

PERMANENT REFERENCE

A REVIEW ON *Liriomyza* SPECIES AND
THEIR NATURAL ENEMIES

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BY

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ABSTRACT

This study was carried out from September 2004 to December 2004. The related reference was collected from journals of Department of Agriculture, Sri Lanka, research report of Horticultural Research and Development Institute, Gannoruwa, Journals of Indian Institute of Horticultural Research, Journals of Department of Entomology and Nematology, University of Florida, Journals of Horticultural research Center of Malaysia, leaflets of Potato Research Center, Philippines, Journals of department of Entomology, University of California, several web pages and from related references of books which are available in library, Eastern university of Sri Lanka. *Liriomyza* species has a wide host range due to the polyphagous nature. So this species affect most of the vegetable crops, valuable ornamental plants and wild crops.

In this study characteristics of different types of the *Liriomyza* species available in the world with special reference to Sri Lanka were reviewed. The findings are used to species differentiation. This study included host range, significances and vulnerable stages of *Liriomyza* species. *Liriomyza* species effectively developed resistance ability against insecticides, because of that natural enemies act as a major role in control measure.

Liriomyza has a wide host range. In Sri Lanka several crops are attacked by *Liriomyza*. Among them are cucurbits, legumes, cereals, fruit crops, tubers, minor export crops and ornamentals. In these plants more than fourteen families are attacked by *Liriomyza huidobrensis*, more than ten families by *Liriomyza sativae* and

more than seven families by *Liriomyza trifolii*. Family cruciferae is attacked by *Liriomyza brassicae*, more than sixteen families by *Liriomyza bryoniae*.

Forty species of larval and pupal parasites have been reported from *Liriomyza* species. This diverse complex of natural enemies at least eleven species of parasites are from *Liriomyza huidobrensis*, twenty species of parasitoids and one pathogen are from *Liriomyza sativa*, fourteen species of parasitoid are from *Liriomyza trifolii*, three species of parasites are from *Liriomyza brassicae*, more than five species of parasitoids are known from *Liriomyza bryoniae*. Families Braconidae, Eulophidae and Pteromalidae are important parasitoids and dragonflies, chrysopids, spiders, ants and true bugs are important predators of *Liriomyza* species.

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