FRUIT OF MORRENIA ODORATA (ASCLEPIADACEAE) AS A HOST FOR THE PAPAYA FRUIT FLY, TOXOTRYPANA CURVICAUDA (DIPTERA: TEPHRITIDAE)

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The papaya fruit fly, Toxotrypana curvicauda Gerstaecker, is a pest of papaya fruit, Carica papaya L. (Caricaceae), throughout much of the neotropics, including southern Florida in the United States. It had previously been considered restricted to papaya (Knab & Yothers 1914; Wolfenbarger & Walker 1974). However, it has been reported from mango in Florida (Butcher 1952) and from additional species of plants in Mexico (Castrejon-Ayala 1987).

I report here that papaya fruit flies have been reared from field-collected fruit of Morrenia odorata Lindl., an asclepiad or milkweed, in Florida. Pods were collected from climbing vines of M. odorata on a palm tree in a suburban neighborhood of Sarasota during April 1993. These fruit were mature in size (6-7 cm long and 3-5 cm diam) but were still green when collected, and produced latex when broken at the stem. Fruit were held in a screened cage in a laboratory at 22°C and 45–5% RH. On 20 April 1993 thirty-four mature larvae emerged from one of two fruit collected in Sarasota 1 April 1993. Three additional fruit collected 8 April did not yield any fly larvae. The 34 larvae were placed in sterilized potting soil for pupation. Twelve male and 11 female adult papaya fruit flies emerged from 19 to 22 May 1993, 30-33 days after pupation. Papaya fruit flies have not been reported previously from this plant.

Morrenia odorata was introduced into Florida, possibly from Argentina, and is widely distributed in the central area of the state. The utilization of such a widely occurring weed may conceivably promote a broader distribution of this pest insect in Florida, and make it easier for the papaya fruit fly to infest disjunct areas of papaya production.

Papaya fruit flies have been reared from the fruit of other Asclepiadaceae, in Mexico. Gonolobus sorodius A. Gray is a host of T. curvicauda in central Mexico (Castrejon-Ayala 1987, Castrejon-Ayala & Camino-Lavin 1991). Also, Baker et al. (1944) reported talayote, or talayotillo (a vine in the milkweed family) as a host either of T. curvicauda or an undescribed species of Toxotrypana in northeast Mexico. This plant...
may be the same as the talayote of Martinez (1969), which is Gonolobus erianthus D.C., a climbing milkweed vine found in Morelos, Mexico. The milkweed genus Morrenia is also a host of other species of Toxotrypana in Argentina (Blanchard 1959).

Voucher specimens are placed in the Florida State Collection of Arthropods, Gainesville, Florida and in the National Museum of Natural History, Washington, D.C. The plant was identified by C. Artaud of the Florida Dept. Agriculture, Division of Plant Industry, Gainesville, Florida. I thank R. Knight for information on Asclepiadaceae and A. L. Norrbom for information on Toxotrypana host records.

**SUMMARY**

Twenty three adult papaya fruit flies, Toxotrypana curvicauda Gerstaecker, were obtained from 34 mature larvae that emerged from field-collected fruit of the milkweed vine, Morrenia odorata Lindl. collected in Sarasota, Florida. Morrenia odorata appears to be an alternate host for the papaya fruit fly in Florida.

**REFERENCES CITED**


**MARTINEZ, M.** 1969. Las Plantas Medicinales de Mexico. 5th Edition, J usto Sierra 52. Mexico 1, D.F.