DERMACENTOR DISSIMILIS, A NEW SPECIES OF TICK FROM SOUTHERN MEXICO

BY R. A. COOLEY

A new species of tick, Dermacentor dissimilis, from southern Mexico, is described from six females and two nymphal specimens received from Dr. W. J. Gertsch, of the American Museum of Natural History, New York City. Several attempts to obtain males have failed.

**Dermacentor dissimilis**, new species

*Figures 1-10*

**FEMALE**

**BODY**: Length, tips of palpi to tip of body (slightly fed specimen), 2.97; width, 1.65. Oval, widest at about the middle. Fully fed specimens measure 10.00 in length by 7.00 in width, and are subelliptical in dorsal profile.

**CAPITULTUM**: Length, tip of hypostome to tips of cornua, from 0.55 to 0.61. Width of basis, from 0.54 to 0.57. Porose areas oval, depressed, with their longer axes divergent anteriorly. Cornua rounded, about as long as wide. Punctations and hairs absent. In ventral view, basis is convex, posterior margin bluntly pointed. Inner faces of palpi mildly grooved longitudinally; article 3 with a mild retrograde spur.

**HYPOSTOME**: Of the six specimens, five have the denticles in a 4/4 pattern while one has it 4/3, and some have individual denticles out of line in the files (see fig. 3). Length, about 0.3.

**SCUTUM**: Length, 1.20 to 1.32; width, 1.10 to 1.14. Widest anteriorly, with mild lateral extensions, the eyes (when present) at the widest points. Posterolateral profile lines distinctly concave. Scapulae long, bluntly pointed. Eyes distinct, faint, or absent. Cervical grooves wide apart, moderately deep. Punctations moderate in size and number. The dirty white color pattern variable in extent. The color visible in some specimens also on basis, palpi, dorsal surface of the legs.

**LEGS**: Trochantal dorsal spur on leg I, distinct, V-shaped. All tarsi and metatarsi about equal in length. Tarsus I with an apical ventral spur; II and III with apical and subapical spurs; IV with an apical and two subapical spurs. Length of tarsus I, 0.48; metatarsus, 0.36; or ratio of 1.0 to 0.75. Length of tarsus IV, 0.48; metatarsus, 0.39; or a ratio of 1.0 to 0.825.

**COXAE**: Coxa I bifid, the internal spur wider. Coxae II, III, and IV with distinct external spurs; internal spurs absent.

**SPIRACULAR PLATE**: Subcircular. Goblets few. Greatest dimension, about 0.33.

**GENITAL APERTURE**: Situated at the level of the intervals between coxae II and III.

**NYMPH**

**BODY**: No unengorged specimens available. Well-fed specimens measure 2.5 in length and 1.75 in width; oval in dorsal profile.

**CAPITULTUM**: Length, tip of hypostome to posterior margin, 0.28; width of basis, 0.21. Basis short and wide, lateral points and cornua absent. Surface convex, punctations and hairs absent. In ventral view, basis is subreniform; convex; punctations and hairs absent. Ventral cornua absent (present in *D. albipictus*). Palpal article 1 visible as a very small convex plate.

**HYPOSTOME**: Short, broad. Dentition 3/3. Length about 0.16.

**SCUTUM**: Length, 0.51; width, 0.60. Broadly rounded behind, anterolateral

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2 All measurements are in millimeters.
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Fig. 1. Female capitulum and scutum, dorsum.
Fig. 2. Female capitulum and coxae, venter.
Fig. 3. Female hypostome.
Fig. 4. Spiracular plate.
Fig. 5. Female tarsus and metatarsus, leg I.
Fig. 6. Female tarsus and metatarsus, leg IV.
Fig. 7. Nymph capitulum and scutum, dorsum.
Fig. 8. Nymph capitulum and coxae, venter.
Fig. 9. Nymph hypostome.
Fig. 10. Nymph spiracular plate.  A, Anterior; D, dorsal.
A NEW TICK FROM MEXICO

sides nearly straight. Eyes distinct in both specimens. Cervical grooves short, moderately deep. Surface crazed, punctations few, faint; hairs absent.

COXAE: Coxa I with two short spurs, the internal one wider. Coxae II and III with short external spurs. Coxa IV with no spurs.

SPIRACULAR PLATE: Small, subcircular. Goblets few. Greatest dimension about 0.15.

MALE

Unknown.

Described and figured from six females and two nymphs taken from a horse, Las Margaritas, about 45 kilometers southeast of Comitán, Chiapas, Mexico, February 17, 1945. Collected by T. C. Schneirla. Holotype female, two paratype females, and one paratype nymph are retained in the American Museum of Natural History. Other types are deposited as follows: one paratype female in the United States National Museum; two paratype females and one paratype nymph in the Rocky Mountain Laboratory.

Remarks

This interesting tick falls into the genus Dermacentor, although its inclusion requires some modification of the generic description. In some females the eyes are distinct, in one absent, and in some obsolescent and not easily found. The hypostome is particularly erratic in having the denticulation formula 4/3 in one specimen instead of 4/4, and in others in having a few individual denticles large and out of alignment in the files.

The shape of the basis capituli (dorsal view) of this tick and the similarity of the spiracular plates suggest close relationship with Dermacentor albipictus, and since the adults and nymphs of D. dissimilis were collected simultaneously from the same horse, it is suggested also that this new species, like D. albipictus, may be a one-host tick.