A new Central American Dasydemella (Psocoptera = Corrodentia; Amphipsocidae)

by

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Abstract: Dasydemella obrienorum sp. nov. is the fifth species known in Dasydemella (Psocoptera=Corrodentia), an American psocid genus formerly recorded only from Mexico and Brazil; the new species was collected in Panama and Guatemala. The genitalia of both sexes, as well as wings, a lacinal tip and a pretarsal claw are illustrated; measurements, ratios and etenidial counts are also given for one specimen of each sex. The characteristic wing markings and the shape of the pterostigma separate D. obrienorum from the other species in the genus. The types are deposited in the author's collection.

Dasydemella is an American psocid genus erected in 1909 by Enderlein; the type species is D. silvestrii, described for a female from Jalapa, Veracruz, México and now known to be widely distributed in this country. To this date, the male of this species has not been described nor illustrated. Roesler (1940), added two species to the genus, D. setosa and D. gynopeza, both from Nova Teutonia, Santa Catarina, Brazil. In these species, the males are winged and the females are wingless ("flugellos" of Roesler = micropterous?). Mockford (1974), described D. dezavasi from Cuba, similar to D. setosa Roesler and known only from the male.

In this paper I describe a *Dasydemella* known from Panamá and Guatemala; the specimens were taken by Drs. Charles W. and Lois O'Brien, dedicated entomologists and enthusiastic collectors, well known for their work on the Curculionidae and Fulgoroidea, respectively. The species here described is dedicated to them.

Measurements are given in microns for one individual of each sex; the following abbreviations were used for parts measured: FW = length of forewing; $\Gamma = length$ of posterior tibia; t_1 , $t_2 = length$ of first and second posterior tarsomeres; $t_1ct = length$ of ctenidia on first posterior tarsomere; IO = length

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distance between compound eyes; D= greatest anteroposterior compound eye diameter in dorsal view of head; d= greatest lateral compound eye diameter in dorsal view of head; PO= d/D.

Dasydemella obrienorum sp. nov.

Female, measurements: FW: 4,806; T: 1,603; t1: 471; t2: 198; t1ct: 16; IO: 584; D: 253; d: 190; IO/D: 2.30; PO: 0.75.

Color (in specimens preserved in 80% alcohol): Body dull yellowish white. Compound eyes black, ocelli clear, with centripetal crescents dark brown, set on a prominent tubercle; spots of vertex pale chestnut, lacinial apices and styli areas of labrum dark brown. Distal halves of fourth segment of maxillary palps pale chestnut. Scape, pedicel and first two flagellomeres of each antenna dull yellow, distal flagellomeres brown. Legs approximately the same color as rest of the body, tibiae slightly darker, distal halves of first tarsal segments pale chestnut, second tarsal segments and claws chocolate, apices of claws dull yellow. Wings (Figs. 1-2) spotted, spots on posterior half of forewings chamois (Ridgway, 1912), spots in and around pterostigma slightly darker. Spots in cubital, anal and axillary cells of foreand hindwings liver brown (Ridgway, 1912). Tergal lobes of mesothorax pale brown, with brown setae, scutellum dark brown. Tergal lobes and scutellum of

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Figs. 1-13. Structures of Dasydemella obrienorum sp. nov. Fig. 1. Forewing, ♀
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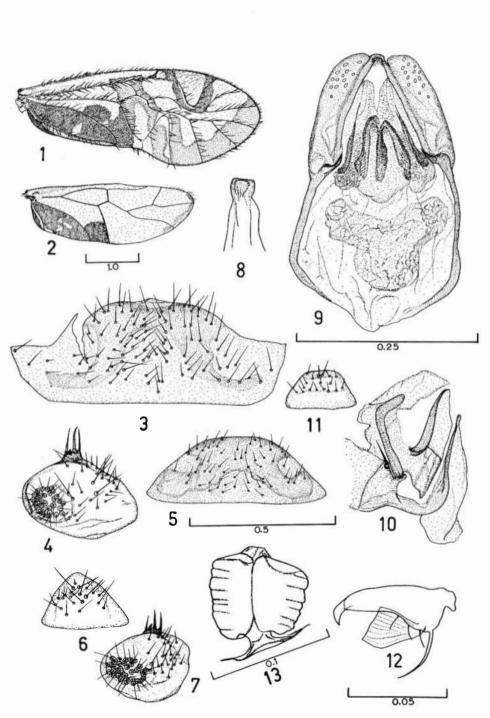
metathorax with deeper pigmentation than mesothorax.

- Fig. 2. Hindwing, 9
 - Subgenital plate, ?
- Fig. 4. Left paraproct, ♀

Fig. 3.

- Fig. 5. Hypandrium o
- Fig. 6. Epiproct, ♀
- Fig. 6. Epiproct, ^QFig. 8 Tip of lacinia, ^Q
- Fig. 9. Phallosome, of
- Fig. 9. Phallosome, o
- Fig. 10. Gonapophyses, ♀
- Fig. 11. Epiproct, o
- Fig. 12. Pretarsal claw, ♀
 - . 12
- Fig. 13. Glandular area of spermatheca, ♀

Scales in mm. Figures 3, 4, 6, 7 and 11 to same scale as Figure 5. Figure 10 to same scale as Figure 9. Figure 8 to same scale as Figure 12.



Morphology: Subgenital plate (Fig. 3) wide, surface setose. Gonapophyses (Fig. 10). Glandular area of spermatheca (Fig. 13). Paraprocts (Fig. 4), stout cone on apical promontory flanked by two macrosetae. Sensory fields with 31-32 trichobothria (counted in one specimen). Epiproct (Fig. 6).

Male, measurements: FW: 4,036; T: 1,537; t₁: 424; t₂: 198, t₁ct: 18; IO: 424; D: 348; d: 292; IO/D: 1.21; PO: 0.838.

Color (in specimens preserved in 80% alcohol): In general same as the female, with slightly deeper pigmentation; ocellar tubercle more prominent than in the female; scape, pedicel and flagellum chestnut, veins pale chestnut.

Morphology: Hypandrium (Fig. 5) wide, setose. Phallosome (Fig. 9) with broad parameres, posterior end of frame acutely angular, blunt tipped, anterior end weakly sclerotized. Paraprocts (Fig. 7) with prominent apical group of three stout macrosetae flanking a strong, short cone; sensory fields with 34 and 36 trichobothria (counted in one specimen). Epiproct (Fig. 11) trapezoidal, setose.

In both male and female, lacinial tips broad and flat (Fig. 8); two abdominal vesicles present; pretarsal claws (Fig. 12) with wide pulvillus and long setae basally.

Type locality: Cerro Campana, Panamá Province, Panamá. July 6, 1974, Charles W.O'Brien and G.B. Marshall. Holotype $\[mathscript{3}\]$, allotype $\[mathscript{9}\]$. Types in the author's collection. Genitalia of both sexes and female right wings mounted permanently in Euparal.

Records, Guatemala: 32 mi. S E of Cobán, elev. 2,000 m. July 26, 1974. Charles W. & Lois O'Brien and G. B. Marshall. 1 σ , 1 \circ .

Comments: This species is separable from the others in the genus by the peculiarities of the wing marking, the highly elevated and narrow areola postica and the shape of the pterostigma, unique in the genus.

RESUMEN

Dasydemella obnenorum sp. nov. es la quinta especie que se conoce de Dasydemella (Psocoptera = Corrodentia), un género americano anteriormente registrado sólo en México y en Brasil. La nueva especie fue colectada en Panamá y en Guatemala. Las estructuras genitales de ambos sexos, así como las alas, un ápice de la lacinia y una uña pretarsal se ilustran en este trabajo. Se presentan también medidas, proporciones y cuentas de ctenidia para un ejemplar de cada sexo. El moteado de las alas y la forma del pterostigma son característicos y permiten separar a D.obnenorum de las demás especies del género. Los tipos se encuentran depositados en la colección del autor.

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