

# Funnel ant

## Funnel ant

*Aphaenogaster pythia*

## Distribution

Funnel ants are pests of sugarcane in areas between Mossman and Tully. Funnel ants naturally live in areas of wet eucalypt forest near rainforest. They are often found in blady grass areas. Granitic gravel loams and some sandy clay loams are the preferred soil types. Funnel ants are found at Ingham and Bundaberg, but do not cause damage to sugarcane in these areas.

## Damage

Funnel ants build mounds of loose pellets of dirt along the cane rows (Photo 1). Ant activity loosens soil about the root mass, so that stools are not firmly anchored. Weakened stools sometimes pull out during harvesting, and soil levels increase in cane supply. Plants also suffer moisture stress in dry weather. Root masses of infested stools are often reduced. Ratoon crops have lower yields and fail in badly infested sites, but there is little effect on plant crops. Damage is worst in areas with light soils and loose sandy subsoil.



Photo 1: Funnel ant mounds.

## Description

Mounds are up to 25 cm wide and 20 cm high with cone-shaped sides and a funnel-shaped opening at the top. Worker ants are found by digging into the mounds, but are hard to find during the day. Workers are honey-coloured and about 5 mm long (Photo 2). They do not bite. Sexual stages are darker-



Photo 2: Funnel ants.

coloured and have wings, males are 5.5 mm long and females 11 mm long. Funnel ants have two backward pointing spines in the middle of their backs. This sets them apart from other yellow ants.

## Biology

Sexually mature ants swarm from nests during November. Mating takes place in the air, and females return to the ground to start new colonies. It takes 49-60 days to make new workers.

Tunnels 7 mm in diameter are dug under the stool and into the subsoil. In deep sandy subsoils tunnels can be deeper than 2 m. Ants do not tunnel into clay subsoil. Oval chambers 5 cm by 2 cm are built for rearing young. Ants live in shallow chambers in the stool zone during the wet season and deeper chambers during the dry.

Funnel ants make small cuts in roots and eat root sap. Several species of planthopper which share ant tunnels also feed on cane roots.

## Management

No insecticide treatment is available to control funnel ants in sugarcane. The greater the number of funnel mounds the bigger the effect on the crop. In healthy crops, up to 3,500 mounds per hectare (about one mound per 2 m of cane row) will not reduce yield. Some varieties suffer less damage from funnel ants than others.