

A NEW SPECIES OF *PLEGADIPHILUS*
(MALLOPHAGA: MENOPONIDAE)
FROM THE CAYENNE IBIS

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ABSTRACT

A new species of Mallophaga, *Plegadiphilus cayennensis*, collected in Venezuela off the Cayenne Ibis is described. This is the fifth known species in the genus.

The genus *Plegadiphilus* Bedford, currently contains four known species all of which are restricted to ibises. Recently Dr. Vernon Tipton, Brigham Young University, sent us several Mallophaga from Venezuelan birds for identification. Included in the lot was a small series of *Plegadiphilus*, which represented a new species. It is herewith described and illustrated.

Plegadiphilus cayennensis, new species
(Fig. 1-3)

FEMALE HOLOTYPE: Head triangular-shaped; preocular width, 0.45; temple width, 0.66; and head length, 0.38 mm. Lateral margin notched, with deep narrow slit. Chaetotaxy of head as shown in Fig. 3.

Prothorax width, 0.43 mm; with 16 marginal pronotal setae, 12 of these are long. Mesosternal plate with 8 medium-length and 2 short setae. Metasternal plate with 18 medium-length setae. Metanotum with 22 marginal setae, 12 of these are long, and 2 short medioanterior setae. Metathorax width, 0.58 mm. Third femoral brushes with 26 setae each.

Abdominal pleurites of segments II-VI with posteroventral angles prolonged posteriorly as pointed projections. Marginal tergal setae: I, 24; 11, 26; III-IV, 32; V, 26; VI, 24; VII, 16; and VIII, 10. Post spiracular setae very long on segments II-VIII. Sternal setae: I, 10; II, 48; III, 52; IV, 80; V, 92; VI, 74; VII, 54; and VIII, 28. Vulva marginally with 20 setae. Anus ventrally with 34 medium-length setae and 34 short-setae, dorsally with 36 medium-length setae and 28 short setae. Total length 2.35 mm. General shape and chaetotaxy as shown in Fig. 3.

MALE ALLOTYPE: Head preocular width, 0.40; temple width, 0.58; and head length, 0.33 mm. Prothorax width, 0.37; and metathorax width, 0.44 mm. Front margin of head more rounded than in female. Thorax similar to female except smaller in size; and with 15 marginal pronotal setae, 11 of these long; 20 metasternal plate setae; and 16 marginal metanotal setae, 8 of these long. Third femoral brushes with 22 setae each.

Marginal tergal setae on abdominal segments I-VIII: 21, 22, 25, 23, 27, 20, 18, and 15. Sternal setae on abdominal segments I-VIII: 5, 36, 37, 54, 61, 55, 34, and 24. Pleurites as for the female.

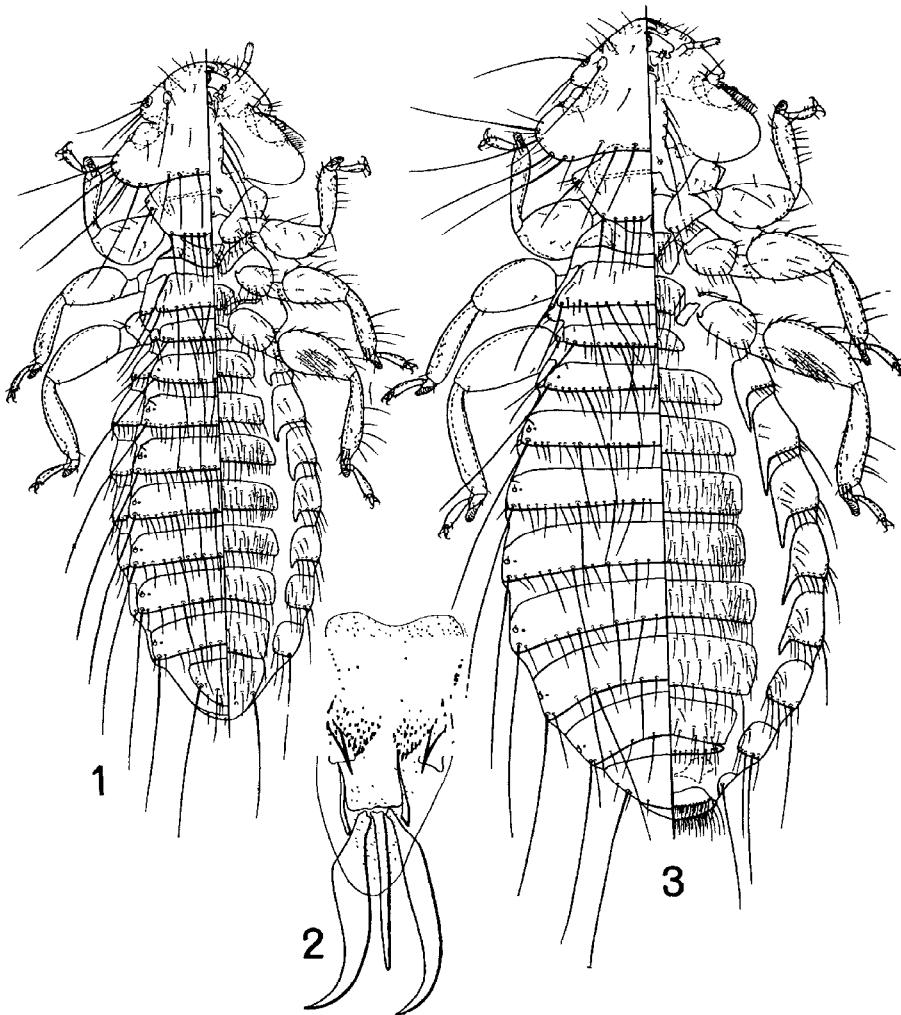


Fig. 1-3. *Plegadiphilus cayennensis*, new species, Fig. 1, Dorsal-ventral view of male. Fig. 2. Male genitalia. Fig. 3. Dorsal-ventral view of female.

Total length, 1.93 mm. General shape and chaetotaxy as shown in Fig. 1. Male genitalia as shown in Fig. 2.

Discussion; Male genitalia of *P. cayennensis* differ grossly from those of *P. threskiornis* Bedford but are nearer to those found in the other species of the genus. *P. plegadis* (Dubinin) and *P. mamillatus* (Piaget) have posterior pleurite projections on abdominal segments II-VII, whereas these projections are found only on segments II-VI in *P. cayennensis* and *P. eudocimus*. *P. cayennensis* is closely related to *P. eudocimus* but can be separated from it by the following differences: (1) larger in size in both sexes; (2) more setae in the femoral brushes; (3) postspiracular setae on abdominal segment V longer in both sexes; (4) male with fewer marginal

tergal setae on segments VI-VIII; (5) female with longer marginal tergal setae medially on segment VIII; and (6) pleurites III-VI of female with 1 marginal seta much longer than others.

Type host: *Mesembrinibis cayennensis* (Gmelin).

Type material: Holotype female, allotype male, and paratype female collected off type host at Hato La Florida, Bolivar, Venezuela on 14 April 1967. The holotype and allotype will be deposited in the U.S. National Museum.

KEY TO SPECIES OF *Plegadiphilus*

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|---|--------------------|
| 1. Pleurites of abdominal segment VII with posterior projections | 2 |
| 1'. Pleurites of abdominal segment VII without posterior projections | 3 |
| 2. Two rows of setae on metanotum | <i>mamillatus</i> |
| 2'. One row of setae on metanotum | <i>plegadis</i> |
| 3. Pleurites of abdominal segment VI with posterior projections | 4 |
| 3'. Pleurites of abdominal segment VI without posterior projections..... | <i>theskiornis</i> |
| 4. Pleurites of abdominal segments III-VI of female with marginal
setae of equal length. Total length of male 1.4 mm. | <i>eudocimus</i> |
| 4'. Pleurites of abdominal segments III-VI of female with one marginal
seta much longer than others. Total length of male 1.9 mm. | <i>cayennensis</i> |