

Pumpkin Fungicides and Insecticides

Weeks after Planting	Fungicide	Rate (product/A)	PHI (days)	Cost (\$/A)	Insecticide	Rate (product/A)	PHI (days)	Cost (\$/A)
0					Admire Pro ^E	7 fl oz/A	21	\$72
1					F			
2					F			
3					F			
4					F			
5 ^A	Dithane DF Rainshield	3 lb/A	5	\$15	Asana XL 0.66EC ^G	9.6 fl oz/A	1	\$8
6	Bravo Weatherstik 6FL ^C	2 pints/A	0	\$12	Thiodan 3EC	1 qt/A	2	\$9
7	Dithane DF Rainshield	3 pints/A	5	\$15	Asana XL 0.66EC ^{GH}	9.6 fl oz/A	1	\$8
8	Bravo Weatherstik 6FL ^{CD}	2 pints/A	0	\$12	Thiodan 3EC ^H	1 qt/A	2	\$9
9	Cabrio ^B Microthiol Disperss	12 oz/A 5 lb/A	0 0	\$17 \$3	Coragen 1.67SC	5 oz/A	1	(?)
10	Bravo Weatherstik 6FL ^{CD}	2 pints/A	0	\$12	Thiodan 3EC ^H	1 qt/A	2	\$9
11	Cabrio ^B Microthiol Disperss	12 oz/A 5 lb/A	0 0	\$17 \$3	Coragen 1.67SC	5 oz/A	1	(?)
12	Dithane DF Rainshield	3 lb/A	5	\$15	Fulfill	2.75 oz/A	0	\$?
Post Harvest	sodium hypochlorite (5.25% Clorox)	13 - 17 fl oz/100 gal	0	<\$1				

- ^A This time corresponds with beginning of runner development. Begin treatment sooner if disease symptoms are observed.
- ^B Quadris 2.08FL @ 11 - 15.4 oz/A (1 day PHI) at a cost of \$24 - 33/A or Flint 50WDG @ 1.5 - 4 oz/A at a cost of \$19 - 50/(0 day PHI) may be substituted for Cabrio. Do not apply more than 4 applications of Flint 50WDG, Cabrio, or Quadris 2.08FL. Do not apply consecutive applications of Cabrio, Flint 50WDG, and/or Quadris 2.08FL.
- ^C Generic formulations of chlorothalonil may reduce the cost/A.
- ^D If Powdery Mildew becomes a problem, Nova 40W can be tank mixed with chlorothalonil @ 2.5 - 5 oz/A (0 day PHI) at a cost of \$10 - 20/A. If conditions persist that promote bacterial diseases, a fixed copper such as Cuprofix can be applied for \$3 - 5/A.
- ^E This rate and cost may be cut dramatically if applied only at the seed or if based on only a small proportion of the row width. Platinum can be applied @ 5 to 8 fluid oz/A at a cost of \$50 - 80/A. Venom can be applied at 4 to 6 oz/A at a similar cost.
- ^F If Admire, Platinum or Venom is applied, no applications are likely to be required.
- ^G Several other pyrethroid insecticides are labeled for use on pumpkins: Capture 2EC @ 2.6 - 6.4 fl oz/A (3 day PHI) at a cost of \$9 - 21/A, Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A, Permethrin 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A, and Pounce 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A.
- ^H If mites become a problem, Kelthane 50WSP @ 1.25 lb/A (2 day PHI) at a cost of \$17/A or Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A can be applied. Do not tank mix Danitol with tri-basic copper sulfate.

Pumpkin Fungicides (Fungal and Bacterial) and Insecticides

Weeks after Planting	Fungicide	Rate (product/A)	PHI (days)	Cost (\$/A)	Insecticide	Rate (product/A)	PHI (days)	Cost (\$/A)
0					Admire Pro ^D	7 fl oz/A	21	\$72
1					E			
2					E			
3					E			
4 ^A	Dithane DF Rainshield Cuprofix Disperss	3 lb/A 2.5 lb/A	5 0	\$15 \$5	E			
5	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Asana XL 0.66EC ^F	9.6 fl oz/A	1	\$8
6	Bravo Weatherstik 6FL ^B	2 pints/A	0	\$12	Thiodan 3EC	1 qt/A	2	\$9
7	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Asana XL 0.66EC ^{FG}	9.6 fl oz/A	1	\$8
8	Bravo Weatherstik 6FL ^{BC} Microthiol Disperss	3 pints/A 5 lb/A	0 0	\$18 \$3	Thiodan 3EC ^G	1 qt/A	2	\$9
9	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Coragen 1.67SC	5 oz/A	1	(?)
10	Dithane DF Rainshield Microthiol Disperss	3 lb/A 5 lb/A	0 0	\$15 \$3	Thiodan 3EC ^G	1 qt/A	2	\$9

11	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Coragen 1.67SC	5 oz/A	1	(?)
12	Dithane DF Rainshield Nova 40W	3 lb/A 5 oz/A	5 0	\$15 \$20	Fulfill	2.75 oz/A	0	\$?
Post Harvest	sodium hypochlorite (5.25% Clorox)	13 - 17 fl oz/100 gal	0	<\$1				

^A This time corresponds with beginning of runner development. Begin treatment sooner if disease symptoms are observed.

^B Generic formulations of chlorothalonil may reduce the cost/A.

^C If Powdery Mildew becomes a problem, Nova 40W can be tank mixed with chlorothalonil @ 2.5 - 5 oz/A (0 day PHI) at a cost of \$10 - 20/A.

^D This rate and cost may be cut dramatically if applied only at the seed or if based on only a small proportion of the row width. Platinum can be applied @ 5 to 8 fluid oz/A at a cost of \$50 - 80/A. Venom can be applied at 4 to 6 oz/A at a similar cost.

^E If Admire, Platinum or Venom is applied, no applications are likely to be required.

^F Several other pyrethroid insecticides are labeled for use on pumpkins: Capture 2EC @ 2.6 - 6.4 fl oz/A (3 day PHI) at a cost of \$9 - 21/A, Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A, Permethrin 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A, and Pounce 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A.

^G If mites become a problem, Kelthane 50WSP @ 1.25 lb/A (2 day PHI) at a cost of \$17/A or Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A can be applied. Do not tank mix Danitol with tri-basic copper sulfate.

Pumpkin Fungicides (Phytophthora and Bacterial) and Insecticides

Weeks after Planting	Fungicide	Rate (product/A)	PHI (days)	Cost (\$/A)	Insecticide	Rate (product/A)	PHI (days)	Cost (\$/A)
0					Admire Pro ^D	7 fl oz/A	21	\$72
1					E			
2					E			
3					E			
4	Dithane DF Rainshield Cuprofix Disperss	3 lb/A 2.5 lb/A	5 0	\$15 \$5	E			
5 ^A	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Asana XL 0.66EC ^F	9.6 fl oz/A	1	\$8
6	Presidio Bravo Weatherstik 6FL ^B	4 oz/A 2 pints/A	2 0	(?) \$12	Thiodan 3EC	1 qt/A	2	\$9
7	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Asana XL 0.66EC ^{FG}	9.6 fl oz/A	1	\$8
8	Presidio Bravo Weatherstik 6FL ^{BC} Microthiol Disperss	4 oz/A 3 pints/A 5 lb/A	2 0 0	(?) \$18 \$3	Thiodan 3EC ^G	1 qt/A	2	\$9
9	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Coragen 1.67SC	5 oz/A	1	(?)

10	Presidio Dithane DF Rainshield Microthiol Disperss	4 oz/A 3 lb/A 5 lb/A	2 5 0	(?) \$15 \$3	Thiodan 3EC ^G	1 qt/A	2	\$9
11	Tanos Dithane DF Rainshield Cuprofix Disperss	8 oz/A 3 lb/A 2.5 lb/A	3 5 0	\$13 \$15 \$5	Coragen 1.67SC	5 oz/A	1	(?)
12	Presidio Dithane DF Rainshield Nova 40W	4 oz/A 3 lb/A 5 oz/A	2 0 0	(?) \$15 \$20	Fulfill	2.75 oz/A	0	\$?
Post Harvest	sodium hypochlorite (5.25% Clorox)	13 - 17 fl oz/100 gal	0	<\$1				

^A This time corresponds with beginning of runner development. Begin treatment sooner if disease symptoms are observed.

^B Generic formulations of chlorothalonil may reduce the cost/A.

^C If Powdery Mildew becomes a problem, Nova 40W can be tank mixed with chlorothalonil @ 2.5 - 5 oz/A (0 day PHI) at a cost of \$10 - 20/A.

^D This rate and cost may be cut dramatically if applied only at the seed or if based on only a small proportion of the row width. Platinum can be applied @ 5 to 8 fluid oz/A at a cost of \$50 - 80/A. Venom can be applied at 4 to 6 oz/A at a similar cost.

^E If Admire, Platinum or Venom is applied, no applications are likely to be required.

^F Several other pyrethroid insecticides are labeled for use on pumpkins: Capture 2EC @ 2.6 - 6.4 fl oz/A (3 day PHI) at a cost of \$9 - 21/A, Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A, Permethrin 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A, and Pounce 3.2EC @ 4 - 8 fl oz/A (0 day PHI) at a cost of \$6 - 11/A.

^G If mites become a problem, Kelthane 50WSP @ 1.25 lb/A (2 day PHI) at a cost of \$17/A or Danitol 2.4EC @ 10.67 fl oz/A (7 day PHI) at a cost of \$12/A can be applied. Do not tank mix Danitol with tri-basic copper sulfate.

Pumpkin Irrigation and Fertigation Schedule

Weeks after Transplanting	Irrigation Rate (inches/A/day) ^a	Irrigation Rate (gallons/A/week) ^b	N Rate (lb N/A/day) ^c	Fertilizer Product	Fertilizer Rate (lb/A/week) ^d
Preplant				50-100-100 ^e	
0	0.10 - 0.15	6,300 - 9,500			
1	0.10 - 0.15	6,300 - 9,500			
2	0.10 - 0.15	6,300 - 9,500			
3	0.15 - 0.20	9,500 - 12,600			
4	0.15 - 0.20	9,500 - 12,600			
5	0.20 - 0.25	12,600 - 15,800	1	Calcium Nitrate	50
6	0.20 - 0.25	12,600 - 15,800	1	Potassium Nitrate	50
7	0.25 - 0.30	15,800 - 19,100	1	20-20-20	50
8	0.25 - 0.30	15,800 - 19,100	1	Calcium Nitrate	50
9	0.25 - 0.30	15,800 - 19,100	1	Potassium Nitrate	50
10	0.25 - 0.30	15,800 - 19,100	1	20-20-20	50
11	0.25 - 0.30	15,800 - 19,100	1	Calcium Nitrate	50
12	0.25 - 0.30	15,800 - 19,100	1	Potassium Nitrate	50
13 ^f	0.25 - 0.30	15,800 - 19,100	1	20-20-20	50
14	0.25 - 0.30	15,800 - 19,100	1	Calcium Nitrate	50

- ^a The water requirement of a plant increases as the plants become larger. In addition, as temperatures increase, more water is lost through transpiration. After the peak of production, the watering rate may be reduced.
- ^b The gallons of water/A/week is based on 27,156 gallons of water/A inch and 2 ft wide beds on 6 ft centers. Therefore, only 1/3 of the soil area is receiving water (2 ft out of 6 ft). If 2 ft beds were spaced on 5 ft centers, then the gallons required would be 15% higher.
- ^c This is a broadcast rate (the entire acreage, not just the area under the plastic). If calculating on a treated acre (the acre under the plastic), the rate would be 2.5 - 3 lb N/A/day.
- ^d This is a broadcast rate (the entire acreage, not just the area under the plastic). This rate can be applied once a week or split over several applications.
- ^e If a soil test is generated, then apply 50 lb/A N and P₂O₅ and K₂O according to the soil test recommendation. However, if no soil test is generated, then apply a fertilizer that results in 50 lb/A N and 100 lb/A of each P₂O₅ and K₂O (50-100-100).
- ^f Stop fertilization when many of the fruit begin to show color. Stop watering 1 to 2 weeks prior to harvest.

Pumpkin Herbicides

Time of Application	Herbicide	Rate Range (product/A)	Recommended Rate (product/A)	Cost (\$/A)
Burndown	Roundup Weathermax	1 - 2 quarts/A	1 - 2 quarts/A	\$15 - 30
	or Gramoxone Inteon 2SL Non-ionic Surfactant	2 - 4 pints/A 0.25% (v/v)	4 pints/A 0.25% (v/v)	\$20 \$1
Preemergence ^A	Dual Magnum	1 - 1.33 pints/A	1.33 pints	\$25
	or Command 4EC	1 - 2 pints/A	1 pint/A	\$14
	Curbit 3EC ^B	3 - 4.5 pints/A	4 pints/A	\$19
	or Strategy ^B	2 - 6 quarts/A	4 - 6 quarts/A	\$42 - 65
	or Sanda	½ - ¾ oz/A	2/3 oz/A	\$24
Postemergence	Sanda	½ - ¾ oz/A	2/3 oz/A	\$22
Post-Directed (Contact kill of all green foliage)	Gramoxone Inteon 2SL Non-ionic Surfactant	2 - 4 pints/A 0.25% (v/v)	4 pints/A 0.25% (v/v)	\$20 \$1
	or Sanda	½ - 1 oz/A	1 oz/A	\$36
Postemergence ^C (Grass control)	Select Max 1EC COC	9 - 16 oz/A 1% (v/v)	12 - 16 oz/A 1% (v/v)	\$15 - \$20 \$3

^A Prefar 4E may be applied PPI @ 5 - 6 quarts/A at a cost of \$57 - 69/A.

^B Do not apply Curbit 3EC to 'Prizewinner' pumpkins.

^C Poast 1.5EC can be applied @ 1 - 1.5 pints/A at a cost of \$9 - 13/A. Use COC @ 1% v/v.

Admire Seed Treatment of Pumpkin Seed

1. Mix 5cc of Admire 2F (2 - 2.5 cc of Admire Pro) with 15 cc of water in a plastic bag large enough to hold the desired seed. A 1 gallon bag will easily hold 2,000 to 3,000 seeds of most varieties. If using a small seeded variety, the amount of water may need to be reduced. If using a large seeded variety, the amount of water may need to be increased.
2. Treat 1,000 pumpkin seeds with the above solution.
3. Add the seed to the bag and shake until the seed absorbs all of the solution.
4. Spread the seeds on a screen wire or paper to dry.
5. If planting through a mechanized planter, add talcum powder at the recommended rate.