

PLUCHEA ODORATA, A NEW HOST RECORD FOR
ACINIA PICTURATA (DIPTERA, TEPHRITIDAE)¹

CARL E. STEGMAIER, JR.²
11335 N. W. 59th Avenue, Hialeah, Florida 33012

Benjamin (1934) reported that *Acinia picturata* (Snow) (= *Acinia fucata* (Fabricius) of Benjamin) feed as larvae within the seedheads of *Pluchea* species. Further information by Foote (1964) is as follows: "*Acinia picturata* (Snow) (= *Acinia fucata* (F.) of North American authors) is found from New Jersey south to Florida and in all of the southern States west to and including California. It is also known to occur in Baja California, in Mexico at least as far south as the State of Veracruz, and in Jamaica, Puerto Rico, and on the island of Antigua. *A. picturata* has been reared from inflorescences of *Pluchea foetida*, *P. imbricata*, *P. purpurascens*, and *P. sericea*, and the larvae of *fucata* have been found in the stems of *Tes-saria absinthoides* and *T. integrifolia*, lending further credence to the distinction between the two species." Dr. Foote (personal communication) acknowledged the rearing of *A. picturata* from *Pluchea odorata* (L.) Cass. as a new host plant record for the species.

I found an extremely heavy infestation of *A. picturata* in the inflorescences of *Pluchea odorata* on 22 March 1966 at Dodge Island, Miami, Florida, by the shores of Biscayne Bay. The plant had just begun to produce clusters of flowering heads. Five plants were found on the west side of the island.

Examination of numerous seedheads established that no more than a single larva of *A. picturata* infested an individual flower of *P. odorata*. Larvae occurred within the immature flowers or buds more frequently than in the older or mature seedheads. The mature seedheads, in most cases, were observed to contain pupae (Fig. 1c); however, few seedheads examined on 23 March 1966 contained empty pupal cases. The larvae (Fig. 1b) fed on many seeds within a single seedhead, made a hollowed-out cell within the fleshy portion of the flowering head, and then constructed an envelope of dead seeds around its body. A single puparium was thus found within the constructed cell of a seedhead (Fig. 1a). Emergence of numerous *picturata* adults (Fig. 1d, e) followed soon after I confined quantities of *Pluchea odorata* inflorescences in rearing containers.

Sweepings of *P. odorata* resulted in the capture of many *picturata* adults, both teneral and mature, after 23 March and during April 1966. Seedhead examinations of *Pluchea odorata* on 7 May 1966 revealed many larvae and pupae that were parasitized by hymenopterous parasites. Variations in the sizes of pupae were noted, and the frequency of seedhead infestations on a percentage basis diminished during May 1966.

¹ Contribution No. 82, Entomology Section, Division of Plant Industry, Florida Department of Agriculture, Gainesville.

² Research Associate, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture.

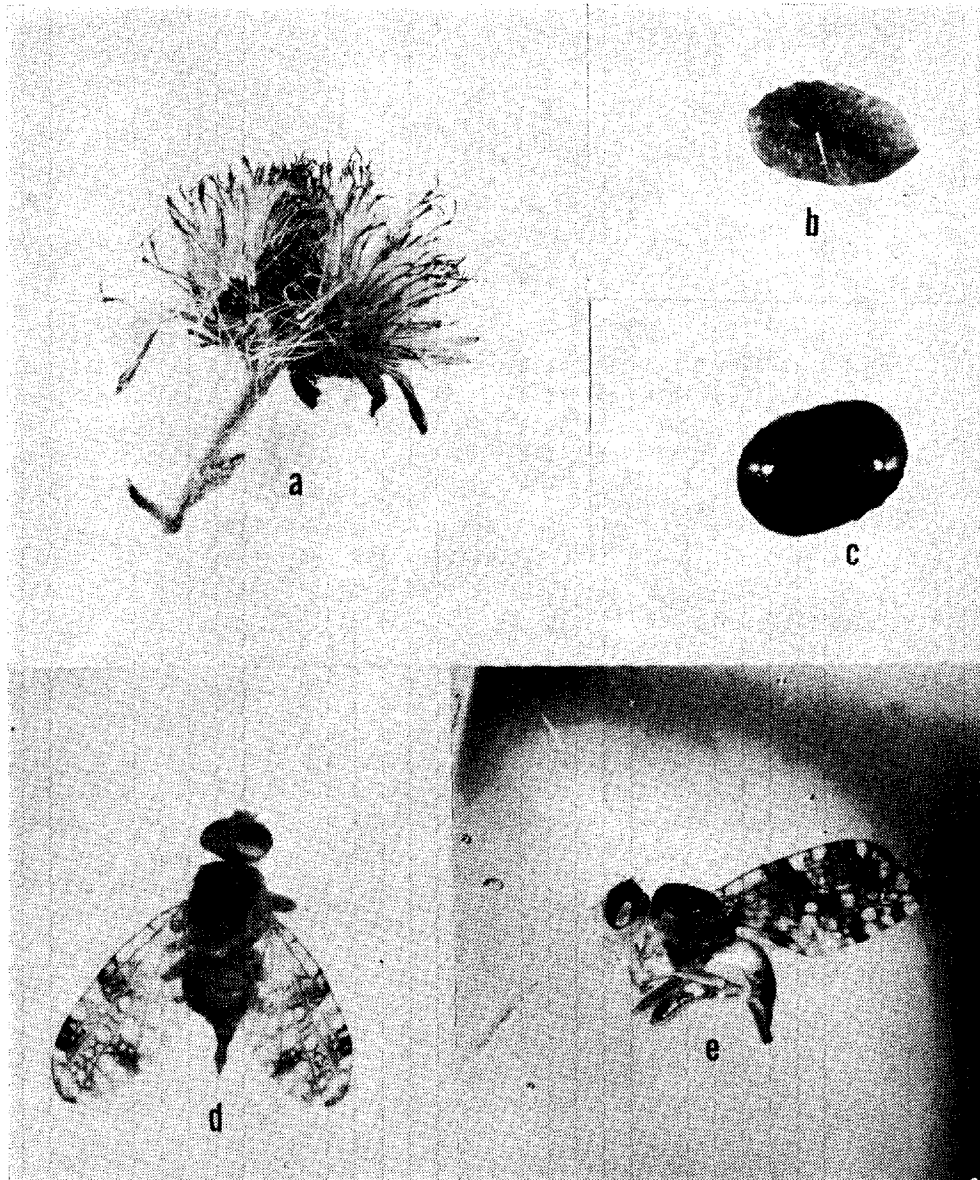


Fig. 1, a. Infested seedhead of *Pluchea odorata* containing a puparium of *Acinia picturata*.
 b. Larva of *Acinia picturata*. d. Dorsal aspect of adult female.
 c. Puparium of *Acinia picturata*. e. Lateral aspect of adult female.

Photographs courtesy of the Division of Plant Industry, Florida Department of Agriculture, Mildred Eaddy, Photographer.

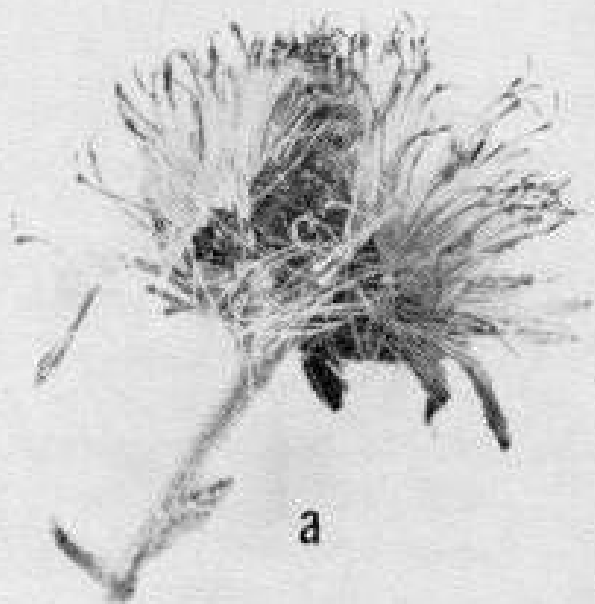
ACKNOWLEDGMENTS

The author is indebted to Dr. Richard H. Foote, Entomology Research Division, ARS, USDA, for the determinations of *Acinia picturata*, for information received in personal communication, and for reviewing this paper; to Dr. Kenneth R. Langdon, Nematologist and Botanist, Division of Plant Industry; and to Harold A. Denmark, Chief, Entomology Section, Division of Plant Industry, Florida Department of Agriculture, for making possible the photographs.

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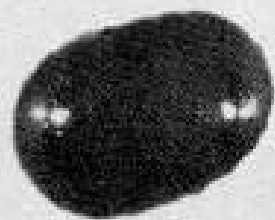
The Florida Entomologist 50(1) 1967



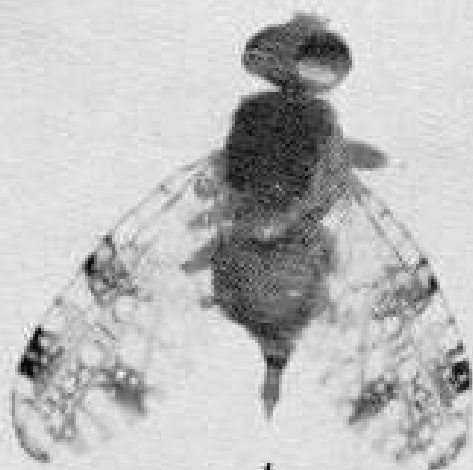
a



b



c



d



e