

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

PATRICK CONANT & CLYDE HIRAYAMA (Hawaii Department of Agriculture, 16 E. Lanikaula St., Hilo, Hawai'i 96820, USA)

***Wasmannia auropunctata* (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 auropunctata* (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 Galápagos 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 rambutan orchard in Pāpa'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 Pāpa'ikou. Two of those were started by the movement of potted palms onto separate properties in the neighborhood. We believe the original infestation in Pāpa'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 Pana'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 Pāna'ewa and Pāpa'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 Kalihiwai, Kaua'i by G. Nagai 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 Kalihiwai. The ants have now apparently been eradicated with applications of Amdro ant bait through a cooperative effort of the HDOA and Hawaii Department of Health, Vector Control Branch.

Literature Cited

Creighton, W.S. 1950. The ants of North America. *Bull. Mus. Comp. Zool.* 104: 1-585.

Hayashi, A.M. 1999. Attack of the fire ants. *Sci. Am.* 280(2): 26, 28.

Nickerson, J.C. 1983. The little fire ant, *Ochetomyrmex auropunctata* (Roger). *Fla. Dep. Agric. Consumer Serv., Div. Plant Ind. Entomol. Circ.* 248.

New Hawaiian Diptera records, with special reference to the Diptera of Kaho'olawe

NEAL L. EVENHUIS (Hawaii Biological Survey, Bishop Museum, 1525 Bernice Street, Honolulu, Hawai'i, 96817-2704, USA; email: neale@bishopmuseum.org)

Although records from other islands in Hawai'i are intermixed in this paper, many of the new records of Diptera below derive from surveys of Kaho'olawe conducted by Bishop Museum staff in 1979 and 1980 while the island was under the jurisdiction of the U.S. Navy and being actively used as a bombing target. Now that the island has been repatriated back to the native Hawaiians and efforts are underway to restore the island to a more natural state, it was thought that the list below would be of use in adding to our knowledge of the existing insect fauna of that island. Except for those marked as deposited in the University of Hawaii, Mānoa (UHM) or the United States National Museum of Natural History, Washington, D.C. (USNM), all specimens are vouchered in Bishop Museum, Honolulu (BPBM). Authorship of the records below is NLE unless otherwise noted.

Anthomyiidae***Fucellia boninensis* Snyder****New island record**

Previously known from Midway (introduced) and naturally occurring in the Bonin Islands, this is the first record from the major Hawaiian Islands.

Material examined: MAUI: Makawao, 30 Auoli Dr., 1600 ft, 30 Sep 1999, dead at light fixture, H.K. Loecheit (BPBM).
—Neal L. Evenhuis & H.K. Loecheit

Asteiidae***Bryania bipunctata* Hardy****New island record**

This single specimen is a remarkable record, given that this endemic Hawaiian species is known otherwise only from the Northwestern Hawaiian Islands (previous records from the main Hawaiian Islands are misidentifications of *Stenomicroa orientalis* Malloch). It is possible that this species may have once had a wider distribution throughout the Hawaiian Islands, but has since been extirpated from the other main Hawaiian Islands, possibly through the advent of humans. Since there has been little human habitation on Kaho'olawe during its history, this may be why *Bryania bipunctata* is still surviving there.

Knowledge of its immature biology (other asteiids have been reared from a variety of plant stems and fungi) would be helpful in assessing its status on this island as well as possibly helping us determine why it does not occur elsewhere in the Hawaiian Island chain.

Material examined: KAHŌ'OLAWĒ: 1, Beck's Cove, 11-14.ii.80, at UV light, W.A. Steffan (BPBM).

Asteia sabroskyi* Hardy*New island record**

Nishida (1997) previously recorded this species from all the main Hawaiian islands except Lāna'i and Kaho'olawe.