



A new pest control chemistry for higher quality yields.

Stop the feeding and stop the damage to dramatically improve yield and quality.



Introducing Beleaf™ – A new mode of action for the ideal pest control to achieve higher quality yields.



Feeding by piercing and sucking insects, such as aphids and plant bugs, damages fruit and vegetable plants, which impacts yield and quality. Every time one of these pests inserts its stylet to feed, it causes plant tissue damage, steals nutrients, and increases the chance for disease transmission.

Beleaf™ insecticide from FMC has a unique mode of action that specifically targets aphids and plant bugs – key pests that impact quality and yield of leafy and fruiting vegetables, brassicas, cucurbits, pome and stone fruits, and potatoes. Beleaf is effective for piercing and sucking pest control, yet it is soft on beneficial insects, such as bees and predator mites. It is an ideal component of Insect Resistance Management programs.

Beleaf vegetable recommendations

- Use Beleaf as your aphicide choice before populations build to economically damaging levels
- Beleaf is soft on beneficials, such as bees and predator mites
- Can be used anytime during the crop season including flowering
- Ensure a clean harvest by applying Beleaf 14-21 days prior to harvest. The PHI is zero for vegetables and 7 days for potatoes
- Use 2.4 ounces for up to 14 days control and 2.8 ounces for up to 21 days control of labeled pests



Beleaf helps preserve and enhance yield and quality by stopping aphids and plant bugs from feeding and damaging plants, and it is soft on beneficial insects, such as bees and predator mites.

A unique mode of action.

Unlike traditional insecticides which depend on direct knockdown of the insect pest by contact only, Beleaf™ insecticide quickly stops aphid and plant bug feeding and potential disease transmission, which protects yield and ensures quality. Once feeding stops, these insects can no longer harm the crop, and they starve.





Beleaf™ insecticide is active by contact and ingestion

- Beleaf has translaminar movement within leaf tissue
- Beleaf is rainfast when it dries on the leaf surface
- Beleaf has no known cross-resistance with other insecticides
- Beleaf is soft on beneficial insects, such as bees and predator mites

A new class of chemistry.

Beleaf™ insecticide is a novel class of chemistry with a unique mode of action. Beleaf is active on the A-Type Potassium Channel. Once the target insect pest is exposed to Beleaf, either by contact, ingestion, or both, the active ingredient quickly moves into the insect and blocks the potassium channel of the nervous system. Within 30 minutes after exposure, piercing and sucking pests begin to lose their ability to feed, which is irreversible, and eventually starve to death. This rapid reduction in feeding activity leads to increased yield and quality of the crop.



Beleaf is selectively effective

- The active ingredient in Beleaf is a pyridinecarboxamide, the only insecticide registered for vegetables in this chemical classification group
- Insects begin to stop feeding within 30 minutes after ingesting or coming in contact with Beleaf
- Beleaf can provide up to 14-21 days of control depending on rate and pest population
- Pest control evaluations should be made after the insect dies, which is approximately 5-7 days after treatment

A key component of Insect Resistance Management programs.

The active ingredient in Beleaf has been shown to be different from any other major class of insecticides. This makes Beleaf a key component in Insect Resistance Management programs. No known cross-resistance with other insecticide classes means that the use of Beleaf in a crop protection program will reduce the resistance selection pressure on other insecticide classes.



The perfect partner in Integrated Pest Management programs.

Given its outstanding efficacy on key pests and how soft it is on beneficial insects, such as bees and predator mites, Beleaf insecticide is considered the perfect partner in Integrated Pest Management programs. Consequently, the use of Beleaf permits these beneficial insects to continue to help control aphids or *Lygus* spp. or pollinate crops. The flexibility that Beleaf can be used anytime during the crop season, including flowering, is a major benefit for growers.

*Change to the ideal pest control chemistry.
Change to Beleaf™ insecticide.*

If you're looking for the ideal Integrated Pest Management program, it should include Beleaf™ insecticide. It stops the feeding of piercing, sucking insects, such as aphids and plant bugs, with minimal risk to beneficial insects, such as bees and predator mites.

Beleaf™ insecticide controls:

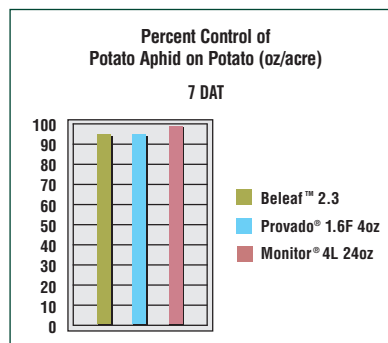
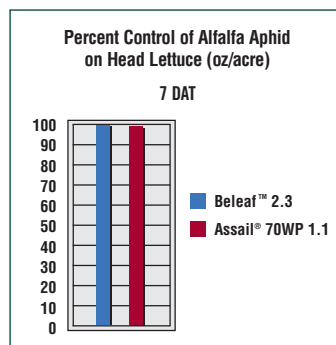
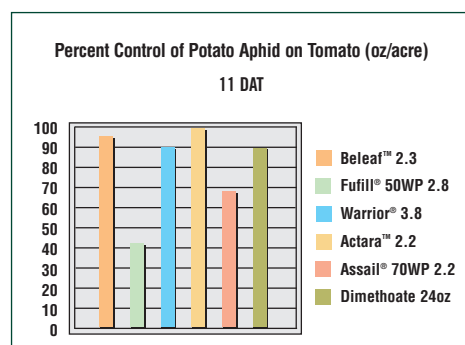
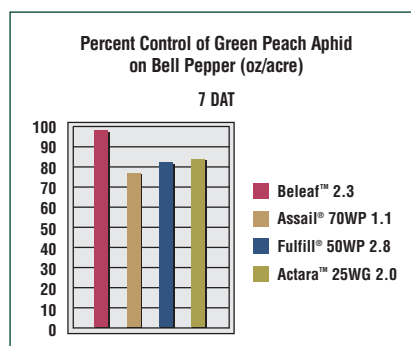
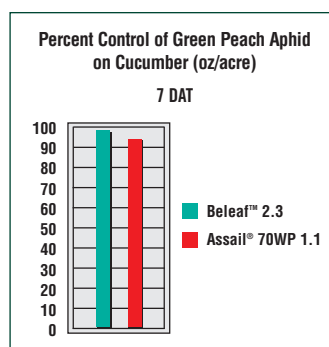
Pest	Rate (oz/A)
Aphids	2.0-2.8
Tarnished Plant Bugs	2.0-2.8
Western Plant Bugs	2.0-2.8
Leafhoppers	2.0-2.8

Aphids

Common Name	Scientific Name
Apple Aphid	<i>Aphis pomi</i>
Black Bean Aphid	<i>Aphis fabae</i>
Black Cherry Aphid	<i>Myzus cerasi</i>
Cabbage Aphid	<i>Brevicoryne brassicae</i>
Cotton / Melon Aphid	<i>Aphis gossypii</i>
Cowpea Aphid	<i>Aphis craccivora</i>
English Grain Aphid	<i>Sitobion avenae</i>
Green Peach Aphid	<i>Myzus persicae</i>
Greenbug	<i>Schizaphis graminum</i>
Leaf Curl Plum Aphid	<i>Brachycaudis helichrysi</i>
Mealy Plum Aphid	<i>Hyalopterus pruni</i>
Foxglove Aphid	<i>Aulacorthum solani</i>
Pea Aphid	<i>Acyrtosiphon pisum</i>
Potato Aphid	<i>Macrosiphum euphorbiae</i>
Rosy Apple Aphid	<i>Dysaphis plantaginea</i>
Spirea Aphid	<i>Aphis spiraeicola</i>
Turnip Aphid	<i>Lipaphis erysimi</i>
Woolly Apple Aphid	<i>Eriosoma lanigerum</i>
Red Lettuce Aphid	<i>Nasonovia ribis-nigri</i>

Non-Aphid Insect Pests

Common Name	Scientific Name
Cotton Fleahopper	<i>Pseudatomoscelis seriatus</i>
Greenhouse Whitefly	<i>Trialeurodes vaporariorum</i>
Tarnished Plant Bug	<i>Lygus lineolaris</i>
Western Plant Bug	<i>Lygus hesperus</i>



Beleaf™ insecticide application information

Beleaf™ insecticide can be tank mixed with other products that are labeled for the same crops (be sure to check and follow product labels). FMC tests indicate that Beleaf is compatible with most other products (physical compatibility with tank-mix partners should be confirmed with a jar test before using – see the label for recommendations).

- Always apply sufficient water to ensure good coverage of the foliage for optimal control
- Beleaf can be applied by ground or air (see label for recommendations)
- Beleaf applications must be 7 days apart
- Do not use Beleaf in greenhouses or home gardens

Maximum Seasonal Use and Pre-Harvest Intervals

Crop	Maximum Seasonal Total (ounces)	PHI Days
Brassica Vegetables	8.4	0
Cucurbit Vegetables	8.4	0
Fruiting Vegetables	8.4	0
Leafy Vegetables	8.4	0
Potato	8.4	7
Pome Fruit	8.4	21
Stone Fruit	8.4	14



Beleaf™ insecticide has an excellent formulation that is easy to use.

Beleaf 50 SG, soluble granule formulation

- Beleaf has a low field rate of 2.0-2.8 ounces per acre
- Beleaf dissolves rapidly in water with proper agitation
- Beleaf is packaged in easy to use 1.5 pound containers

When applying Beleaf, refer to the product label for specific use instructions.

Mixing and Application: Apply 2.0 – 2.8 ounces per acre (0.063 – 0.089 ai/A) depending on targeted insect pest and population stage (see the label for recommendations). Begin applications before populations reach damaging economic thresholds based on university guidelines. Lower rates are suggested for early season application with low pest densities, or when tank mixing with other products registered for the targeted insect pest. Use the higher rates of Beleaf alone in the tank for higher pest populations, dense foliage, and longer residual.

Beleaf may be tank mixed with products labeled for use on leafy and fruiting vegetables, brassicas, cucurbits, potatoes, pome and stone fruit crops. Beleaf is generally compatible with other insecticides, fungicides, fertilizers and micronutrient products provided sufficient free water is available for dispersion of all the tank-mix products, and agitation is used to thoroughly mix the products. However, the physical compatibility of Beleaf 50 SG with tank-mix partners should be checked prior to application using a jar test to be sure there are no compatibility problems. Read and follow all manufacturers' label recommendations for the tank-mix products.

Available In: 6 x 1.5 lb. containers. One jug will treat 10 acres at 2.4 ounces per acre and 8.6 acres at 2.8 ounces per acre.

For more information on using Beleaf in your ideal pest control program, contact your FMC Star Retailer today.



FMC Corporation Agricultural Products Group
1735 Market Street, Philadelphia, PA 19103

1-888-59-FMC-AG • cropsolutions.fmc.com

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