White-Footed Ants

Background: The white-footed ant, Technomyrmex albipes (Fr. Smith), is native to tropical Asia but has been accidentally introduced into Florida. Colonies are confirmed in several southeast Florida counties, as well as Sarasota and Lee Counties on the Florida west coast and Orange County, Florida. Although these ants do not bite or sting, they are often found tending insects such as aphids, mealybugs and scale that produce honeydew. They are easily observed foraging in large numbers both indoors and outside where sweet food sources are present.

It is likely that the ant is moved to new areas through human activity, especially in landscape nursery products. White-footed ants have not been identified in the U.S. outside of Florida. Once viewed as a minor nuisance, this ant is now recognized as an aggressive and difficult insect to manage.

Description: White-footed ants are found in huge colonies that vary in size from 400,000 to over one million individuals. Multiple queens are present in each colony. Many satellite, or sub-colonies commonly occur in trees and landscape shrubs. The ants measure approximately 3mm in length, and are often mistakenly identified as ghost ants. However, white-footed ants have 5 abdominal segments visible from above, whereas ghost ants have only four segments. The distinctive cream-colored tarsae, or feet, of white-footed ants are visible with magnification.

About half of the colony is made up of sterile, female workers. The other half of the colony is composed of “intercastes”, which are wingless males and females capable of mating and egg production. Reproductive flights and budding are the means of new colony formation. Little information is available regarding the life span of the workers, but queens may live for up to one year. There is no trophallaxis, or regurgitation of food, as in many other social insects. Therefore, baits control only those ants ingesting the toxin and the larvae to whom sterile, trophic eggs are fed.

Damage: Although white-footed ants do not cause structural damage, they may accumulate on and near electrical connections, causing damage and electrical outages. Their protective behavior of scales and other honeydew producing insects results in population explosions of these plant pests. They are difficult to control once they create satellite nests, especially in structural voids, with total elimination virtually impossible. Foraging behavior is most noticeable from April through August.

Management: Elimination of food sources is a primary step in control of white-footed ants. They will be attracted to insect honeydew as well as floral nectar from plants such as Ixora, orchids, etc. Application of TalstarOne™ multi-insecticide at 0.5 to 1.0 fluid ounce per 1,000 square feet should be made to all landscape shrubs and trees. When landscape shrubs are dense and large, it is important to apply high volumes of water, up to 10 gallons per 1,000 square feet, to insure penetration into protected areas of foliage preferred by the ants. Foraging trails can be observed during the early morning or early evening, assisting in location of nests where additional TalstarOne™ treatment should be made. TalstarOne™ is the single most effective insecticidal treatment for white-footed ants according to Florida researchers and pest control professionals. Complete coverage is critically important in establishing control of white-footed ants, as untreated areas are quickly used by colony members.
When significant mulch coverage is present, Talstar® EZ granular insecticide or Talstar® PL granular insecticide should be applied at 2.3 - 4.6 pounds per 1,000 square feet to the mulched area to provide control of ants nesting in the mulch materials. Regular monitoring is mandatory for suppressing white-footed ant populations, so that trouble spots can be retreated in a timely manner. Favored nesting sites in Florida include loose bark on trees such as live oak, in natural or created cavities in plant stems, rotten trunks or limbs, and in galleries created at some time by termites. Petiole bases of palms, leaf litter, and compost piles are additional potential infestation sites that should be inspected. Nesting sites will usually contain eggs, developing offspring, pupae, and adult ants. New colonies tend to take up residence at sites where other colonies may have previously existed.

Sanitation will help to prevent or reduce infestation by white-footed ants. Trim tree and shrub branches away from the structure to prevent ants within the trees and shrubs from gaining access to homes and businesses.

Selected References:

