

Biology and Comparative Morphology of Two Cecid Flies, *Procontarinia mattiana* and *Erosomyia mangifera* (Dip.: Cecidomyiidae), in Hormozgan Province

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Abstract

Mango gall midges, *procontarinia mattiana* Kiffer & Cocconi, and mango inflorescence midge *Erosomyia mangifera* Felt (Dip:Cecidomyiidae), are account among the most important insect pests of mango trees. The feeding behaviors and the damages of these two pests are completely different. Mango gall midge as the most of the other cecidomyiids produces galls in its host and lays the eggs as clusters on the underside or rarely on the upper side of leaves. The galls are formed after the entrance of newly emerged larvae to the leaf tissue. The number of larvae that are able to enter to the leaf tissue and produce gall is very lower than the number of total laid eggs due to the high mortality of larvae from emergence to entrance to the leaf tissue. There is only one larva in each gall. It completes its life cycle in the gall. In the high infestations, the infected leaves curl and fall down before the end of larval period. While inflorescence midge only attacks the inflorescence and does not produce galls. It lays its eggs on inflorescence singly or in little clusters. Larvae live in channels produced in inflorescence and pupae are formed in cavities produced in soil surface. This pest damages directly by feeding from inflorescence tissue and indirectly by providing suitable conditions for fungal infections on inflorescences.

Adults of both species are tiny midges and their bodies are covered with fine hairs. These two species are very similar and could only be distinguished by the grasping hook of male abdomen and telescopic ovipositor of females. The larvae can be distinguished by their sternal spatula.

Keywords: Mango, Gall midge *Procontarinia mattiana*, Blossom midge, *Erosomyia mangifera*, Biology, Morphology

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