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CARMENTA GUAYABA, A NEW CLEARWING MOTH FROM PERU (LEPIDOPTERA: SESIIDAE)

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ABSTRACT.- A new species of Sesiidae from Iquitos, Peru, Carmenta guayaba Eichlin, n. sp., is described and salient features illustrated. Adults were reared from larvae boring in the bark of Psidium guajava L. (guava).

KEYWORDS: Amazon, Carmenta guayaba n.sp., distribution, hostplant, Iquitos, Loreto, mimicry, Myrtaceae, Neotropical, sex attractants, South America, taxonomy.

Due to the secretive nature of the Sesiidae, they are poorly known in the Neotropics (Duckworth and Eichlin, 1978:1-2), and the host plants of few species are documented. This report is the direct result of a request for the identification of a clearwing moth reared from the bark of Psidium guajava L. (guava) (Myrtaceae) in Peru. The specimens were provided by Guy Couturier, Muséum National d'Histoire Naturelle, Paris (MNHN) and collected by his Peruvian colleague Cesar Delgado, Instituto de Investigaciones de la Amazonia peruana, Iquitos. They study insect pests of fruit trees in the Peruvian Amazon region. This species name is made available to facilitate the work of these researchers.

Carmenta guayaba Eichlin, new sp. (Fig. 1)

Diagnosis .- Wing length 8.5-10.0mm. Carmenta guayaba has thickened, shortened antennae (less than half the length of the forewing). The labial palps are roughened and contrastingly colored, with apical half lemon yellow. Both pairs of wings are transparent and with rust red powdered on the anterior and posterior margins and on the outer portion of the discal spot. The dark abdomen has narrow yellow bands on segments two, four, six (also segment seven on males), and at least laterally on five, and ventrally has a yellow band only on segment four. There are no known Carmenta species with this combination of features (Duckworth and Eichlin, 1978)

Description .- FEMALE (Fig. top & middle): Head with vertex brown black; front gray, white laterally; occipital fringe yellow dorsally, brown black laterally; labial palpus roughened, ventrobasally narrowed and extended with wide, brown-black scales, ventroapical half lemon yellow, some brown black dorsally and at tip; antenna thickened, shortened (less than half length of forewing), orange ventrally. Thorax brown black, very narrow, yellow, subdorsal stripe; some yellow laterally; yellow on metathorax. Abdomen brown black, dorsally with yellow banding on segments 2, 4 and 6; laterally with yellow also on 5; ventrally with yellow on 4 only; last segment with sublateral yellow stripe and narrow yellow stripe laterobasally running diagonally joining dorsoapically with stripe from other side forming V-shape as seen from above, back to front. Legs mostly brown black with yellow marginally and basally on forecoxa; pale orange on forefemur; yellow around tibiae at tibial spur pairs, distally on first tarsal segment and mesally on all tarsi. Wings mostly hyaline with narrow brown-black margins and discal spot; forewing with narrow line of rust red scaling on costal margin, mostly rust red on posterior margin, rust red on apical half of discal spot. (The holotype female was not dissected.)

MALE: Similar to female holotype; abdominal with pale markings much like female, 5-7 pale yellow to white and with addition of segment 7 pale yellow on posterior margin; as on female anal tuft not well formed, yellow stripe only on lateral margin. Genitalia as figured (Fig. bottom).

Host plant.- Psidium guajava L. (guava) (Myrtaceae).

Distribution .- Known only from the type locality: PERU: Loreto, Iquitos. Types .- Holotype 9 - PERU: Loreto, Iquitos, 21 Apr 1999, C. Delgado; Estacion IIAP, Quistococha (MNHN). Allotype &: same as holotype (USNM).

Paratype &: same as holotype, except: Genitalia by S. A. Kinnee, CDA #881. (CSCA).

Etymology .- The specific epithet, guayaba, is the Spanish name for guajava in tropical America and reflects the host plant species for this moth.

Remarks .- This species is known from three reared specimens, the female holotype and two male paratypes (one an allotype). According to G. Couturier, "This material has been obtained in the orchard of the Instituto de Investigaciones de la Amazonia Peruana en Iquitos, Estacion Quistococha carretera Iquitos-Nauta, 73°16 W 3°49 S (Latin America and the Caribbean: Agroclimatological Data-FAO Rome, 1985). The caterpillars eat the living part of the bark, and they do not live in galleries" (pers. comm.).

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LITERATURE CITED

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Fig. 1. Adult female of Carmenta guayaba Eichlin (top: dorsal view; middle: ventral view); male genitalia (bottom: ventral view).