

Pest Alert

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Charles H. Bronson, Commissioner of Agriculture

Argentine Ant, *Linepithema humile* Mayr (Hymenoptera: Formicidae)

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INTRODUCTION: The Argentine ant, *Linepithema humile* (Mayr) (Hymenoptera: Formicidae), was introduced into Louisiana in 1890 on coffee ships from Brazil. It has since spread to most of the southern United States where it has become a nuisance pest in the urban environment. It can and does disrupt ecosystems by directly displacing other ant species and other insects. Argentine ants utilize a wide variety of food sources that include protein (live or dead insects) and substances rich in sugars such as honeydew secretions from aphids. Foraging worker ants will also search for food indoors. Argentine ants form large colonies that can include numerous nesting sites that can cover a large area.

The Argentine ant can be a serious pest of commercial honey bee hives. This ant challenges the front entrance of the bee hive causing the European honey bee (EHB), *Apis mellifera* Linnaeus, to guard it. The ants then invade the colony in large numbers through the top or other unguarded openings in the hive (Fig. 1), causing the EHB to abscond, abandoning the honey and brood for the ants to take back to their nest. If left unhindered, the ants will continue to overwhelm one or two hives a day until the whole bee yard is consumed. Argentine ants are very small and not easily obvious which makes it difficult for a beekeeper to spot the beginning ant invasion. It is common for the ant's takeover to go unnoticed in the bee yard or in a hive.

Beekeepers in Hillsborough County at the Port of Tampa, Gibsonton and Ruskin have reported hive losses caused by the Argentine ant. When beekeepers move their hives to bee yards that are not already occupied by EHB colonies, the Argentine ant can overwhelm new colonies overnight, ultimately causing the loss of an entire bee yard.

DISTRIBUTION: The Argentine ant is considered to be established in most of the southern United States. In Florida, it has been reported from the following counties: Alachua, Bay, Broward, Duval, Escambia, Gulf, Highlands, Hillsborough, Okaloosa, Orange, Palm Beach, Pinellas, Polk, Putnam, Seminole, Walton and Washington.

DESCRIPTION: Workers are small, 2-3 mm (1/8") in length, light to dark brown to almost black in color. Queens are two to four times larger than the worker, the abdomen is notably enlarged and are light brown with a grayish abdomen. Drones (males) are 4-5mm (1/4") long, light brown and winged.

ECONOMIC IMPACT: For years US beekeepers have been experiencing economic strain because of honey bee habitat loss and the introduction of new pests and diseases. The impact of pests such as the Argentine ant will only add to this burden by increasing operation costs due to additional insecticide treatments and/or moving bee yards.

REFERENCES:

Swoboda, Lois, Dini Miller. *Argentine Ant* Virginia Polytechnic Institute and State University, Virginia Cooperative Extension Service, Blacksburg, VA. , Publication Number 444-285. Posted January 2003.



Florida Department of Agriculture and Consumer Services
Adam H. Putnam, Commissioner



Figure 1. Argentine ants invading top of hive.
Photo credit: Jeffrey Lotz, FDACS/DPI



Figure 2. Argentine ant size compared to a cell of honey.
Photo credit: Jeffrey Lotz, FDACS/DPI



Figure 3. Argentine ant has a smooth (hairless) abdomen.
Photo credit: Jeffrey Lotz, FDACS/DPI



Figure 4. Argentine ants, when they have fed on honey their abdomens are almost transparent.

Photo credit: Jeffrey Lotz, FDACS/DPI



Figure 5. Argentine ants consuming a dead bee in the hive.

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