

A NEW SPECIES OF CHIGGER
IN THE GENUS *SISECA* (ACARI: TROMBICULIDAE)
FROM CAMIGUIN ISLAND, MINDANAO, PHILIPPINES

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Abstract

Siseca gigarara n. sp. is described from specimens collected off a lizard host, *Brachymeles schadenbergi*, on Camiguin Island, Mindanao, Philippines. The genus is rediagnosed and comments on the genus are provided.

DURING THE EARLY 1960s workers for the Bishop Museum, Honolulu, Hawaii, USA and the Silliman University Museum of Natural History, Dumaguete City, Philippines, collected ectoparasites from small mammals, birds, and lizards on many islands in the Philippines. Examination of the ectoparasites has revealed the presence of a new species of chigger in the genus *Siseca*. The holotype is in the collection of the B. P. Bishop Museum (BPBM); paratypes are there and in the Philippine National Acarology Collection (PNAC) at the Visayas State College of Agriculture, in Baybay, Leyte, Philippines. Data on a previously described species, *Siseca rara* are included. Voucher specimens of that taxon are in the BPBM; paratypes are there and in the PNAC. Terminology follows that of Goff *et al.* (1982). All measurements are given in micrometers.

Genus *Siseca* Audy, 1956: 41.

***Siseca* Womersley and Audy, 1957: 268.**

Type species. *Trombicula rara* Walch, 1923: 593.

Rediagnoses. Trombiculini of medium to large size. PTF 7B or 7BS, galeala N. Claw 2-pronged, external claw shorter than internal prong. Chelicerae long with dorsal and ventral subapical tooth. Eyes 2/2. Scutum large and quadrate, with or without slight projection of posterior margin; densely punctate. SB wide apart and inserted close to anterior margin. Sensillae filliform with distal branches. Total body setae less than 45. Legs all 7 segmented, 3 genualae I, an elongate mastitarsala often present.

Audy (1956) proposed *Siseca* to accommodate *Trombicula rara*. Vercammen-Grandjean (1968) relegated *Siseca* as a sub-genus of *Eutrombicula*. Nadchatram and Dohany (1974) reestablished *Siseca* to generic status, while Domrow and Lester (1985) retain species in the Australian fauna in the genus *Eutrombicula*. The generic status of Audy (1956) and Nadchatram and Dohany (1974) is followed here.

***Siseca gigarara* Brown, n. sp. (Figure 1)**

Description of species. Larvae. Idiosoma. Measuring 450×380 in partially engorged specimen. Eyes 2/2, anterior 10 diam., posterior 9 diam., on ocular plate. One pair of humeral setae measuring 65-69; 22 dorsal idiosomal setae, measuring 49-57, arranged in regular rows 6.6.4.2.2; 2 pairs of sternal setae, anterior 36-37, posterior 35-36; 10 preanal setae, 33-36; 4 postanal setae 51-63; total idiosomal setae 42. Gnathosoma. Palpal setal formula B/N/NNN/7B; palpal claw 2-pronged, 18-20 long; galeala N, cheliceral blade (49-52), broad at base, with tricuspid cap; gnathobase punctate, bearing 2 branched setae. Scutum. Punctate with biconcave anterior margin; posterior margin broadly rounded with shallow central concavity; lateral margins with slight concavities; AM base posterior to AL bases; SB far anterior to level of PL bases; PL > AM > AL; PW/SD = 1.24-1.25; sensillae flagelliform with branches on distal 2/3, Scutal

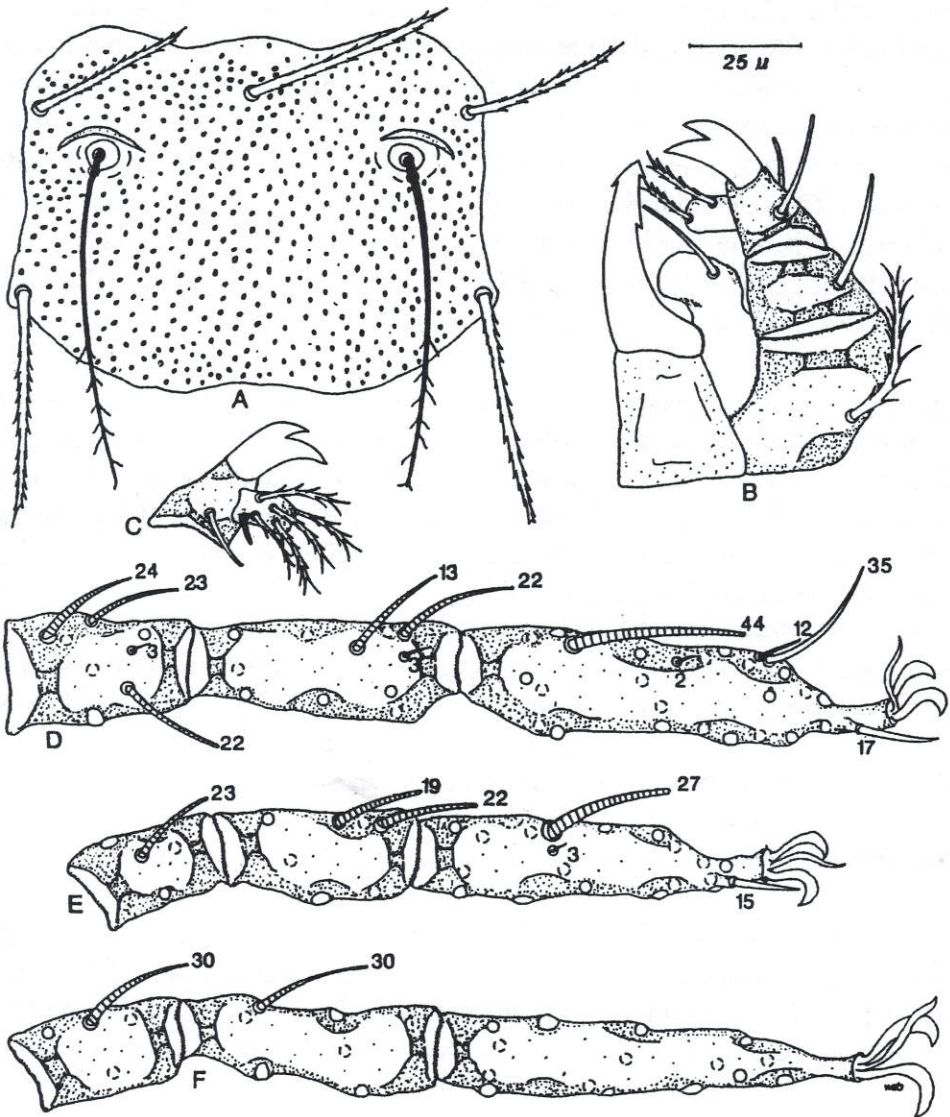
measurements of holotype followed by the means and ranges of 10 paratypes in parentheses: AW 105 (107, 104-108); PW 108 (111, 108-115); SB 75 (76, 74-78); ASB 31 (30, 29-31); PSB 54 (54, 54-56); AP 41 (43, 41-45); AL 39 (41, 39-45); PL 57 (58, 57-61); sens. 75 (74, 68-85). Legs. All 7-segmented terminating in a pair of claws and a clawlike empodium. Onychotriches absent. IP = 923-1050. Leg I: 144-175; coxa with 1 branched seta (1B); trochanter 1B; basifemur 1B, telefemur 5B; genu 4B, 2 genualae, microgenualae; tibia 8B, 2 tibialae, microtibialae; tarsus (90×21), tarsala (44), microtarsala, subterminala, parasubterminala, pretarsala. Leg II: 280-326; coxa 1B; trochanter 1B; basifemur 2B; telefemur 4B; genu 3B, genuala; tibia 6B, 2 tibialae; tarsus (70×21), 16B, tarsala (27), microtarsala, pretarsala. Leg III: 330-371; coxa 1B; trochanter 1B; basifemur 2B; telefemur 3B; genu 3B, genuala; tibia 6B; tarsus (90×18), 15B.

Type data. Holotype and 10 paratypes (126660) from Mt. Mambajao, Camiguin Island, Mindanao, Philippines, 5-6 K NE Sangsangan, Catorman ex *Brachymeles schadenbergi*, 20 May 1967 (parasitope and collector not recorded). The holotype is in the collection of the BPBM; paratypes are there and in the PNAC.

Remarks. *Siseca gigarara* can be separated from all other members of the genus by the larger standard data measurements, by the elongation of tarsala I, and II, and by the lack of mastatarsala III. The species name reflects the relative size of this taxon.

Included species. *Siseca rara* Womersley and Audy, 1957: 268. Diagnoses. Larvae. Idiosoma. Measuring 410×315 in partially engorged specimen. Eyes 2/2, on ocular plate. One pair of humeral setae; 20 dorsal idiosomal setae, arranged in 5 rows 6.2.4.4.2; 2 pairs of sternal setae; 10 preanal setae; 4 postanal setae; total idiosomal setae 38. Gnathosoma. Palpal setal formula B/N/NNN/7B; palpal claw deeply bifurcate; galeala N. Scutum. Lightly punctate with biconcave anterior margin; with shoulders; posterior margin convex; lateral margins straight; AM base even with AL bases; SB far

Figure 1: *Siseca gigarara* Brown, n. sp. A, scutum; B, dorsal aspect of gnathosoma; C, ventral aspect of palpal tibia and tarsus; D, leg I showing specialized setae (measurements in micrometers) and bases of branched setae; E, leg II as above; F, leg III as above.



anterior to level of PL bases; PL > AM > AL; PW/SD = 0.8-1.0; sensillae filliform, branched in distal one-third. Scutal measurements of means and ranges of 10 specimens: AW 72, 70-76; PW 86, 83-92; SB 47, 45-49; ASB 15, 13-18; PSB 48, 44-52; AP 32, 29-38; AM 37, 32-40; AL 29, 27-34; PL 40, 37-43; sens. 47, 39-54. Legs. All 7-segmented terminating in a pair of claws and a clawlike empodium. Onychotriches absent. IP = 702-752. Leg I: 230-256; coxa with 1 branched seta (1B); trochanter 1B; basifemur 1B; telefemur 5b; genu 4B, 2 genualae, microgenualae; tibia 8B, 2 tibialae, microtibialae; tarsus (50×22), tarsala (14-16), microtarsala, subterminala, parasubterminala, pretarsala. Leg II: 222-241; coxa 1B; trochanter 1B; basifemur 2B; telefemur 4B; genu 3B, genuala; tibia 6B, 2 tibialae; tarsus (40×16), 16B, tarsala (11-13), microtarsala, pretarsala. Leg III: 216-219; coxa 1B; trochanter 1B, basifemur 2B; telefemur 3B; genu 3B, geuala; tibia 6B; tarsus (51×16), mastitarsala 42, 15B.

Voucher specimens examined. Leyte Island, from *Callosciurus samarensis* (= *Sundasciurus samarensis*), *Mabuya multicarinata* and *Rattus samarensis* (= *R.r. mindanensis*). Palawan Island from *Tupaia palawanensis*, *Tragulus nigricans* (= *T. napu*) and *R. exulans*. Mindanao Island from *Callosciurus mindanensis* (= *Sundasciurus mindanensis*). Voucher specimens are in the collection of the BPBM and the PNAC.

Remarks. The specimens examined agree in size, standard data and scutal configuration to *Siseca rara* Womersley and Audy (1957). This taxon has been previously reported from the Philippines by Philip and Woodward (1946) and by Brown and Goff (1988). ❖

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