

SCIENTIFIC NOTE
A New Host Record for *Oidaematophorus beneficus*
Yano & Heppner (Lepidoptera: Pterophoridae)

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ABSTRACT. The Hamakua pamakani plume moth, *Oidaematophorus beneficus*, a purposely introduced biological control agent, was found feeding on Maui pamakani, *Ageratina adenophora*, an unreported host plant. The find is significant because the new host is officially listed as a noxious weed, as is the original host, *Ageratina riparia*, known as Hamakua pamakani or spreading mist flower.

INTRODUCTION

Oidaematophorus beneficus Yano & Heppner was introduced into Hawai'i in 1973 from Mexico for control of Hāmākua pamakani (*Ageratina riparia* (Regal) R. King & H. Robinson) by the Hawai'i Department of Agriculture (HDOA) (Nakao *et al.* 1975). The larvae are leaf feeders, normally causing smooth edged holes in the leaves. Two other natural enemies were also introduced to control this weed, the Hāmākua pamakani gall fly *Procecidochares alani* Steyskal, and a fungus, *Entylooma ageratinae* (Davis *et al.* 1992). The authors reported that these 3 agents have substantially to completely controlled the weed in most infested pastures on Hawai'i Island. On 9 October 1991, I collected several larvae of *O. beneficus* from the leaves of Maui pamakani (*Ageratina adenophora* (Spreng) R. King & H. Robinson) at the summit of Mount Ka'ala, O'ahu. Only 1 larva survived to emerge as an adult. Subsequently at the same site on 12 May 1994, I collected several more larvae from Maui pamakani. Four specimens survived to become adults. Identifications of all adult specimens were made by B. Kumashiro, HDOA taxonomist, and deposited in the HDOA collection. I have also observed larvae of this moth on Maui pamakani on the east side of Kaupō Gap, Maui. Only one biocontrol agent was ever introduced for control of Maui pamakani: a gall fly, *Procecidochares utilis* Stone (Diptera: Tephritidae). The fly was purposely introduced in 1944 from Mexico and is now well established (Bess & Haramoto 1972). Feeding damage to Maui pamakani by *O. beneficus* is serendipitous, since both species of *Ageratina* in Hawai'i are on the HDOA noxious weed list.

LITERATURE CITED

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