RUTGERS
New Jersey Agricultural Experiment Station

This is a section from the

# 2024/2025
# Mid-Atlantic Commercial Vegetable Production Recommendations

The recommendations are **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 at: *https://njaes.rutgers.edu/pubs/publication.php?pid=e001*.

This manual will be revised biennially. **In January 2025, a Critical Update** with important updates to the 2024/2025 manual will be communicated through local Extension Agents and Vegetable Specialists.

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.

**Cooperating Agencies**: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and County Boards of Commissioners. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.

# F. Commodity Recommendations

# Pesticide Use Disclaimer

## THE LABEL IS THE LAW

**A pesticide applicator is legally bound by the labeling found on and with the pesticide container in their possession. Before using a pesticide, check and always follow the labeling distributed with the product at the point of sale for legally enforceable rates and use restrictions and precautions.**
Although labels are available on the Internet from electronic label services such as Proagrica's CDMS (*https://www.cdms.net/*), Greenbook (*https://www.greenbook.net*), or Agworld DBX powered by Agrian (*https://www.agrian.com/labelcenter/results.cfm)* the information contained in these electronic labels may not be identical to the labeling distributed with the product. **Please be advised that these electronic label services provide use disclaimers, and in some cases legally binding *User Agreements* assigning ALL liability to user of service. (**See section D 3.1. Labels and Labeling for more detail.)

## Guide to the Recommended Pesticide Tables in the Following Crop Sections:

1. Pesticides are listed by **group number or code based on chemical structure and mechanism of action**, as classified by the Herbicide Resistance Action Committee (**HRAC**, *https://hracglobal.com*) for herbicides, the Insecticide Resistance Action Committee (**IRAC**, *https://irac-online.org*) for insecticides, and the Fungicide Resistance Action Committee (**FRAC,** *https://www.frac.info/*) for fungicides. **In this guide, if the group number or code is in bold font, there are resistance concerns for the product.**
2. **Restricted use pesticides** are marked with a * in the Tables. These products may only be used by certified and/or licensed pesticide applicators, and when stated on the label, those making applications under their direct supervision. Some labels may restrict use solely to certified and/or licensed applicators. (See section D 3.2.1 Restricted Use Classification Statement for more detail).
3. **In addition to the pesticide products listed in the Commodity Recommendations below, other formulations or brands with the same active ingredient(s) may be commercially available. ALWAYS CHECK THE LABELING ON THE PRODUCT CONTAINER ITSELF:**
   **a) to ensure a pesticide is labeled for the same intended use,**
   **b) to ensure the pesticide is labeled for the desired crop,**
   **c) for differences in application rates and % active ingredient(s), and**
   **d) additional restrictions.**
4. All pesticide recommendations contained in this document are prescribed for spray applications to a **broadcast area of 1 acre** (43,560 square feet). **Adjust the rate accordingly for banded applications** (See section E 1.3. Calibrating Granular Applicators) **or for chemigation** (check labels for amounts per 1,000 feet).
5. Check the physical product label for and do not exceed the maximum amount of pesticide *per application* and the maximum number of applications *per year*.
6. **Bee Toxicity Rating (Bee TR)**: N=nontoxic; L=minimum impact on bees; M=moderately toxic, can be used if dosage, timing, and method of application are correct, but should NOT be applied directly to the crop if bees are present; H=highly toxic, severe losses expected, -- = data not available.
7. In accordance with the USDA National Organic Program, the Organic Materials Research Institute (OMRI) maintains a directory of all products that OMRI has determined are allowed for use in organic production, processing, and handling. These products are catalogued online in the **OMRI Products List** (see *https://www.omri.org/omri-lists*).

# Beets (Garden)

Beets are frost tolerant and produce the best commercial quality when grown during cool temperatures (50-65°F, 10-18°C). Lighter color and wider zoning occur during rapid growth in warm temperatures. Beets will form seed stalks if exposed to temperatures below 50°F (10°C) for 2 or 3 weeks after several true leaves have formed. Beets have a high boron requirement - see Plant Nutrient Recommendations below.

## Recommended Varieties[1]

| Market | Hybrid | Days | Color | Shape | Use |
|---|---|---|---|---|---|
| Avalanche | No | 50 | White | Round | Roots, bunching |
| Boro | Yes | 51 | Red | Globe | Roots, tops, bunching, baby beets |
| Bulls Blood | No | 58 | Red with White Zones | Globe | Roots, tops (red) |
| Chioggia Guardsmark | No | 60 | Purple with White Zones | Globe | Roots |
| Cylindra | No | 54 | Red | Cylindrical | Roots, bunching |
| Eagle | Yes | 50 | Red | Globe | Roots, bunching |
| Early Wonder | No | 52 | Red | Globe | Greens, bunching |
| Fresh Pak | Yes | 40 | Green-Red leaves | Long | Greens |
| Green Top Bunching | No | 58 | Red | Round | Greens, bunching |
| Kestrel | Yes | 53 | Red | Globe | Roots, bunching |
| Merlin | Yes | 55 | Red | Globe | Roots |
| Moneta (monogerm) | Yes | 46 | Red | Glove | Roots, bunching |
| Red Ace | Yes | 53 | Red | Globe | Roots, bunching |
| Red Cloud | Yes | 53 | Red | Round | Roots, bunching |
| Ruby Queen | No | 55 | Red | Round | Roots, bunching |
| Touchstone Gold | No | 60 | Gold | Round | Roots, bunching |
| Zeppo | Yes | 50 | Red | Round | Roots, bunching |

[1]**Listed alphabetically**.

## Recommended Nutrients Based on Soil Tests

In addition to using the table below, check the suggestions on rate, timing, and placement of nutrients in your soil test report and Chapter B Soil and Nutrient Management. Your state's soil test report recommendations and/or your farm's nutrient management plan supersede the recommendations found below.

| | | Soil Phosphorus Level | | | | Soil Potassium Level | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Low | Med | High (Opt) | Very High | Low | Med | High (Opt) | Very High | |
| **Beets[1,2]** | **N (lb/A)** | **$P_2O_5$ (lb/A)** | | | | **$K_2O$ (lb/A)** | | | | **Nutrient Timing and Method** |
| | 75-100 | 150 | 100 | 50 | 0 | 150 | 100 | 50 | 0 | Total nutrient recommended |
| | 50 | 150 | 100 | 50 | 0 | 150 | 100 | 50 | 0 | Broadcast and disk-in |
| | 25-50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Sidedress 4-6 weeks after planting |

[1]Apply 1.5-3 lb/A of boron (B); see also Table B-7. in Chapter B Soil and Nutrient Management.
[2]Apply 25-30 lb/A of sulfur (S) for most soils.

## Boron Deficiency and Black Spot

Boron (B) deficiency can cause black spots inside roots and large black dry rots on root surfaces. B deficiency is most likely to occur in alkaline soils high in calcium and is exacerbated by dry conditions. Apply B at planting according to soil test results.

## Seed Treatment

Use treated seed to prevent disease, see Disease Control below for more information.

## Seeding and Spacing

Seed from early April to mid-August. Germination temperatures range from 50-85°F (10-29°C). For fresh market beets, sow seeds ½ inch deep at the rate of 12 seeds/ft of row. Space rows 15-20 inches apart; thin plants to 3 inches apart. Narrow row systems with between row spacings of 6-12 inches and in-row seeding rates of 8 seeds per foot are appropriate for processing beets. Processing beets are precision planted to achieve final stands for intended processing use. Beet "seeds" are dried fruits with 1-3 seeds. Seed companies can provide sprout counts to determine seeding rates more accurately for precision planting.

## Harvest and Post-Harvest Considerations

Market beets are harvested when they reach a size of 1.5-3 inches in diameter. Beet tops for greens may be cut and handled like spinach or Swiss chard. For bunching beets, roots are undercut and carefully pulled by the tops. For larger acreages, beets for roots may be topped and machine dug using a modified potato digger.

Store beets at 32°F (0°C) and 98-100% relative humidity. Like other root crops, beets are well adapted to storage. Topped beets stored at 32°F can keep 4-6 months. Cold storage or cool-cellar storage are both suitable, provided the humidity is kept sufficiently high to prevent dehydration. Before storage, beets should be topped and sorted to remove the ones with disease symptoms or mechanical injuries. Beets should not be stored in large bulk. They should be stored in well-ventilated containers such as ventilated bin boxes or slatted crates to help dissipate respiratory heat. Increased carbon dioxide concentrations (5-10%) in beet storage increases fungal spoilage.

Bunched beets and beet greens are much more perishable than topped beets, but they can be stored at 32°F for 10-14 days. A relative humidity of at least 95% is desirable to prevent wilting. Air circulation should be adequate to remove respiration heat but not so rapid that it speeds up transpiration and wilting. Satisfactory precooling is accomplished by vacuum cooling or hydrocooling. Crushed ice helps keep the bunched beets cold, especially if refrigeration is not available. Bunched beets are commonly shipped with package and top ice to maintain freshness.

# Weed Control

## THE LABEL IS THE LAW-see the Pesticide Use Disclaimer on the first page of Chapter F.

## Recommended Herbicides

1. Identify the weeds in each field and select recommended herbicides. More information is available in the "Herbicide Effectiveness on Common Weeds in Vegetables" (Table E-3) in Chapter E Pest Management.
2. Minimize herbicide resistance development. Identify the herbicide mode of action group number and follow recommended good management practices; **bolded group numbers in tables below are herbicides at higher risk for selecting resistant weed populations.** Include non-chemical weed control whenever possible.

**1. Soil-Applied (Preplant Incorporated)**

| Group | Product Name (*=Restricted Use) | Product Rate | Active Ingredient | Active Ingredient Rate | PHI (d) | REI (h) |
|---|---|---|---|---|---|---|
| 8 | Ro-Neet 6E | 1.67 to 2 qt/A | **cycloate** | 2.5 to 3 lb/A | -- | 48 |

-Preplant incorporated only; incorporate into 3 to 4 inches of soil immediately after application. Plant any time after treatment. Use on mineral soils **only**. Use lower rate on sandy soils and higher rate on heavier soils.
-**Do not** apply over 150 lb N/A when applying this herbicide in conjunction with a fluid fertilizer.

**2. Postemergence**

| Group | Product Name (*=Restricted Use) | Product Rate | Active Ingredient | Active Ingredient Rate | PHI (d) | REI (h) |
|---|---|---|---|---|---|---|
| **1** | Shadow 3EC<br>Select 2EC<br>Select Max 0.97EC | 4 to 5.33 fl oz/A<br>6 to 8 fl oz/A<br>9 to 16 fl oz/A | **clethodim** | 0.07 to 0.125 lb/A | 30 | 24 |
| | Poast 1.5EC | 1 to 2.5 pt/A | **sethoxydim** | 0.2 to 0.5 lb/A | 60 | 12 |

-**Select 2EC**: use crop oil concentrate (COC) at 1% v/v (1 gal/100 gal of spray solution). **Select Max**: use nonionic surfactant (NIS) at 0.25% v/v (1 qt/100 gal of spray solution). **Shadow 3EC**: use crop oil concentrate (COC) at 1% v/v (1 gal/100 gal of spray solution) for large or stressed grasses; use nonionic surfactant (NIS) at 0.25% v/v (1 qt/100 gal of spray solution) when crop safety is a concern. **Poast**: Apply with COC at 1.0% v/v. -**The use of COC 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 NIS when grasses are small and soil moisture is adequate. -Use lower labeled rates for annual grass control and higher labeled rates for perennial grass control.
-Yellow nutsedge, wild onion, wild garlic, and broadleaf weeds will **not** be controlled.
-Controls many annual and certain perennial grasses, including annual bluegrass, but Poast is preferred for goosegrass control. For best results, treat annual grasses when they are actively growing and before tillers are present. Control may be reduced if grasses are large or under hot or dry weather conditions. Repeated applications may be necessary to control certain perennial grasses. If repeated applications are necessary, allow 14 days between applications.
-**Do not** tank mix with or apply within 2 to 3 days of any other pesticide, unless labeled, as this may increase the risk of crop injury or reduce the control of grasses. **Do not** apply more than 8 fl oz/A of Select 2EC in a single application and **do not** exceed 2 pt/A for the season; **do not** apply more than 16 fl oz/A of Select Max in a single application and **do not** exceed 4 pt/A for the season. **Do not** apply more than 5.33 fl oz/A of Shadow 3EC in a single application and **do not** exceed 21.33 fl oz/A for the season.
-**Do not** apply more than 2.5 pt/A Poast in a single application and **do not** exceed 5 pt/A for the season. Rainfastness is 1 h.

*2. Postemergence - continued next page*

*2. Postemergence - continued*

| | | | | | | |
|---|---|---|---|---|---|---|
| **5** | Spin-Aid 1.3EC* | 1.5 to 3 pt/A | **phenmedipham** | 0.244 to 0.488 lb/A | 60 | 12 |

-**For use in DE, MD, NJ, PA, and VA only. See label for application restrictions, mixing instructions, and weather restriction to prevent crop injury or herbicide failure.** Multiple applications may be applied to ground to control early germinating weeds. Apply 1.5 pt/A after the 2-leaf stage. Increase rate up to 2.3 pt/A after the 4-leaf stage. Increase rate up to 3 pt/A after the 6-leaf stage. Repeat applications may be made 5 to 7 days later, or when another flush of weeds germinates. A maximum of 3 applications is allowed.
-Spin-Aid is effective on brassica species including wild mustard, shepherdspurse, and London rocket. Other weeds controlled include common chickweed, common lambsquarters, groundcherry, purslane, common ragweed, and annual sowthistle.
-**Do not** apply this product through any type of irrigation system. **Do not** spray when conditions for drift are favorable or while dew is present. Leave a 16 ft buffer from the treated area when the wind direction is toward sensitive plants.
-Spin-Aid may cause injury if the crop is under stress as the result of rapid changes in weather from cool, overcast days to hot (>75°F), bright days; windy conditions; drought; use of preplant herbicides, preemergence herbicides, or other chemicals; insect or disease injury; or close cultivation. Rainfastness is 6 h.

**3. Other Labeled Herbicides** These products are labeled but limited local data are available; and/or are labeled but not recommended in our region due to potential crop injury concerns.

| Group | Product Name (*=Restricted Use) | Active Ingredient |
|---|---|---|
| **2** | UpBeet | **triflusulfuron** |
| 4 | Stinger | **clopyralid** |
| **14** | Vida | **pyraflufen** |
| **14** | Aim | **carfentrazone** |

# Insect Control

## THE LABEL IS THE LAW-see the Pesticide Use Disclaimer on the first page of Chapter F. Recommended Insecticides

## Aphids

**Apply one of the following formulations:**

| Group | Product Name (*=Restricted Use) | Product Rate | Active Ingredient(s) | PHI (d) | REI (h) | Bee TR |
|---|---|---|---|---|---|---|
| 4A | Admire Pro | 4.4 to 10.5 fl oz/A | imidacloprid - **soil** | 21 | 12 | H |
| 4A | Admire Pro | 1.2 fl oz/A | imidacloprid - **foliar** | 7 | 12 | H |
| 4A | Actara 25WDG | 1.5 to 3.0 oz/A | thiamethoxam | 7 | 12 | H |
| 4A | Platinum 75SG | 1.70 to 4.01 oz/A | thiamethoxam | AP | 12 | H |
| 4C | Transform WG | 0.75 to 1.5 oz/A | sulfoxaflor | 7 | 24 | H |
| 4D | Sivanto Prime | 7.0 to 14.0 fl oz/A | flupyradifurone | 7 | 4 | M |
| 28 | Exirel | 13.5 to 20.5 fl oz/A | cyantraniliprole | 1 | 12 | H |
| 29 | Beleaf 50SG | 2.0 to 2.8 oz./A | flonicamid | 3 | 12 | L |

## Beet Armyworms and Webworms

**Note:** Beet armyworm and Hawaiian beet webworm populations may be resistant or less susceptible to pyrethroid insecticides.

**Apply one of the following formulations:**

| Group | Product Name (*=Restricted Use) | Product Rate | Active Ingredient(s) | PHI (d) | REI (h) | Bee TR |
|---|---|---|---|---|---|---|
| 5 | Blackhawk 36WG | 2.25 to 3.5 oz/A | spinosad | 3 | 4 | M |
| 5 | Entrust (OMRI) | 4.5 to 10.0 fl oz/A | spinosad | 3 | 4 | M |
| 5 | Radiant SC | 5.0 to 10.0 fl oz/A | spinetoram | 7 | 4 | M |
| 11A | XenTari (OMRI) | 0.5 to 2.0 lb/A | *Bacillus thuringiensis aizawai* | 0 | 4 | N |
| 11A | DiPel DF | 05 to 2.0 lb/A | *Bacillus thuringiensis kurstaki* | 0 | 4 | N |
| 18 | Intrepid 2F | 4.0 to 10.0 fl oz/A | methoxyfenozide | 1 | 4 | L |
| 18 + 5 | Intrepid Edge | 4.5 to 12.0 fl oz/A | methoxyfenozide + spinetoram | 7 | 4 | M |
| 22 | Avaunt 30WDG, Avaunt eVo | 3.5 to 6.0 oz/A | indoxacarb | 7 | 12 | H |
| 28 | Coragen 1.67SC<br>Coragen eVo | 3.5 to 7.5 fl oz/A<br>1.2 to 2.5 fl oz/A | chlorantraniliprole | 1 | 4 | L |
| 28 | Vantacor | 1.2 to 2.5 fl oz/A | chlorantraniliprole | 1 | 4 | L |
| 28 + 3A | Elevest* | 5.6 to 9.6 fl oz/A | chlorantraniliprole + bifenthrin | 21 | 12 | H |
| 28 | Exirel | 13.5 to 20.5 fl oz/A | cyantraniliprole | 1 | 12 | H |

## Flea Beetles

| Apply one of the following formulations: | | | | | | |
|---|---|---|---|---|---|---|
| **Group** | **Product Name (*=Restricted Use)** | **Product Rate** | **Active Ingredient(s)** | **PHI (d)** | **REI (h)** | **Bee TR** |
| 1A | Sevin XLR Plus | 0.5 to 1.0 qt/A | carbaryl | 7 | 12 | H |
| 3A | Fastac CS* | 1.8 to 3.8 fl oz/A | alpha-cypermethrin | 7 | 12 | H |
| 3A | Brigade 2EC* | 5.12 to 6.40 fl oz/A | bifenthrin | 1 | 12 | H |
| 3A | Hero* | 2.6 to 6.1 fl oz/A | zeta-cypermethrin + bifenthrin | 1 | 12 | H |
| 3A | Mustang Maxx* | 1.76 to 4.0 fl oz/A | zeta-cypermethrin | 1 | 12 | H |
| 4A | Admire Pro | 4.4 to 10.5 fl oz/A | imidacloprid - **soil** | 21 | 12 | H |
| 4A | Admire Pro | 1.2 fl oz/A | imidacloprid - **foliar** | 7 | 12 | H |
| 4A | Actara 25WDG | 1.5 to 3.0 oz/A | thiamethoxam | 7 | 12 | H |
| 4A | Platinum 75SG | 1.70 to 4.01 oz/A | thiamethoxam | AP | 12 | H |
| 28 + 3A | Elevest* | 5.6 to 9.6 fl oz/A | chlorantraniliprole + bifenthrin | 21 | 12 | H |

## Leafminers

| Apply one of the following formulations: | | | | | | |
|---|---|---|---|---|---|---|
| **Group** | **Product Name (*=Restricted Use)** | **Product Rate** | **Active Ingredient(s)** | **PHI (d)** | **REI (h)** | **Bee TR** |
| 5 | Blackhawk 36WG | 2.25 to 3.5 oz/A | spinosad | 3 | 4 | M |
| 5 | Entrust SC (OMRI) | 4.5 to 10.0 fl oz/A | spinosad | 3 | 4 | M |
| 5 | Radiant SC | 6.0 to 10.0 fl oz/A | spinetoram | 7 | 4 | M |
| 28 | Exirel | 13.5 to 20.5 fl oz/A | cyantraniliprole | 1 | 12 | H |

# Disease Control

## THE LABEL IS THE LAW-see the Pesticide Use Disclaimer on the first page of Chapter F.

## Recommended Fungicides

### Seed Treatment

Use seed treated with Apron XL (0.085 to 0.64 fl oz/100 lb) or Allegiance FL (0.75 fl oz/100 lb) for *Pythium* damping-off protection *plus* Maxim 4FS (0.08 to 0.16 fl oz/100 lb) for *Rhizoctonia* and *Fusarium* protection. Seed treatments are not a substitute for high quality seed.

### Damping-off caused by *Phytophthora*, *Pythium*, and *Rhizoctonia*

| **Code** | **Product Name (*=Restricted Use)** | **Product Rate** | **Active Ingredient(s)** | **PHI (d)** | **REI (h)** | **Bee TR** |
|---|---|---|---|---|---|---|
| **Apply one of the following preplant incorporated or as a soil-surface spray after planting:** | | | | | | |
| 4 | Ridomil Gold 4SL | 1.0 to 2.0 pt/A | mefenoxam | 0 | 48 | N |
| 4 | Ultra Flourish 2E | 2.0 to 4.0 pt/A | mefenoxam | 0 | 48 | N |
| 4 | MetaStar 2E AG (see label) | 4.0 to 8.0 pt/A | metalaxyl | 14 | 48 | N |
| **Apply the following as an in-furrow spray only for *Pythium* and *Rhizoctonia* control:** | | | | | | |
| 4 + 11 | Uniform 3.66SE[1] | 0.34 fl oz/1000 ft row | mefenoxam + azoxystrobin | AP | 0 | N |

### Bacterial and Fungal Diseases

### Leaf Spots (*Cercospora* and *Alternaria*) and other foliar diseases

Allow 2 to 3 years between beet plantings. Thoroughly disc under crop residues as pathogens can overwinter on residues. Warm, wet weather and rainfall favor leaf spot development. Scout plantings regularly, especially if wet weather persists. Apply one of the fungicides listed below preventatively and/or when weather conditions are favorable for disease development. Repeat every 7 to10 days.

**Do not** make more than 2 sequential applications of Cabrio, or 1 application of a FRAC code 11 fungicide, before alternating to a non-FRAC code 11 fungicide. **Tank mix fungicides with fixed copper** to help reduce fungicide resistance development. Resistance of Cercospora Leaf Spot (CLS) to FRAC code 11 has been reported in table and sugar beets and to FRAC code 3 in sugar beets. In cases of suspected resistance, tank mixing a copper-

based fungicide with the biofungicides Double Nickel (OMRI), LifeGard (OMRI) or Regalia (OMRI) have provided some suppression of CLS. Repeated scouted is needed during the season to identify potential cases of fungicide resistance.

| Code | Product Name (*=Restricted Use) | Product Rate | Active Ingredient(s) | PHI (d) | REI (h) | Bee TR |
|---|---|---|---|---|---|---|
| M01 | copper (OMRI)[1] | at labeled rates | copper | 0 | 48 | N |
| **Rotate one of the following FRAC code 11 fungicides plus a fixed copper at labeled rates:** | | | | | | |
| 11 | azoxystrobin 2.08F[2,3] | 6.0 to 15.5 fl oz/A[2,3] | azoxystrobin | 0 | 4 | N |
| 11 | Cabrio 20EG | 8.0 to 12.0 oz/A | pyraclostrobin | 0 | 12 | N |
| 11 | Flint Extra 500SC | 2.0 to 2.9 fl oz/A | trifloxystrobin (**Do not apply near Concord grapes**, see label) | 7 | 12 | N |
| 11 | Reason 500SC[4] | 8.2 fl oz/A[4] | fenamidone | 14 | 12 | -- |
| **With one of the following:** | | | | | | |
| 3 | tebuconazole 3.6F | 4.0 to 6.0 fl oz/A | tebuconazole | 7 | 12 | N |
| 3 | Tilt 3.6EC[5] | 3.0 to 4.0 fl oz/A[5] | propiconazole | 14 | 12 | N |
| 7 | Fontelis 1.67SC | 16.0 to 30.0 fl oz/A | penthiopyrad | 0 | 12 | L |
| 7 + 9 | Luna Tranquility 4.16SC | 8.0 to 11.2 fl oz/A | fluopyram + pyrimethanil | 7 | 12 | -- |
| 7 + 11 | Merivon 2.09SC | 4.0 to 5.5 fl oz/A[6] | fluxapyroxad + pyraclostrobin | 7 | 12 | N |
| 7 + 12 | Miravis Prime | 6.8 fl oz/A | pydiflumetofen + fludioxonil | 7 | 12 | -- |

[1]There are several OMRI listed copper-based products; see labels for specifics. Copper applications may help suppress some fungal pathogens in organic production systems.
[2]Use 9.0 to 15.5 fl oz/A for Cercospora Leaf Spot
[3]Poor control with azoxystrobin (FRAC code 11) has been reported in southern NJ and across NY
[4]Alternaria Leaf Spot suppression only
[5]Cercospora Leaf Spot only
[6]Use 5.5 fl oz/A for Cercospora Leaf Spot

## Pocket Rot, Wirestem, Stem Canker, and Crown Rot (*Rhizoctonia solani*)

Pocket rot and other diseases caused by *Rhizoctonia* are most prevalent in cool, wet soils and especially in plantings showing poor plant vigor. Rotate between fields each year and scout on a regular basis.

| Group | Product Name (*=Restricted Use) | Product Rate | Active Ingredient(s) | PHI (d) | REI (h) | Bee TR |
|---|---|---|---|---|---|---|
| 11 | azoxystrobin 2.08F[1] | 0.40 to 0.80 fl oz/1000 ft row, banded or in-furrow | azoxystrobin | 0 | 4 | N |
| 4 + 11 | Uniform 3.66SE [1,2] | 0.34 fl oz/1000 ft row | mefenoxam + azoxystrobin | AP | 0 | N |

[1]See label for specific details. [2]Also for *Pythium* damping-off

**If you are having a medical emergency after using pesticides, always call 911 immediately.**

POISON Help®
1-800-222-1222

## In Case of an Accident

- Remove the person from exposure
- Get away from the treated or contaminated area immediately
- Remove contaminated clothing
- Wash with soap and clean water
- Call a physician and/or the National Poison Control Center (1-800-222-1222). Your call will be routed to your State Poison Control Center.
- Have the pesticide label with you!
- Be prepared to give the EPA registration number to the responding center/agency