GUAM PEST SERIES **AGRICULTURE AND NATURAL RESOURCES**

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Larval damage

Common Name: Leafminer
Scientific Name: *Liriomyza trifolii* (Burgess) (Diptera: Agromyzidae)

Eggs are laid inside the leaf. The larvae, which are small, yellow maggots, hatch out and feed in the tissues inside the leaf, leaving a wandering track where they have been. When they are fully grown, the larvae cut a slit in the leaf and fall to the ground. They pupate in the soil. The whole life cycle takes as little as two weeks. Several species of parasites attack the leafminers, keeping their numbers under control most of the year. However, in the dry season, some farms may experience huge populations of these leafminers.

Heavily mined leaves fall off early, resulting in decreased production.

Beans are most severely affected, but many other crops are attacked. High leafminer numbers are occasionally seen on tomatoes, and could appear in watermelon if unwise spraying practices are used which kill the parasites selectively. Other crops on which this species of leafminer may be found are cucumber, melon and bell pepper.

The leafminer originated in Central and North America. It has spread to many islands in the Tropics. It was accidentally introduced to Guam around 1977 and is now also present in the Northern Mariana Islands, some of the Caroline Islands, and American Samoa.

Control: Control may be difficult. Most insecticides on the market kill the parasites but not the leafminers, and may cause more problems than if no sprays had been used. Generally, the leafminers are not a serious problem at the tail end of the dry season and in the wet season. Where serious problems are experienced, it may be worth leaving part of the seriously damaged field unsprayed and replanting the rest. In these circumstances, parasites may build up in sufficient numbers in the old planting to control the problem in the new planting. Consult an Agricultural Extension Agent for current recommendations on insecticide usage by calling 734-2575, 734-2579, 734-2518 or 734-4753.

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