

Citrus Gall Midge, *Prodiplosis longifila* Gagné  
(Diptera: Cecidomyiidae)<sup>1</sup>  
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**INTRODUCTION:** The citrus gall midge *Prodiplosis longifila* Gagné was first found in Florida by Rainwater (1934). This gall midge was recently collected on lime trees, *Citrus aurantifolia* (Christm.) Swingle, at Homestead, Dade Co., Florida during the fall of 1984 by the senior author. The adult was described in 1986 by R.J. Gagné.

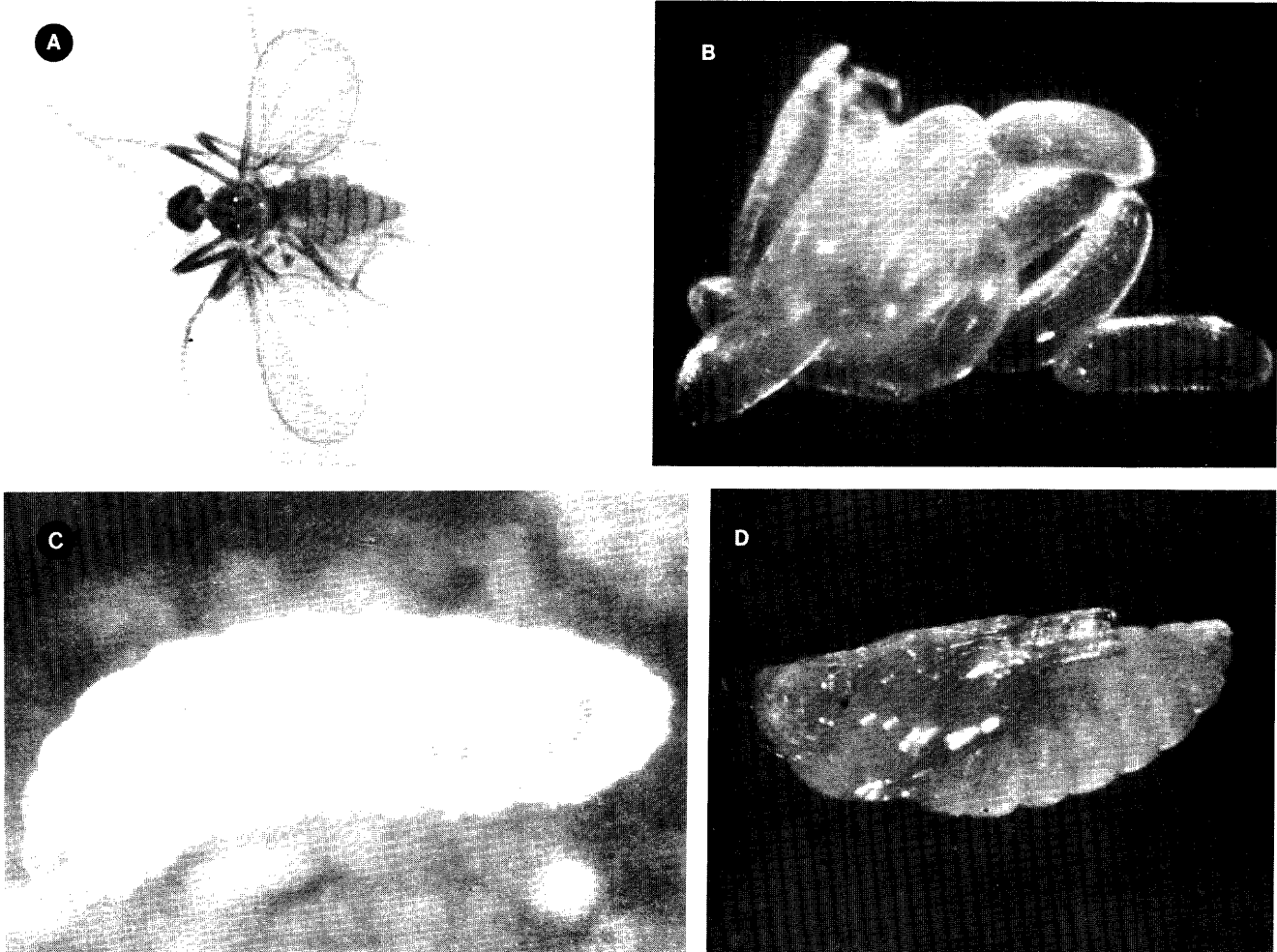


Fig. 1. Citrus Gall Midge: A. Adult Citrus Gall Midge; B. Eggs removed from flower; C. Larva removed from flower; D. Pupa.

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**DESCRIPTION:** The adult is a small, black-yellowish fly about 1.5 mm in length. (Fig. 1A). The wing lengths average 1.42 mm in males and 1.53 mm in females. The antenna lengths average 1.62 mm in males and 1.22 mm in females. The eggs are small, clear, about 0.27 mm in length (Fig. 1B). The larva is almost transparent when newly formed and yellowish during the last instar. A full grown larva is about 1.9 mm in length (Fig. 1C). The pupa is light yellowish when newly formed and black and yellowish near adult emergence (Fig. 1D). A detailed larval and pupal description is being published separately by Peña et al. (in press). Eggs hatch in 1-2 days. Larval development requires 8-12 days. The pupal stage lasts 4-5 days, and adults typically live 1-2 days. Gagné (1986) has provided a key to adults of Nearctic species of *Prodiplosis*.

**HOSTS:** Limes, *Citrus aurantifolia*; tomatoes, *Lycopersicon esculentum*; potatoes, *Solanum tuberosum*, wild cotton, *Gossypium* sp., etc.

**FLOWER DAMAGE:** Larvae feed on the epidermal cells of the ovary, pistils, and stamens. The mean number of larvae found per flower was 24.26. The larvae drop to the ground where the pupal stage is passed.

**DISTRIBUTION:** Gagné (1986) reported *P. longifila* from Florida, South America, and the West Indies.

**ECONOMIC IMPORTANCE:** The larva of *P. longifila* is a pest of limes (Peña et al. 1987). In 1984 heavy infestations were encountered attacking lime groves in Dade and Collier counties.

**SURVEY AND DETECTION:** Look for flowers with necrosed ovary, stamens, and petals. Where infestations are heavy there may be excessive flower drop.

**CONTROL:** Control information is very limited for this pest. If control appears to be necessary contact your County Extension Agent.

**LITERATURE CITED:**

- Gagné, R. J. 1986. Revision of *Prodiplosis* (Diptera: Cecidomyiidae) with description of three new species. Ann. Entomol. Soc. America 79:235-245.
- Peña, J. E., R. M. Baranowski, and R. T. McMillan, Jr., 1987. *Prodiplosis longifila* (Diptera: Cecidomyiidae), a new pest of citrus in Florida. Florida Entomol. 70:527-529.
- Peña, J. E., R. Gagné, and R. Duncan. (in press, Florida Entomol.). Biology of *Prodiplosis longifila* Gagné (Diptera: Cecidomyiidae).
- Rainwater, C. F., 1934. Insects and a mite of potential economic importance found in wild cotton in Florida. J. Econ. Entomol. 27:756-761.