INTRODUCTION AND PROBABLE ESTABLISHMENT OF
HEMIPSOCUS CHLOROTICUS (PSOCOPTERA: HEMIPSOCIDAE) IN FLORIDA

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ABSTRACT

Hemipsocus chloroticus (Hagen) is reported in the Americas for the first time. Records from Miami International Airport are cited suggesting its introduction there on orchid plants primarily from Guatemala. The first field collections of this insect in Florida were made early in 1972. Data are reviewed which suggest that the species was either absent or too scarce to be detected by collectors in southern Florida prior to 1972.

Hemipsocus chloroticus (Hagen) was described from Ceylon in 1858. Thornton et al. (1972) recorded it also from Vietnam, Java, Dornoe, Philippines, Taiwan, Japan, Amami Islands, Hawaii, Guam, Caroline Islands, and Marshall Islands. There are no published records from the American tropics or subtropics, nor are there any known field collections from the area except the ones cited below. It seems likely that the species is established locally in southern Mexico (3 specimens from Veracruz were intercepted by U. S. Department of Agriculture inspectors at Brownsville, Texas in 1960 and were sent to me for identification) and Guatemala.

From 1961-1967, I received 10 lots of this species for identification from the U. S. Department of Agriculture. These had been taken at Miami International Airport. Seven of these were from orchid plants entering the country, and 3 were from an ultraviolet light trap in the inspection room. Six of the orchid plant lots originated in Guatemala and 1 in India. These data strongly suggest the source and mode involved in introduction of this species into Florida. The records from the ultraviolet light trap suggest that these insects escaped readily from their host (the species of Hemipsocus are rapid runners and adults take to flight readily). This could happen also prior to entry of the inspection room. The species is probably not restricted to orchids. Other species of Hemipsocus occur on banana, palms, and at least occasionally on dry leaves of dicotyledonous trees and shrubs.

The first field collections of this insect in Florida were made in a light trap operated by S. W. Frost at Archbold Biological Station, Highlands County. One female was taken 3 January and 1 male 10 January 1972.

It is never possible to prove beyond any doubt that a species was absent from an area prior to a certain date, but there are much collecting data from southern Florida prior to the dates indicated above. From August 1951 to December 1971, I made 11 collecting trips for psocids to southern Florida without finding this species. From November 1959 to the present, I have done the psocid determinations for the Florida Department of Agriculture. This has involved about 700 specimens from all parts of Florida and no H. chloroticus were found. During the same period I determined about 800 other psocid specimens from southern Florida for various collectors without finding this
species. Included in this number were about 400 specimens taken by Dr. Frost in light traps at the Archbold Station from November 1958 to May 1969. It is pertinent that *H. chloroticus* was lacking from this material. If *H. chloroticus* was present in southern Florida prior to 1972, its numbers were probably too low to be detected by the usual collecting methods. I do not believe that this new member of the Florida psocid fauna will be of any economic significance.

**LITERATURE CITED**


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