



Supplemental Labeling

(Not for use in New York)

BUMPER[®] 41.8 EC

(PROPICONAZOLE) FUNGICIDE

EPA Reg. No. 66222-42

DIRECTIONS FOR USE

- It is a violation of Federal law to use this product inconsistent with its labeling.
- This supplemental labeling must be in the possession of the user at the time of pesticide application.
- Follow all applicable directions, restrictions, Worker Protection Standard requirements, and precautions on the EPA registered label.
- These new uses can be found on the EPA stamped label for Bumper 41.8EC (66222-42) dated August 10, 2007.

APPLICATION INSTRUCTIONS

For best results, sufficient water volume should be used to provide thorough coverage. In most situations, Bumper 41.8 EC is most effective when applied and allowed to dry before a rainfall. Avoid application under conditions when uniform coverage cannot be obtained or when excessive spray drift may occur. Do not apply directly to humans or animals.

Aerial Application: For those crops other than tree crops where aerial applications are indicated, apply in a minimum of 2 gals. of water per acre, unless specified otherwise in the APPLICATION INSTRUCTIONS section of this label. For tree crops, a minimum of 5 to 10 gals. of water per acre is recommended using the higher volume on large trees unless specified otherwise in the APPLICATION INSTRUCTIONS section of this label.

Ground Application: For tree crops, a minimum of 50 gals. of water per acre is recommended unless specified otherwise in the APPLICATION INSTRUCTIONS section of this label. For all other crops, apply Bumper 41.8 EC by ground equipment in a minimum of 10 gals. of water per acre unless specified otherwise in the APPLICATION INSTRUCTIONS section of this label.

APPLICATION INSTRUCTIONS

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
ALMONDS	Brown Rot Blossom Blight (<i>Monilinia laxa</i> , <i>M. fructicola</i>)	4-8 fl. oz.	Apply Bumper 41.8EC in at least 15 gallons of spray per acre at 5-10% bloom and 50-100% bloom using ground or air equipment in sufficient volume to provide thorough coverage. Under severe disease conditions, use the highest rate. Minimum retreatment interval is 7 days.
	Anthrachnose (<i>Collectotrichum acutatum</i>)	8 fl. oz.	Apply Bumper 41.8EC in at least 15 gallons of spray per acre beginning at bud break using ground or air equipment in sufficient volume to provide thorough coverage on a 7-14 day interval.
<ul style="list-style-type: none"> • Do not apply more than 32 fl. oz. per acre per season of Bumper 41.8EC. • Do not apply more than 0.90 lb. a.i. propiconazole per acre per season. • Do not apply within 60 days of harvest. • Do not graze livestock in treated areas or cut treated cover crop for feed. 			



M A N A

Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
BANANAS AND PLANTAINS	Black Sigatoka (<i>Mycosphaerella fijiensis</i>)	3 fl. oz.	Make applications before disease symptoms appear at the onset of the rainy season. Apply recommended rate in 10 to 20 gallons of water per acre using ground or air application equipment. Make no more than 2 consecutive applications on a 21 to 25 day schedule before rotating to another labeled product with a different mode of action for at least 2 sprays. A maximum of 8 applications can be made. If possible, it is recommended to have at least 2 consecutive months "triazole free" during the period of lower disease pressure. Mixing Procedures Oil-in-Water Emulsion: Add the crop oil to the spray tank. Add the emulsifier (0.6 fl. oz. per gal. of oil) and Bumper 41.8EC to the spray tank and mix thoroughly for 5 minutes. Add water to the spray tank and mix thoroughly for 15 minutes. Oil Alone: Add crop oil to the spray tank. Add the Bumper 41.8 EC to the spray tank and mix thoroughly for 5 minutes. Maintain agitation.
	<ul style="list-style-type: none"> Do not apply Bumper 41.8EC within 100 yards of non-bagged bananas. Do not apply Bumper 41.8EC on bananas or plantains unless they are protected by polyethylene bags. Do not apply more than 24 fl. oz. of Bumper 41.8EC during each growing season (this includes any pre-harvest sprays). Do not feed whole bananas and plantains to animals. Do not apply more than 0.67 lb. a.i. propiconazole per acre per season. 		
BERRIES* *Bushberries Bingleberry, Blackberry, Blueberry, Bosenberry, Currants, Dewberry, Elderberry, Gooseberry, Huckleberry, *Caneberries Loganberry, Lowberry, Marionberry, Olallieberry, Red and Black Raspberry, Youngberry Juneberry Lingonberry Salal And cultivars and/or hybrids of these	Mummyberry Disease (<i>Monilinia vaccinicorymbosi</i>)	6 fl. oz.	Make first application beginning at green tip and repeat in 7 to 10 days. If conditions are favorable for disease development, additional applications may need to be made at pink bud and repeated every 7 to 10 days through petal fall.
	Leaf spot and Stem canker (<i>Septoria albopucate</i>) Rust (<i>Pucciniastrum vaccinii</i>)	6 fl. oz.	Apply when conditions favor disease development. Repeat applications on a 4 week spray interval.
	Leaf and Cane Spot (<i>Septoria rubi</i>)	6 fl. oz.	Apply as a delayed dormant spray after training in the spring. Repeat this application in the late spring, again at bud break, and again once flowering has begun.
	Powdery Mildew (<i>Microsphaera vaccinii</i>)	6 fl. oz.	Apply at 5-10% bloom. Repeat this application at full bloom and on a 14 day interval while conditions are favorable for disease development.
	Leaf Spot (<i>Septoria spp.</i>)	6 fl. oz.	Make first application any time prior to bloom and again after petal fall. If needed, repeat application just after harvest.
	Cottonball (<i>Monilinia oxycocci</i>)	4-6 fl. oz.	Make the first application at leaf bud break and repeat in 7 to 10 days. Make the third application at early bloom and repeat in 7 to 10 days. Apply in 20 to 50 gals. of water for ground application or 5 gals. of water for aerial application. Under severe pressure, use the higher rate for control.
	<ul style="list-style-type: none"> Unless directed otherwise for a specific pest, Bumper 41.8EC may be applied by either ground in a minimum of 5 gal. per acre or air in a minimum of 15 gal. per acre. Do not apply more than 30 fl. oz. per acre per season of Bumper 41.8EC. Do not apply within 30 days of harvest. Do not apply more than 0.84 lb. a.i. propiconazole per acre per season. 		



Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
CARROTS	Leaf Blights (<i>Cercospora carotae</i>) (suppression of <i>Alternaria dauci</i>) Powdery Mildew (<i>Erysiphe polygoni</i>)	4 fl. oz.	Apply when conditions favor disease development. Continue applications on a 7 to 10 day interval using the shorter interval when disease conditions are severe. If desired, a spreader-sticker may be used.
		2 fl. oz. plus chlorothalonil at 0.75 lb. a.i.	Apply recommended rate of Bumper 41.8EC with 0.75 lb. a.i. of chlorothalonil per acre. Begin applications when conditions favor disease development. Continue applications on a 7 to 10 day interval.
	<ul style="list-style-type: none"> • Bumper 41.8 EC may be applied by either ground in a minimum of 15 gal. per acre or air in a minimum of 5 gal. per acre. • Do not apply more than 16 fl. oz. per acre per season of Bumper 41.8 EC. • Do not apply within 14 days of harvest. • Do not apply more than 0.45 lb. a.i. propiconazole per acre per season. 		
CELERY AND LEAF PETIOLES SUBGROUP Celery Chinese Celery Cardoon Celtuce Florence Fennel Rhubarb Swiss Chard	Early blight (<i>Cercospora apii</i>) Late blight (<i>Septoria apicola</i>)	4 fl. oz.	Apply recommended rate of Bumper 41.8EC on a 7 day schedule either by ground or air. If desired, Bumper 41.8 EC may be tank mixed with an appropriate spreader-sticker. Apply in 10 gals. of water for ground application or 5 gals. of water for aerial application.
	<ul style="list-style-type: none"> • Do not apply more than 16 fl. oz. of Bumper 41.8 EC per acre per crop season. • Do not apply within 14 days of harvest. • Do not apply more than 0.45 lb a.i. propiconazole per acre per season. 		
CEREALS Wheat Barley Rye Triticale Oats	Control of leaf diseases: Rusts (<i>Puccinia</i> spp.) Powdery mildew (<i>Erysiphe</i> spp.) Leaf blight Glume blotch Tan spot (<i>Pyrenophora tritici-repentis</i>) Helminthosporium leaf blight Spot blotch (<i>Bipolaris sorokinina</i>) Barley scald (<i>Rhynchosporium secalis</i>) Barley stripe Net blotch (<i>Pyrenophora teres</i>) Fusarium head blight (suppression only)	4 fl. oz.	Protecting the flag leaf is important for maximizing yield. When Bumper 41.8EC is applied at 50% to fully emerged, the highest yields are normally obtained. Applications may be made no closer than at 14 day intervals. The use of an oil based adjuvant may improve spray coverage.
	Early Season Suppression of: Tan spot Powdery mildew Glume blotch Leaf Blight (<i>Septoria tritici</i>)	2-4 fl. oz.	For early season leaf disease suppression, apply recommended rate of Bumper 41.8EC for suppression of listed diseases. Apply in the spring. Make a second application up to Feekes growth stage 10.5 for season long control. Applications may be made no closer than a 14 day interval.
	Foot rot (<i>Pseudocercospora</i> spp.)	4 fl. oz.	Apply recommended rate of Bumper 41.8 EC per acre plus half rates of other EPA-registered fungicides such as Topsis M. Apply at tillering but before elongation has occurred.
	<ul style="list-style-type: none"> • Applications may be made using ground, air, or chemigation equipment. • Do not apply more than 8 fl. oz. of Bumper 41.8 EC per acre per season, but do not apply more than 4 fl. oz. per acre per season if forage or hay will be harvested. • Do not apply within 30 days of harvest for forage, 40 days before harvest for grain and straw, and 45 days before harvest for hay. • Do not apply more than 0.22 lb. a.i. propiconazole per acre per season. 		



Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
CORN (FIELD, SEED, AND POPCORN)	Helminthosporium leaf blights (<i>Helminthosporium maydis</i> , <i>H. turcicum</i> , and <i>H. carbonum</i>)	2-4 fl. oz.	Apply when disease first appears and continue on a 7 to 14 day schedule. Use the low rate when disease pressure is low. Under heavy pressure or when conditions favor disease development, apply the high rate. Apply Bumper 41.8 EC at recommended rates by ground, air, or chemigation.
	Rusts (<i>Puccinia spp.</i>) Gray leaf spot (<i>Cercospora zeae-maydis</i>) Eye spot (<i>Kabatiella zeae</i>)	4 fl. oz.	Apply Bumper 41.8 EC at recommended rates by ground, air, or chemigation when rust pustules first appear and continue on a 7- to 14-day schedule when conditions favor disease development. For best disease control, early applications at initial disease onset perform better.
<p>For field corn, field corn grown for seed, and popcorn:</p> <ul style="list-style-type: none"> Do not apply more than 16 fl. oz. of Bumper 41.8 EC per acre per season. Do not apply within 30 days of harvest for forage, grain, and stover. Do not apply more than 8 fl. oz. of Bumper 41.8EC per acre per season on field corn harvested for forage. Do not apply more than 0.45 lb. a.i. propiconazole per acre per season. <p>For sweet corn:</p> <ul style="list-style-type: none"> Do not apply within 14 days of harvest for ears and 14 days of harvest for forage. 			
CRAN- BERRIES (OR, WA, WI only)	Cottonball (<i>Monilinia oxycocci</i>)	4-6 fl. oz.	Make the first application at leaf bud break. Make the second application 14 days later. Make the third application at early bloom and repeat again in 14 days. Under severe pressure, use the higher rate for control. Bumper 41.8EC may be applied by either ground or aerial application equipment in a minimum of 20 gal. per acre.
	<ul style="list-style-type: none"> Do not apply more than 24 fl. oz. per acre per season of Bumper 41.8EC. Do not apply within 45 days of harvest. Do not apply more than 0.67 lb. a.i. propiconazole per acre per season. 		
FILBERTS (Hazelnuts)	Eastern Filbert Blight (<i>Anisogramma anomala</i>)	5-8 fl. oz.	Begin applications when green leaf tissue becomes visible and continue at 14 to 21 day intervals. Under severe disease conditions, use the higher rate and shorter interval. On certain varieties, Bumper 41.8EC applications may cause smaller and/or greener leaves. Yields of filberts displaying these characteristics have not been reduced due to propiconazole treatments. Bumper may be applied by either ground or aerial application in a minimum of 15 gal. per acre.
	<ul style="list-style-type: none"> Do not apply more than 32 fl. oz. per acre per season of Bumper 41.8EC. Do not apply more than 0.90 lb. a.i. propiconazole per acre per season Do not apply within 60 days of harvest. Do not graze livestock in treated areas or cut treated crop for feed. 		
ONIONS (dry bulb) GARLIC SHALLOTS (dry bulb) ONIONS, GREEN Green Shallots Green Eschalots Japanese bunching onions Leeks Spring Onions Scallions And or cultivars or hybrids of these	Purple Blotch (<i>Altemari pom</i>)	4-8 fl. oz.	Apply by ground in a minimum of 15 gals. of water per acre or by air in a minimum of 5 gals. of water per acre. Begin applications when conditions favor disease development and continue on a 7 to 10 day interval. Use the higher rate and shorter interval when disease conditions are severe. In tank mix, apply recommended rate in combination with another fungicide for control of Botrytis leaf blight or purple blotch. Begin applications when conditions favor disease development and continue on a 7 to 10 day interval or according to the tank mix partner's label. Use higher rates when disease conditions are severe. To achieve optimum control, use a wetting agent or a spreader/sticker.
	Suppression of Botrytis leaf blight (<i>Botrytis squamosa</i>)	2-4 fl. oz. plus tank mix partner	
<ul style="list-style-type: none"> Do not apply more than 16 fl. oz. of Bumper 41.8EC per acre per season. Do not apply within 14 days of harvest on dry bulb onions. Bumper may be applied on the day of harvest for green onion types. Do not apply more than 0.45 lb. a.i. propiconazole per acre per season. 			



Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
PISTACHIOS	Botryosphera Panicle and Shoot Blight (<i>Botryosphera dothidea</i>)	5-8 fl. oz.	Begin applications when green leaf tissue becomes visible and continue on a 14 to 21 day interval. Under severe disease conditions, use the higher rate and the shorter interval. Under certain conditions Bumper 41.8EC applications may cause smaller and/or greener leaves. Yields of pistachios displaying these characteristics have not been reduced due to Bumper 41.8EC treatments. Bumper 41.8EC may be applied by either ground or by aerial application in a minimum of 15 gal. per acre.
	<ul style="list-style-type: none"> Do not apply more than 32 fl. oz. per acre. Do not apply within 60 days of harvest. Do not apply more than 0.90 lb. a.i. propiconazole per acre per season. Do not graze livestock in treated areas or cut treated cover crop for feed. 		
SORGHUM	Ergot (<i>Claviceps sorghi</i>)	3-4 fl. oz.	Make first application at or just prior to flowering. Repeat on a 5 to 7 day interval. Apply up to four times. Make application using aerial application equipment in a minimum of 10 gals. of spray per acre or by ground in a minimum of 15 gals. of spray per acre.
	<ul style="list-style-type: none"> Do not apply more than 16 fl. oz. of Bumper 41.8EC per acre per season. Do not apply within 30 days of harvest for forage. Do not apply within 21 days of harvest for grain and stover. Do not graze livestock or cut for green chop or silage within 30 days of application. Do not apply more than 8 fl. oz. of Bumper 41.8EC per acre per season on sorghum harvested for forage. Do not apply more than 0.45 lb. a.i. propiconazole per acre per season. 		
SOYBEANS	Aerial Web Blight (<i>Rhizoctonia solani</i>) Anthracnose (<i>Colletotrichum truncatum</i>) Brown Spot (<i>Septoria glycines</i>) Frogeye Leaf Spot (<i>Cercospora sojina</i>) Soybean Rust (<i>Phakopsora pachyrhizi</i>)	4-6 fl. oz.	Applications may be made using ground or aerial application equipment. Use dilution rates found in the APPLICATION INSTRUCTIONS section of this label. When applying by air, adding an oil-based additive is recommended for improved coverage and penetration. Apply 5-6 fl. oz. at the first appearance of Aerial web blight and repeat the application 14 to 21 days later. Under severe conditions, use the higher rate and shorter interval. For control of other foliar diseases, apply 6 fl. oz. at growth stage R3 (early pod set) when pods are 1/8 to 1/4 inch long and 21 days later at growth stage R5 (pod fill). Apply 4-6 fl. oz. at first indication that soybean rust is in the area. For best control, preventative applications work best. Repeat on a 14 to 21 day interval using the higher rate and shorter interval when disease is present in field and incidence is less than 2% (2 plants in 100 infected). If incidence is greater than this or if disease is in mid canopy, control will not be acceptable. Scouting for rust and/or being aware of the proximity of the disease via monitoring systems will aid in the proper timing to maximize the effectiveness of the fungicide applications. On certain varieties, Bumper applications may cause crinkled or smaller greener leaves. Yields of dry beans displaying these characteristics have not been reduced due to propiconazole treatments.
	<ul style="list-style-type: none"> Do not apply more than 12 fl. oz. of Bumper 41.8EC per acre per season. Applications may be made up to growth stage R6. Do not apply more than 0.34 lb. a.i. propiconazole per acre per season. 		



M A N A

Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
STONE FRUIT: APRICOTS, CHERRIES (SWEET AND TART), NECTARINES, PEACHES, PLUMS, PLUMCOTS, PRUNES, AND CULTIVARS AND OR HYBRIDS OF THESE	Brown Rot Blossom Blight (<i>Monilinia</i> spp.)	4 fl. oz.	Apply by ground or air in a minimum of 15 gal. per acre at early bloom stage. Stone fruit diseases are most effectively controlled by ground applications. If disease pressure is low, a second application may be made as needed up through petal fall. Make a second application if disease pressure is high or for susceptible varieties at 75-100% bloom. If blossoming is prolonged or conditions favorable for disease persist, make a third application at petal fall.
	Powdery Mildew (<i>Podosphaera</i> spp.) Cherry Leafspot (<i>Blumeriella jaapii</i>) Rust (<i>Tranzschelia discolor</i>)	4 fl. oz.	Follow the brown rot blossom blight schedule above applying by ground or air in a minimum of 15 gal. per acre. Stone fruit diseases are most effectively controlled by ground applications. Make up to 2 additional applications on a 10 to 14 day interval from the end of petal fall to harvest.
	Fruit Brown Rot (<i>Monilinia</i> spp.)	4 fl. oz.	Apply by ground or air in a minimum of 15 gal. per acre as needed with a maximum of 2 sprays during the preharvest period up to the day of harvest (0 day PHI). Stone fruit diseases are most effectively controlled by ground applications. If high inoculum and severe disease conditions persist, apply another registered fungicide after the two Bumper 41.8EC applications.
<ul style="list-style-type: none"> • Bumper 41.8EC may be applied on the day of harvest. • Do not apply more than 0.56 lb. a.i. propiconazole per acre per season. • Do not apply more than 20 fl. oz. of Bumper 41.8EC per acre per season. • Applications of Bumper 41.8EC during bloom to Stanley plums have occasionally caused fruit to be less oval in shape and smaller in size at harvest. To avoid this, do not apply Bumper 41.8EC to Stanley plums earlier than 21 days before harvest. 			
STRAW- BERRIES	Anthrachnose (<i>Colletotrichum acutatum</i>) Leaf Spot (<i>Cercospora fragariae</i>) Powdery Mildew (<i>Sphaerotheca macularis</i>) Leaf Rust (<i>Phragmidium potentillae</i>)	4 fl. oz.	Begin applications when disease levels are no more than 5%. Apply up to 4 times on a 7 day interval. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action. Bumper 41.8EC may be applied by either ground in a minimum of 20 gal. per acre or aerial in a minimum of 15 gal. per acre.
	<ul style="list-style-type: none"> • Do not apply more than 16 fl. oz. of Bumper 41.8EC per acre per season. • Bumper 41.8EC may be applied on the day of harvest. • Do not apply more than 0.45 lb. a.i. propiconazole per acre per season. 		
SUGAR BEETS	Leaf Spot (<i>Cercospora beticola</i>) Powdery Mildew (<i>Erysiphe polygoni</i>)	4 fl. oz.	Begin applications are first sign of disease and repeat at 10 to 14 day intervals. Make no more than 2 consecutive applications before rotating to another registered fungicide with a different mode of action. If disease levels continue to increase, immediately switch to a fungicide with a different mode of action. Bumper 41.8EC may be applied by air, ground, or chemigation equipment. Use dilution rates found in the APPLICATION INSTRUCTIONS section of this label.
	<ul style="list-style-type: none"> • Do not apply more than 12 fl. oz. of Bumper 41.8EC per acre per season. • Do not apply within 21 days of harvest. • Do not apply more than 0.34 lb. a.i. propiconazole per acre per season. 		



Supplemental Labeling

(Not for use in New York)

CROP	PESTS CONTROLLED	RATE OF APPLICATION PER ACRE	RECOMMENDATIONS
TREE NUTS Almond (see specific directions in ALMOND Section) Beechnut Brazil Nut Butternut Cashew Chestnut Chinquapin Filbert (see specific directions in FILBERT section) Hickory Macadamia Pecan (see specific directions in PECAN section) Walnut Pistachios (see specific directions in PISTACHIO section)	Foliar Diseases	4-8 fl. oz.	Apply Bumper 41.8EC at first sign of disease. Repeat on a 7 to 14 days interval. Bumper 41.8EC may be applied by either ground or aerial application in a minimum of 15 gal. per acre. Tree nut diseases are most effectively controlled by ground applications.
	<ul style="list-style-type: none"> Do not apply more than 32 fl. oz. of Bumper 41.8EC per acre per season. Do not apply within 60 days of harvest except for pecan (see specific directions in PECAN section of this label). Do not apply more than 0.90 lb. a.i. propiconazole per acre per season. Do not graze livestock in treated areas or cut treated cover crop for feed. 		

FL OZ. OF BUMPER 41.8 EC PER ACRE	LB. A.I. PER ACRE	ACRES TREATED PER 1 GALLON OF BUMPER 41.8EC
2	0.056	64.0
4	0.1125	32.0
6	0.169	21.3
8	0.225	16.0
10	0.28	12.8
12	0.34	10.7
16	0.45	8.0
20	0.56	6.4
24	0.67	5.3
30	0.84	4.3
32	0.90	4.0

ROTATIONAL CROPS

Alfalfa can be planted 75 days after the last Bumper 41.8EC application if the total application of propiconazole has not exceeded 0.22 lb. active ingredient per acre during the previous year. Do not plant any other crop intended for food, grazing, or any component of animal feed or bedding within 105 days of Bumper 41.8 EC application to the preceding crop unless the second crop appears on this label.

Bumper 41.8EC (66222-42)(supplemental for all new uses plus corn)-not for CA or NY –with aerial apps

4515 Falls of Neuse Road, Suite 300, Raleigh NC 27609
T: 919.256.9305 ♦ F: 919.256.9308