## ASK THE EXPERT

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New grub control product

Problem: We learned recently that there is a new insecticide called Merit for white grub control. How good is this chemical? We would appreciate your comments. (New York)

**Solution:** The insecticide Merit 75 WSP is made by Miles, Inc. The Environmental Protection Agency recently approved registration of Merit 75 WSP for turf and ornamental use in all of the United States, except California and New York where the label is pending.

Merit is a broad spectrum systemic that consists of a new active ingredient called imidacloprid. This product works on an insect's nervous system, resulting in death.

The product is reportedly effective at low rates (0.3 lb. ai/acre) and helps manage insect pests by ingestion and contact. It has a CAUTION signal word.

Merit 75 WSP is labeled for use on residential and commercial turfgrass, golf courses, cemeteries, parks, playgrounds and athletic fields. It is labeled to manage white grubs, billbugs and annual bluegrass weevils in turfgrass.

Merit is available as 75 WSP product in one-quart-per-acre packets sealed in foil pouches. A granular formulation and an insecticide/fertilizer combination should be available in the future.

In your area, particularly in sandy soils, European chafers would be the primary white grub. You may also find other white grubs such as Japanese beetles and northern masked chafers. According to Miles, an average of 95 to 98 percent control of these white grubs can be achieved.

To improve treatment efficacy, you must water the area after treatment. Thatch in excess of ½-inch should be managed for better movement of the product.

Miles representatives have indicated that an application made on the first of April should be sufficient to manage the grub problem until October. Treatments made from the first of April through mid-August can be expected to achieve more than 85 percent control. However, for 95 to 98 percent control, they suggest applying it during May to July.

In states where Merit is registered, read and follow label specifications for best results.

## Galls on spruce trees?

Problem: We have had poor results controlling the galls which form at the base of small spruce branches. We have used Sevin insecticide in the past around late July and early August, and haven't had good luck. When is the best time to control this pest, and what do I use? (Michigan)

**Solution:** Spruce trees get two different types of galls caused by tiny insects called adelgids. Though commonly referred to as spruce gall aphids, they are not true aphids.

It is important to identify the type of adelgid to provide proper treatment at the proper time.

The Cooley spruce gall adelgid produces galls about 2 inches long by ½-inch wide at the tips of twigs. To manage this problem, treatments should be made after the galls open in late July or early August, or before buds start to break in the spring (about early April).

Another kind of gall is called Eastern spruce gall adelgid. The galls are about one inch in diameter. This insect produces galls at the base of small branches. It has a slightly different activity period, which may explain why you have had problems in managing these galls. To manage Eastern spruce gall adelgids, treat the plants after galls open in middle to late September or before buds start to break in spring.

For both types of gall problems, insecticides such as Dursban or Sevin can be used in the spring. After you identify the type of gall insect you are dealing with, monitor the galls for their opening time. Make sure to apply at the proper time when galls open. Timing is one of the most important factors in many pest management approaches.

Read and follow label specifications for best results.

## Damage from horticultural oils

Problem: We have used horticultural oil in the fall and one year we had severe injury on a number of plants such as spruce, yews and pines. It happened only at a certain time of the season. We have used the same oil on other plants, at later dates, without any problem. (Michigan)

**Solution:** In recent years, the horticultural oils have become highly refined and should not present a serious problem, if used according to label specification. Read the label, learn which plants are sensitive to oils, and avoid treating them.

Other possible causes of the injuries: temperature extremes, low soil moisture, high pressure while treating (blasting), sensitive plants, hot mix in the hose not recirculated into the tank prior to treating, and improper mixing.

Reports indicate that another important factor is the plant tissue hardening at the time of oil application. Plant tissues are sensitive to oil injury in late fall. Experts believe that when we get 48 hours of cumulative freezing temperatures, it is somewhat safe to apply oil treatments.

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Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.