ONIONS, GARLIC, SHALLOTS

General Information

GENERAL INFORMATION

Bumper 41.8 EC is a broad spectrum fungicide for the control of specified diseases in labeled crops. Do not use this product in greenhouses or as a tree injection.

When an adjuvant is to be used with this product, Makhteshim Agan of North America, Inc. suggests the use of a Chemical Producers and Distributors Association certified adjuvant.

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 the 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 the 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 the 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 the label.

BANDED APPLICATION: For banded applications, the treated area is the area covered by the band, not total cropland planted.

RESISTANCE MANAGEMENT

Bumper 41.8 EC is effective in controlling pests and minimizing the development of resistance when used in rotation with other fungicides in an IPM program. To reduce selection pressure for resistant pests:

- Bumper 41.8 EC should be used in rotation with classes of fungicides with different modes of action.
- Use Bumper 41.8 EC as part of a pest management program that includes cultural and biological control where possible.
- Bumper 41.8 EC is in the Group 3 class of fungicides. The mode of action for propiconazole, the active ingredient in this product, is as a demethylation inhibitor of sterol biosynthesis (DMI) which disrupts membrane synthesis by blocking demethylation. Resistance can develop when products with the same mode of action are used repeatedly.
- Consult your State or local agricultural pest control advisor(s) for pest control strategies established for your area.

Refer to the label for tank mix information.

Limitations, Restrictions, and Exceptions

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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 specifi ed 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.

- 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.
- Suppression of Botrytis leaf blight

Method

Broadcast/Foliar Air
Broadcast/Foliar Ground
Rates

field rates 0

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Restricted Entry Interval

24 hours

Timings

When conditions favor disease development.