



MERIT®

Product

Reference

Guide

PRODUCT OVERVIEW

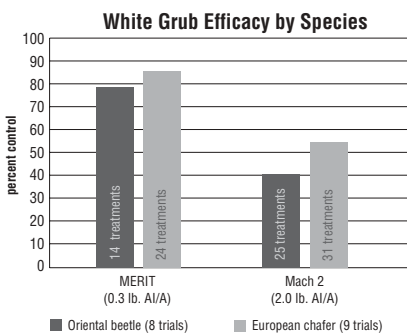
Merit® insecticide is a broad-spectrum, systemic insecticide that is highly effective at low use rates and delivers outstanding control of a variety of turf and ornamental insects. Merit provides protection against the white grub complex from egg lay through second instar. In addition, Merit offers control of mole crickets, when applied prior to, or during, the peak egg hatch period. For years, turf and ornamental professionals have relied on Merit and its unique mode of action to provide strong residual activity and superior biological performance.

Merit is available in five formulations: Wettable Powder (75WP), Flowable (Merit 2), Water-Soluble Packets (75WSP), Granular (.5G), and Granular (2.5G). With its low use rates, Merit helps reduce exposure to applicators and non-target organisms. Based on recommended application rates, Merit is effective at rates up to 96 percent lower than other registered soil insecticides for use on turf.

MODE OF ACTION/HOW PRODUCT WORKS

Imidacloprid, the active ingredient in Merit, is in the chloronicotinyl chemical class. Merit acts by blocking the receptor sites in an insect's nervous system. The message sent by the preceding nerve is not received by the next nerve, or it receives an incomplete message. Therefore, insects that have ingested or absorbed imidacloprid just stop what they are doing or suspend normal behavior. Hence, insects stop feeding immediately and do not survive.

EFFICACY DATA



Treatments applied before August 16th
Data compilation from field trials conducted by independent university researchers. Includes only data from trials that made "Head-to-Head" comparisons of Merit® applied at 0.3 lb. AI/A and Mach 2 applied at 2.0 lb. AI/A.

Key Grubs Controlled

- Japanese Beetle
- Northern Masked Chafer
- Southern Masked Chafer
- European Chafer
- Oriental Beetle

Benefits

- Proven performance
- Broad-spectrum control
- Strong residual activity
- Superior biological performance
- Low use rates
- Low risk to applicator and non-target organisms
- Variety of formulations
- Mini-drum packaging
- Soil application to shrubs and trees provides long-lasting control
- Effective at use rates up to 96% lower than most currently registered soil insecticides for use on turf (based on recommended application rates)

FREQUENTLY ASKED QUESTIONS

Q: When is the best time to apply Merit for white grub control on turfgrass?

A: Merit is most effective when applied prior to, or just after, egg lay. In most cases, adult emergence occurs in early summer, often after significant rainfall or irrigation, followed by mating and egg laying. This usually continues for four to six weeks. Under normal circumstances, Merit will provide residual white grub control for four months or longer in turf.

Q: Does Merit control all major white grub species?

A: Merit protects turf from all major white grub species, including superior control of the Big 5: Japanese and oriental beetles, European chafer, and northern and southern masked chafers. Merit also controls green June beetles better than other insecticides used for turf and ornamentals.

INSECTS CONTROLLED

TURF PESTS

- White grubs including larvae of:
 - Japanese beetle
 - Black turfgrass ataenius
 - Northern masked chafer
 - Southern masked chafer
 - European chafer
 - Oriental beetle
 - May and June beetles (*Phyllophaga* spp.)
- Billbug larvae
- Annual Bluegrass weevil (*Hyperodes* spp.)
- Mole crickets
- Cutworms (suppression)
- Chinch bugs (suppression)

ORNAMENTAL PESTS

- Adelgids
- Aphids
- Borers
- Elm leaf beetles
- Japanese beetles
- Lace bugs
- Leafhoppers
- Leafminers
- Mealybugs
- Pine tip moth
- Royal palm bug
- Sawfly larvae
- Scale insects (soft scales)
- Thrips (suppression)
- Whiteflies
- White grubs