

Artipus floridanus Horn, another weevil pest of citrus<sup>1</sup>

(COLEOPTERA: CURCULIONIDAE)

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INTRODUCTION: Six species of weevils routinely found on Florida citrus were discussed and keyed in Entomology Circular 202 (Woodruff, 1979). Subsequent circulars have treated 5 species in detail, leaving only Artipus floridanus Horn.

DESCRIPTION (fig. 1-2): This small (5-6.5 mm) whitish weevil has a broad snout, the frons slightly narrower than rostrum. Mandibles with well developed scar indicating point of attachment of deciduous cusp, the mandibles lacking sulcus from lower edge of scar to posterior ventral edge of mandible. Claws are free, no auxiliary claws present, corbel of tibia 3 is closed. Humeri of elytra well developed.

There are no distinctive patterns of scales, but the color varies from white to a scattering of metallic green scales on a pale background. The punctures are deep and obvious.

TAXONOMY: The genus Artipus contains only the species floridanus in the U. S. It is placed in the subfamily Brachyderinae and tribe Naupactini which contains 26 other U. S. species in the following 5 genera: Graphognathus, Pantomorus, Mesagroicus, Ericydeus, and Glaphyrometopus (Kissinger, 1964).

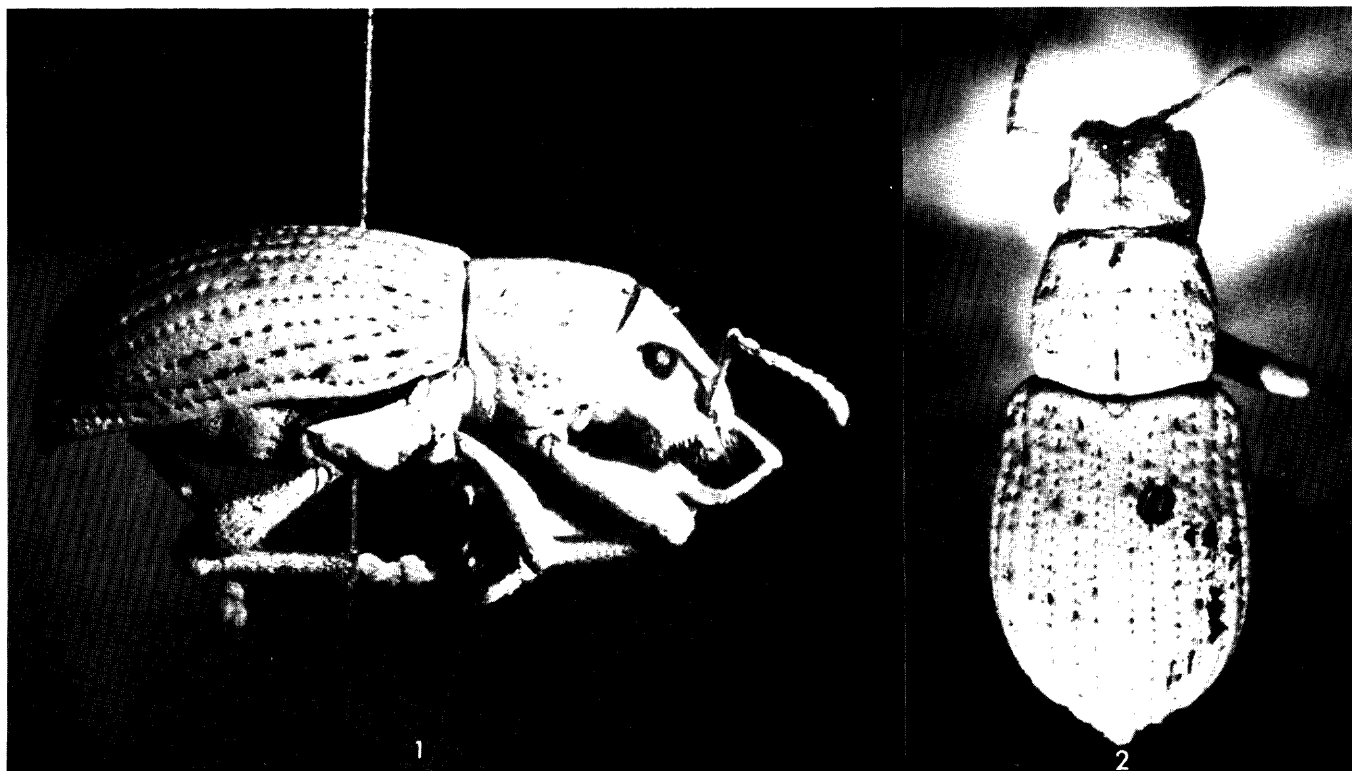


Fig. 1-2: Adult Artipus floridanus; 1) lateral, 2) dorsal.

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BIOLOGY: There has been only cursory mention of the biology in the literature. It is presumed that the larvae feed on roots of various plants, and adults feed on foliage. Recently Dr. Clay McCoy (pers. communication) has been rearing larvae on the artificial diet developed for Diaprepes abbreviatus (L.). Publication of these data should clarify much of the life cycle of Artipus floridanus.

ADULT HOSTS: Over 150 species of host plants have been recorded for this species in many plant families. Although it shows a definite preference for citrus, it is nearly omnivorous on all groups of plants.

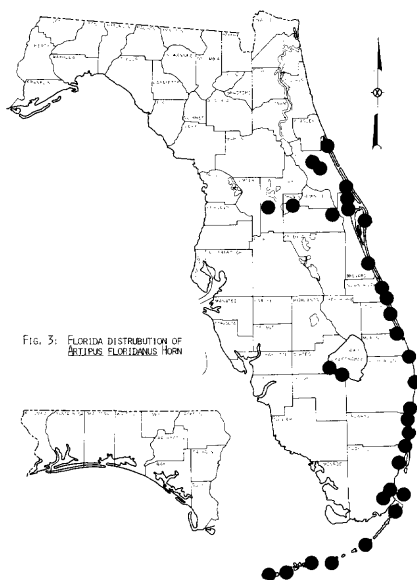
ECONOMIC IMPORTANCE: Although Artipus is locally abundant on some individual trees, it rarely has been severe enough to require control (Griffiths and Thompson, 1957). Little information is available on the larval damage to roots, but adults often notch leaves extensively.

DISTRIBUTION (fig. 3): As shown on the map, most records are on the east coast from the lower Florida Keys to as far north as Daytona Beach. It also occurs commonly in the Bahamas, and its distribution suggests a West Indian origin. It has been found once at Clewiston and in Glades County and then again at Groveland and Apopka, representing the only central Florida records. None has been found on the Gulf Coast.

SURVEY AND DETECTION: Adults are easily seen on foliage because of their grey-white color. Damage on leaves is in the form of notching, similar to many other Florida weevils.

CONTROL: Heptachlor and aldrin are apparently effective insecticides, but neither is registered by EPA for use on citrus.

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SELECTED REFERENCES:

- Griffiths, J. T., and W. L. Thompson. 1957. Insects and mites found on Florida citrus. Univ. Florida Agric. Exp. Sta. Bull. 591:1-96, 91 fig.
- Kissinger, D. G. 1964. Curculionidae of America north of Mexico. Taxonomic Publ., South Lancaster, Massachusetts. 143p., 59 fig.
- Woodruff, R. E. 1979. Florida citrus weevils (Coleoptera:Curculionidae). Florida Dept. Agric., Div. Plant Ind., Ent. Circ. 202:1-4, 20 fig.