

Pest Alert

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Florida Department of Agriculture and Consumer Services, Division of Plant Industry
Charles H. Bronson, Commissioner of Agriculture

An Ornamental Fig Pest, *Horidiplosis ficifolii* Harris (Diptera: Cecidomyiidae), Genus and Species New to Florida and North America

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INTRODUCTION: Elliptical blister-like galls were found on leaves of Indian Laurel, *Ficus microcarpa* L. F. in Naples (Collier County, E2008-112; Scott Krueger, 4 January 2008). As the gall morphology did not match that of any gall midges previously reported from *Ficus* in North America (see Gagné 1989), fresh galled leaves were sent to Dr. Raymond J. Gagné (retired, Systematic Entomology Laboratory, USDA-ARS, Washington DC) for closer examination and rearing to the adult stage. On 20 February 2008, he successfully reared adults and determined them to be *Horidiplosis ficifolii* Harris (Diptera: Cecidomyiidae).

This gall midge is relatively new to science, having been described only in 2003 (Harris and DeGoffau 2003) based on material originating in Taiwan, Japan, and China and intercepted by plant health inspectors in the Netherlands and Denmark.

DESCRIPTION: Gall midges apparently attack the young leaves which may become discolored, pocked with brown, blister-like lesions and severely disfigured (Fig. 1). Heavily infested leaves may drop from the plant. The gall midge larvae feed inside the blisters, and only one larva has been found in each blister. They are tiny (2 mm or less), white in their early stages and become bright orange as they mature (Fig. 2).

HOSTS: The specimens upon which the description of *Horidiplosis ficifolia* was based were reared from bonsai *Ficus benjamina* L., which originated in Taiwan and China. In Florida, the galls have been found only on *F. microcarpa* as bonsai plants in at least one nursery and on large trees in the landscape. Curiously, although *F. benjamina* is very abundant, comprising probably many miles of hedges in the Naples area, and even where it grows under infested *F. microcarpa* trees, it has not been found to be infested. We cannot rule out the possibility that the Florida gall midges represent a different, undescribed and cryptic species of *Horidiplosis*.

BIOLOGY AND ECONOMIC IMPACT: Nothing has been published on the biology or economic importance of this gall midge. As various species of *Ficus* are very important container and landscape plants in much of Florida and elsewhere, *H. ficifolii* may become a serious pest to the commercial ornamental industry.

DISTRIBUTION: The genus *Horidiplosis* contains six oriental species, primarily from India, and all are associated with figs.

FLORIDA DISTRIBUTION: *Horidiplosis ficifolii* presently is known only from Collier County, where it is apparently widespread in the vicinity of Naples.

REFERENCES:



Florida Department of Agriculture and Consumer Services
Adam H. Putnam, Commissioner

Gagné, R. J. 1989. *The plant-feeding gall midges of North America*. Cornell University Press, xi + 356 p.
Harris, K.M. and L. J. W. DeGoffau. 2003. *Horidiplosis ficifolii*, a new species of gall midge (Diptera: Cecidomyiidae) damaging ornamental fig plants, *Ficus benjamina* L. *Tijdschrift voor Entomologie* 146: 301-306.



Fig 1. Galled leaves of *Ficus microcarpa*.
Photo credit: G. J. Steck



Fig 2. Gall midge larvae in leaf blisters on *Ficus microcarpa*.
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