

Critical Updates for the 2022/2023 Mid-Atlantic Commercial Vegetable Production Recommendations (January 2023)

Chapter F. Horticulture

Beans Varieties

Lima Beans Emperor: 80 days, cold soil tolerance

Cole Crops Varieties

Broccoli Apollo (*spelling correction*)

Brussels Sprouts

Variety	Hybrid	Maturity
Marte	Yes	Early

Green Cabbage

Variety	F1	Maturity	Lbs	Shape	Use	Y	BR	TB	Thr	SH
Artost	yes	Early	3-6	Round	F, P	H		H		H
Capture	yes	Late	3-6	Round	F, P	H	M			
Checkmate	yes	Early	2-3	Round	F	H				H
Tiara	yes	Early	1-2	Round						

Cauliflower

Variety	F1	Color	Maturity	Season	Self-Wrapping
Toledo	Yes	White	Midseason	Fall	Yes
Twister	Yes	White	Midseason	Fall	Yes

Tomato Varieties

Market Tomatoes – Globe Tomatoes

Variety	Color	Season	Culture	Use	Disease Resistance	Plant Habit
Carrie	Red	Mid	Field	DM, LW	V, F, Asc, Tswv, Tylc	D
Carole	Red	Mid	Field, High Tunnel	DM, LW	F, Lb, N, TomvV, V	I
Patsy	Red	Mid	Field	DM, LW S	F, V, TSWV, Tylc	D
Rambler	Red	Early	Field	DM, LW, S	V, F, Asc, Tswv, GlS	D
Roadster	Red	Early	Field	DM, LW, S	V, F, Asc, Tswv	D
Thunderbird	Red	Mid	Field	DM, LW, S	Asc, F, V, GlS, Tylc	D

Other Corrections

Tomatoes Plant Tissue Testing N 2.8-4.0% (*page 413*)

Chapter F. Weed Management

Pesticide labels can be changed without notice. Users must find and read a current label before applications are made. The following updates on 24c labels, crops, and pre-packaged herbicides do not substitute for reading the approved label.

24c Labels

24c labels (also called state labels or special local needs [SLN]) are granted by individual states and are only allowed for the specific states that have received these labels.

Halex GT has a 24c label for DE only, allowing processing lima bean to be planted 10 months after application.

Command 3ME has a 24c label for lima bean in DE, MD, NJ, and VA. This label also allows lima bean to be planted 60 days following an application in a previous crop (i.e., processing peas), assuming the rate was not above 12 fl oz.

Crop Specific Weed Management Updates

Various Vegetable Crops

Shadow 3EC (clethodim) is labeled for use on various vegetable crops (see table below). Do not exceed 21.33 fl oz/A per season

Shadow 3 EC Rate (per Application) and Preharvest Interval (PHI)

Crop	Rate	PHI (d)
Asparagus	4 – 5.3 fl oz/A	1
Snap/lima bean, Potato, Sweet Potato	4 – 10.7 fl oz/A	30
Beets (Garden), Carrot, Celery, Cole crops (broccoli, Brussels sprout, cabbage, cauliflower, collards, kale, kohlrabi, mustard greens), Endive, Lettuce, Parsley, Spinach, Root Vegetables (horseradish, parsnip, turnip)	4 – 5.3 fl oz/A	30
Cucurbits (cucumber, cantaloupe, pumpkin, squash, watermelon)	4 – 5.3 fl oz/A	14
Fruiting vegetables (eggplant, peppers, tomato)	4 – 5.3 fl oz/A	20
Garlic, Onion (bulb)	4 – 5.3 fl oz/A	45
Leek, Onion (green)	4 – 5.3 fl oz/A	14
Pea (succulent shelled)	4 – 5.3 fl oz/A	21
Radish	4 – 5.3 fl oz/A	15
Strawberry	4 – 5.3 fl oz/A	4

Asparagus

Chateau EZ replaces Chateau WDG

Dual Magnum 24c label for use in DE has been extended until 9/20/2026; NJ has been renewed until 1/28/2027

Beans, Lima

Spartan Charge 24c label for use in DE on lima bean has been renewed until 12/31/2026

Dual Magnum 24c label for use in DE on lima bean as a postemergence application to extend residual control of grasses and pigweed species. Dual Magnum will not control any weeds that are emerged; emerged weeds should be removed with a herbicide application or cultivation.

If a preplant or preemergence application of Dual Magnum was made to the crop, a postemergence application may be applied provided the total amount of Dual Magnum does not exceed 2.0 pt/A.

Apply Dual Magnum postemergence only after the first trifoliate stage of the bean plant; earlier applications

may result in unacceptable crop injury. When Dual Magnum is applied over the top of lima bean, leaf spotting or speckling may be observed.

Command 24c label for use in NJ expired in 2022; renewal is pending.

Carrots

Dual Magnum 24c label for use in NJ has been renewed until 1/28/2027

Cole Crops

GoalTender 24c label for use in DE, NJ, and PA extends until at least 12/31/2023; includes postemergence applications to broccoli, cabbage, and cauliflower

Dual Magnum 24c for cabbage use in NJ has been renewed until 1/28/2027

Garlic

Chateau EZ replaces Chateau WDG

Leeks

Dual Magnum 24c label for use in NJ has been renewed until 1/28/2027

Zidua SC has been labeled as a postemergence application to extend residual control. Not labeled for coarse-textured soils

Onions

Dual Magnum 24c label for use in NJ has been renewed until 1/28/2027

Dual Magnum 24c label for use in PA expires on April 28, 2023; renewal is pending

Zidua SC has been included in the full label and does not have an expiration date

Peppers

Dual Magnum 24c label for use in NJ has been renewed until 1/28/2027

Dual Magnum 24c label for use in PA expires on April 28, 2023; renewal is pending

Potatoes

Chateau EZ replaces Chateau WDG.

Spinach

Dual Magnum 24c label for use in NJ has been renewed until 1/28/2027

Dual Magnum 24c label for use in PA expires on April 28, 2023; renewal is pending

Summer Squash

Reflex 24c label for use in NJ expired in 2022; renewal is pending

Tomato

Authority MTZ and Preview 2.1 are two prepackaged mixtures of sulfentrazone plus metribuzin, labeled for transplanted processing tomatoes only; **preplant application only**. Ratio of metribuzin and sulfentrazone differ for these two products, see table below. Local research has shown potential injury with sulfentrazone. These rates of sulfentrazone will not provide extended residual control.

Reglone 24c label (NJ only) has been extended until 12/31/2025. Use in tomatoes for row middle weed control and desiccation

Reflex 24c label for use in NJ expired in 2022; renewal is pending

Watermelon

Reflex 24c label for use in NJ expired in 2022; renewal is pending

Pre-Packaged Herbicides Recently Released for Various Vegetable Crops

Trade Name	If You Apply (per acre)	Applied (ai per acre)	Equivalent to a Tank Mixture of These Products (per acre)
Authority MTZ 45DF	8 oz	0.13 lb metribuzin 0.09 lb sulfentrazone	2.8 oz metribuzin 75DF 3.3 fl oz Spartan Charge 3.5EC
Boundary 6.5L	2 pt	1.24 lb S-metolachlor 0.314 lb metribuzin	1.3 pt Dual Magnum 7.26EC 10 fl oz metribuzin 4L
Calibra 3.1ZC	2.4 qt	0.168 lb mesotrione 1.67 lb S-metolachlor	5.36 fl oz Callisto 4SC 1.7 pt Dual II Magnum 7.64 EC
Coyote 3.67SC	2 qt	0.168 lb mesotrione 1.67 lb S-metolachlor	5.36 fl oz Callisto 4SC 1.75 pt Dual II Magnum 7.64 EC
Empyros 3.82E	1.4 qt	0.035 lb tolpyralate 1.3 lb S-metolachlor	1.3 fl oz Shieldex 3.3SC 1.3 pt Dual II Magnum 7.64 EC
Moccasin MTZ 52DF	3 pt	1.25 lb S-metolachlor 0.419 lb metribuzin	1.3 pt Dual Magnum 7.26EC 13.4 fl oz metribuzin 4L
Preview 2.1 3.35SC	10 fl oz	0.17 lb metribuzin 0.09 lb sulfentrazone	5.4 fl oz metribuzin 4L 3.3 fl oz Spartan Charge 3.5EC
Restraint 6.5EC	30 fl oz	0.02 lb tolpyralate 1.5 lb acetochlor	0.85 fl oz Shieldex 3.3SC 1.7 pt Harness 7E

Chapter F. Insect Management

1. A new liquid formulation of Assail is now available, Assail 30SC.
2. Please note in the following correction to the **sweet corn** aphid control section that Assail 30G and 30SC are the only 4A neonicotinoids labeled.
3. **Tomatoes:** please be aware that russet mites are an occasional tomato pest, particularly of greenhouse and high tunnel production. We will be adding them in the next guide edition.
4. **Cole Crops:** If you have experienced resistance issues with diamondback moth, be aware that Dibrom 8 EC (naled) is labeled at 1 pt/a, 1 d PHI, 48 h REI. Please note that it is highly toxic and very disruptive to biological control agents.
5. **Cole Crops:** In addition to swede midge, Senstar is labeled also for whitefly.
6. **Sweet Corn, Potatoes, Sweet Potatoes:** Nurizma (broflanilide) is now labeled for in-furrow application targeting rootworms, seedcorn maggot, white grubs, and wireworms. This represents a brand new IRAC mode of action group.