RESEARCH AND EXTENSION

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Problem: White Grubs; May Beetles - *Phyllophaga sp.* and Southern Masked Chafers - *Cyclocephala imaculata*





Hosts: Various turfgrasses especially bentgrass, Kentucky bluegrass, and the fine fescues.

Description: In Kansas, there are two major species of white grubs. The first and most important is the Southern Masked Chafer. This insect completes its life cycle in one year. The second is the May Beetle, also known as the June Bug. May beetles have a three-year life cycle with the second year being the most destructive. Southern Masked Chafers tend to be more destructive than the May Beetle due to greater numbers of grubs produced. The Southern Masked Chafer adult looks like a smaller version of the May Beetle adult.

Recommendations: Lawns that have had a history of grub damage can be treated with imidacloprid before the young grubs hatch. Imidicloprid works by interfering with the transmission of nerve impulses in insects and has a low toxicity rating for humans and pets. This product may be sold under different trade names. Examples of products containing imidacloprid include:

Bonide Annual Grub Beater Gordon's Grub No More Hi-Yield Grub Free Zone II & III

These products are applied in late June to early July but can be applied as early as May. Water in after application.

Traditional insecticides are applied after the grubs hatch but are still small. This is normally about the last week in July to the first week in August. A more exact method of determining application timing is by noting the peak adult beetle flight and then spraying after a specified period of time. Use dylox (Dylox and BioAdvanced 24-Hour Grub Killer Plus) for lawns that are already damaged by grubs.

Granules, however, should be applied on a dry surface. Granular applicators, preferably of the gravity spreader design rather than broadcast spreader type, are required to distribute granular insecticides uniformly.

Application of either formulation should be followed irrigation of approximately 1 inch of water (but stopping before runoff). If watering is delayed for 24 hours or more, the effectiveness of the product is reduced. Children and pets must be prevented from entering the treated area until the irrigation has dried.

References:

- 1. <u>Grub Management in Turfgrass Using Insecticides</u>, K-State Research and Extension Entomology Publication MF-3439
- 2. Turfgrass Insects of the United States and Canada, Cornell University Press, pg. 145-192

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Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.



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