak season (December through April) allow 7 to 21 days to receive your order from the day you send it. We will notify you if any delay is anticipated. If you have not received your order after 30 days, please contact us and include the date of your order, your telephone number, and let us know if your check has cleared the bank.

DELIVERY METHOD: We ship the most economical way, usually by the U.S. Postal Service. **Customers with Post Office Boxes:** Please include a street address, name of road, state route number, or daytime telephone number in case we ship by United Parcel Service (UPS) which requires a street address. Please add \$2 if you require UPS delivery which requires extra handling.

BULB SHIPMENTS and other SEASONAL ITEMS

Orders are tallied throughout the year for shipment commencing mid-September and ending early November. We ship to northern areas first. A free 4-page growing guide is included with bulb shipments. Bulbs are shipped only within the 48 contiguous U.S. states. Bulb orders for fall shipment are accepted only while supplies last.

FOREIGN CUSTOMERS

Write, call, or e-mail for ordering terms. We do not ship bulbs or nursery stock outside the continental U.S. **Canada:** If ordering seeds only, add \$2 to shipping and handling, otherwise double shipping. Please pay with a credit card or with a Canadian Postal Money Order payable in U.S. dollars.

PRICES AND QUANTITIES: Prices are in effect until December 31, 2005 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.



Eggplant
Listada De Gandia



Beet
Detroit Dark Red



Flower
Tashkent #1 Marigold



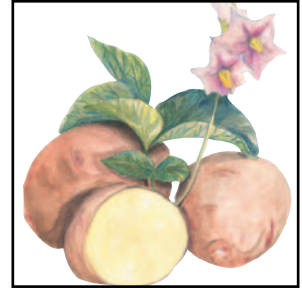
Frying Pepper
Tequila Sunrise



Spice Pepper
Aji Dulce



Winter Squash
Thelma Sanders' Sweet Potato



Potato
Rose Gold



Greens
Arugula



Tomato
Brandywine, OTV



Potato
Red Dale



Herb
Sweet Genovese Basil



Hot Pepper
Chocolate Habanero



Lettuce
Yugoslavian Red



Greetings from SESE's Workers, Interns, and Visitors

Background: Worchester Indian Red Pole Lima

Back from left: Gabriel Duke, Ira Wallace, Amber Brown carrying Zoe Bliss Brown-Bird, Kate Hourihan, Axel Nitschke, Robert Schneck-McConnell, Hannah Farrin

Front from left: Jane, jbird, Katy, Hans Hammar

Not pictured: Gordon Sproule, Ben Spencer, Elsa Spencer, Luuk-kob Spencer, Philip Callen, River Oneida

Southern Exposure Seed Exchange

P.O. Box 460
Mineral VA 23117

540-894-9480
Fax: 540-894-9481
gardens@southernexposure.com
www.southernexposure.com

Presort
Standard
U.S. Postage
PAID
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Mineral, VA 23117

OR CURRENT RESIDENT

*Don't judge each day by the harvest you reap
but by the seeds that you plant.*

Robert Louis Stephenson



Tomato
Radiator Charlie's Mortgage Lifter



Chinese Cabbage
Michihili



Flower
State Fair Zinnia

Photos by 2004 Contest Winners
William Van Doren and Laura Sutherland

Your Photo Here!

Enter our 2005 Photo Contest! The best pictures will appear on next year's catalog, and one will win a \$100 gift certificate!

Please submit photos in either digital or paper form of anything in our catalog. Our staff will vote on the winner in October 2005. Enter as often as you like. We will return originals upon request, but we reserve the right to copy all photos with the intent of creating a photo archive to show potential customers the wonderful varieties we offer.

More photos online at www.southernexposure.com



Tomato
Arkansas Traveler