A NEW SPECIES OF THE GENUS CUMMINGSIA FERRIS FROM THE REPUBLIC OF COLOMBIA[1]

(MALLOPHAGA: TRIMENOPONIDAE)

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ABSTRACT—*Cummingsia* **inopinata** Méndez, n. sp. from *Thomasomys cinereiventer* J. A. Allen, is described and illustrated. A member of the order Rodentia is added as a new host of the genus *Cummingsia*, which had been formerly recorded exclusively from South American marsupials. This finding seems to represent a case of secondary infestation by a species of *Cummingsia* on a rodent.

Judging from previous information on the genus *Cummingsia*, it had been considered that all its species were associated with South American marsupials. These obviously represent patterns of primary infestation on these mammals. Recently, however, a collection of biting and sucking lice from Colombia, submitted to me for identification by Dr. H. Trapido, has revealed an interesting new species of *Cummingsia* as a genuine parasite of *Thomasomys cinereiventer*, a member of the rodent family Cricetidae. This discovery modifies our knowledge of *Cummingsia* by adding a host belonging to a different mammalian order. The presence of this louse on a rodent seems to indicate an interesting case of secondary infestation of probable recent origin.

I am indebted to Dr. K. C. Emerson for the loan of a male and a female specimen of *Cummingsia peramydis* Ferris for comparative studies. My thanks are also expressed to Dr. Harold Trapido of the Rockefeller Foundation Unit at the Universidad del Valle, Colombia, for the opportunity of describing the following new species.

Cummingsia inopinata, n. sp.

(Figs. 1–5)

Diagnosis.—Morphological features of the head places this new species near *C. intermedia* Werneck; however, it is fundamentally different from the latter species in having a single row of setae on each abdominal sternite, except the first one, instead of two rows. Additional significant differences are present in the male and female genitalia which are here illustrated.

MALE (figs. 1–4). Head (fig. 2) conspicuous, wider than long, with temples slightly produced and bearing two long widely spaced setae in addition to several short setae. Rest of chaetotaxy moderately developed. Anterior margin of head convex, interrupted by small notch on each side, thus defining a clypeal region.

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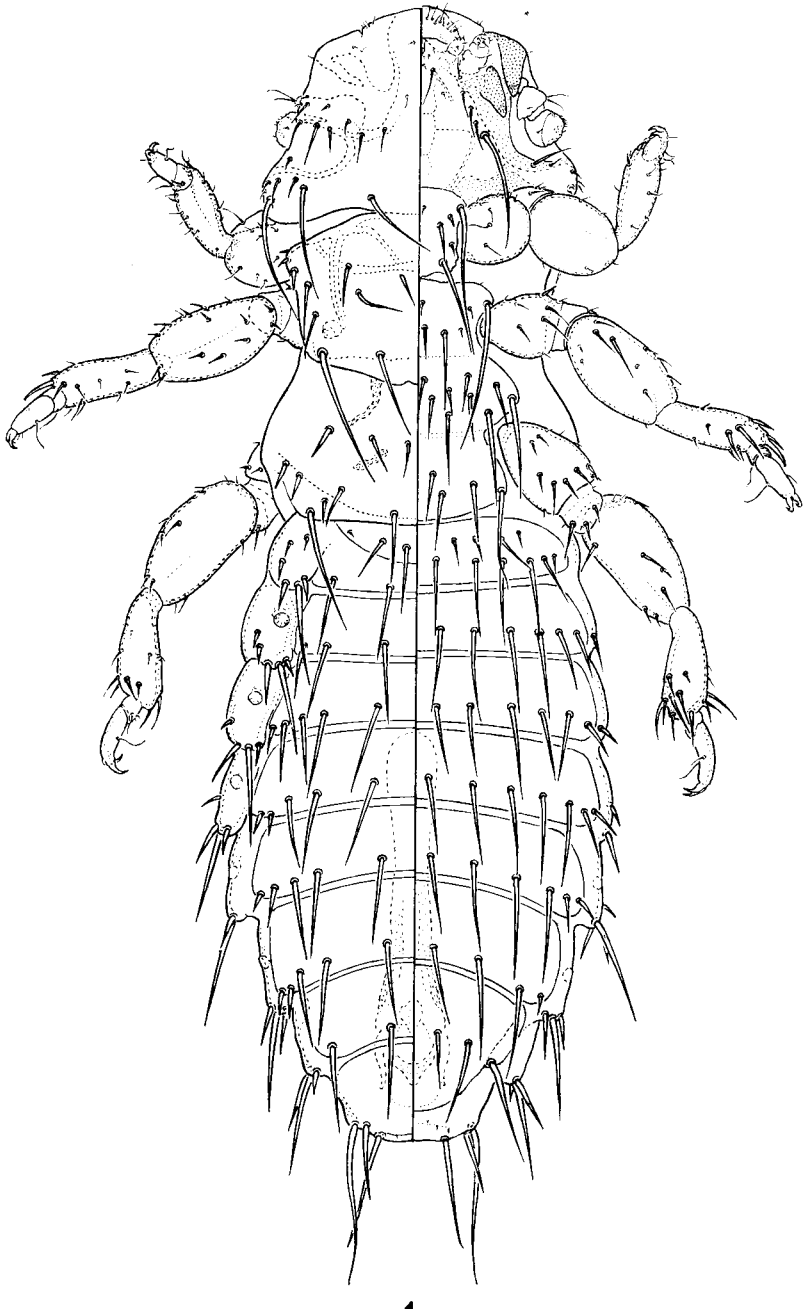

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Lateral margins devoid of a notch, with most anterior area subangular. Labial palpus short, provided with several minute setae. Maxillary palpus about twice the length of labial palpus, also bearing a few minute setae. Preantennal ventral processes blunt, heavily sclerotized. Each antenna short, concealed in large, deep ventral fossa. Basal antennal segment very small, apparently without setae; second segment semitriangular, with two short setae on outer margin, besides one inner seta; third segment globular, with few minute setae. Prothorax smaller than pterothorax, suggesting an hexagonal shield having several setae of variable length. Pterothorax notably wide, showing subangular lateral margins, provided with various setae. Thoracic spiracles conspicuous. Thoracic sternal plates (fig. 3) distinct, the last three united, armed with well distributed setae. All legs stout, typical of genus, moderately clothed with setae. Abdomen ovate, slightly elongate, showing indented lateral margins. Tergal and sternal abdominal plates prominent, those of first segment with two rows of setae, remaining plates with one row. Pleural plates particularly well defined on segments 2–4, containing several strong setae. Genitalia (fig. 4) simple, characterized by broad basal plate having anterior portion considerably expanded into a blade of sinuate margins, expanded at its rounded apex. Each paramere short, ending in slender tip turned upward, bearing short subapical seta. Pseudopenis well developed, Y-shaped, with basal arm very short, open at tip. Ejaculatory sac delicate, membranous, covered with fine microspicules.

FEMALE.—In general morphology and chaetotaxy similar to the male, from which it differs in its sexual characters and larger size. Female genital region (fig. 5) apparently limited to last two abdominal segments. Caudal segment provided with two long caudo-marginal setae on each side, the outermost the longest. Genitalia fundamentally contained in this segment, characterized by broad genital armature with convex anterior margin and sclerotized lateral margins. Basally this structure bears two gonopods which are near each other and possesses a group of gonopodal setae preceded by ventral setae of armature.

Types.—Holotype male (No. HTC-2425) from Laguna de la Cocha, Depto. de Nariño, Colombia, elevation 2700 m, 18 May, 1968; allotype female (HTC-2399), same data as holotype; 4 male and 18 female paratypes, same data as holotype; 1 female paratype from Comis, 38 km between Pasto and Sibundoy, Depto. de Putumayo, Colombia, elevation 3100 m, 25 May, 1968. All specimens examined collected by Dr. H. Trapido.

Lengths.—Male holotype, 1.27 mm; female allotype, 1.44 mm.

Type host.—*Thomasomys cinereiventer* J. A. Allen, 1912.

Holotype and allotype will be deposited in the collection of the U.S. National Museum. Paratype specimens will be deposited in the British Museum (Natural History), Universidad del Valle, Cali, Colombia, Bernice P. Bishop Museum, Honolulu, Hawaii, and in the collections of Drs. Phyllis T. Johnson and K. C. Emerson. The rest of the paratypes

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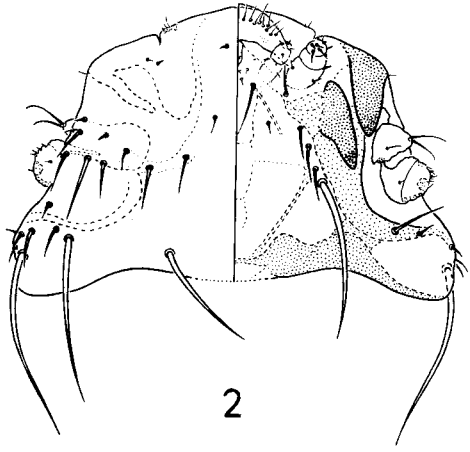
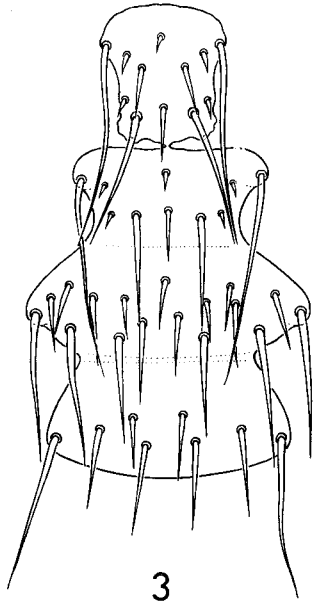
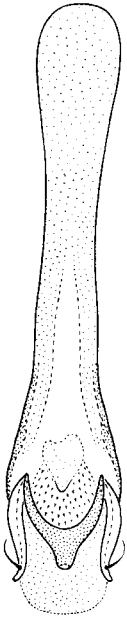
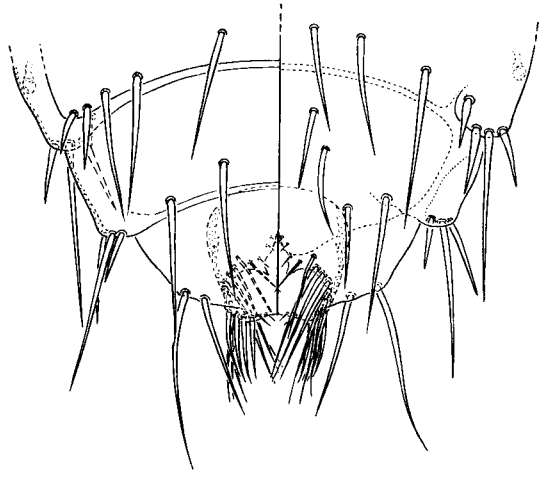
Fig. 1, *Cummingsia inopinata*, n. sp., dorsal-ventral view. ♂ holotype.









Figs. 2–5, *Cummingsia inopinata*, n. sp.: 2, head, ♂ holotype; 3, thoracic sternal plates, ♂ holotype; 4, genitalia, ♂ holotype; 5, terminal abdominal segments, ♀ allotype.

will be maintained in the collection of the Gorgas Memorial Laboratory.

Remarks.—An attempt to explain how *Thomasomys cinereiventer*, a rodent of the family Cricetidae, acquired the ectoparasite described in this paper, can be made with some reservations. At present very little is known about the habits of this mammal, which seems to have been usually trapped on the ground. Nevertheless, the finding by Dr. H. Trapido of three specimens of a true bird flea, *Dasypsyllus gallinulae*, on three different individuals of *T. cinereiventer* at Cerro Munchique, Departamento del Cauca, Colombia, suggest the possibility that this rodent is at least partially arboreal. It might temporarily occupy tree holes or other sites containing bird nests, a source from which the mentioned fleas were probably obtained. Since most American marsupials are arboreal or semi-arboreal, I am inclined to think that, in a similar manner, *T. cinereiventer* may have acquired the original stock from which the new species of *Cummingsia* under discussion was derived, many years ago from opossum nests.

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