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TWO NEW SPECIES OF *CHEYLETUS* LATREILLE, 1796 (ACARI,
CHEYLETIDAE, PROSTIGMATA) FROM GERBILS.

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Two new species of genus *Cheyletus* (Acari, Cheyletidae) are described from Gerbils: *Ch. punctulatus* sp. n. from *Gerbillus pyramidum* from Marocco and *Ch. allactaga* sp. n. from *Allactaga sibirica*, from Mongolia.

The two new species of *Cheyletus* described here were collected from Gerbils: *Ch. punctulatus* from *Gerbillus pyramidum* in North Africa and *Ch. allactaga* from *Allactaga sibirica*, in Mongolia.

Genus *CHEYLETUS* Latreille, 1796

1. *CHEYLETUS PUNCTULATUS* sp. n.

This new species is known from a single female.

Description

Female (Figs. 1-4): Holotype 480 μm long (idiosoma) and 360 μm wide. Total length including gnathosoma 645 μm . *Dorsum*: Cuticle of dorsal surface striate-punctate. There are two dorsal plates bearing punctate striations resembling the cuticular striations but oriented differently and with larger punctations. Are present dorsally the setae *vi*, *ve*, *sc i*, *sc e*, *d 1*, *d 5*, *l 1* to *l 5*. The *d 1* are very short and barbed, all the others are longer and slightly spatulate apically (lengths 56 μm to 85 μm). *Venter*: Cuticle striate, not punctate. Coxae with 2-1-2-2 setae, all smooth except external seta of coxae III barbed. Setae *ic 1*, *ic 3*, *ic 4*, *g 1* to *g 5* thin and smooth. One of the anal pairs (? anterior) is longer (50 μm) than the others and spatulate apically. Legs relatively thin. Tarsus I 105 μm long. Solenidion of tarsus I short (18 μm long) and thin and flanked by a thick barbed seta 18 μm long seta. Number of setae (I-IV): Trochanters 1-1-2-1. Femora 2-2-2-1. Genua 2-2-2-2. Tibiae 5-4-4-4. Tarsi 9-7-7-7. All these setae are barbed except some apical setae of tarsi. Gnathosoma: peritreme in inverted U WITH 7-8 segments. Palptibialspline (= claw) with 2 short basal tooth.

Palptarsus: inner comb with 31-33 teeth, outer comb with 19-21 teeth.

Host and Locality: From *Gerbillus pyramidum*, 20 km N. of Oued Draa, Southern Marocco, 28°40' N, 10°50' W, 27.III.1975 (Coll. G. Rheinwald). Holotype female (Coll. F. S. L.) in Museum Alexander Koenig, Bonn, Germany.

Remark

This species differs from all the known species by the striate-punctate aspect of the dorsal cuticle and the dorsal plates.

2. *CHEYLETUS ALLACTAGA* sp. n.

Only the female is known.

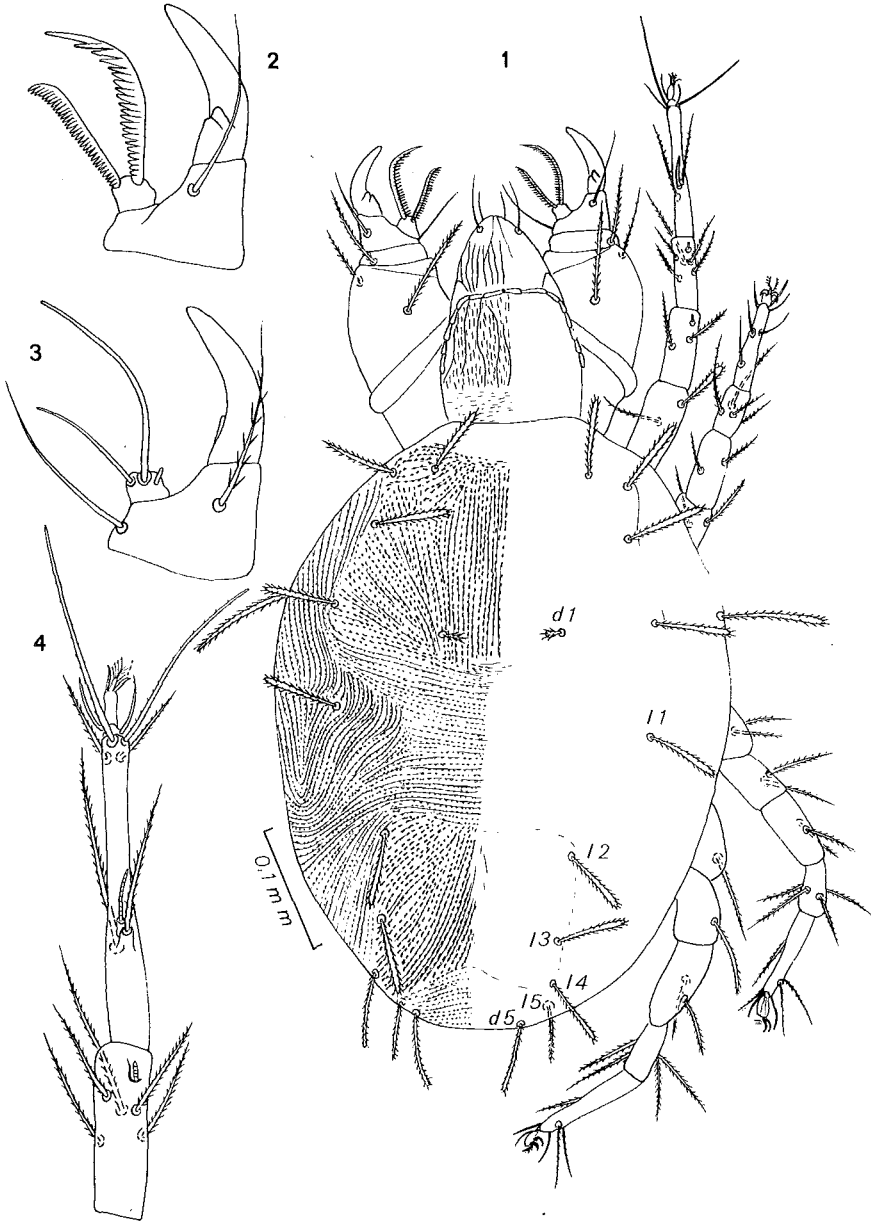
Description

Female holotype (Figs. 5-9): Idiosoma 420 μm long and 300 μm wide. Total length, including gnathosoma 576 μm . Cuticle striated. *Dorsum* with two plates: anterior plate wider (225 μm wide) than long (150 μm long) with a very poorly distinct and an incomplete network of lines; posterior plate as long as wide (135 μm). Both plates widely separated. Dorsal setae barbed, spatulate 50 to 75 μm long. The longest is *h* (75 μm). The setae *d 1* to *d 4* are absent in all our specimens. *Venter*: coxal setae 2-1-2-2, relatively long, all are smooth except external coxal III barbed. Genitals 1 to 4 smooth, genital 5 barbed. Anals barbed. Legs rather long and thin; number of setae as in *Ch. trouessarti* (see Fain, 1979). The dorsal setae of femur and genu III and IV are strongly flattened. Tarsus I 95 μm long, with a thin solenidion 27 μm long and flanked by a guard seta longer (40 μ) than the solenidion and very slightly barbed. *Gnathosoma*: peritreme in the shape of an inverted U and with 6 + 7 links. The spine (= claw) of palptibia with 2 long and rather narrow teeth. In the holotype there is a third small additional tooth at one side. Outer comb of palptarsus with 14 teeth, inner comb with 24-26 teeth. Palpfemur strongly concave inside.

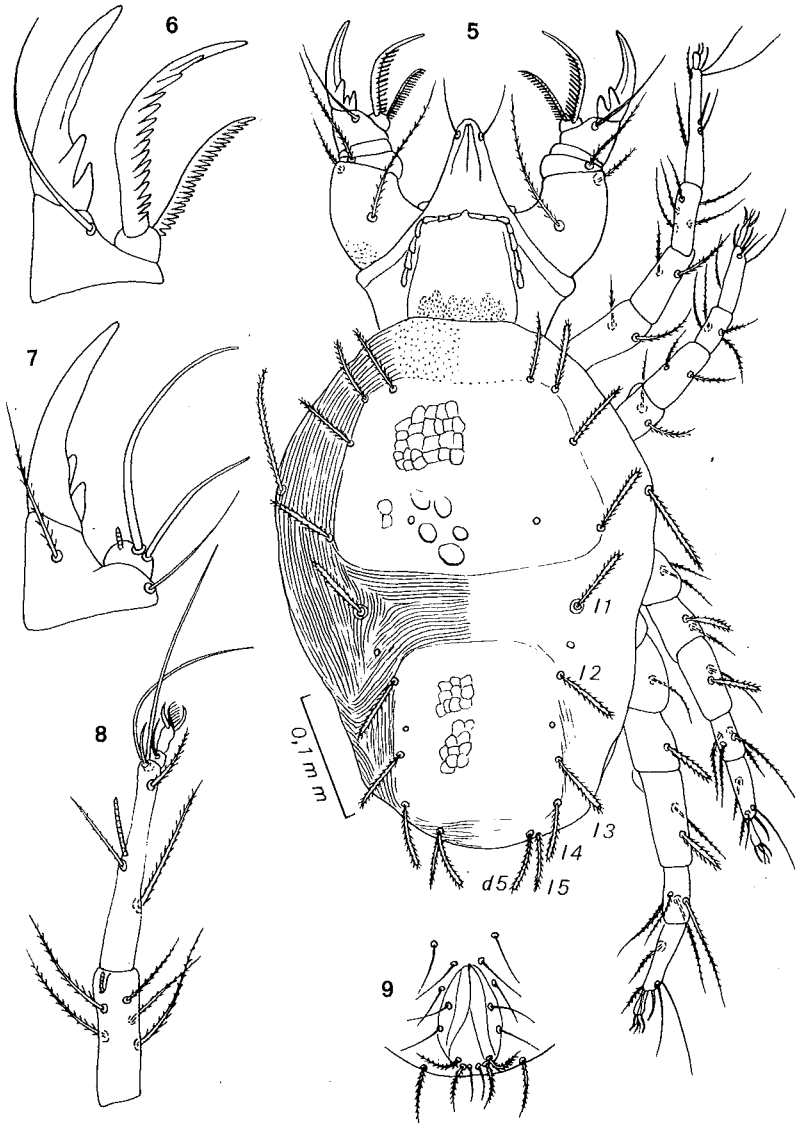
Host and Locality: Holotype and 1 paratype female from *Allactaga sibirica* in Bulgan-gol, Mongolia, 28.V.1974. Paratype females from the same host in Chovd-gol, Mongolia, 2.VI.1975 (2 females) and in Conocharychn-gol, 6.VI.1975 (5 females). These three rodents were collected by Dr. Stubbe. Holotype in the collection of Museum für Naturkunde, Humboldt-Universität, Berlin.

Remarks

This species resembles *Cheyletus aversor*. It differs from it by the following characters: 1) Absence of *d 1* and *d 2*; 2) Palpfemur narrower and distinctly concave inside; 3) Propodonal shield relatively narrower (ratio length-width = 1:1,5; in *Ch. aversor* this ratio is 1:1,6 or 1:1,7); 4) The basal teeth of palptibial claw are narrower, more cylindrical, longer and less unequal than in *Ch. aversor*; 5) Hysteronotal shield relatively larger and with lateral margins straight (in *Ch. aversor* the lateral margin of this shield are concave); 6) Dorsal shields less separated. This distance is 39 to 48 μm (average 42 μm), while in specimens of *Ch. aversor* collected in Belgium this distance is 66-105 μm (average 80 μm); 7) Palptarsus combs with less numerous teeth.



Figs. 1-4 *Cheyletus punctulatus* sp. n. 1, Holotype female in dorsal view; 2 and 3, palptarsus and palptibia in dorsal and ventral view; 4, tarsus and tibia I.



Figs. 5-9 *Cheyletus allactaga* sp. n. 5, Holotype female in dorsal view; 6 and 7, palptarsus and palptibia in dorsal and ventral view; 8, tarsus and tibia I; 9, genital and anal region.

REFERENCES

- FAIN, A. (1979). Idiosomal and leg chaetotaxy in the Cheyletidae. *Internat. J. Acarol.*, 5 (4), 305-310.
- SUMMERS, F. M. and PRICE, D. W. (1970). Review of the family Cheyletidae. *Univ. of California Public. in Ent.*, 61, 1-153.

