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TWO NEW SPECIES AND OTHER RECORDS OF CHIGGERS FROM TEXAS (ACARINA : TROMBICULIDAE)

BY

James M. Brennan


ABSTRACT.

Described are Neoschoengastia rebeccanae off Eremophila alpestris and Trombicula usitata off Mormoops megalophylla. New distributional records are given for Beamerella acutascuta, Neoschoengastia brennani, Tragardhula sinnamaryi and Trombicula jessiemae.

This contribution supplements that of Loomis and Crossley (1963 who described 3 new species of chiggers from Texas and supplied new records for 25 others. It was intended that the 6 species embraced here be incorporated in the work cited above, but circumstances delayed assembling the data until too late for their inclusion.

Scarcely more than 40 species are known from Texas. This probably represents but a small fraction of the chiggers occurring in this area of over 267 thousand square miles and which includes 5 of the life zones of Merriam within its boundaries.

NEW SPECIES.

Neoschoengastia rebeccanae n. sp.

(Fig. 1).

Type data: Holotype, RML 38077, off Eremophila alpestris (Horned Lark), Kingsville, Kleberg Co., Texas, 3 September 1961, B. McDaniel, collector.

In the collection of the Rocky Mountain Laboratory.

Diagnosis: Related to N. carveri Wharton and Hardcastle and N. namrui Wharton and Hardcastle. Separated from both these by 2-4 sternals and 3 genualae

FIG. 1. — Neoschoengastia rebeccanae n. sp.
Scutum and eyes, and specialized setae of legs with measurements in microns.
I. *N. carveri* has numerous sternals and 8 genualae I, and *N. namrui* 2-2 sternals, 10 genualae I and in addition more than 5 genualae II and III. All have huge eyes and unusually long tarsala I.

**Body**: Broad ellipsoidal. Length and width of holotype, partly engorged, 391 by 270 μ. Eyes 2/2, very large, in a plate, the anterior larger, diameter 37 μ. Anus between sixth and seventh rows of ventral setae.

**Gnathosoma**: With large puncta generally distributed. Palpal setae B/B/BNB; tarsus with 7 branched setae, a subterminala and a tarsala; tibial claw stout, trifurcate. Blade with tricuspid cap and subapical dorsal notch. Galeal seta branched.

**Scutum**: As figured. With strongly sinuous margins and coarse striae encroaching from the rear giving the illusion of dividing the scutum in half. Moderately punctate and a thickened ridge anterior to each sensillary base. Sensilla subcapitate with long setules densely distributed. AL > PL > AM. Measurements of holotype: AW 58, PW 77, SB 32, ASB 24, PSB 35, AP 43, AM 32, AL 63, PL 58, S 31.

**Legs**: With large puncta. Specialized setae as figured, a very long tarsala I, no parasubterminala. Non-specialized setae plumose to sparsely branched, coxa III with 6 heavily branched setae.

**Body setae**: Dorsals about 150, 31 to 41 μ long. Ventral setae 2-4 (sternals) plus more than 100.

Fondly named for Rebecca Ann Friedenwald, the recently arrived daughter of Captain and Mrs. Robert L. Friedenwald, whose enormous eyes are no less impressive than those of her namesake.

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**Trombicula usitata** n. sp.

(Fig. 2).

**Type data**: Holotype and a paratype RML 34266, off *Mormops megalophylla* (Leaf-chinned Bat), Frio Cave, Uvalde Co., Texas, November 1956, Ted Tibbetts, collector.

In the Rocky Mountain Laboratory.

**Diagnosis**: A rather ordinary-appearing species of *Trombicula* sens. lat. with 3 genualae I, a genuala II and III, and no mastitarsala III; palpal tarsus with 5 branched setae, a nude seta and tarsala; palpal femur and genu produced laterally.

**Body**: Ovate. Length and width of holotype 396 by 248 μ. Eyes 2/2, in a plate. Anus at fifth row of ventral setae.

Fig. 2. — *Trombicula usitata* n. sp. Scutum and eyes, and specialized setae of legs.
Gnathosoma: Moderately punctate. Blade with tricuspid cap. Palpal femur and genu with pronounced lateral expansions; palpal setae B/B/NNB; tarsus with 5 branched setae, a nude seta and a tarsala; claw slender, trifurcate. Galeal seta nude.


Legs: Sparsely punctate. Specialized setae as figured. Non-specialized setae moderately to sparsely barbed.

Body setae: Humeral setae 34 μ, remaining dorsals similar to scutals, 20 to 29 μ, the shorter ones posterior, arranged 2-6-8-8-4-4. Ventral setae 2-2 (sternals) plus about 60. Those posterior to the anus similar to the dorsals.

New records of species.

Beamerella acutasuta Brennan, 5 specimens from Mormoops megalophylla (Leaf-chinned Bat), Frio Cave, Uvalde County, 22 January and 17 November, 1956, D. K. Jameson and Ted Tibbetts, collectors.

First records for U.S.A. Neotropical. Described from Trinidad.

Neoschoengastia brennani Crossley and Loomis, 9 off Toxostoma curvirostre (Curve-billed Thrasher), Cameron County, 18 and 19 October, 1962, Richard B. Eads.

Described from Kansas and Colorado.

Tragardhula sinnamaryi Floch and Fauran, 2 off Dumetella carolinensis (Catbird), Cameron County, 7 May 1962, 1 off Hylocichla mustelina (Wood Thrush), Cameron County, 23 April 1963, Richard B. Eads.

First records from U.S.A. Neotropical. Described from French Guiana.

Trombicula jessiemae Gould from Cameron County, Richard B. Eads, 1 off Notiosorex crawfordi (Desert Shrew), Boca Chica, 11 April 1960; 1 off Liomys irroratus (Spiny Pocket-mouse), 31 July 1961; 20 off Peromyscus leucopus (White-footed Mouse), 2 December 1960, 24 January and 24 March, 1961, 9 January and 19 November 1962; 4 off Mus musculus (House Mouse), 8 January 1962; 1 off Rattus rattus (Black Rat), 20 November 1960.

Described from southern California. Known also from Las Arrastras and Tiburon Island, Lower California, Mexico.

Reference