

This is a section from the

**2016**

**Mid-Atlantic**

# **Commercial Vegetable Production Recommendations**

The manual, which is published annually, is NOT for home gardener use.

The full manual, containing recommendations specific to New Jersey, can be found on the Rutgers NJAES website in the Publications section  
[njaes.rutgers.edu](http://njaes.rutgers.edu)

The label is a legally-binding contract between the user and the manufacturer.

The user must follow all rates and restrictions as per label directions.

The use of any pesticide inconsistent with the label directions is a violation of Federal law.

Before grafting: 1) expose the scion and rootstock to sunshine for two to three days, 2) withhold water from the plants to avoid spindly growth and 3) make sure that the scions and rootstock have stems of a similar diameter. Grafted plants are usually healed and acclimated in a plastic tunnel. The healing and acclimatization are very important for grafted plants to survive. The tunnel is covered with materials that provide shade and maintain a high relative humidity inside the tunnel.

### Leaf Spots

Scout on a regular basis and begin preventative sprays when weather conditions favor disease development or when symptoms of disease first appears and repeat every 7 to 10 days.

Tank mix chlorothalonil--1.5 pt 6F/A or fixed copper at labeled rates with one of the following FRAC code 11 fungicides:

azoxystrobin--6.0 to 15.5 fl oz 2.08F/A or OLF  
Cabrio--8.0 to 12.0 oz 20EG/A (leaf spots only)  
Fontelis--10.0-24.0 fl oz 1.67SC/A  
Quadris Top--8.0 to 14.0 fl oz 2.72SC/A

**and rotate with one of the following:**

chlorothalonil--1.5 pt 6F/A or OLF  
fixed copper at labeled rate

Do not make more than 4 total applications of fungicides from the FRAC code 11 group in a single year. Tank mix FRAC code 11 fungicides with a protectant fungicide such as copper or chlorothalonil to help reduce resistance development.

### Fruit Rot

Scout on a regular basis and begin preventative sprays when weather conditions favor disease development and repeat every 7 to 10 days.

Tank mix chlorothalonil--1.5 pt 6F/A or fixed copper at labeled rates with one of the following FRAC code 11 fungicides:

azoxystrobin--6.0 to 15.5 fl oz 2.08F/A or OLF  
Priaxor--4.0-8.0 fl oz 4.17SC/A

Quadris Top--8.0 to 14.0 fl oz 2.72SC/A

**and rotate with one of the following:**

chlorothalonil--1.5 pt 6F/A or OLF  
fixed copper at labeled rate

Do not make more than 4 total applications of fungicides from the FRAC code 11 group in a single year. Tank mix FRAC code 11 fungicides with a protectant fungicide such as copper or chlorothalonil to help reduce resistance development.

### Tomato Spotted Wilt Virus (TSWV)

TSWV is spread by thrips from flowering ornamental plants to eggplant. Do not grow any ornamental bedding plants in the same greenhouse as eggplant transplants. Monitor and scout greenhouses for thrips and begin an insecticide control program once observed.

### Fruit Disorders

#### Liver Spot and Pitting

'Liver spot' and 'pitting' are late season physiological disorders that appears on fruit at post-harvest as a result of chilling injury. Light-tan to coppery colored spots appear on fruit after washing often with the appearance of scratching on the fruit surface. The scratching of fruit is most likely cause by rough handling or where fruit were in contact with the ground. Small slightly sunken brown pits can also develop on fruit. Liver spot and/or pitting are thought to occur because of a thinner waxy fruit cuticle as a result of cooler temperatures. Temperatures at or below 50°F are often associated with both disorders.

#### Internal Seed Cavity Browning (ISCB)

Symptoms of ISCB include the discoloration, or browning of the fruit tissue directly surrounding the seed cavities of the fruit. Internal seed cavity browning can be caused by low temperatures, as well as, bruising and compression injury during harvest and postharvest handling.

## GARLIC

### Varieties

Obtain the best strains of Italian or German (late or pink-skinned type) "Rocambole" garlic, Polish softneck (no hard seed stalk) types that will braid, or elephant types from a local grower who has had success with fall-planted garlic or reputable agriculture products vendors. Unlike many strains sold commercially, such a strain will be hardy and, therefore, will overwinter very well. Avoid the Creole types (also called Early, Louisiana, White Mexican, etc.), since they are not very winter-hardy and do not keep well. Both the Italian and Creole types have a white outer skin covering the bulb, but the Italian type has a pink skin around each clove. Elephant garlic (*Allium ampeloprasum* -- is a type of leek that produces bulbils; it is milder than regular garlic and up to four times larger) may not yield very well when fall-planted in areas with severe cold or extensive freezing and thawing cycles, which cause heaving. The Italian and Elephant types take about 220 days to mature.

Many of the most productive Italian garlic strains will produce seed stalks prior to harvest. Snap these seed stalks just as they begin to coil for best yields. "Rocambole" types have coiled seedstalks that are perfectly normal and not the result of any poor cultural practice or herbicide contamination.

## Recommended Nutrients Based on Soil Tests

Before using the table below, refer to important notes in the Soil and Nutrient Management chapter in Section B and your soil test report. These notes and soil test reports provide additional suggestions to adjust rate, timing, and placement of nutrients. Your state's soil test report recommendations and/or your farm's nutrient management plan supercede recommendations found below.

Garlic	Pounds N per Acre	Soil Phosphorus Level				Soil Potassium Level				Nutrient Timing and Method
		Low	Med	High	Very	Low	Med	High	Very	
				(Opt.)	High			(Opt.)	High	
		Pounds P <sub>2</sub> O <sub>5</sub> per Acre				Pounds K <sub>2</sub> O per Acre				
	125	150	150	150	0	150	150	150	0	Total nutrient recommended.
	75	150	150	150	0	150	150	150	0	Broadcast and disk-in.
	25	0	0	0	0	0	0	0	0	Topdress <sup>1</sup> when 6-in. tall (March 15). Topdress <sup>2</sup> 6-weeks after first split (May 1).
	25 <sup>1</sup>	0	0	0	0	0	0	0	0	1).

<sup>1</sup>Apply all topdressing at mid-day when plants are dry to reduce the chance of burn.

<sup>2</sup>Use ammonium sulfate for the second topdressing to help with pungency.

### Planting

Garlic cloves should be planted between about September 15 and October 25 in central Pennsylvania. They could be planted up to 10 days earlier in cool, short-season areas and up to 3 weeks later in warm, long-season areas. Fall-planted garlic establishes an excellent root system and receives a natural cold treatment that produces the highest possible garlic yields. Cloves must be exposed to temperatures between 32° and 50°F (0° and 10°C) for about 2 months prior to the long day-length periods that induce bulbing. Therefore, spring-planted garlic (e.g., Elephant type) may be fairly successful where it can be planted by early March.

Garlic yields tend to increase as the size of the mother bulb increases. The long, slender cloves in the center of the bulb, cloves weighing less than 1 gram, and bulbs with side growths and very poor skin covering of cloves should not be used for planting.

### Spacing

Garlic should be planted 4 by 4 inches apart in triple rows or multiple beds 16 to 18 inches apart. Between-row spacing depends on the equipment available. Clove tops should be covered with 1 to 1½ inches of soil. The cloves must not be so deep that the soil will interfere with the swelling of the bulbs, nor so shallow that rain, heaving from alternate freezing and thawing, and birds will dislodge them. Physical placement of cloves with the root end oriented downward gives optimum results. Cloves dropped into furrows are likely to lie in all positions and may produce plants with crooked necks.

### Harvest and Post Harvest Considerations

Fall-planted garlic is ready to harvest about the second week in July. When a few tops fall over, push all of them down and pull a sample. There are only about 10 days to 2 weeks for optimum garlic harvest. Before then, the garlic is unsegmented like an onion; much after that period, the cloves can separate so widely that the outer sheath often splits and exposes part of the naked clove. Harvested at the proper time, each clove should be fully segmented and yet fully covered by a tight outer skin.

Run a cutter bar under the bulbs to cut the extensive root system and partially lift them. Bulbs are usually pulled and gathered into windrows. Tops are placed uppermost in the windrow to protect bulbs from the sun, and the garlic is left

in the field for a week or more to dry or cure thoroughly. Curing can also be accomplished in a well-ventilated shed or barn. Use this option when rain is forecasted during the curing phase. Bulbs must be thoroughly dried before being shipped or stored.

After curing garlic, discard diseased and damaged bulbs. Clean the remaining bulbs to remove the outer loose portions of the sheath, and trim the roots close to the bulb. Braid or bunch together by the tops of the bulbs, or cut off the tops and roots and bag the bulbs like dry onions.

When properly cured, garlic keeps well under a wide range of temperatures. Temporary storage in open-mesh sacks in a dry, well-ventilated storage room at 60° to 90°F is acceptable. However, garlic is best stored under temperature and humidity conditions required for onions (32° to 35°F and 65% relative humidity). Garlic cloves sprout quickly after bulbs have been stored at temperatures near 40°F, so avoid prolonged storage at this temperature. Garlic stored at above 70% relative humidity at any temperature not only molds but also begins to develop roots.

### Marketing

New growers should develop a local retail market (road-side stands, night markets, gourmet restaurants), wholesale shipper, or processing market before planting. The demand for garlic is increasing due to recent reports about the health and medical benefits of garlic.

### Weed Control

Identify the weeds in each field and select recommended herbicides that control those weeds. See Tables E-3 and E-4.

Match preplant incorporated and preemergence herbicide rates to soil type and percent organic matter in each field.

Apply postemergence herbicides when crops and weeds are within recommended size and/or leaf stage.

Determine the preharvest interval (PHI) for the crop. See Table E-4 and consult the herbicide label.

Find the herbicides you plan to use in the Herbicide Resistance Action Committee's (HRAC) **Herbicide Site of Action Table E-8** and follow the recommended good management practices to minimize the risk of herbicide resistance development by weeds in your fields.

### Preplant Incorporated or Preemergence

Bensulide--5.0 to 6.0 lb/A. Apply 5.0 to 6.0 quarts per acre Prefar 4E before planting and incorporate 1 to 2 inches deep with power-driven rotary cultivators, or apply preemergence and activate with one-half inch of sprinkler irrigation within 36 hours to control most annual grasses. Use the maximum recommended rate preemergence followed by irrigation to suppress certain annual broadleaf weeds including common lambsquarters, smooth pigweed, and common purslane.

### Postemergence

Bromoxynil--0.125 to 0.250 lb/A. Apply 4.0 to 6.0 fluid ounces per acre Buctril 4E when weeds are 1 to 2 inches tall and the garlic is less than 12 inches tall. Use the lower rate on small weeds and the higher rate on larger weeds or when they are under stress. Use 40 to 100 gallons of spray solution per acre. Concentrated spray solutions increase the risk of crop injury. Good coverage of the weeds is essential for good control. Do not apply within 112 days of harvest when garlic is grown on mineral soil. Do not apply within 60 days of harvest when garlic is grown on muck soil.

Clethodim--0.094 to 0.125 lb/A. Apply 6.0 to 8.0 fluid ounces per acre Select 2EC with oil concentrate to be 1 percent of the spray solution (1 gallon per 100 gallons of spray solution) or 12.0 to 16.0 fluid ounces of Select Max 0.97EC with nonionic surfactant to be 0.25% of the spray solution (1 quart per 100 gallons of spray solution) postemergence to control many annual and certain perennial grasses, including annual bluegrass. Select will not consistently control goosegrass. The use of oil concentrate with Select 2EC may increase the risk of crop injury when hot or humid conditions prevail. To reduce the risk of crop injury, omit additives or switch to nonionic surfactant when grasses are small and soil moisture is adequate. Control may be reduced if grasses are large or if hot, dry weather or drought conditions occur. For best results, treat annual grasses when they are actively growing and before tillers are present. Repeated applications may be needed to control certain perennial grasses. Yellow nutsedge, wild onion, or broadleaf weeds will not be controlled. Do not tank-mix with or apply within 2 to 3 days of any other pesticide unless labeled, as the risk of crop injury may be increased, or reduced control of grasses may result. Observe a minimum preharvest interval of 45 days and apply no more than 32 fluid ounces per acre in one season.

Fluazifop--0.125 to 0.188 lb/A. Apply 0.50 to 0.75 pints per acre Fusilade DX 2E with oil concentrate to be 1 percent of the spray solution (1 gallon per 100 gallons of spray solution) or a nonionic surfactant to be 0.25 percent of the spray solution (1 quart per 100 gallons of spray solution) postemergence to control annual grasses and certain perennial grasses. For best results, treat annual grasses when they are actively growing and before tillers are present. Repeated applications may be needed to control certain perennial grasses. It will not control yellow nutsedge, wild onion, or any broadleaf weed. Do not tank-mix with any other pesticide unless labeled, as the risk of crop injury may be increased, or reduced control of grasses may result. Observe a minimum preharvest interval of 45 days and apply no more than 6 pints per acre in one season. Do not plant corn, sorghum, cereals, or any other grass crop within 60 days of the last application.

Sethoxydim--0.2 to 0.3 lb/A. Apply 1.0 to 1.5 pints per acre Poast 1.5EC with oil concentrate to be 1 percent of the spray solution (1 gallon per 100 gallons of spray solution) postemergence to control annual grasses and certain perennial grasses. **The use of oil concentrate may increase the risk of crop injury when hot or humid conditions prevail.** To reduce the risk of crop injury, omit additives or switch to nonionic surfactant when grasses are small and soil moisture is adequate. Control may be reduced if grasses are large or if hot, dry weather or drought conditions occur. For best results, treat annual grasses when they are actively growing and before tillers are present. Repeated applications may be needed to control certain perennial grasses. Yellow nutsedge, wild onion, or broadleaf weeds will not be controlled. Do not tank-mix with or apply within 2 to 3 days of any other pesticide unless labeled, as the risk of crop injury may be increased, or reduced control of grasses may result. Observe a minimum preharvest interval of 30 days and apply no more than 3 pints per acre in one season.

### Postharvest

Paraquat--0.6 lb/A. **A Special Local-Needs 24(c) label has been approved for the use of Gramoxone SL 2.0 or OLF for postharvest desiccation of the crop in Delaware, New Jersey and Virginia.** Apply 2.4 pints per acre Gramoxone SL 2.0 or OLF as a broadcast spray after the last harvest. Add nonionic surfactant according to the labeled instructions. See the label for additional information and warnings.

### Insect Control

#### **THE LABEL IS THE LAW. PLEASE REFER TO THE LABEL FOR UP TO DATE RATES AND RESTRICTIONS.**

**NOTE:** Copies of specific insecticide product labels can be downloaded by visiting the websites [www.CDMS.net](http://www.CDMS.net) or [www.greenbook.net](http://www.greenbook.net). Also, specific labels can be obtained via web search engines.

### Beet Armyworm (BAW)

Apply one of the following formulations:

methomyl--1.5 pts/A Lannate LV

spinetoram--5.0 to 10.0 fl oz/A Radiant SC

spinosad--3.0-6.0 fl oz/A Entrust SC **OMRI-listed**

### Thrips

During hot, dry weather, the population of thrips increases following harvest of adjacent alfalfa or grain. Thrips could, therefore, present the most serious insect problem on garlic. (See "Insect Control" section under Onions. Read and follow specific label directions for use on garlic; if not listed, do not use.) Apply one of the following formulations:

acetamiprid--5.0 to 8.0 oz/A Assail 30SG (or OLF)

dinotefuran--5.25 to 7 fl oz/A; **foliar** Scorpion 35SL or 3.0 to 4.0 fl oz/A foliar Venom 70 SG or 8.75 to 10.50 fl oz/A; **soil** Scorpion 35SL or 5.0 to 6.0 fl oz/A; **soil** Venom 70SG

gamma-cyhalothrin--2.56 to 3.84 fl oz/A Proaxis

lambda-cyhalothrin--1.28 to 1.92 fl oz/A Warrior II or 2.56 to 3.84 fl oz/A Lambda-Cy (LambdaT, or OLF)

malathion--1.5 to 2.0 pts/A Malathion 57EC (or OLF)

permethrin--6.0 to 8.0 fl oz/A Perm-UP 3.2 EC (or OLF)

spinetoram--6.0 to 10.0 fl oz/A Radiant SC

spirotetramat--5.0 fl oz/A Movento (larvae) (or OLF)  
zeta-cypermethrin--2.88 to 4.00 fl oz/A Mustang Maxx (or OLF)

**Note:** Use of spinosad or methomyl for beet armyworm control will suppress thrips population.

Pesticide	Use Category <sup>1</sup>	Hours to Reentry <sup>2</sup>	Days to Harvest <sup>3</sup>
<b>INSECTICIDE</b>			
acetamiprid	G	12	7
dinotefuran	G	12	1
gamma-cyhalothrin	R	24	14
lambda-cyhalothrin	R	24	14
malathion	G	24	3
methomyl	R	48	7
permethrin	R	12,24	1
spinetoram	G	4	1
spinosad	G	4	1
spirotetramat	G	24	3
zeta-cypermethrin	R	12	7
<b>FUNGICIDE (FRAC code)</b>			
azoxystrobin (Group 11)	G	4	0
Cabrio (Group 11)	G	12	7
Cannonball (Group 12)	G	12	7
chlorothalonil (Group M5)	G	12	7
Endura (Group 7)	G	12	7
Forum (Group 40)	G	12	0
Inspire Super (Groups 3 + 9)	G	12	7
iprodione	G	24	AP
Metastar (Group 4)	G	48	AP
Pristine (Groups 11 + 7)	G	12	7
Omega (Groups 3 + 11)	G	12/24	7
Quilt (Groups 3 + 11)	G	12	14
Quilt Xcel (Groups 3 + 11)	G	12	14
Reason (Group 11)	G	12	7
Ridomil Gold (Group 4)	G	12	7
tebuconazole (Group 3)	G	12	7
Ultra Flourish (Group 4)	G	48	AP
Uniform (Groups 4 + 11)	G	0	AP
Zampro (Groups 45 + 40)	G	12	0

See Table 3.

<sup>1</sup> G = general, R = restricted

<sup>2</sup> Chemicals with multiple designations are based on product and/or formulation differences. CONSULT LABEL.

<sup>3</sup> AP=At Planting

## Disease Control

### Damping-off (*Pythium* and *Rhizoctonia*)

Use clean pathogen-free seed that has been treated with a fungicide seed treatment. Apply one of the following before planting to assist with managing damping-off pathogens.

mefenoxam--(Ridomil Gold--0.5 to 1.0 pt 4SL/A or Ultra Flourish--1.0 to 2.0 pt 2EC/A) (*Pythium* only)  
metalaxyl (MetaStar)--2.0 to 4.0 pt 2EC/A (*Pythium* only)  
azoxystrobin--0.40 to 0.80 fl oz 2.08F/1000 row ft or OLF (*Rhizoctonia* only)

Uniform--0.34 fl oz 3.66SE/1000 row ft in-furrow (see label for specific details) for *Pythium* and/or *Rhizoctonia*

### White Rot (*Sclerotium cepivorum*)

Disease development is favored by cool, moist soil conditions. Soil temperatures for infection range from 50 to 75°F, with optimum being 60 to 65°F. At soil temperatures above 78°F, the disease is greatly inhibited. Sclerotia can

survive for over 20 years, even in the absence of a host plant. Soil moisture conditions that are favorable for onion and garlic growth are also ideal for white rot development. Rotate between crops for as many years as possible.

At planting, apply an in-furrow treatment of one of the following:

iprodione at 4.0 pt in 20 gallons of water minimum based on a 38 to 40-inch row spacing; spray both the cloves and the covering soil used to fill the furrow (1 application per year allowed).

Cannonball--0.5 oz 50 WP/1000 ft row in-furrow prior to seed placement

tebuconazole--20.5 oz 3.6F/A or OLF in a 4 to 6 inch band over the top or in-furrow at seeding. Tebuconazole also can be applied via drip irrigation. For best results apply immediately after seeding.

Two additional foliar tebuconazole applications at 4.0 to 6.0 fl oz 3.6F/A or OLF may also be applied.

In treated fields, do not grow crops other than garlic and leafy vegetables during the harvest year, and do not grow garlic, leafy vegetables, tomatoes, root crops, cereal grains, or soybeans during the following year.

### Botrytis Leaf Blight (Blast)

Scout fields on a regular basis. Cool summer temperatures (55 to 75 °F) and long periods of leaf wetness provide optimum environmental conditions for rapid leaf blighting. Leaves of older plants are more susceptible to blast infection than are the younger plants. Apply the following preventatively when weather conditions favor disease development and repeat at 7 to 10 day intervals.

Tank mix and/or alternate chlorothalonil--1.5 to 3.0 pt 6F/A or OLF with one of the following:

Endura--6.8 oz 70WG/A (also purple blotch)

Pristine--14.5 to 18.5 oz 38WG/A

Inspire Super--16.0 to 20.0 fl oz 2.82SC/A (also for purple blotch)

Quilt Xcel--17.5 to 26.0 fl oz 2.2SE/A (also for downy mildew)

Omega--1.0 pt 500F/A (also for purple blotch and downy mildew)

Do not make more than 2 consecutive applications of Endura or Pristine before switching to a fungicide with a different mode of action.

Thoroughly disc or plow under plant debris after harvest.

### Purple Blotch (*Alternaria porri*)

Scout fields on a regular basis. Purple blotch development increases with high humidity, rain and persistent dews with an optimum temperature range of 71 to 85°F. Apply one of the following preventatively when weather conditions favor disease development and repeat at 7 to 10 day intervals.

Tank mix chlorothalonil--1.0 to 3.0 pt 6F/A or OLF with one of the following fungicides:

Cabrio--8.0 to 12.0 oz 20EG/A

Endura--6.8 oz 70WG/A

Inspire Super--16.0 to 20.0 fl oz 2.82SC/A (also Botrytis leaf blight)

azoxystrobin--6.0 to 12.0 fl oz 2.08F/A or OLF

Quilt--14.0 to 27.5 fl oz 1.66F/A

Quilt Xcel--14.0 to 21.0 fl oz 2.2SE/A

tebuconazole--4.0 to 6.0 fl oz 3.6F/A or OLF

Omega--1.0 pt 500F/A (also for Botrytis leaf blight and downy mildew)

Do not make more than one consecutive application of Pristine, azoxystrobin (both FRAC code 11) or, Endura (FRAC code 7) before switching to a fungicide with a different mode of action (i.e., FRAC code).

Thoroughly disc or plow under plant debris after harvest.

### Downy Mildew (*Peronospora destructor*)

Tank mix chlorothalonil--1.0 to 3.0 pt 6F/A or OLF with one of the following fungicides:

Reason--5.5 fl oz 500SC/A

Zampro--14.0 fl oz 525SC/A

Forum--6.0 fl oz 4.18SC/A

Cabrio--12.0 oz 20EG/A

azoxystrobin--9.0 to 15.5 fl oz 2.08F/A or OLF

Quilt Xcel--17.5 to 26.0 fl oz 2.2SE /A

Omega--1.0 pt 500F/A (also for Botrytis leaf blight and purple blotch)

### Fusarium Basal Rot (*Fusarium spp.*)

The fungus infects and causes decay of the stem plate. During the growing season, leaves can turn yellow and then brown. This disease is favored by very warm soil temperatures so symptoms are most frequently observed in mid- to late summer. A four-year crop rotation with non-hosts is the most effective management strategy.

### Bloat Nematode (*Ditylenchus dipsaci*)

Infected garlic appears bloated and twisted, with swollen leaves and distorted and cracked bulbs. Secondary infection by *Fusarium* sp. is common. Plant only clean seed. Avoid planting bulbs that are split, have damaged basal plates or are desiccated. Currently there are no certification programs for garlic so check with your supplier about what production process they have in place to ensure clean seed cloves. Plant garlic in a location that has not been cropped to garlic or another *Allium* crop for at least four years. Following harvest plant biofumigant cover crops may help reduce nematode levels. Keep soils moist since the bloat nematode cannot survive long periods in high moisture. Implement good sanitation practices and avoid dumping culls and other infested debris in the field.

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## GREENS (MUSTARD, TURNIP)

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### Recommended Greens Varieties – Mustards and Turnips For Kale and Collard Greens, see the cole crop section

Variety	Type	Use <sup>1</sup>	Hybrid	Season <sup>2</sup>	Description
Florida Broadleaf	Mustard	CG	No	Fall	Green, flat leaf
Garnet Giant	Mustard	S	No	Fall	Red, flat leaf
Green Wave	Mustard	CG, S	No	Fall	Green, curled leaf
Tendergreen	Mustard	CG	No	Fall	Green, flat leaf
Red Giant	Mustard	CG, S	No	Fall	Red, crinkled leaf
Red Splendor	Mustard	CG, S	No	Spring/Fall	Red, serrated leaf
Savannah	Mustard	CG	Yes	Spring/Fall	Green, flat leaf
Scarlet Frills	Mustard	S	No	Spring/Fall	Red, ruffled leaf
Southern Giant Curled	Mustard	CG	No	Fall	Green, curled leaf
Dark Purple Mizuna	Asian Mustard	CG, S	No	Fall	Green, serrated leaf
Red Streaked Mizuna	Asian Mustard	CG, S	No	Fall	Red, serrated leaf
Green Mizuna	Asian Mustard	CG, S	No	Fall	Green, serrated leaf
Tatsoi	Asian Mustard	CG, S	No	Fall	Green, semi savoy leaf
Tatsoi Savoy	Asian Mustard	CG, S	No	Fall	Green, heavy savoy leaf
Summerfest Komatsuna	Asian Mustard	CG, S	Yes	Spring/Fall	Green, flat leaf
Red Komatsuna	Asian Mustard	CG, S	Yes	Spring/Fall	Red, flat leaf
Alamo	Turnip	CG, S	Yes	Spring/Fall	Green, flat leaf
All Top	Turnip	CG	Yes	Fall	Green, flat leaf
Seven Top	Turnip	CG	No	Fall	Green, serrated leaf
Topper	Turnip	CG	Yes	Spring/Fall	Green, serrated leaf
Top Star	Turnip	CG	Yes	Spring/Fall	Green, serrated leaf

<sup>1</sup>Use CG=Cooked Green, S = Salad green for salad mixes.

<sup>2</sup>Recommended growing season for full size harvest to avoid bolting.

Greens may be planted throughout the year for harvest in the baby stage.