

# A Fruit Fly, Anastrepha nigrifascia Stone (Insecta: Diptera: Tephritidae)<sup>1</sup>

H. V. Weems Jr.<sup>2</sup>

### Introduction

Anastrepha nigrifascia Stone is one of six species of fruit flies of the genus Anastrepha, which occur in Florida or which have been established in Florida at some time.

### **Distribution**

This species is limited to the Florida Keys, from Key Largo Key to Key West. The holotype female was trapped 21 May 1935 by G.B. Merrill on Big Pine Key.

This species appears to have a very restricted distribution. It is seldom collected and is not considered to be of economic importance. Trap collection records indicate that it probably occurs in the adult stage throughout the year, although the heaviest populations appear to be during April–May.

## **Description**

This is a small yellowish fruit fly, somewhat larger than a house fly, with rather long, patterned wings. *A. nigrifascia* can be distinguished from other species of *Anastrepha*, which have been recorded for Florida by the presence of a narrow, transverse, dark brown band across the posterior of the mesoscutum at the base of the scutellum and by the ovipositor of the female, the tip of which is tapered and unserrated. The head is yellow with frontal bristles and ocellar triangle black; antenna yellow, arista yellowish

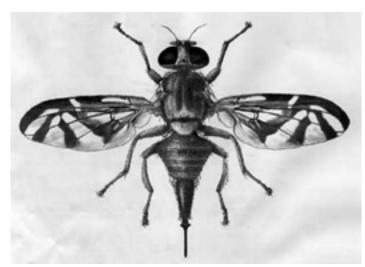


Figure 1. Adult female *Anastrepha nigrifascia* Stone. Credits: Division of Plant Industry

basally becoming brownish distally. The mesonotum is mostly brownish-yellow, the scutellum yellow, while the macrochaetae is black; pile yellow brown. The legs are yellow. The wing pattern is partly yellowish, partly brownish infuscated, and is somewhat variable. In some specimens, the inverted V band is connected at its apex with the S band on the anterior portion of the wing, while in others the inverted V band is incomplete with the distal arm of the V connected anteriorly to the S band and the proximal arm of the V constricted or separated in cell R<sub>5</sub>.

- 1. This document is EENY-262 (originally published as DPI Entomology Circular 66), one of a series of Featured Creatures from the Entomology and Nematology Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Published: January 2002. Reviewed: March 2011; revised March 2012. This document is also available on Featured Creatures website at <a href="http://entomology.ifas.ufl.edu/creatures">http://entomology.ifas.ufl.edu/creatures</a>. Please visit the EDIS website at <a href="http://edis.ifas.ufl.edu">http://edis.ifas.ufl.edu</a>. Additional information on these organisms, including many color photographs, is available at the Entomology and Nematology Department website at <a href="http://entomology.ifas.ufl.edu/">http://entomology.ifas.ufl.edu/</a>.
- 2. H. V. Weems, Jr., retired, Florida Department of Agriculture and Consumer Services, Division of Plant Industry.

## **Life History**

The life history of *Anastrepha nigrifascia* has not been ascertained, although adults have been reared several times from its two known hosts.

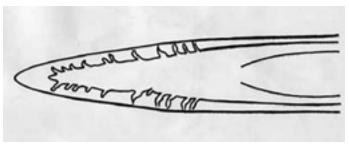


Figure 2. Ovipositor tip. Credits: Division of Plant Industry

## **Selected References**

State Plant Board of Florida Eleventh Biennial Report for the period July 1, 1934-June 30, 1936. Jan. 1937. p. 21. *Anastrepha* sp. "W," Brown.

Stone A. 1942. The Fruit Flies of the Genus *Anastrepha*. U.S. Department of Agriculture Miscellaneous Publication No. 439, Washington, DC. 112 pp.

White IM, Elson-Harris MM. 1994. Fruit Flies of Economic Significance: Their Identification and Bionomics. CAB International. Oxon, UK. 601 pp.

## **Hosts**

- Manilkara zapota, sapodilla
- Mimusops emarginata, wild-dilly or wild-sapodilla