

### **Application Objective**

After completing this module you will be able to help growers select seeds and planting stock that meet the requirements for organic certification.

### **Learning Objectives**

After completing this module you will understand:

The different types and appropriate uses of seeds, seedlings, and planting stock in an organic system

What seed treatments are acceptable in an organic system

The requirements for on-farm transplant production

The required documentation for record keeping and certification

### **Topics**

Differences in how seeds and planting stock are treated under the NOP Standards

Acceptable seed treatments (i.e. compounds applied to seeds or physical treatments applied to seed)

What constitutes commercial availability for organic seeds

The documentation required to meet the seed and planting stock Standards

### **Relevant Sections of the NOP Standards**

205.204 Seeds and planting stock practice standard

### **Materials and Resources**

Relevant sections of the NOP Standard (<http://www.ams.usda.gov/nop/NOP/standards.html>)

NCAT's *Organic Crops Workbook* (Pages 37-39) (<http://attra.ncat.org/attra-pub/PDF/cropsworkbook.pdf>)

OMRI Products List (See approved seed treatments) ([http://www.omri.org/OMRI\\_product\\_list.html](http://www.omri.org/OMRI_product_list.html))

### **Additional Reference Materials**

National Organic Program Questions & Answers (<http://www.ams.usda.gov/nop/Q&A.html>)

*Organic Potting Mix for Certified Production* (<http://www.attra.ncat.org/attra-pub/potmix.html>)

*Organic Plug and Transplant Production* (<http://www.attra.ncat.org/attra-pub/plugs.html>)

*Organic Greenhouse Vegetable Production* (<http://www.attra.ncat.org/attra-pub/ghveg.html>)

*Integrated Pest Management for Greenhouse Crops* (<http://www.attra.ncat.org/attra-pub/gh-ipm.html>)

*Organic Alternatives to Treated Lumber* (<http://www.attra.ncat.org/attra-pub/lumber.html>)

*Suppliers of Seed for Certified Organic Production (Including Untreated and Non-GMO Seed)*  
(<http://www.attra.ncat.org/attra-pub/altseed.html>)  
Seed and Planting Stock List ([http://www.omri.org/OMRI\\_SEED\\_list.html](http://www.omri.org/OMRI_SEED_list.html))

## Keywords

Annual seedling. A plant grown from seed that will complete its life cycle or produce a harvestable yield within the same crop year or season in which it was planted.

Commercially available. The ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan.

Excluded methods. A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

Planting stock. Any plant or plant tissue other than annual seedlings but including rhizomes, shoots, leaf or stem cuttings, roots, or tubers, used in plant production or propagation.

Transplant. A seedling which has been removed from its original place of production, transported, and replanted.

## Exercise 1: Selecting Seed

1. Read section 205.204 Seeds and Planting Stock Practice Standard before beginning this exercise. You may also want to consult the OMRI Brand Names Product List. The NOP Questions & Answers web page also provides clarification about some of these issues and is apt to provide the most up-to-date interpretation of the Standards.
2. You will be assigned to a three-person group and assigned two crops. One member of your group will be the farmer in the following scenario. The other two will be County Extension faculty members.

The County Extension faculty members are sitting in their office when a farmer in the first year of organic production comes into the office. The farmer has a list of varieties that he/she would like to use in the next growing season. He/She has already looked at the NOP website and found that *Rosie's Select Seeds* and *Heritage Seeds* are companies that offer organic seeds and planting stock. He/She used the catalogs to make the seed selections. The farmer wants the County faculty members to review the selections that he/she has made and help complete the seed section of the Organic System Plan.

3. Fill out Section 3, Seeds and Seed Treatments, and Part A of Section 4, Sources of Seedlings and Perennial Stock, in the Organic System Plan -- only for the crops assigned to your group (e.g., carrot, tomato, corn, etc.). You do not need to complete Part B of Section 4 because this grower does not produce seedlings on his/her farm.



**Tomatoes**

**Grower Choice:** Red Globe (F1), 1,000 seeds, (Rosie's Select Seeds)

**Carrots**

**Grower Choice:** Napoleon (Pelleted), 10,000 seeds, (Rosie's Select Seeds)

**Corn**

**Grower Choice:** Super Sweet, Sweet Lady (F1), 3 lbs., (Rosie's Select Seeds)

**Spinach**

**Grower Choice:** Jamaica (F1) (Treated), 100,000 seeds, (Rosie's Select Seeds)

**Onions**

**Grower Choice:** Southern Belle (F1), 60 bunches, (Rosie's Select Seeds)

**Broccoli**

**Grower Choice:** Puget (F1), 10,000 seeds, (Heritage Seeds)

**Raspberries**

**Grower Choice:** Cacalaki, 500 plants, (Rosie's Select Seeds)

**Strawberries**

**Grower Choice:** Gem (PVP), 40 bunches, (Rosie's Select Seeds)

**Lettuce**

**Grower Choice:** Redbowl (Red Oak), 1/4 lb., (Heritage Seeds)

**Beets**

**Grower Choice:** Monet (Monogerm) (F1), 20,000 seeds, (Rosie's Select Seeds)



# ROSIE'S SELECT SEEDS

*For the grower who produces the  
best, only the finest will do!*

# Tomatoes

## Red Determinate

### **FREEDOM (F1)**

Maturity: 76 Days

Tomato Spotted Wilt Virus (TSWV) resistant! If you're down South and a tomato lover but have stopped growing tomatoes because of TSWV this is the variety for you! Say goodbye to stunted plants with infected, discolored fruit that is unmarketable. Freedom is resistant to TSWV, and produces beautiful high yielding tomatoes even under adverse weather conditions and high disease pressure. Try this new hybrid, and bring back those tomato yields that have been comprised by TSWV. Vigorous determinate. *Mini (20 seeds) \$3.50; 50 seeds \$7.05 ; 250 seeds \$19.20; 500 seeds \$38.10 ; 1,000 seeds \$64.30; \$5,000 seeds \$55.20/1,000*

### **RED GLOBE (F1)**

Maturity: 78 Days

Do you need a high yielding, main season tomato that can be shipped? This tomato has out preformed most others in trials in the East and Midwest and has been the grower's choice in those regions for a number of years. This disease tolerant, vigorous variety produces a heavy set of large, smooth, firm, globe-shaped fruit with excellent taste. Vigorous determinate. *Mini (40 seeds) \$3.05; 250 seeds \$7.60; 500 seeds \$13.10; 1,000 seeds \$23.40; 5,000 seeds \$19.50/1,000*

### **PAULUSTRA (F1)**

Maturity: 78 Days

A better tasting, Red Globe type of tomato. Fruit is slightly larger than Red Globe with a sweeter tomato flavor. Vigorous, disease resistant plants produce an abundance of smooth, firm fruits late into the season. Vigorous determinate. *Mini (40 seeds) \$2.25; 250 seeds \$7.55; 500 seeds \$12.50; 1,000 seeds \$22.10; 5,000 seeds \$19.40/1,000 Packet \$2.50; 10,000 seeds \$11.20; 100,000 seeds \$72.00*

# Beets

## Round Red

### **BIG RED**

Maturity: 55 Days

Biggest, highest quality tops for bunched greens. Outstanding extra-tall tops which are bright green, vigorous, and disease resistant. Combine this with uniform, deep red roots and you have a great variety. Vigorous greens can be harvested early. *Packet: 385 seeds. PKT \$2.00; Oz \$3.30; ¼ lb \$5.50; lb \$13.50*

### **MONET (Monogerm) (F1)**

Maturity: 46 Days

Single-seed feature for precision sowing. A typical beet "seed" can contain more than one embryo. Monogerm beet seeds contain only one embryo. This feature eliminates thinning and results in superior uniformity. Smooth, purple colored roots with medium-tall greens. Not recommended for summer production. *Packet: 385 seeds. PKT \$3.00; 10,000 seeds @\$1.39/1,000; 50,000 seeds @ \$1.00/1,000; 100,000 seeds @ \$0.90*

### **RED ROE (F1) (OG)**

Maturity: 50 Days

The best all-around red beet in the South. Round to oval, smooth, deep red roots grow rapidly and uniformly. Maintains sweet and tender flavor even when conditions are not favorable. Medium-tall, red-veined greens. Organically grown. *Mini: 200 seeds. Packet: 385 seeds. PKT \$2.90; 5,000 seeds @ \$1.30/1,000; 25,000 seeds @ \$0.85/1,000*

**OG = Certified Organic**  
**PVP = Plant Variety Protected**  
**F1 = Hybrid**  
**T = Seed Treated**  
**C = Cold Tolerant**

# Carrots

## Pelleted Carrots

***To pellet or not to pellet?*** Pelleting ensures that seeds are a uniform size and shape compared to raw seeds and allows for more accurate and faster seeding by hand or machine. The pellets are made with inert materials and clay that break down quickly with application of water and won't adversely effect the seeds or soil. Once the pellets absorb water they split open within 24-36 hours and allow for normal and uniform seed emergence. Our pelleted carrot seeds contain the "Pro-coat" covering, developed and applied by Seed Systems, Inc. Most of our pelleted lettuce seeds include a "priming" to help speed germination to increase the uniformity and seedling stand.

## Early Varieties

### **NAPOLEON** (Pelleted) (F1)

Maturity: 56 Days

This variety is easy to sow and quick to germinate even under adverse weather conditions. In our grower taste trials it was ranked the best-tasting carrot in the early harvest category for the past two years. The 8", cylindrical, roots are very smooth and produce a deep orange/red color. Long tops, great for direct marketing. *Packet: 250 seeds. Limit: 100,000 seeds per order. Packet \$2.80; 10,000 seeds \$11.60; 100,000 seeds \$75.00*

### **SUNRISE** (F1) (Pelleted)

Maturity: 54 Days

This variety is for the customer who likes a gourmet look and taste. Sunrise's yellow color, large tops and great taste makes it desirable for the sophisticated consumer. The slender and long (8") carrots stay tender and retain their color even in the heat! Widely adapted. Try it! *Packet: 250 seeds. Packet \$2.50; 10,000 seeds \$11.20; 100,000 seeds \$72.00*

### **Maniker's** (OG)

Maturity: (OP) 70 days.

*Description:* This elegant white carrot is a European delicacy. In the early 1700s, white carrots were a common sight in old world produce markets. Maniker's conical white roots are often green at the shoulders and similar in shape to a Chantenay, growing 6-8 inches long with a mild flavor. This selection is known for its long storage ability. *\$6.50/500 seeds, \$16.95/oz*

### **NAVAHO** (Treated) (Pelleted)

Maturity: 57 Days

Navaho is a short carrot (4") with short tops and excellent eating quality. This variety is excellent for baby carrots or for fresh market buyers who love their sweet taste. Their deep orange color is attractive and their texture is excellent.

*10,000 seeds \$4.20; 100,000 seeds \$42.00*

# BROCCOLI

## Hybrid

### **MOZART (F1) (Treated)**

Maturity: 56 Days

Medium sized, tight, dark green main head with early production. A bonus is the abundant production of side shoots that keep on producing long after the main head has been harvested. Plants are vigorous and have good disease resistance. Harvest spring, summer, and fall. Available treated seeds only. *Mini: 100 seeds. Mini \$2.20; 1,000 seeds \$4.55; 5,000 seeds @ \$3.50/1000; 25,000 seeds @ \$3.15/1,000*

### **ROMI**

Maturity: 63 Days

Recommended for summer, fall and winter production. Big plants with heavy, very firm, dark green, tight, domed heads that have great tolerance to stress. Also tolerant to heat and cold, head rot, brown bead, and mildew.

Produces some side shoots. *Mini: 100 seeds @\$2.60; 1,000 seeds \$6.55; 5,000 seeds @ \$5.50/1000; 25,000 seeds @ \$4.15/1,000*

### **PUGET (F1)**

Maturity: 58 Days

For summer or fall harvest. Puget's heads are dark green, tight, well-domed and large. Plants are vigorous and tolerate heat and are resistant to downy mildew. This mid to late variety is widely adapted to different weather and soil conditions. Produces an abundance of side shoots. *Mini: 100 seeds. Mini \$2.50; 1,000 seeds \$6.55; 5,000 seeds @ \$5.50/1000; 25,000 seeds @ \$4.50/1,000*

### **EVER**

Maturity: 50 Days

The favorite extra-early broccoli of the Northeast. Although the head is not as large as the later varieties, Ever is widely adapted to different climates and soils. Excellent cold weather tolerance but doesn't like areas where spring temperatures are hot. *Mini: 100 seeds. Mini \$2.60; 1,000 seeds \$6.90; 5,000 seeds @ \$5.75/1000; 25,000 seeds @ \$4.80/1,000*

# ONIONS

### **SUN STAR (F1)**

Maturity: 100 Days

Produces uniform, large golden-skinned onions with medium flavor and thick rings. Widely adapted, long-day variety, Sun Star matures well anywhere in North America from spring sowing. Medium-sized bulbs that are great for salads, slices, onion rings and frying. Good storage onion. Pink root tolerant. NOTE: Also offered as seeds. *Onion plants are shipped by zone January-May starting in the South. They cannot be shipped to Idaho or outside the U.S. Mini \$3.55; PKT \$5.15; ¼ Oz. \$7.15; Oz \$22.20; ¼ lb. \$59.00; lb. \$205.00*

### **DARCY'S PRIZE**

Maturity: 100 Days

Huge, white skinned, mild onions are easy to grow. The large round bulbs are early and do not require a long, hot growing season to make big onions. Has fairly good storage properties. Adaptation: 38°-60° latitude.

NOTE: Also offered as seeds. *Onion plants ship by zone Jan-May starting in the South. Mini \$2.95; PKT \$4.15; ¼ Oz. \$6.15; Oz \$20.30; ¼ lb. \$57.00; lb. \$202.00*

### **SOUTHERN BELLE (F1)**

Maturity: 100 Days

Short-day sweet onion for Southern growers only. You don't have to live in Vidalia, Georgia to grow sweet onions! These onions are medium sized producing 3-4" diameter bulbs which are flattened and sweet. Plant 4" apart. Very short storage quality, approximately 30 days. Suitable for planting anywhere in the South. Adaptation: 20-36° latitude. Pink root resistant. *Onion plants are shipped by zone January-May starting in the South. 1 Bunch \$9.10; 3 Bunches \$16.50; 5 Bunches \$22.50; 30 bunches \$56.50*

# Corn

## Bi-Color Super Sweets

### **TENDER TIM (F1)**

Maturity: 71 Days

Our best tasting extra-early Super Sweet variety! Attractive, 9-9 1/2" ears with 18 rows of kernels have superb flavor that lasts even after a week of storage! Great for freezing. 6' plants. Good cool soil germination but avoid excessive moisture. Order Tender Tim (Untreated) or Tender Tim (Treated). *Packet: 200 seeds \$3.75; 1 Pound \$17.50; 5 Pounds \$15.00; 20 Pounds @\$14.00; 100 pounds @\$13.00*

### **SWEET LADY (F1)**

Maturity: 66 Days

Great for fresh sales or for processing. This variety has been bred for great flavor, tenderness and good disease resistance! One of Rosie's best traditionally bred super-sweets. Attractive, long ears with dark green husks. 10" ears with 16-20 rows of medium sized kernels. 6' plants. Does not germinate well in cool soils, recommended minimum soil temperature at planting 60°F). Sweet Lady (Untreated) or Sweet Lady T (Treated). *Packet: 200 seeds \$3.95; 1 Pound \$18.00; 5 Pounds \$16.00; 20 Pounds @\$14.20; 100 pounds @ \$13.30*

### **TENDER TIM EARLY (F1) (Treated)**

Maturity 66 Days

This extra early version of Tender Tim has the same great qualities but matures about five days later. The eating quality is excellent. Slightly smaller ears and plants. Ears average 8" with 16 rows of kernels. 5 1/2-6' plants. Good germination in cool soils. Order Early Tim (Untreated) or Early Tim (Treated). *Packet: 200 seeds. Packet: \$3.75; 1 Pound \$17.50; 5 Pounds \$15.00; 20 Pounds @\$14.00; 100 pounds @\$13.00*

### **SUGAR BABY (F1) (sh2)**

Maturity: 82 Days

Later maturing but definitely one of the most consistently sweet varieties you can grow. Great looking ears with deep green husks. Very attractive for direct market sales. The ears avg. 9" long with 16-20 rows of small, tender, sweet, white kernels. Attractive dark green husk. 6', single-stalked plants. Poor cool soil emergence so don't plant too early. Order Sugar Baby (Untreated) or Sugar Baby T (Treated). *Packet: 200 seeds. Packet: \$3.90; 1 Pound \$19.20; 5 Pounds \$17.40; 20 Pounds @\$15.20; 100 pounds @ \$13.60 Pounds \$17.40; 20 Pounds @\$15.20; 100 pounds @ \$13.60*

# Spinach

### **JAMAICA (F1) (Untreated)**

Maturity: 40 Days

Large, light green semi-savoy with DM resistance. Upright plants have thick, light green leaves that are attractive and highly disease resistant. Their semi-savoy characteristic makes for easy washing. Somewhat heat tolerant and bolt resistant, but avoid late spring planting. Ideal for early spring and late fall. *Packet: 250 seeds. Packet \$3.00; \$5.50 500 seeds; \$9.95 1,000 seeds.*

### **JAMAICA (F1) (Treated)**

Maturity: 40 Days

Large, light green semi-savoy with DM resistance. Upright plants have thick, light green leaves that are attractive and highly disease resistant. Their semi-savoy characteristic makes for easy washing. Somewhat heat tolerant and bolt resistant, but avoid late spring planting. Ideal for early spring and late fall. *Packet: 385 seeds. Packet \$3.00; 10,000 seeds \$ 6.70; 50,000 seeds \$23.00; 100,000 seeds \$40.00*

# Lettuce

## Red Oakleaf

### REDBOWL (Red Oak) (OG)

Maturity: 28 days baby, 51 days mature  
Radiant deep-red, deeply lobed, delicate oak-like leaves form a full rosette. Red bowl matures early, is not bitter in warm conditions and is slow to bolt. Color is best in cool weather, but grows well spring, summer, and fall. Great addition for salad mixes. *Mini: 400 seeds, \$2.95. Packet: 800 seeds \$4.15; 1/2 Oz. \$7.15; Oz \$12.30; ¼ lb. \$30.00; lb. \$102.00*

### CONCORD

**Maturity:** 28 days baby, 51 days mature  
New! Dark red baby oakleaf. Leaves are serrated with deep red lobes. Fast growing and good quality even with multiple harvests which make it an ideal variety to add to salad mixes. Similar to Juno, which it replaces, but full heads are larger, baby leaves are more upright and easier harvesting. Resistant to downy mildew races 1-16, 21 and 23. *Mini: 400 seeds. Packet: 800 seeds. Mini \$1.95; PKT \$3.15; 1/2Oz. \$7.15; Oz \$13.30; ¼ lb. \$57.00; lb. \$112.00*

### BLUSH

**Maturity:** 28 days baby, 49 days mature  
A giant red oakleaf type. The large, productive, upright, trumpet-shaped heads are made up of delicate, lobed, medium green leaves with red speckles. An unusual French leaf lettuce with nice salad quality. Slow bolting. Tolerates heat. *Mini: 400 seeds. Packet: 800 seeds. Mini \$2.95; PKT \$4.55; 1/2Oz. \$12.00.; Oz \$21.30; ¼ lb. \$57.00; lb. \$195.00*

# Raspberries

### CACALAKI

New this season! Best performer in grower trials. Midseason variety that is 5-10 days earlier than Nova. Widely adapted. NOTE: May not mature early enough for some Northern growers with early frost. From Delaware. **We are offering virus-free, one-year-old plants (dormant canes) for shipment in March through May. NOTE: Raspberries cannot be shipped outside the U.S. AK and HI customers please call for shipping quotes. 5 Plants \$20.00; 25 plants \$48.00; 100 plants \$135.00**

### NOVA

New last year! High yields and great taste! Midseason. Vigorous and high yielding. Resistant to most common cane diseases. Medium-size, bright red fruits which have a great flavor. From Maryland. **We are offering one-year-old plants (dormant canes) for shipment in March through May. NOTE: Raspberries cannot be shipped outside the U.S. AK and HI customers please call for shipping quotes. 5 Plants \$20.00; 25 plants \$48.00; 100 plants \$135.00**

# Strawberries

**Strawberry plants are shipped from March through May. They cannot be shipped to CA, HI or outside the U.S. AK customers please call for shipping quotes.**

## **SPRINGLOW**

The sweetest early berry. Medium-large size fruits have excellent flavor, bright red color, and are suitable for fresh use or freezing. Vigorous plants are resistant to red stele and verticillium wilt. Produces an abundance of daughter plants in warm temperatures that may need to be removed. *1 Bunch \$12.00; 4 Bunches \$25.00; 20 Bunches \$75.00*

## **JACOB'S JEWEL**

New last year! Huge fruits with excellent flavor. Very large, firm fruits ideal for U-pick or farmstand sales. The hardy, disease resistant plants are well adapted to the Midwest and Northeast. Their sweetness will keep sales up. *1 Bunch \$16.00; 4 Bunches \$40.00; 20 Bunches \$100.00*

## **GEM (PVP)**

Superb flavor, large berries. Gem is one of the best-selling strawberry varieties in the South. Famous for its large berries with superb flavor and texture and high yields. Keeps flowering even with hot weather. *1 Bunch \$12.00; 4 Bunches \$25.00; 20 Bunches \$75.00*

# Heritage Seeds

Purveyors of fine seed since 1952



Bringing you the best of  
the old and the new

# Strawberries

## **Elogy (F1)**

*Maturity:* Tribute bears early summer through fall with a large mid-season yield

*Description:* Attractive berries have very glossy red skin. A great hit with those who like a slightly acidic strawberry. Superb when consumed fresh and unsugared. The medium to large fruit are borne on vigorous plants that are highly resistant to red stele and tolerant to verticillium wilt.

*Price and quantity:* \$12.00/25plants, \$25.00/100 plants, \$75.00/500 plants

## **Taboc**

*Maturity:* Mid-season

*Description:* Taboc is known for its huge sized berries, excellent flavor, winter hardiness and disease resistance. Our customer survey indicates Taboc produces very large fruit size. The berries have very good flavor; color and firmness were rated good. First fruits may split or be rough. Plants are vigorous, but may not run freely indicating closer spacing may be required. Taboc is highly recommended for home gardeners and direct marketing growers.

*Price and quantity:* \$11.50/25 plants, \$28.90/100 plants, \$70.00/500 plants

## **Red Luscious**

*Maturity:* Mid-season

*Description:* New disease resistant organic variety. Small, firm and juicy sweet bright red berries. Great for fresh picking and transports well due to firmness.

*Price and quantity:* \$11.00/25 plants, \$25.00/100 plants, \$70.00/500 plants

## **Red Jewel**

*Maturity:* Mid-season

*Description:* Large, firm and juicy sweet bright red berries. Great for home use or processing. Resistant to leaf spot.

*Price and quantity:* \$12.00/25 plants, \$26.00/100 plants, \$68.00/500 plants

## **Certain Applause**

*Maturity:* Late-season

*Description:* Large, sweet berries; sure crowd pleasers late-season. Good for home use and fair for processing. Resistant to red stele

*Price and quantity:* \$10.00/25 plants, \$26.00/100 plants, \$67.00/500 plants

<p><b>OG = Certified Organic</b> <b>PVP = Plant Variety Protected</b> <b>F1 = Hybrid</b> <b>T = Seed Treated</b> <b>C = Cold Tolerant</b></p>
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# Raspberries

## **Millsborough (OG)**

*Maturity:* Early-Spring Bearer, June harvest.

*Description:* Large, dark red berry that is the old standard and most widely planted worldwide. Heavy producer that ships well. Hardy to Zone 5. 1-year plant. Bundle of 5.

*Price and quantity:* 5 bare root/bundle for \$21.95, 25 bare root/bundle for \$62.50, 100 bare root/bundle \$142.95.

## **Golden Autumn (OG)**

*Maturity:* Everbearer

*Description:* Very sweet berries are large, juicy and firm. Tolerates warm humid climates. Vigorous grower. Crops in July and Sept. 1-year plant. Bundle of 5.

*Price and quantity:* 5 bare root/bundle for \$23.05, 25 bare root/bundle for \$62.75, 100 bare root/bundle \$145.95.

## **Sweet Nugget**

*Maturity:* Everbearer

*Description:* Large, plump and juicy goodness all the time! Sweetness abundant in burgundy colored fruits. Consistent production of high quality fruit.

*Price and quantity:* \$8.00/ 5 bundle, 15 bare root/bundle for \$29.95, 30 bare root/bundle \$45.95

## **Red Patriot**

*Maturity:* Late summer through fall

*Description:* A flavorful, very large, very firm and coherent berry that has shown to be winter hardy in clinical trials. A moderately vigorous plant.

*Price and quantity:* \$14.00/ 5 root/bundle, 15 bare root/bundle for \$36.00, 30 bare root/bundle \$65.00

## **Laurie's Choice Black Raspberries**

*Maturity:* Late-season

*Description:* Laurie's Choice has high production and whose upright growth and cluster formation make its berries very easy to pick. It has medium to large, firm, glossy fruit with the best black raspberry flavor. Moderately hardy but very vigorous, Laurie's choice shows tolerance to powdery mildew.

*Price and quantity:* \$18.00/ 5 bundle, 15 bare root/bundle for \$49.95, 30 bare root/bundle \$65.95

# Spinach

## **Bloomsdale (OG)**

*Maturity:* Early maturing - 60 days

*Description:* Introduced in 1925, this classic, savoy-leafed spinach has tasty, thick, dark- green leaves. Grows well in spring or fall and can overwinter if protected with mulch. Dependable and cold hardy. Direct seed in early spring, as soon as the soil can be worked, for a spring crop, and in early August for harvest in the late fall. Enrich soil well with mature compost. Harvest leaves or the whole plant before it goes to seed.

*Price and quantity:* \$2.59/pack, \$14.49/¼ lb, \$43.49/ lb

## **Viroflay (Heirloom, OG)**

*Maturity:* Early maturing - 45 days

*Description:* One of the largest, most vigorous varieties we have trialed. Flavorful arrow to oval shaped leaves are slightly savoyed. Great variety for fall. Extremely vigorous plants bear 10 in. leaves. Avoid late spring planting.

*Price and quantity:* \$3.95/ pack of 250 seeds; \$7.50/500 seeds; \$12.50/1,000 seeds

## **Bullfighter**

*Maturity:* 45 Days

*Description:* Our finest variety with extremely large heavy smooth leaves! Excellent taste and texture that is very slow bolting! This variety has everything! A true gourmet Spinach!

*Price and quantity:* \$2.79/pack, \$16.49/¼ lb, \$45.49/ b.

## **Chorus Line**

*Maturity:* 45 Days

*Description:* Vigorous, Healthy, Early-Maturing Plants Bear Huge Yields!

*Price and quantity:* \$1.00/pack, \$14.95/¼ lb, \$34.95/lb

## **Welk's Delight**

*Maturity:* 45 Days

*Description:* Welk's Delight Spinach will grow to a long standing variety that is fully savored. Grows to dark green in color with a thick leaf.

*Price and quantity:* \$1.30/pack, \$15.49/¼ lb, \$39.49/lb

# Lettuce

## **Red Bowl**

*Maturity:* 28 days baby, 51 days mature

*Description:* Radiant deep-red, deeply lobed, delicate oak-like leaves from a full rosette. Red bowl matures early, is not bitter in warm conditions and is slow to bolt. Color is best in cool weather, but grows well in spring, summer and fall. Great addition for salad mixes.

*Price and quantity:* \$2.50/400 seeds, \$4.00/800 seeds, \$7.00/½ oz, \$10.50/1 oz, \$25.00/¼ lb, \$95.00/lb

## **Jessica's Favorite (OG)**

*Maturity:* 45-55 days

*Description:* This favorite looseleaf lettuce has sweet, large, light- green, crumpled leaves. Inner leaves blanch almost white. Slow-bolting, never bitter, early and adaptable. Sow directly into soil as soon as it begins to warm, 6-8 weeks before danger of frost has passed. Seeds need light to germinate, so should be sown near soil surface. For earlier plants, start indoors 4-6 weeks before transplanting into the garden. Harvesting tips. Thin plants when they have 4 true leaves. Harvest outer leaves from young lettuce plants, entire head when mature.

*Price and quantity:* \$2.95/400 seeds, \$4.15/800 seeds, \$7.15/½ oz, \$12.30/1 oz, \$30.00/¼ lb, \$102.00/lb

## **Baroness**

*Maturity:* 28 Days

*Description:* New! Beautiful, dark green, heavily ruffled leaves provide texture, loft, and weight to baby leaf mixes. Baronesses leaves are darker green, thicker and heavier. Not for full size heads. Resistant to DM races 1-17, 21, 23 and LMV.

*Price and quantity:* \$1.60/Mini (400 seeds) \$2.40/ Packet (800 seeds) \$7.30/½ oz

## **CreamTop**

*Maturity:* 28 Days

*Description:* Plant produces flavorful butterhead type heads of lettuce. It has a mild buttery flavored taste. Excellent for salads and garnishes. Very heat tolerant and slow to bolt.

*Price and quantity:* \$2.00/Mini (400 seeds) \$3.40/ Packet (800 seeds) \$8.30/½ oz

## **Big Manhattan**

*Maturity:* 28 Days

*Description:* Plant produces flavorful medium size heads of butter-head lettuce. Leaves are very flavorful with buttery texture. Excellent for salads and garnishes.

*Price and quantity:* \$1.00/Mini (400 seeds) \$1.90/ Packet (800 seeds) \$6.70/½ oz

# Broccoli

## **Nutra-Rich**

*Maturity:* 60-80 days

*Description:* This nutritious selection is unusually high in free glutamine that is one of the building blocks of protein, a primary energy source of the brain and a major healing nutrient. It has a large central head with medium-sized side shoots on vigorous and attractive plants, making this a choice new variety. 24 in. plant with 4-6 in. central head. *Price and quantity:* \$2.49/pack, \$13¼ lb, \$30/lb

## **Italian Delight**

*Maturity:* 48 days

*Description:* Favorite multi-cut Italian variety.

A traditional variety producing small, 3-4" main heads projected well above the foliage followed by a large yield of side shoot spears. Heads mature at varying rates, resulting in a long harvest period. Harvest main head when 3" in diameter or less to encourage heavier side shoot production. For spring or fall production. Organically grown.

*Price and quantity:* \$1.95/Mini (100 seeds), \$2.49/packet (800 seeds), \$10¼ lb, \$28.97/lb

## **Tight Head (F1) (Untreated)**

*Maturity:* 55 Days

*Description:* Extremely tight head for longer lasting freshness and consumer preference. 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.

*Price and quantity:* \$2.05/Mini (100 seeds), \$2.55/packet (800 seeds), \$12¼ lb, \$29.95/lb

## **Balthazar**

*Maturity:* 80 days Spring, or 135 days

*Description:* High yields of compact, dark blue-green, well rounded, medium large heads with small buds. The best variety for Fall planting because it withstands cold.

*Price and quantity:* \$1.45/Mini (100 seeds), \$6.25/packet (1000 seeds), 5,000 seeds @ 5.25/1000

## **Shakeup**

*Maturity:* 45 Days

*Description:* The tender stems, buds, and flowers have a wonderfully delicate slightly bitter/spicy/peppery broccoli flavor which can be enjoyed in salads, stir-fried, or steamed. Sow the seeds in the very early spring or wait until late summer for a fall crop. Harvest just before the flowers open.

*Price and quantity:* \$1.85/Mini (100 seeds), \$2.95/packet (800 seeds), \$13¼ lb, \$29.95/lb

# Beets

## **Fall Collection Blend**

*Maturity:* (OP/F1) 65 days. Late October and November harvest will get the roots at their sweetest.

*Description:* If you have never waited to harvest your beets until after the autumn frosts, you have never tasted the intense sweetness that beets can achieve. The first frosts signal the root to begin storing sugars for the winter. Our distinctive blend of Red Ace, Golden, and Blankoma lets you grow a range of colors that make eye-catching pickles and relish. Equally impressive when served fresh.

*Price and quantity:* \$3.85/385 seeds, \$6.95/¼ lb, \$13.95/lb

## **Matador Organic (OG)**

*Maturity:* (OP) 64 days.

*Description:* The renaissance of the salad mix has made unique uses for all types of greens, and the leaves of Matador are a regal addition. The strong, deep red tops grow to 13 inches tall and have a clean crisp flavor. The 2-3 inch round roots have delightful red and white zoning. Harvest when small for the very best in eating quality.

*Price and quantity:* \$3.95/385 seeds; 10,000 seeds @ \$1.45/1,000; 50,000 seeds @ \$1.10/1,000

## **Touch of Gold**

*Maturity:* 55 days

*Description:* New! Orange skin, rich gold interior. Green leaves with attractive yellow stems are prized in salads when small, and have a mild flavor when cooked. The sweet, round roots are beautiful on their own or mixed with other colors.

*Price and quantity:* \$3.20/385 seeds, \$6.95/¼ lb, \$13.95/lb

## **Motown Blood Red**

*Maturity:* 55 days

*Description:* Quality canning and pickling beet. Robust flavor! Tops are dark green tinged with maroon.

*Price and quantity:* \$1.50/385 seeds, \$3.95/¼ lb, \$9.95/lb

## **Radiant**

*Maturity:* 80 days

*Description:* Succulent, delightful flavor, best eaten when beet is between golf and tennis ball size. Leafy tops can be boiled or steamed and are spinach-like.

*Price and quantity:* \$2.20/385 seeds, \$5.95/¼ lb, \$11.95/lb

# Carrots

## **Fire Red - Pelleted** (NatureCoat™ Pellet)

*Maturity:* 60 days

*Description:* New! Pinkish red color. Early harvest. Consumer preference specialty. Unusual coral-red, 9" long roots. Best cooked to deepen the color and improve the texture and flavor, which is rather strong raw. Medium-small tops. Specialty market.

*Price and quantity:* \$6.30/Mini (500 seeds) \$12.50/Packet (1200 seeds)

## **Linda's Organic** (OG)

*Maturity:* (OP) 68 days.

*Description:* Our Swiss organic seed producer considers this certified organic Linda selection one of the best. Linda's medium long, 7-8 inch roots are characteristically uniform, small cored, deeply colored, sweet and crunchy. Grown in Europe as both a spring and fall harvest variety. Developed from years of organic selections

*Price and quantity:* \$6.25/500 seeds, \$10.30/800 seeds

## **Emperor's Choice**

*Maturity:* 70 days

*Description:* Daucus carota. Plant produces 9" long by 1 ½" wide deep orange carrots. This is an excellent overall carrot, very flavorful. Does best in loose soils.

*Price and quantity:* \$4.45/400 seeds, \$7.35/800 seeds, \$14.85/oz Pelleted seeds: \$4.65/250 seeds, \$8.55/1000 seeds, \$21.95/5000 seeds

## **Crunchy Sweet**

*Maturity:* 63 days

*Description:* Plant produces heavy yields of 8" long flavorful bright orange carrots. Perfectly shaped carrots making it a perfect slicing variety. It has rich color and is very flavorful and crispy. Excellent fresh or cooked

*Price and quantity:* \$4.45/400 seeds, \$7.35/800 seeds, \$14.85/oz Pelleted seeds: \$4.65/250 seeds, \$8.55/1000 seeds, \$21.95/5000 seeds

# Onion

## **Ernesto's White (OG)**

*Maturity:* 90 days

*Description:* Medium-sized onion. Good keeper, but does not store quite as long as the yellow onions. Reliable variety with flattened bulbs and a sweet flavor. Slow to bolt. Each bulb can weigh more than 1 lb. White papery wrap. Suitable for mild climates.

*Price and quantity:* \$10.55/bunch; \$29.95/3 bunches; \$36.50/5 bunches.

## **Hunter Yellow (OG)**

*Maturity:* 80 days

*Description:* The common, but important, cooking onion. Bulbs are medium large, thick-flat in shape and yellow in color. Firm skin. Excellent variety for storage. Hot if eaten raw, but the heat dissipates during cooking. Red or yellow onions have a bioflavonoid called quercetin, but white onions do not.

*Price and quantity:* \$9.95/1 bunch; \$25.50/3 bunches; \$30.00/5 bunches.

## **Burgundy Mini**

*Maturity:* 60 days

*Description:* Early, purple-red-skinned mini onion.

Glossy rich burgundy, transforming to a nice pastel pink when cooked or pickled. Harvest at golf ball size or very young as baby bunching onions with purple pearl ends.

*Price and quantity:* \$2.45/100 sets, \$5.00/¼ oz, \$18.00/oz, \$195.00/lb

## **Jupiter White**

*Maturity:* 60 days

*Description:* An excellent modern variety that is used by commercial growers who value its reliability and heavy cropping. Produces high quality globes which have tremendous keeping characteristics

*Price and quantity:* \$2.45/100 sets, \$5.00/¼ oz, \$18.00/Oz \$195.00/ lb

## **Stanton's Yellow**

*Maturity:* 60 days

*Description:* This variety is slightly rounder in shape, matures a few days later and gives a heavy yield of really tasty onions. The skin gives good protection and has a nice color. Bolt resistant and stores well.

*Price and quantity:* \$2.45/100 sets, \$5.00/¼ oz, \$18.00/oz, \$195.00/lb

# Tomatoes

## **Freedom (OG) (Heirloom)**

*Maturity:* 80 days, mid season

*Description:* Up to 1-pound fruits in clusters up to 9. Good disease resistance. Great flavor.

Determinate size. A real favorite with customers who like that old time flavor in a slicing tomato.

*Price and quantity:* \$2.95/30 seeds, \$6.00/70 seeds, \$18.00/250 seeds, \$35.00/500 seeds, \$60.00/1,000 seeds, 10,000 seeds for \$18.00/1,000 seeds

## **Early Golden**

*Maturity:* 60 days

*Description:* New last year! The best early orange tomato. The medium-firm, globe-shaped fruits average 6-7 oz Orange Blossom has a mild flavor, balanced with a little acidity, and has a nice texture. Determinate.

*Price and quantity:* \$2.95/40 seeds, \$6.00/70 seeds, \$18.00/250 seeds, \$35.00/500 seeds, \$60.00/1,000 seeds, 10,000 seeds for \$18.00/1,000 seeds

## **Lovers Lane Grape Tomato**

*Maturity:* 66 days from setting out transplants

*Description:* Indeterminate. Rich flavor, huge yields, and ease of growth! The most flavorful grape tomato ever grown! Bright red, resistant to cracking, and about an inch long, these charming little fruits arise in huge clusters (like grapes) on vining plants. They're firm and very smooth, not spongy like some grape tomatoes can be. Perfect for fresh eating, they have great staying power — which is a good thing, because this vine will produce over a long, long season!

*Price and quantity:* \$2.95/40 seeds, \$6.00/70 seeds, \$18.00/250 seeds, \$35.00/500 seeds, \$60.00/1,000 seeds, 10,000 seeds for \$18.00/1,000 seeds

## **Harvard (OG) (Heirloom)**

*Maturity:* 79 days, mid season

*Description:* Very productive heirloom that produces up to 1-pound, deep-red oxheart-shaped, meaty fruit. Lots of sweet, tomatoey flavors. A great slicing and salad tomato. Determinate size

*Price and quantity:* \$3.05/30 seeds, \$6.50/70 seeds, \$19.95/250 seeds, \$38.00/500 seeds, \$65.00/1,000 seeds, 10,000 seeds for \$20.00/1,000 seeds

## **Old Timer Heirloom**

*Maturity:* 60 days

*Description:* This old variety is a prolific yielder ... average fruit size is 10-16 oz!! Crack free and Disease resistant too!! **Red**

*Price and quantity:* \$2.50/25 seeds, \$7.00/70 seeds, \$20.00/250 seeds, \$38.00/500 seeds, \$57.00/1,000 seeds, 10,000 seeds for \$18.00/1,000 seeds

# Corn

## Bi-Color Super Sweet

### **Delicious (OG)**

*Maturity:* 80 days

*Description:* New! Finally a hybrid organic sweet corn! Large, blocky ears average 7 1/2-8" with 16-18 rows of tender, sweet kernels with good corn flavor. Ears are easy to pick. Avg. ear placement is 2' high on sturdy 6' plants. Widely adapted. Average germination vigor (recommended minimum soil temperature at planting 55°F/13°C). Organically grown.

*Price and quantity:* \$4.00/150 seeds, \$20.00/lb, 5 lbs @ \$18.00/lb, 20 lbs @ \$15.00/lb

### **Early Riser**

*Maturity:* 65 days

*Description:* New last year! Earliest bicolor. We dropped Quickie several years ago but have been asked by many growers to bring it back, so here it is! Compared to Fleet the flavor is not as sweet, but Quickie is a day earlier and some growers have reported a more uniform maturity. Short, sturdy, 5' plants with 7" (14 row) ears. Good taste, good package and easy picking. Good cool soil vigor. Recommended for 42° latitude and higher; at lower latitudes ear size may be too small. We recommend 22,000 plants per acre. 275T (Treated) or 275 (Untreated).

*Price and quantity:* Packet: \$3.30/150 seeds, \$6.95/½ lb, \$18.00/1 lb, 5 lbs @ \$16.00/lb, 20 lbs @ \$15.00/lb

### **Silver Springs Bi-color**

*Maturity:* 75 days

*Description:* Both yellow and white kernels on the same, 8" ear. Grows 78" tall. The extra sweet taste lasts up to 14 days after harvest.

*Price and quantity:* \$2.10/200 seeds, \$13.00/lb, 5 lbs @ \$12.00/lb, 20 lbs @ \$11.20/lb, 100 lbs. @ \$12.30/lb

### **Delightful Yellow Popcorn**

*Maturity:* 110 days

*Description:* A medium season hybrid with fast emergence, sturdy plants, large ears and high yields. Deep kernels shell easily. Pops up huge and tender.

*Price and quantity:* \$2.90/200 seeds, \$15.00/lb, 5 lbs @ \$14.00/lb, 20 lbs @ \$13.20/lb, 100 lbs. @ \$12.30/lb



