

## **LIRIOMYZA LEAFMINER**

### General Information

For Use on Greenhouse-, Shadehouse-, and Field-Grown Ornamentals; Foliage Plants; Christmas Trees; and other Woody Ornamentals.

Quali-Pro Abamectin 0.15 EC is an emulsifiable concentrate containing 0.15 lb. abamectin per gallon. When mixed with water according to the directions for use, Quali-Pro Abamectin 0.15 EC will control mites and leafminers and suppress thrips, aphids, and whiteflies on the following ornamental plants: Greenhouse-, shadehouse- and field-grown ornamentals; foliage plants; Christmas trees; and other woody ornamentals.

To control mites, apply Quali-Pro Abamectin 0.15 EC when mites initially appear; then repeat as needed to maintain control. To control leafminers, apply Quali-Pro Abamectin 0.15 EC and repeat every 7 days or as needed to maintain control.

To suppress whiteflies, thrips, and aphids, apply Quali-Pro Abamectin 0.15 EC when the young/immature stages of these pests are first seen; then repeat once per week for 2-3 weeks. Then rotate to other registered insecticides having a different mode of action for a minimum of 2-3 weeks before reverting to Quali-Pro Abamectin 0.15 EC. Please see the Resistance Management section of the label for additional information regarding rotating products. Note: For Quali-Pro Abamectin 0.15 EC to kill aphids, whiteflies, and thrips, it must come in direct contact with the pests.

To obtain uniform coverage, mix Quali-Pro Abamectin 0.15 EC with sufficient water and apply as a foliar spray. Residual control of pests can be improved on field-grown woody ornamentals, Christmas trees, and landscape plants by adding a Horticultural Spray Oil (not dormant oil) at 2-4 qts/100 gals. finished spray (equivalent to 0.5-1.0% of spray volume). To maintain control, repeat application of Quali-Pro Abamectin 0.15 EC as necessary, but not sooner than 7 days after previous application. Some plants are sensitive to oils. Therefore, unless prior experience has shown plant safety, the user should apply a Quali-Pro Abamectin 0.15 EC plus Horticultural Spray Oil mixture on a small number of plants and observe them for two weeks. If no plant damage is observed, then spray the remaining plants. Excessively warm or cold temperatures following treatment in

combination with oils could increase the chances of plant damage. Read and follow label directions for both Quali-Pro Abamectin 0.15 EC and any Horticultural Spray Oil product to be used, and do not exceed the maximum rates detailed on either label.

Do not apply Quali-Pro Abamectin 0.15 EC in quantities less than 8 fl. oz. per acre or more than 16 fl. oz. per acre per application. Use a sufficient quantity of water to obtain thorough coverage on foliage. Review the Resistance Management and Restrictions sections (below) for additional guidance.

Quali-Pro Abamectin 0.15 EC is non-phytotoxic on a wide range of ornamental plants.

However, since all combinations or sequences of pesticide sprays including surfactants and adjuvants have not been tested, it is recommended that a small area be sprayed first to make certain that no phytotoxicity occurs.

### Resistance Management

To minimize potential development of pest resistance to abamectin, use of resistance management strategies is imperative, especially when applying Quali-Pro Abamectin 0.15 EC to ornamental plants that are hosts of pests on the label that have multiple generations per crop or per year. Examples of resistance management may include but are not limited to the following: use of various cultural practices, nonchemical alternatives (such as beneficial arthropods), rotating susceptible and non-susceptible plants, rotating pesticides with different modes of action, avoiding use of the same product on successive pest generations, and using labeled rates at specified spray intervals. Consult your State Cooperative Extension Service to obtain additional information regarding the implementation of these or other resistance management strategies.

For managing susceptibility in *Liriomyza* leafminers, apply Quali-Pro Abamectin 0.15 EC no more than three times; then apply a registered alternative product with a different mode of action for no more than three times before rotating back to Quali-Pro Abamectin 0.15 EC or another alternative product. Product rotation intervals should be based on the generation time of *Liriomyza* leafminers to avoid applying Quali-Pro Abamectin 0.15 EC to successive generations.

### Limitations, Restrictions, and Exceptions

## Notes:

- Repeat at intervals of 7 days or as needed to maintain effective control.

For example, apply in 100-200 gals. of water per acre. If water volume is less than 100 gals., use at least 8 fl. oz. per acre. If water volume of 200 gals. or more per acre is required for sufficient plant coverage, apply the maximum rate of 16 fl. oz. per acre. Another example: if 400 gals. of water is necessary, apply 4 fl. oz. per 100 gallons.

## Use Restrictions

- Do not apply by air.
- Do not use Quali-Pro Abamectin 0.15 EC for suppressing thrips, whiteflies, and aphids on gerbera, chrysanthemums, and roses which are primary hosts of Liriomyza leafminers and mites controlled by Quali-Pro Abamectin 0.15 EC.

Additional applications of Quali-Pro Abamectin 0.15 EC on these plants will increase the selection pressure on mites and Liriomyza leafminers which could produce greater pest tolerance (resistance) to Quali-Pro Abamectin 0.15 EC.

- Do not use Quali-Pro Abamectin 0.15 EC in citrus nurseries.
- Do not use Quali-Pro Abamectin 0.15 EC on ferns or Shasta Daisy since phytotoxicity may occur on certain species of ferns (e.g., Adiantum spp.) and Shasta Daisy (L. eucanthemum spp.).
- Do not apply through any type of irrigation system.

## Method

[Foliar spray](#)

## Rates

[field rates 0](#)

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## Restricted Entry Interval

12 hours

## Timings

N.A.