

SCIENTIFIC NOTE

**Fortuitous Introduction of Two Natural Enemies
of *Lantana camara* to Chuuk****R. Muniappan¹ and G.V.P. Reddy**

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Abstract. *Ophiomyia lantanae* (Froggatt) and the *Calycomyza lantanae* Frick were recorded from *Lantana camara* L. in Chuuk Islands. Both of these agromyzids are native to tropical Americas and were not intentionally introduced and this is the second report of fortuitous introduction of natural enemies of *L. camara* in to the Chuuk State possibly from Pohnpei State within the Federal States of Micronesia.

Lantana camara L. (Verbenaceae) was introduced to Micronesia probably as an ornamental plant. It is a native to the neotropical region and it has become a serious invasive weed in most of the tropical and subtropical countries in Africa, Asia and Oceania. It forms bushes and several bushes coalesce to form thickets. It grows in low islands of atolls to higher volcanic islands in the Pacific. In spite of its invasive properties it has been extensively used in the ornamental horticulture throughout the world. Holm et al (1977) consider it as one of top ten noxious weeds in the world.

Since the beginning of the last century, biological control has been attempted in many parts of the world with varying degrees of success as different cultivars display differences in susceptibility to insect herbivores (Perkins and Swezey, 1924; Ramachandra Rao, 1920; Waterhouse and Norris, 1987).

Schreiner (1989) reported the absence of records of insects sent to Chuuk for biological control of lantana. However, Denton et al. (1991) reported the establishment of *Teleonemia scrupulosa* Stål (Hemiptera: Tingidae), *Uroplata girardi* Pic. (Coleoptera: Chrysomelidae), *Lantanophaga pusillidactyla* Walker (Lepidoptera: Pterophoridae), *Salbia haemorrhoidalis Guenee* (Lepidoptera: Pyralidae) and *Epinotia lantana* (Busck) (Lepidoptera: Tortricidae) and suggested that these insects were possibly introduced fortuitously from Pohnpei. In this paper we report further fortuitous establishment of two additional natural enemies in the Chuuk State.

In November 2002, one of the authors (RM) conducted a survey of *L. camara* natural enemies in the island of Wenu, Chuuk State of the Federal States of Micronesia and found establishment of the lantana seedfly, *Ophiomyia lantanae* (Froggatt) (Diptera: Agromyzidae) and the lantana leaf blotch minor, *Calycomyza lantanae* Frick (Diptera: Agromyzidae) in addition to the occurrence of all the natural enemies recorded by Denton et al. (1991).

In November 2002 only a few plants were infested by *T. scrupulosa* near the village Peniesene. Both adults and larvae of *U. girardi* were found on lantana plants growing in the shades of trees at Tunuuk. Other natural enemies reported by Denton et al. (1991) were found in low numbers throughout the Weno island wherever lantana was present.

The lantana seedfly, *O. lantanae* was introduced to Pohnpei from Hawaii in 1948 (Bryan, 1949). Denton et al. (1991) who surveyed lantana natural enemies in Micronesia confirmed

its establishment in Pohnpei but did not find it in Chuuk Islands. The lantana leaf blotch minor *C. lantanae* was introduced to Guam from Australia in 1992 (Muniappan et al. 1992) and then from Guam to Pohnpei in 1995 (Esguerra et al., 1997). In this survey, it has been noted that both insects are well established in Weno Island of the Chuuk State, possibly introduced from Pohnpei as was the case with the introduction of other natural enemies of lantana. Fortuitous establishment of natural enemies of lantana introduced to Pohnpei in Chuuk seem to be a very common phenomenon, indicating the need for vigorous enforcement of plant quarantine regulations in this state especially movement of plants from the neighboring state Pohnpei.

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