THE BLACKBERRY CLEARWING BORER, *PENNISETIA MARGINATA* (HARRIS): A FIRST REPORT IN FLORIDA

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According to Covell (1984) the blackberry clearwing borer (or raspberry crown borer), *Pennisetia marginata* (Harris), ranges only as far south as North Carolina and Mississippi. Likewise, neither Engelhardt (1946), Kimball (1965), nor Sharp et al. (1978) recorded this species of Sesiidae as a resident of Florida.

Several synthetic pheromones were used for collecting clearwings in west Florida during the fall months of 1984. A single male *P. marginata* was taken on November 14, near Branchton in northeastern Hillsborough county. It was attracted to a Pherocon 1C sticky trap (Zoecon Corp., Palo Alto, CA) baited with 500 μg of (E,Z)-3,13-octadecadien-1-ol dispersed from a rubber septum. Solomon (1982) reported in Mississippi, that *P. marginata* responded only to the E,Z-alcohol out of the many combinations of 3,13-octadecadienyl acetates and alcohols tested.

The Hillsborough Co., Florida specimen was collected in an old-field community dominated by broomsedge (*Andropogon* sp.) and blackberry (*Rubus cuneifolius* Pursh), with scattered myrtles (*Myrica cerifera* L.) and saltbush (*Baccharis halimifolia* L.). Since the larvae of *P. marginata* bore in the stems of various species of the genus *Rubus*, the blackberry plants scattered throughout this old field are probably the larval host plant. Two other species of blackberries (*R. betulifolius* Small and *R. trivialis* Michx.) occur in central Florida and may also serve as hosts for this species. An attempt will be made in the future to recover larvae from the blackberry canes at the collection site.

Regarding other possible Florida specimens, Tom Eichlin (pers. comm.) indicated a very old specimen of *P. marginata* in the Museum of Comparative Zoology, Harvard University (collected by R. Thaxter) labeled "Florida," but it contains no locality or date of collection. A search of Florida Department of Plant Industry Collection in Gainesville likewise uncovered one undated specimen in poor condition, labeled *Bembecia marginata* (collected by H. V. Weems at Sebring). Howard Weems (pers. comm.) does not now recall collecting the specimen, nor can he remember the date it was collected or under what circumstances. These two records if valid, also add documentation of the new sesiid species for the state of Florida.

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NEW RECORDS OF THE RARE CLEARWING MOTH, *ALCATHOE CAROLINENSIS* ENGELHARDT, (SESDIIDAE) IN FLORIDA

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The rare black, tailed, clearwing moth, *Alcathoe carolinensis* Engelhardt, is previously known from Florida only by a single specimen taken by Sharp & Eichlin (1979) in north-central Florida during an extensive four-year sex attractant trapping study (1975-78). This lone Florida specimen was a male taken in a sticky trap located in a peach orchard near Lowell in Marion Co. on October 6, 1977. Prior to Sharp's state record, *A. carolinensis* was known in the U.S. only from a single male specimen considered by Engelhardt (1946) to be a female and a doubtful record presumably taken by Beutenmüller in the Black Mountains of North Carolina. Engelhardt speculated incorrectly that the lone specimen was probably a mislabled clearwing species from Mexico or Central America.

In the late summer and fall months of 1984, extensive sampling for sesiids using sex attractants was begun at numerous locals in west-central and southwestern Florida. This survey will continue for two years but has already produced three new Florida localities for *A. carolinensis*, thus confirming Sharp's lone published state record. The specimens are as follows: 1) 1 male taken at Chassahowitzka, Citrus Co. on Oct. 12, 1984; 2) 1 male taken 1 mi. W. of Homosassa Springs, Citrus Co. on Oct. 14, 1984; and 3) 1 male taken 1½ mi. SW of Crystal River, Citrus Co. on Oct. 19, 1984. The Chassahowitzka specimen was taken in a Pherocon R-1C sticky trap, but the other two were trapped alive in excellent condition, in home-made cylindrical live-traps originally designed for sugared-beer baiting for noctuid moths. All three specimens were attracted to commercially prepared strips containing capillary tubes (Pest Select, Inc.) which release *EZ*-3,13-octadecadien-1-ol acetate (usually abbreviated *EZ*-3,13 ODDA). Several other isomers & chemical combinations known to be sesiid attractants were also utilized, but they failed to attract *A. carolinensis*. These include: 1) *ZZ*-3,13-ODDA, 2) *EZ*-2,13-ODDA, 3) *EZ*-3,13-ODD alcohol, and 4) 50% *EZ*-3,13-ODDA plus 50% ZZ-3,13-ODDA. The identifiction of *A. carolinensis* was confirmed by T. D. Eichlin, Division of Plant Industry, Sacramento, California. The specimens are presently deposited in the U.S.F. Biological Collections.

It should be noted that the single specimen taken in 1977 (Sharp, et. al. 1978) responded to a trap baited with a mixture of 25% *ZZ*-3,13-ODDA plus 75% *EZ*-3,13-ODDA, and the date was within a week of the first specimen taken in 1984. It is possible that *A. carolinensis* in Florida, has a fairly narrow annual emergence window, because to date it has been recorded only in October, even though traps were baited with attractant more or less continuously throughout the fall months in suitable areas.