Control of The Texas Leaf-cutting Ant

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DESCRIPTION, LIFE HISTORY AND HABITS

The Texas leaf-cutting ant, Atta texana Buckley, is a serious agricultural pest of southern and eastern Texas and central Louisana. It causes serious damage to field crops, truck gardens, fruit and shade trees, and pine seedlings in reforestation areas.

The leaf-cutting ant is rustybrown and at least two of the castes commonly seen have short, stout spines protruding from the large. clumsy-appearing head. Several castes are found in each colony: consequently, the ants vary considerably in size. The queens are the largest and are 1/2 to 3/4 inches long, with long brownish wings. The soldiers are next in size, smaller than the queens, and have strong, well-developed jaws. The workers are slightly smaller than the soldiers and are commonly seen traveling along the forage trails carrying leaf particles. The smallest ants in the colony are seldom seen outside. Their duty is to care for the fungus gardens and probably to feed the young.

The colony is most active from May to September but may remain active throughout the year. Mating flights usually occur in May and eggs laid by the queens hatch during most of the year. Most of the ants are concentrated in the central colony during the winter and early spring. During this period control measures are most effective.

A colony generally consists of numerous mounds, 12 to 14 inches in height, and other openings from which the workers' forage may be found from a few yards to over 300 yards away from the central colony. The central colony contains several large, hemispherical chambers into which the workers bring the leaf particles. In the chambers the leaf particles are further reduced in size and placed in a bed on which a fungus is grown. It is this fungus garden which furnishes food for the ants.

Leaf-cutting ants prefer a loose sandy or sandy loam soil but sometimes are found in the heavier soils.

CONTROL

Methyl bromide has proved to be the most efficient material for controlling the leaf-cutting ant. The liquid chemical is packaged and sold in 1-pound cans. A special band-type applicator is necessary for the introduction of the liquid into the hole. A rubber tube 3 to 4 feet long should be attached firmly to the applicator. This tube is thrust 6 to 12 inches into one of the openings near the center of the colony and held in place with the foot while the can is opened with a special device. The liquid methyl bromide changes to a gas immediately when the can is punctured and, being heavier than air,

flows into the bottom of the chamber.

Treatment should be made during February and March because the ants are concentrated near the center of the colony during this period.

CAUTION

Avoid spilling methyl bromide on the skin or inhaling its vapors as it is poisonous.

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