Blotch Leafminer, *Amauromyza maculosa* (Malloch) (Insecta: Diptera: Agromyzidae)\(^1\)

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**Introduction**

A blotch leafminer, *Amauromyza maculosa* (Malloch), is a pest of dooryard plantings of chrysanthemum throughout most of Florida. It is not an important pest of commercial chrysanthemums in the principal commercial planting areas of Bradenton-Ft. Myers and Stuart-Delray Beach. This species, which, according to Spencer and Stegmaier (1973), probably evolved in South America and has extended its range into North America since the end of the Pleistocene Period, may be distinguished readily from related species by the variegated color of the halteres of the adult flies. The large blotch mines, produced on foliage by the feeding of the larvae, are similar to those produced by larvae of another agromyzid fly, *Nemorimyza posticata* (Meigen), which also occurs in Florida and usually on Solidago and Aster.

**Synonymy**


Holotype female from Jamaica, New York, in U.S. National Museum of Natural History.

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**Blotch Leafminer, Amauromyza maculosa (Malloch) (Insecta: Diptera: Agromyzidae)**

*Phytobia (Amauromyza) maculosa* Frick, 1952: 393.

**Distribution**

Throughout most of the United States, including Florida and Hawaii; Antilles, Bahamas, Bermuda, Costa Rica, Argentina, Brazil, Uruguay and Venezuela.

**Identification**

The adult is a small, shiny black, clear-winged fly about 2.2 to 2.7 mm long. Head entirely black; mesonotum shining black; pleura and legs entirely black; squamae and fringe silvery white; halteres variegated, primarily white, but knob with a conspicuous black area above; wing length about 2.2 to 2.7 mm. Larvae are yellowish white, about 3 mm long, and make blotch-like tunnels within leaves where these larvae are readily visible as they feed.

**Hosts**

Polyphagous on Compositae; known hosts in Florida include *Baccharis, Bidens, Chrysanthemum, Emilia, Erechtites, Eupatorium, Gaillardia, Gnaphalium, Helianthus, Melanthera, Senecio, Sonchus,* and *Tagetes*. Recorded hosts elsewhere include *Arctium, Artemisia, Aster, Erigeron, Lactuca,* and *Xanthium.*

**Leaf Damage**

Feeding larvae cause conspicuous blotch mines in foliage before they emerge and pupate externally. Injury to foliage by mines and oviposition punctures causes plant to be unsightly. Heavy infestations may cause some leaf mortality. Three to six larvae are common in a single leaf, frequently forming a large community mine.

**Management**

Pest management programs for commercial production of chrysanthemums are sufficient to control *A. maculosa.*

For additional information see the Insect Management Guide for Landscape Plants (http://edis.ifas.ufl.edu/IG013).

**Selected References**

Frick, K.E. 1952. A generic revision of the family Agromyzidae (Diptera) with a catalogue of New World species. California University Publication Entomological 8: 339-452.

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Figure 4. Chrysanthemum plant severely infested by the blotch leafminer, *Amauromyza maculosa* (Malloch). Credits: Division of Plant Industry

Figure 5. Blotch mine in chrysanthemum leaf opened to expose the feeding larva of the blotch leafminer, *Amauromyza maculosa* (Malloch). Credits: Division of Plant Industry

Figure 6. Oviposition punctures in chrysanthemum leaf caused by the blotch leafminer, *Amauromyza maculosa* (Malloch). Credits: Division of Plant Industry


