

CONTROL OF MEALYBUGS

General Information

Use Restrictions

- Apply this product only as specified on this label.
- Ventigra insecticide is intended for use by professional applicators.
- Ventigra is NOT for homeowner use.
- Ventigra is NOT for sale, distribution, or use in Nassau or Suffolk counties in New York state except by New York-specific supplemental labeling.
- DO NOT make more than 2 sequential applications before rotating to a product of a different mode of action group.
- DO NOT apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.
- DO NOT make Ventigra applications at intervals shorter than 7 days.
- DO NOT apply to plants exhibiting symptoms of stress or injury, such as stunting, wilting, leaf burn or drop, or abnormal growth.
- NOT intended for vegetables grown to maturity in the greenhouse.
- A 30-day plant-back interval back is appropriate for all food crops not listed on this label.
- DO NOT tank mix Ventigra with:
 - Insect growth regulators
 - Plant growth regulators
 - Carbamate insecticides
 - Organophosphate insecticides
 - Pyrethroid insecticides
- For any requirements specific to your state or tribe, consult the agency responsible for pesticide regulation.

Product Information

Ventigra insecticide contains the active ingredient Inscalis insecticide, common name afidopyropen. When used as directed, Ventigra controls aphids, mealybugs, and whiteflies, and suppresses certain species of mealybugs and scale insects (see Table 1. Ventigra insecticide Use-specific Application Instructions). Ventigra can be used on ornamentals, landscape plants, on vegetable transplants for the home

consumer market and in plant nurseries. Ventigra is primarily active through ingestion by the insect and demonstrates translaminar activity in the plant; it is not fully systemic. Thorough coverage of plant surfaces will result in the most effective control. Ventigra acts quickly to inhibit insect feeding.

Ventigra insecticide can be effectively used in Integrated Pest Management (IPM) and resistance management programs for the labeled pests in ornamentals and vegetable transplants.

Mode of Action

The active ingredient in Ventigra is classified by the IRAC (International Resistance Action Committee) as a targetsite-of-action Group 9D insecticide, a chordotonal organ TRPV (Transient Receptor Potential Vanilloid) channel modulator. This disrupts feeding and other behaviors in target insects. Repeated use of insecticides with similar modes of action can lead to the buildup of resistant pest populations.

Resistance Management

For resistance-management, Ventigra contains a Group 9D insecticide. Any insect population may contain individuals naturally resistant to Ventigra and other Group 9D insecticides. The resistant individuals may dominate the insect population if this group of insecticides are used repeatedly in the same fields. Appropriate resistance management strategies should be followed. To reduce the potential for developing insect resistance, rotate to an insecticide with a different mode of action. Monitor treated pest populations for resistance development. Read product label before applying any insecticide and follow label directions.

To delay insecticide resistance, take the following steps:

- Rotate the use of Ventigra or other Group 9D insecticides within a growing season, or among growing seasons, with different groups that control the same pests. Avoid application of more than the maximum seasonal use rate or the total number of consecutive sprays of Ventigra per season.
- Use tank mixtures with insecticides from a different group that are equally effective on the target pest when such use is permitted. DO NOT rely on the same mixture repeatedly for the same pest population. Consider any known cross-resistance issues (for the targeted pests) between the individual components of a mixture. In addition, consider the following recommendations provided by the

Insecticide Resistance Action Committee (IRAC):

- Individual insecticides selected for use in mixtures should be highly effective and be applied at the rates at which they are individually registered for use against the target species.
- Mixtures with components having the same IRAC mode of action classification are not recommended for insect resistance management.
- When using mixtures, consider any known crossresistance issues between the individual components for the targeted pest(s).
- Mixtures become less effective if resistance is already developing to one or both active ingredients, but they may still provide pest management benefits.
- The insect resistance management benefits of an insecticide mixture are greatest if the two components have similar periods of residual insecticidal activity. Mixtures of insecticides with unequal periods of residual insecticide activity may offer an insect resistance management benefit only for the period where both insecticides are active.
- Adopt an integrated pest management program for insecticide/acaricides use that includes scouting, uses historical information related to pesticide use, crop rotation, record keeping, and which considers cultural, biological and other chemical control practices.
- Monitor after application for unexpected target pest survival. If the level of survival suggests the presence of resistance, consult with your local university specialist or certified pest control advisor.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or IPM recommendations for the specific site and pest problems in your area.
- For further information or to report suspected resistance contact BASF representatives at 1-800-832-HELP (4357).

Application Information

Ventigra can be used on ornamentals in the following use sites:

- Commercial and retail nurseries, field and container
- Commercial, public, and recreational gardens
- Commercial and residential landscapes, including golf courses, parks and recreation areas

- Forest tree and conifer nurseries and plantations
- Greenhouses, shadehouses, and lathhouses
- Interiorscapes

Ventigra insecticide can be used on the following ornamental plants:

- Annual bedding plants
- Perennials, herbaceous and woody
- Flowering and foliage plants
- Woody plants and trees

Ventigra may be applied to juvenile fruit and nut trees, vines, brambles, and bushberries grown in commercial ornamental production nurseries. Immature and/or inedible fruits or nuts or berries may appear on the plant but are not intended for harvest or consumption.

Ventigra can be used on the following vegetable transplants for the home consumer market only, NOT for commercial vegetable production (greenhouse or field):

- Unless noted with an *, use not permitted in California.
- Brassica stem and head: *broccoli, Brussels sprouts, *cabbage, Chinese cabbage (napa), cauliflower, and cultivars, varieties, and/or hybrids of these
- Cucurbit vegetables: chayote, Chinese waxgourd, citron melon, *cucumber, gherkin, edible gourd (including Chinese okra, cucuzza, hechima, hyotan), Momordica spp. (including balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (including true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon and snake melon), pumpkin, summer squash (including crookneck squash, scallop squash, straightneck squash, vegetable marrow, *zucchini), winter squash (including butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash), *watermelon
- Fruiting vegetables: African eggplant; bush tomato; cocona; currant tomato; *eggplant; garden huckleberry; goji berry; ground cherry; martynia; naranjilla; okra; pea eggplant; pepino; *pepper, bell; pepper, nonbell; roselle; scarlet eggplant; sunberry; tomatillo; *tomato; tree tomato; cultivars, varieties and hybrids of these commodities
- Leafy vegetables (except brassica vegetables): amaranth, leafy; arugula; aster, Indian; blackjack; broccoli raab; broccoli, Chinese; cabbage, Abyssinian; cabbage, seakale; Cat's Whiskers; cham-chwi, cham-na-mul; chervil, fresh leaves; Chinese cabbage, bok choy; chipilin; chrysanthemum, garland; cilantro, fresh leaves;

collards; corn salad; including lamb's lettuce, and Italian corn salad; cosmos; cress, garden; cress, upland; dandelion; dang-gwi; dillweed, fresh leaves; dock; dol-nam-mul; ebolo; endive; escarole; fameflower; feather cockscomb; Good King Henry; Hanover salad, huauzontle; jute leaves; kale; *lettuce, bitter, *lettuce, head; *lettuce, leaf (Romaine); maca; mizuna; mustard greens; orach; parsley, fresh leaves; plantain, buckhorn; primrose, English; purslane, garden; purslane, winter; radicchio; radish, leaves; rape greens; rocket, wild; shepherd's purse; *spinach; spinach, Malabar; spinach, New Zealand; spinach, tree; Swiss chard; tanier spinach; *turnip greens; violet, Chinese; watercress; cultivars and/or hybrids of these

- Leaf petioles vegetables: cardoon; celery; celery, Chinese; fuki; rhubarb; udo; zuiki; cultivars, varieties, and hybrids of these commodities

Aerial Application

Thorough coverage is required to obtain optimum insect control when aerial applications are employed. Avoid applications under conditions when uniform coverage cannot be obtained or when spray drift may occur. Use no less than the minimum allowed gallons of spray solution per acre. Refer to Use-specific Application Instructions table. For all crops, thorough coverage is required for optimum pest insect control. DO NOT apply when conditions favor drift from target area. DO NOT apply directly to humans or animals.

Ventigra insecticide is rainfast one (1) hour after an application has dried. DO NOT apply if rain or an irrigation event is expected within one hour of application.

Ventigra demonstrates translaminar movement, but is not fully systemic.

Apply Ventigra in sufficient volume of water to ensure thorough coverage of foliage.

For Ventigra to be most effective, apply at the first sign of insect pests and before the build-up of heavy pressure.

Application must be timed to coincide with locally recommended treatment thresholds for specific pest listed (see Table 1. Ventigra insecticide Use-specific Application Instructions).

Water Volume. Ventigra is not systemic but has translaminar activity. Thorough and uniform coverage of the leaf surface and/or direct contact of the spray mixture with the target pest is required for control. Make foliar application using properly calibrated sprayers. BASF recommends 100 gallons/acre spray solution to ensure

complete coverage of all leaf surfaces.

To provide optimum coverage of ornamentals with hard-towel foliage, an adjuvant may be used with Ventigra spray solution. Test the safety and compatibility of all adjuvants before use. Always read and follow the specific adjuvant label using the proper concentration of adjuvant to avoid plant injury.

Spray Drift Reduction Management

DO NOT apply when wind speed favors drift beyond the area intended for treatment. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering these factors when making application decisions. Avoiding spray drift is the responsibility of the applicator.

Importance of Droplet Size. An important factor influencing drift is droplet size. Small droplets (<150 to 200 microns) drift more than large droplets. Within typical equipment specifications, applications should be made to deliver the largest droplet spectrum that provides sufficient control and coverage. Use only medium or coarser spray nozzles (for ground and aerial applications) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

Ground Applications. Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application. For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two (2) rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

Aerial Applications. The spray boom should be mounted on the aircraft to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or 80% rotor diameter. Flight speed and nozzle orientation must be considered in determining droplet size. Spray must be released at the lowest height consistent with pest control and flight safety. DO NOT release spray at a height greater than 10 feet above the crop canopy unless a greater height is required for aircraft safety. When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by

adjusting the path of the aircraft upwind. Making applications at the lowest height that is safe reduces the exposure of the droplets to evaporation and wind.

Wind Speed Restrictions. Drift potential increases at wind velocities of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Only apply this product if the wind direction favors on-target deposition. DO NOT apply when wind velocity exceeds 15 mph and avoid gusty and windless conditions. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions. DO NOT make ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by stable air and increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by mist or ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally near the ground surface in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

Terrain Precaution. Local terrain can influence wind patterns. The applicator must be familiar with these patterns and understand their impact on drift.

Sensitive Areas. To ensure the protection of threatened or endangered species, it is important to maintain spray drift loadings below levels of concern for any area adjacent to the application site that is not excluded as possible habitat for these organisms.

Cleaning Spray Equipment

Before application, start with clean, well-maintained application equipment. Following spray application, thoroughly clean all application equipment. Drain application equipment of any excess product. Thoroughly rinse application equipment and flush hoses, boom, and nozzles with clean water. Clean all other associated application equipment. Take all necessary safety precautions when

cleaning equipment. DO NOT clean equipment near wells, water sources, or desirable vegetation.

Plant Phytotoxicity

Ventigra insecticide has been applied to a wide variety of common ornamental plants without observed plant injury. Not all species, varieties, and cultivars have been tested for tolerance to Ventigra, possible tank mix combinations with Ventigra, pesticide treatments preceding or following those with Ventigra, and combinations of Ventigra with surfactants or adjuvants. Local conditions can also influence plant tolerance and may not match those under which BASF has conducted testing. Because many cultivars within a plant species vary in tolerance to chemical applications and growing conditions, the grower must recognize these differences and test the product accordingly.

At a minimum, always test a small group of representative plants for tolerance to Ventigra under local growing conditions and before large-scale use. Grower assumes responsibility for testing species suitability under local growing conditions by treating a small number of plants at the specified rate. At a minimum, this should include evaluating treated plants for several weeks following treatment for possible injury or other effects. To the extent consistent with applicable law, by applying Ventigra, the user assumes responsibility for any crop damage or other liability associated with factors beyond the manufacturer's control, such as weather, presence of other materials, and manner or use of application. Plants with known potential for injury, such as Poinsettia at bract stage, are listed in Table 2. Sensitive Plant Species (see table in the label.)

See Table 3 in the label for Dilution Rate Conversion for Ventigra.

Limitations, Restrictions, and Exceptions

Use Directions

Ventigra is not a rescue treatment and should be applied at the onset of pest infestation.

For use in production of vegetable transplants for the home consumer market.

DO NOT make applications at intervals shorter than 7 days.

DO NOT apply more than the maximum seasonal use rate of 14 fl ozs of Ventigra

(0.09 lb afidopyropen ai) per acre per crop season.

For indoor greenhouse use on ornamental plants, DO NOT apply more than the maximum seasonal use rate of 17 fl ozs of Ventigra (0.11 lb afidopyropen ai) per acre per crop season.

DO NOT apply more than the annual maximum use brate of 42 fl ozs of Ventigra (0.27 lb afidopyropen ai) per acre per calendar year.

Minimum spray carrier volume (per acre): 20 gallons for ground; 5.0 gallons for air.

Resistance Management. DO NOT make more than 2 sequential applications of Ventigra before using an effective insecticide with a different mode of action.

See Table 3. Dilution Rate Conversion for Ventigra for information on use rates and respective spray volumes.

When an adjuvant is to be used with this product, BASF recommends the use of a Chemical Producers and Distributors Association certified adjuvant.

Method

[Broadcast/Foliar Air](#)

[Broadcast/Foliar Ground](#)

Restricted Entry Interval

12 hours

Timings

[At the onset of pest infestation.](#)