

***Wasmannia nauruensis* (Hymenoptera: Formicidae): established on the Island of Hawai'i**

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***Wasmannia nauruensis* (Roger) New state record**

This ant was first collected by M. Brazier in Hawaiian Paradise Park (HPP) subdivision near Pahoa, Puna District, on 1 March 1999 and submitted to our laboratory in Hilo. It would not key out in the "Key to the Ants of Hawai'i" (N. Reimer, unpubl.). We sent specimens of the ant to Reimer in our Honolulu office and he identified them as *Wasmannia nauruensis* (Roger), commonly known as the little fire ant (LFA). It was subsequently confirmed as this species by D. Agosti of the American Museum of Natural History. Hawaiian specimens from the localities discussed in the text are deposited in the insect collection at the Hawaii Department of Agriculture in Honolulu.

This ant is native to Central and South America but has been accidentally introduced to several locations throughout the world including West Africa, New Caledonia, the Galapagos and Solomon Islands (Hayashi, 1999) and Florida (Nickerson, 1983).

The ant is well known for its tiny size yet powerful sting (Creighton, 1950). It has been reported as a nuisance to agricultural workers elsewhere and is causing such problems in a nambutan orchard in Pāpā'ikou, South Hilo District, as well as in an anthurium farm in Hilo.

The total number of separate and disjunct infestations known on the island is 13. Three of these are closely grouped in Pāpā'ikou. Two of these were started by the movement of potted palms onto separate properties in the neighborhood. We believe the original infestation in Pāpā'ikou started by the planting of infested *Caryota* sp. palms as a windbreak in May and June 1995. The anthurium farm in Hilo also appears to have become infested by planting this same species of palm. *Caryota* sp. palms planted on 2 sides of a residential property in HPP again appeared to be the source of a third infestation. The source of all 3 sets of palms appears to be the site of a commercial nursery in Pāpā'ewa.

Three other infestations are known in HPP, all belonging to M. Brazier. It is believed this owner accidentally infested her other properties by moving plants with soil from her infested parcel to the others. The original source of this HPP infestation is unclear.

The source of an infestation in Kapoho, Puna District, is likewise unknown. This infestation is a commercial nursery which has been selling potted plants for many years, possibly infested with the ant. At least 2 other nurseries (in Pāpā'ewa and Pāpā'ikou) have been selling possibly infested plants, perhaps for as long as 6 years or longer. The source of those infestations is likewise unknown, nor do we know how or when it originally arrived on the island of Hawai'i.

Specimens of LFA were also collected at Kalihewa, Kaua'i by G. Ngai of the Hawaii Department of Agriculture (HDOA) on 6 October 1999. This infestation had been discovered by tracing a shipment of plants from the island of Hawai'i to Kaua'i from at least 1 nursery infested with LFA. The plants had been planted in a large landscaping project at Kalihewa. The ants have now apparently been eradicated with applications of Amdro not bait through a cooperative effort of the HDOA and Hawaii Department of Health, Vector Control Branch.

Literature Cited

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Hoyash, A.M. 1999. Ants of the fire ants. *Sy. Ent.* 20(2): 9-18.

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New Hawaiian Diptera records, with special reference to the Diptera of Kula'ulawe

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Although records of insect fauna of Hawai'i are mentioned in the pages of many of the new records of Diptera below, data are from surveys of Kula'ulawe conducted by Bishop Museum staff in 1979 and 1980 when the island was under the jurisdiction of the U.S. Navy and being actively used as a bombing range. Now that the island has been returned back to the native Hawaiians and efforts are underway to restore the island to a more natural state, it was thought that the old books would be of use in adding to our knowledge of the dipterofauna of this island. Except for the 22 species as deposited at the University of Kansas—Manoa, 1440 Lincoln Drive, Natural History Museum of Kansas University, Westport, 66401, USNM, all specimens are deposited at Bishop Museum, Department of Entomology, 2005 Bishop Drive, Honolulu, Hawai'i 96813.

Anthomyidae***Gnathomyia hawaiiensis* S. & W.****New island record**

Previously known from Midway, Nihoa, and Kaula, and locally occurring in the Kula'ulawe area on the western end of the island of Hawai'i.

Material collected: MAUT, Makaha, 135400, 1979; U.S. Dept. of Agriculture, Hilo, HI, 1978-1979. —David L. Beckwith & D.K. Caldwell

Ateulidae***Dysanthea bipunctata* Loew****New island record**

This species is listed as a remarkable recent migrant to the extreme Hawaiian species is known to be a common form on the Northwestern Islands. It has many records from the main island on a single property, the dune fields of *Scaevola* around the Makaha. It is possible that this species may have arrived under distribution from outside of Hawai'i. It has, but has never been reported from the other main Hawaiian Islands, possibly through the advent of *Scaevola*. There has been an extensive distribution on Kula'ulawe during its history, but why *Dysanthea bipunctata* is still so common there.

Knowledge of the immature history of *Dysanthea* has been somewhat limited by a lack of prior study and further would be helpful in assessing its status on the island as well as possibly helping to determine why it does not occur elsewhere on the Hawaiian Islands.

Material collected: MAUT, Makaha, 135400, 1979; U.S. Dept. of Agriculture, Hilo, HI, 1978-1979. —David L. Beckwith & D.K. Caldwell

Chironomidae***Chironomus* sp.****New island record**

Material collected: MAUT, Makaha, 135400, 1979; U.S. Dept. of Agriculture, Hilo, HI, 1978-1979. —David L. Beckwith & D.K. Caldwell