

## ANTS ON THE GOLF COURSE: AN ASSET AND A PROBLEM

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Ants. Ants are widespread on turf throughout Michigan. They are abundant in home lawns and golf courses. Ants are social insects. They live in colonies with the queens located in chambers as deep as two feet below the surface. Most of the ants in the colony belong to the worker caste. They forage the ground surface for food. A large proportion of their food may be in the form of live and dead insects and insect eggs. Food is brought back to the nest for storage. Ants frequently feed each other their larvae through regurgitation.

The Benefit. Worker ants foraging the surface pick up many insect larvae and eggs. In some studies ants have been shown to be predators of chinch bugs and sod webworm eggs. Suppressing ants in turf may lead to increased numbers of turf insect pests.

The Problem. Ant mounds are unsightly and result in small dead areas on golf course tees and greens. Although mounds are usually not visible in home lawns and golf course roughs, and therefore not a problem in those areas, they can present a serious problem on tees, greens, and fairways. Insecticidal control is difficult because the nests are deep in soil, well below the depths to which insecticides penetrate. Insecticide applications suppress ant colonies for one to four weeks depending on soil type, ant species, environmental conditions and the insecticide used.

Insecticides Used for Ants. Some insecticides recommended for ants of golf courses are Sevin, Mavrik, Orthene, Proxol, Dylox, Diazinon, Dursban and Turcam. All of these will provide short term suppression of ant activity for 3-7 days. Diazinon has been observed to suppress ants for 12 days, and Dursban for up to 28 days. Little information is available on the residual activity of insecticides for ant control on turfgrass.

Current Research. Because of their feeding behavior, ants are susceptible to insecticide baits. Two baits now being used for control of fire ants in the southern United States are Logic and Amdro. We initiated a test supported by the Michigan Turfgrass Foundation in August to determine the efficacy of Sevimol, Triumph, Dursban, Amdro I, Amdro II, Mocap, and Biosafe nematodes against ants. Dr. Niemczyk in Ohio has just completed an ant test there also. Complete results of these tests will be presented at the Michigan Turfgrass Conference in January of 1990. If ant baits are going to be used on turf in the future it may be worthwhile to investigate changes in insect pest populations as a result of ant suppression.