

THE LITTLE FIRE ANT, OCHETOMYRMEX AUROPUNCTATA (ROGER)

(HYMENOPTERA:FORMICIDAE)<sup>1</sup>

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**INTRODUCTION:** Prior to the advent of the chlorinated hydrocarbons, phosphatics, and carbamates, the little fire ant, Ochetomyrmex auropunctata (Roger), was a problem in Florida. The use of modern chemicals, especially malathion and parathion, reduced the populations of the ants until they were no longer a menace. In recent years the reduction in use of these chemicals has allowed the population to increase, and in some areas, to develop into a serious problem.

**DISTRIBUTION:** Ochetomyrmex auropunctata is neotropical in origin and was apparently introduced into several localities in Florida. This ant is common throughout central and northern South America, the West Indies, and warmer portions of Mexico (Wheeler, 1929). Ochetomyrmex is common in south Florida but is less frequently collected in central Florida. It also occurs in California. The ant requires tropical or subtropical conditions and appears to be susceptible to cold temperatures.

**TAXONOMY AND DESCRIPTION:** Ochetomyrmex auropunctata was originally described by Roger (1863) as Tetramorium auropunctatum from specimens collected in Cuba. The genus Ochetomyrmex was described by Mayr (1877) prior to the description of the genus Wasmannia by Forel (1893). In much of the literature to date Wasmannia has been used in error, since Ochetomyrmex takes precedence as the generic name. Hercynia panamana was described by Enzmann (1947) as a new genus and species from Panama. Brown (1948) relegated Hercynia panamana to synonymy as the type specimens were identical to auropunctata.

The worker appearance is distinctive, and is not likely to be confused with native ants. They are small, about 1/16 in (1.5mm), and are golden-brown to brown. The antennae consist of 11 segments with the last two forming a distinct club. The antennal scrobes are well-marked and extend almost to the occipital border. The epinotal spines are set close together at the base, strongly diverging and slightly incurved when seen from above. The node of the petiole is rectangular in profile and higher than the post-petiole. The erect body hairs are long, coarse, and rather sparse. (Creighton, 1950).



Fig. 1. Ochetomyrmex auro-  
punctata worker and queen.  
(DPI Photo #702255-3 and  
#702255-14)

**NESTING HABITS:** The little fire ant is unusual in having no definite nests (Spencer, 1941). The ant may nest under leaf debris, rotten limbs, stones, and in the crotches of trees or clumps of grass. Nests are frequently found behind the sheath of palms or palmettos. The species is highly adaptable in that it nests in both open and shaded situations, seeming to thrive equally well under moist or xeric conditions (Smith, 1942).

One should not consider the ants contained in a nest as a solitary colony. A single "nest" will contain several dealate reproducing queens, numerous workers, pupae, larvae, and eggs; however, they are obviously connected by worker movement between the "nests" within an area.

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ECONOMIC IMPORTANCE: The little fire ant is especially noted for its painful and longlasting sting (Smith, 1965). Spencer (1941) reported that little fire ant workers did not readily sting; however, they would sting when pressed by clothing or other objects.

In infested citrus groves, the ants are predominant on the leaves, around fruit, and on the trunk. Thus, contact with worker ants cannot be avoided by laborers. Recently, pickers working in an infested lime grove in Hendry County demanded double wages to continue harvesting fruit. Spencer (1941) reported that premium wages had to be paid to harvest fruit in some infested groves.

In houses, the little fire ant may infest clothing, beds, furniture, or food (Smith, 1965). Food such as fats, peanut butter, and other oily materials in homes are preferred by the ant, although in nature it tends honeydew-secreting insects (Fernald, 1947).

In Puerto Rico, it was the dominant ant that tended honeydew-producing insects (Smith, 1942). The workers also feed on dead insects, other arthropods, small animals, and are probably predaceous on many insects (Smith, 1965). Ochetomyrmex has been used to limit cocoa pests in Cameroun where farmers encourage the spread of the ant by distributing artificial nests formed in bundles of raffia leaves (Bruneau de Mire, 1969).

SURVEY AND DETECTION: Single workers of the little fire ant may be detected by looking for the ant in association with honeydew-producing insects. Since the ant nests indeterminately, thorough examination of all potential nesting sites in an area is necessary to exclude the possibility of its occurrence.

In homes, the ant is attracted to fatty or oily substances especially in the kitchen; thus, these materials may be used as attractants to determine if the ant is present.

CONTROL: There are no insecticides specifically registered for the little fire ant. Consult a local extension agent for further information.

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