

FIFTEEN NEW RECORDS AND A NEW SPECIES OF
COLLEMBOLA FROM THE DOMINICAN REPUBLIC

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ABSTRACT

Fifteen collembolan taxa are reported for the first time from the Dominican Republic and *Ptenothrix dominicana* n. sp. is described. The new combination *Metasinella subfusa* (Wray) is proposed. The neotropical distribution is given for those taxa determined to species.

Through the kindness of Dr. Eric Smith of the Field Museum of Natural History (FMNH), Chicago, Illinois, and Mrs. Mignon Davis of the United States National Museum of History (USNM), Washington, D.C., I have studied a series of springtails from the Dominican Republic. Fifteen new records are reported herein and a new species is described. Prior to this contribution the collembolan fauna of the Dominican Republic was known from a single species: *Drepanocyrtus dowlingi* Wray (1953a).

All specimens are deposited in the FMNH except for the single specimen of *Troglopedetes delamarei* which is in the USNM and a paratype of *Ptenothrix dominicana* n. sp. to be found in the Illinois Natural History Survey.

In order to avoid needless repetition under the treatment of each species, the 5 locations at which specimens were collected are listed below. The number of specimens studied and the location number follow the species name.

LOCATIONS

1. Provincia La Vega, La Cienaga, 1,000 m, 4-II-1975, W. L. & D. E. Brown, leaf litter. FMNH (HD) # 75-280.
2. Provincia La Vega, El Rio Bonao, 24 kms, 600-800 m, 7-II-1975, W. L. Brown, ravine leaf litter. FMNH (HD) # 75-281.
3. Provincia La Altagracia, 3 km NW Boca de Yuma, 13-II-1975, W. L. & D. E. Brown, humus from sink hole in dry coastal forest. FMNH (HD) # 75-282.
4. Provincia Barahona, 4 km N of Polo, 900-1, 100 m, Feb. 9-II-1975, W. L. & D. E. Brown, coffee litter. FMNH (HD) # 75-284.
5. Distrito Nacional, Cueva Cofresí, 1.5 km N of Boca Chica, 15 m in twilight zone, 14-V-1973, Don and Mignon Davis. USNM.

FAMILY PODURIDAE SENSU LATO

Hypogastrura (Ceratophysella) armata
(Nicolet) 1841 (7 spec., loc. 4)

This species, of apparent cosmopolitan distribution, has been recorded in the Neotropical Region from Argentina, Brazil, Chile, Costa Rica, Mexico, and Uruguay.

Brachystomella parvula (Schäffer)

1896 (5 spec., loc. 3, 4).

This is another species with a wide geographic distribution. In the neotropics it is known from Argentina, Brazil, Chile, Costa Rica, Jamaica, Peru, Surinam, and Venezuela.

FAMILY ISOTOMIDAE

Cryptopygus sp. (1 spec., loc. 2)

Additional specimens from this locality are being studied by Mr. Peter N. Lawrence of the British Museum (Natural History) who is revising the genus.

Folsomides americanus Denis 1931 (2 spec., loc. 4)

The species is known in the neotropic from Argentina, Chile, Costa Rica, Cuba, Guatemala, Peru, Puerto Rico, and Venezuela.

Isotomiella minor (Schäffer) 1896 (2 spec., loc. 4).

A species with a cosmopolitan distribution, in the Neotropical Region known from Argentina, Brazil, Chile, Costa Rica, Guatemala, Mexico, Peru, and Puerto Rico.

Isotomurus sp. (4 spec., loc. 1)FAMILY ENTOMOBRYIDAE *SENSU LATO**Dicranocentrus* sp. (7 spec., loc. 2)

This species is described in a revision of the genus now in press. It is known also from Cuba and Haiti.

Lepidocyrtus sp. (9 spec., loc. 3, 4)*Metasinella subfusa* (Wray) 1953b *new combination* (8 spec., loc. 1, 4)

The evidence leading to this new combination will be discussed in an upcoming review of the genus. It suffices to say here that the species is also known from Puerto Rico and that this is the first record of the genus outside caves.

Metasinella rapoportii Massoud & Gruia 1973 (9 spec., loc 3)

This species was known previously only from the type locality in Cuba. It is reported for the first time outside caves.

Cyphoderus similis Folsom 1927 (1 spec., loc. 3)

Species previously known from Argentina, Costa Rica, Panama, and Peru.

Troglopedetes delamarei Massoud & Gruia 1973 (1 spec., loc. 5)

Species known previously only from the type locality in Cuba.

Campylothorax sp. (1 spec., loc. 4)*Paronella* sp. (11 spec., loc. 1, 2, 3, 4)

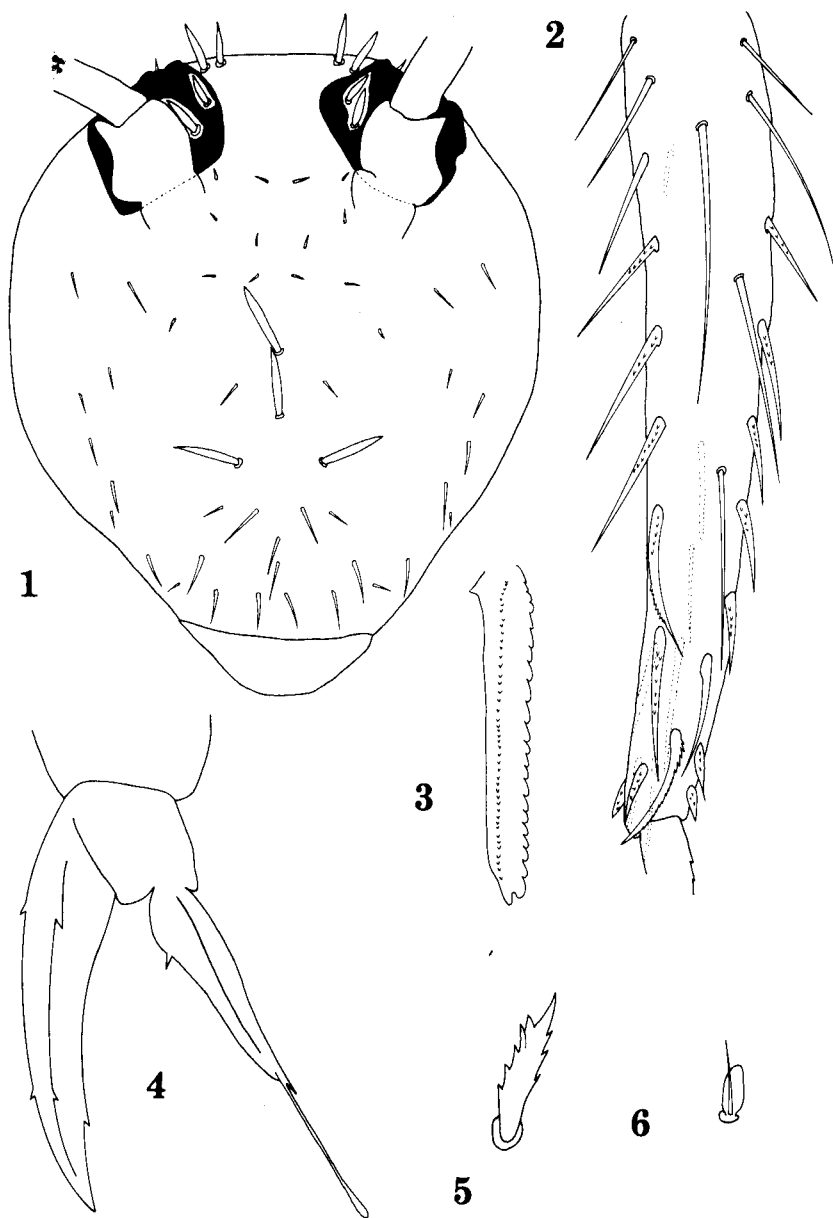


Fig. 1-6. *Ptenothrix dominicana* n. sp.: 1) head chaetotaxy; 2) dental chaetotaxy, dorsal view; 3) mucro; 4) claw structure, metathoracic (leg 3); 5) macrochaeta, leg 3; 6) sensilla leg 3.

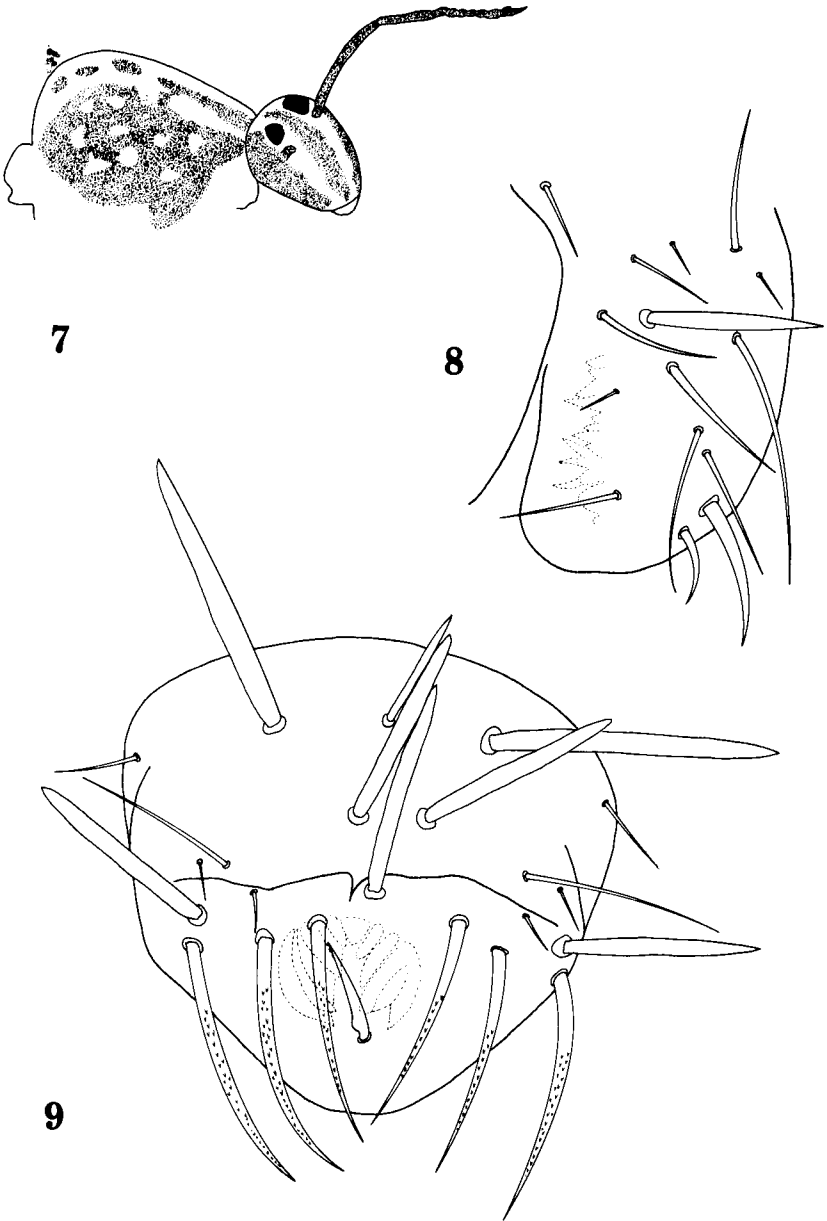


Fig. 7-9. *Ptenothrix dominicana* n. sp.: 7) habitus showing distribution of purple pigment; 8) chaetotaxy of lateral anal valve; 9) chaetotaxy of dorsal anal valve.

FAMILY SMINTHURIDAE SENSU LATO

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Sphyrotheca sp. (1 spec., loc. 1)*Ptenothrix dominicana* Mari Mutt, NEW SPECIES

All specimens females. Length excluding antennae and furcula up to 1.4 mm. Background color of head and body light yellow. Distribution of purple pigment upon antennae, head and body as in Fig. 7. Legs and furcula deeply pigmented throughout. Distal 1/2 of third antennal segment (Ant. 3) composed of 6 subsegments. Ant. 4 not clearly subsegmented but with setae arranged in circular whorls. Eight eyes on each side of head. Head chaetotaxy as in Fig. 1. Metathoracic tibiotarsi with a pair of deeply serrated macrochaetae (Fig. 5). Tibiotarsi with several short sensillae (Fig. 6), without spines of any size. Structure of claws as in Fig. 4. Chaetotaxy of lesser abdomen as in Fig. 8 and 9. Anal appendages apically smooth. Abd. 6 with internal teeth of type described by Delamare Deboutteville & Massoud (1963) in *Ptenothrix argentina* and *P. brasiliensis*. Dental chaetotaxy as in Fig. 2. Mucro as in Fig. 3.

Diagnosis: The new species is morphologically closest to *Ptenothrix brasiliensis*. It can be readily separated from the latter by the head chaetotaxy, color pattern, claw structure and absence of short spines on the tibiotarsi of *P. dominicana*.

Material Examined: Holotype and 3 paratypes, location no. 2.

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