

Residents urged to report unusual stinging ants

Kia'i Moku

By Lloyd Loope



An infestation of the much-dreaded little fire ant (LFA), *Wasmannia auropunctata*, was discovered on a farm in Waihee, Maui, in early October, the first known LFA foothold on the island. As reported in the Oct. 16 Maui News, Hawaii Department of Agriculture (HDOA) will be working with the owner to eradicate the ½-acre infestation; LFA may have been at this site for a year. These tiny pale-orange ants deliver painful stings that develop into large red welts; some people are more sensitive to them than others. LFA may be perceived by many as less of a threat than the red imported fire ant but is nevertheless a very serious pest that can attain high densities, and its powerful sting poses problems for domestic animals, wildlife, agricultural workers and others who come in contact with it. When populations build up outdoors, they eventually come indoors and sting people in their homes. In this regard it is actually worse than the other “imported fire ants” on the mainland. Details of the LFA threat and how to combat it are nicely summarized in a CTAHR leaflet, available at www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-LFA.pdf

Native to South and Central America, LFA has invaded locations in West Africa, Florida, the Galapagos Islands, several Pacific island nations (New Caledonia, Wallis and Futuna, Solomon Islands, Vanuatu, and Tahiti), Israel, and Australia.

Though LFA was first detected in Hawaii on the Big Island in March 1999, it is believed to have been there for at least four years before it was discovered; a lag between invasion and detection is regarded as “normal.” In retrospect, LFA likely had reached Hawaii from Florida; genotypes of Hawaii LFA are essentially identical to some LFA specimens from the Lake Placid area of central Florida. As soon as LFA was discovered in Puna in 1999, HDOA realized the seriousness of the



Photo courtesy of the Hawaii Department of Agriculture

Colonies of the little fire ant *Wasmannia auropunctata* are extremely small, numbering about 100. An entire colony can fit inside the shell of a macadamia nut. Worker ants and eggs are shown here. An infestation of the fire ant was found on a Waihee farm last year and efforts are under way to eliminate the ant. Its powerful sting can create large red welts on humans and could pose problems for pets and wildlife if able to gain a foothold on the islands.

situation. They developed a pest advisory and assigned an entomologist to lead efforts to address this new invasion, involving detection, experimental efforts at eradication of local populations, and inter-island quarantine.

A 2005 review of HDOA's efforts to address this serious ant pest suggested that they were “hindered by low staffing levels; lack of public and commercial awareness; lack of access to nursery sales records; the difficulty of detecting this ant; lack of a registered ant control product for use in orchard fruit and vegetable crops; the failure of most people to take the threat of its invasion seriously. HDOA demurred from an all out eradication effort and enactment of an intra-island quarantine to prevent infected nurseries from selling plants.” The fact that some plant nurseries were infested and probably selling infested plants made containment virtually impossible. By September 1999, LFA was known to occupy 30 acres in three

populations. By January 2004, there were known to be 31 populations totaling nearly 200 acres; eight of the populations at that time involved nursery infestations and the nurseries were still selling plants. LFA is currently coalescing in Hilo and Puna, much as coqui frogs are doing.

Maui has been determined to keep this ant out. Early detection efforts have been underway here for almost a decade, some involving students in intermediate and high schools. HDOA has implemented largely effective interisland quarantine that has at least helped to delay the infestation for a decade. What's next?

Maui residents have shown impressive resolve in keeping the coqui frog confined to a relatively few areas, and coqui eradication is still considered a possibility. Most on Maui consider LFA a much more serious pest than coqui. We have the advantage of being able to learn from the Big Island's experience. Obviously, the community needs to play a major supporting role if there is to be hope of sus-

tained LFA eradication. One way to prevent LFA from being established is to report unusual stinging ants. True to their name LFA are small, about as long as a penny is thick, with a sting disproportionate to their size. Please call HDOA at 873-3962 or MISC at 573-6472 if you think you may have found LFA.

Will Maui citizens be able to pull together to effectively address the LFA threat?

- *Lloyd Loope is a research scientist with the U.S. Geological Survey stationed at the Haleakala Field Station. He holds a doctorate in botany from Duke University and is an active member of the Maui Invasive Species Committee. “Kia'i Moku,” (Guarding the Island) is prepared by the Maui Invasive Species Committee to provide information on protecting the island from invasive plants and animals that can threaten the island's environment, economy and quality of life.*