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**THE BINDWEED PLUME MOTH, *EMMELINA MONODACTYLA*
(LEPIDOPTERA: PTEROPHORIDAE): FIRST HOST RECORD FOR
PHAEOGENES VINCIBILIS (HYMENOPTERA: ICHNEUMONIDAE)¹**

Foster Forbes Purrington and Deborah H. Stinner²

ABSTRACT

The first host record for *Phaeogenes* (= *Oronotus*) *vincibilis*, a solitary ichneumonine pupal parasite, is the bindweed plume moth, *Emmelina monodactyla*.

Worldwide importance of *Ipomoea batatas* (sweet potato) as a food staple and the contrasting status of some other herbaceous Convolvulaceae species as pernicious agricultural weeds has focused much interest on their faunal associates here and in Mediterranean Europe (Rosenthal and Buckingham 1982) in efforts to discover suitably specific bio-control agents. *Emmelina monodactyla* (L.), the bindweed plume moth, is a cosmopolitan (Forbes 1923) leaf feeder on several convolvulaceans including *Convolvulus arvensis* (field bindweed), *Calystegia sepium* (hedge bindweed), as well as sweet potato (Barnes and Lindsey 1921, Mohyuddin 1969). We observed a vigorous population of this moth on lush adventitious field bindweed in a greenhouse at Wooster, OH during the 1986 and 1987 growing seasons.

In both years, plume moth pupae were parasitized (ca. 25%) by *Phaeogenes* (= *Oronotus*) *vincibilis* (Cresson), a solitary endoparasite. This constitutes the first host record for this wasp. In addition to parasitism by *P. vincibilis*, *Emmelina monodactyla* was attacked (ca. 2%) by *Cotesia* sp. (Hymenoptera: Braconidae), a solitary larval endoparasite.

Whereas several of the field bindweed insects we observed in the greenhouse were also found associated with bindweed outdoors, *Phaeogenes vincibilis* was not. Therefore, the association of *P. vincibilis* with *E. monodactyla* should be viewed as a possible outcome of the eclectic character of greenhouse faunal assemblages until it can be repeated from field rearings.

Known hosts of other *Phaeogenes* species represent a range of Microlepidoptera, including other pterophorids for *P. cynarae* Bragg, and sesiids for *P. ater* Cresson (Carlson 1979, Purrington and Nielsen 1987).

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