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DESCRIPTION OF A NEW *COPTURUS* PEST OF AVOCADOES  
FROM MEXICO

(COLEOPTERA: CURCULIONIDAE: ZYGOPINAE) HUMANISTICA

by

D. G. KISSINGER,

R. D. Num. 4, Reading, Penna.,

U. S. A.

U. N. A. M.

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*Copturus aguacatae* nov. sp.

Length: 3.77 to 4.87 mm.; width: 2.00 to 2.25 mm.

Black, elytra reddish except at humeri, base, suture, and apex which are black; legs and antennae reddish; rostrum varies from piceous to reddish; sides of prothorax sometimes reddish. Pubescence sparse, not arranged in a definite pattern, largely white or orange in color, elytra with a more or less distinct region of whitish scales basad of elytral declivity, basal area of elytra with a few, fine, dark scales; prothorax at apex and apical lateral region with sparse orange scales, scales toward base and front coxae become whiter; abdomen densely clothed with whitish scales. Rostrum of male one-third longer than prothorax, of female one-half longer than prothorax; in both sexes evenly curved, antennae inserted slightly distad of basal third of rostrum. Frons of male at narrowest width one-fourth as wide as rostrum (in dorsal view) at antennal insertion, of female at narrowest width one-half as wide as rostrum at antennal insertion. Scape of antenna slightly shorter than funicular segments 1 and 2 combined; second funicular segment one-sixth to one-third longer than first, of

male slightly longer than segment 3 and 4 combined, of female slightly shorter than segments 3, 4, and 5 combined, about as long as club in both sexes; club 0.24 mm. long by 0.10 mm. wide. Prothorax at base about one-half wider than long (measured along mid dorsal line), apex two-thirds as wide as base; sides converging slightly to somewhat distad of middle, then rounding more strongly toward apex which is not constricted; with a short, median, longitudinal raised carina in middle of dorsal surface; punctures about 0.06 mm. in diameter, on dorsal surface interspaces narrow, cariniform, obliterated in part so that some punctures are coalescent, laterally interspaces are somewhat wider and not obliterated; in profile dorsal surface is rather strongly arcuate, highest point is distinctly basad of middle. Elytra at humeri two-fifths wider than prothorax at base, about 2.5 times as long as prothorax, length to width as 5:4; widest point slightly behind humeri, sides converging slightly from there to middle; intervals 5-9 more or less raised and prominent at preapical callus at declivity, intervals 5, 7 and 9 more prominently produced in that area; elytral tip slightly, acutely produced; intervals 3, 5, and 7 with a distinct, longitudinal carina, these intervals more prominent than other intervals; intervals 4 and 6 with slight, subcomplete carina; other intervals more or less flat.

Holotype, male, *Mexico*: Guerrero: Zumpango, 30 III 1951, E. Neri, in the entomological collection of the "Defensa Agrícola," México, D. F.; allotype, female, same data as holotype, in same collection; twenty paratypes: three, same data as holotype; eight, Puebla: Atlixco; four, Puebla: La Trinidad Tepango, 8 June 1955, J. M. Ramírez (U. S. National Museum); three, Morelos: Oaxtepec, VI 1956, F. Islas; two, Joncatepec, 9 VI 1955, J. M. Ramírez (U. S. National Museum). Paratypes are in the entomological collection of the "Defensa Agrícola," México, D. F.; author's collection, U. S. National Museum; and British Museum (N. H.).

With the exception of *Copturus constrictus* Champion and *C. verrucosus* Champion, *C. aguacatae* is distinct from all the Mexican and Central American species of *Copturus* by the prominent swellings of the elytral intervals above the declivity. The elytra of all of the

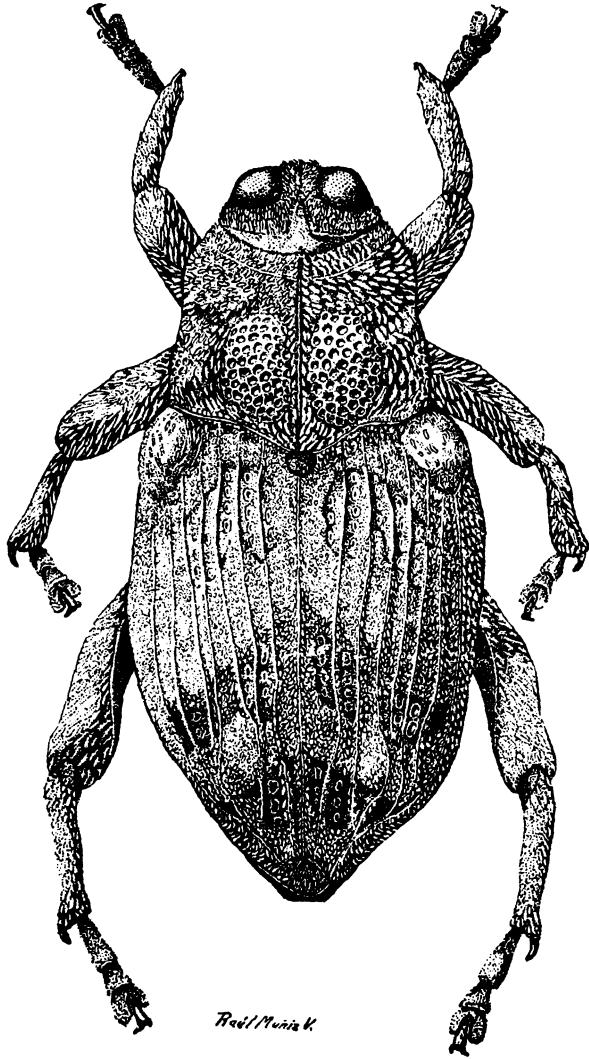
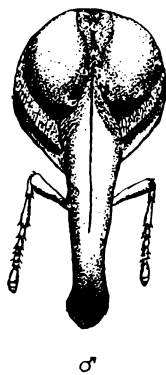
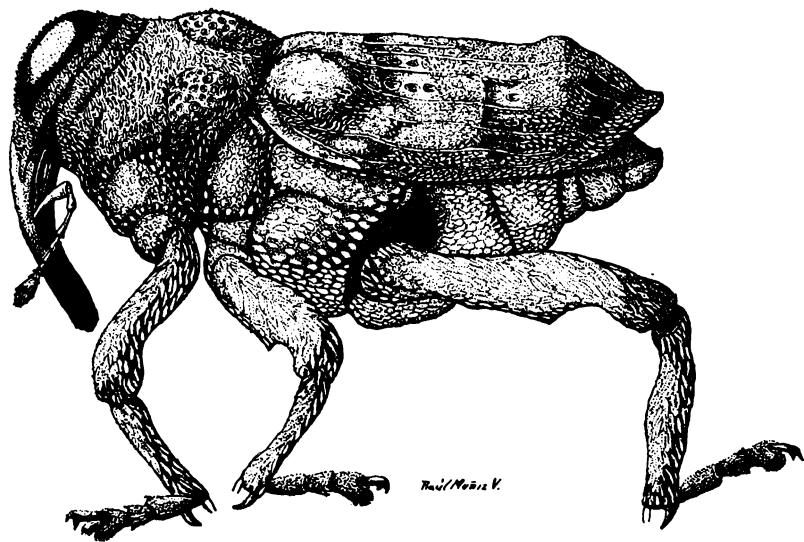
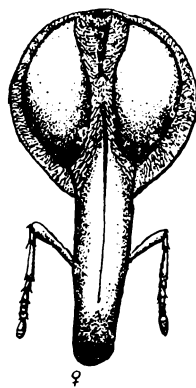


Fig. 1.—*Copturus aguacatae* nov. sp., hembra, aspecto dorsal.



*Paul Meris V.*



Figs. 2 a 5.—*Copturus aguacatae* nov. sp., 2, aspecto lateral del medio; 3, aspecto frontal de la cabeza del macho; 4, antena de la hembra; 5, aspecto frontal de la cabeza de la hembra.

other Central American species of *Copturus* are more or less even throughout. *C. verrucosus* has the prothorax even more strongly arched and has a very prominent carina on the prothorax. *C. constrictus* has the elytral tips strongly produced into a toothlike projection.

In the U. S. National Museum collection L. L. Buchanan has placed *Copturus perseae* Günther (1935) in the genus *Copturomimus* Heller (1895) so that the name of the species becomes *Copturomimus perseae* (Günther, nov. comb.). Examination of Günther's material shows that the males have a small, striate area on the inside of the front femora, a character of importance Champion (1906) used in redefining the genus. *Copturomimus hustachei* nov. nom., is here proposed to replace *Copturomimus perseae* Hustache (1947, p. 189), which is preoccupied by Günther (1935).

Including the species just described, five species of Zygotinae related to *Copturus* are known to attack avocado in the New World: *Copturus aguacatae* Kissinger, *Copturus constrictus* Champion (1906, p. 73), *Copturus lunatus* Hustache (1937, p. 82), *Copturomimus perseae* (Günther, 1935), and *Copturomimus hustachei* Kissinger. *Copturus lunatus* and *Copturomimus hustachei* both have a large distinct black spot behind the middle of the elytra. *Copturomimus perseae* is smaller than *Copturus aguacatae*, the male has a striate area on the front femur (which character the latter genus lacks), and the elytra are not prominent above the declivity as in *aguacatae*.

In the U. S. National Museum is material of *Copturus constrictus* which is associated with avocado. Costa Lima (1956, p. 219) associates *Copturus lunatus* with "abacateiro" (*Persea gratissima*) in Brasil. *Copturomimus perseae* was described from material from Costa Rica associated with avocado. *Copturomimus hustachei* is a serious pest of avocado in Colombia (Moreno, 1947).

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