

## **SHADEHOUSE, GREENHOUSE, FIELD-GROWN ORNAMENTALS, ETC. - APHIDS, THRIPS AND WHITEFLIES**

### General Information

Lucid is an emulsifiable concentrate which when mixed with water according to the directions for use will control leafminers and mites and suppress whiteflies, thrips and aphids on ornamentals.

Mix with sufficient water and apply as a foliar spray to obtain uniform coverage. For mites, apply when mites first appear and repeat as necessary to maintain control. For leafminers, apply as needed and repeat at 7-day intervals or as necessary to maintain control.

For suppression of aphids, thrips and whiteflies, apply when young, immature stages of these pests are first observed and repeat every 7 days for two or three weeks. After which time, rotate to other products that have different modes of action than Lucid for at least two to three weeks. Refer to the RESISTANCE MANAGEMENT section for additional comments of rotation. Aphids, thrips and whiteflies are killed by direct contact with the Lucid spray.

Residual control of pests may be enhanced with the addition of a horticultural spray oil at 0.5 to 1.0% of the spray volume on field-grown woody ornamentals, landscape plants and Christmas trees.

Repeat application as necessary, but no sooner than 7 days to maintain control. Some plants are sensitive to oils and so without prior experience the user should spray a small number of plants and observe plants for two weeks before spraying the remaining plants. Excessive cold or warm temperatures may increase the chance of plant damage following application with oils. Carefully read and follow directions on the oil label and do not exceed maximum rates listed on either label.

General Information per Application: Do not apply less than 8 fl. oz. or more than 16 fl. oz. per acre. Use sufficient water to obtain uniform plant coverage. Refer to the RESISTANCE MANAGEMENT section and the RESTRICTIONS section for additional information.

## RESISTANCE MANAGEMENT

Treatment may not be effective against these pests if Lucid-tolerant strains develop. Therefore, when applying Lucid to plants that are hosts of labeled pests with multiple generations per crop or year, resistance management strategies must be used. Such strategies may include, but are not limited to, rotation of products with different modes of action, avoid treatment of successive generations with the same product, use of labeled rates at specified spray intervals, nonchemical alternatives such as beneficial arthropods, rotation of susceptible to non-susceptible plants and various cultural practices.

For additional information on the implementation of these or other resistance management strategies, consult with your State Cooperative Extension Service.

To manage susceptibility in *Liriomyza* leafminer species, apply a maximum of three applications of Lucid and then rotate to Citation for a maximum of three applications, before rotating back to Lucid or using another product. The rotation between these two products with different modes of action should be based on the generation time of *Liriomyza* species to avoid applying Lucid to successive generations.

## RESTRICTIONS

Do not use Lucid for suppression of aphids, whiteflies and thrips on roses, chrysanthemums and gerbera. These ornamentals are primary hosts of mites and *Liriomyza* leafminers for which Lucid applications should be targeted. Additional applications of Lucid to suppress aphids, thrips and whiteflies on these plants will increase the selection pressure on mites and *Liriomyza* leafminers which may result in greater tolerance to Lucid among these pests.

Do not apply this product through any type of irrigation system.

Not for aerial application.

Do not use in citrus nurseries.

Lucid has been evaluated for phytotoxicity 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. Phytotoxicity has

been observed following the use of Lucid on certain species of ferns (e.g. Adiantum spp.) and Shasta Daisy (L. Eucanthemum spp.). It is therefore recommended that Lucid not be used on ferns or Shasta Daisy.

#### Limitations, Restrictions, and Exceptions

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#### COMMENTS:

- For suppression of pest populations, young immatures must be contacted by the spray.

#### Method

[Foliar spray](#)

#### Rates

[field rates 0](#)

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#### Restricted Entry Interval

12 hours

#### Timings

[Apply when young, immature stages of these pests are first observed.](#)