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A NEW SPECIES OF *SPHODROCEPHEUS*
FROM THE WESTERN U. S.¹
(ACARI: CRYPTOSTIGMATA, CEPHEIDAE)

Tyler A. Woolley² and Harold G. Higgins³

In a previous paper (Woolley and Higgins, 1963) we delineated the characteristics of the family Cepheidae, some of the synonymy involved with certain genera and described a new genus and species. Collections since that time have disclosed further examples of *Sphodrocephus tridactylus* and a new species within the genus. These new distributional records are included below with the diagnosis and description of a new species.

Sphodrocephus tridactylus W. & H., 1963

Three male specimens of this species were collected in moss, four miles south of Waldport, Lincoln Co., Oregon, by G. Krantz and J. D. Lattin, 7 February 1960. Very little variation was noticed between these specimens and those previously collected. This record extends the distributional range of the species in Oregon.

Sphodrocephus anthelionus, sp. n.

(Figs. 1-5)

DIAGNOSIS.— The new species differs from *S. tridactylus* in its larger size, in the shorter, tufted sensilli (Fig. 1A) and notogastral hairs (Fig. 4). The new species also exhibits differences in the lengths of the prodorsal hairs but is particularly contrasted to *S. tridactylus* in the presence of a translamella and slight mucro posterior to it; the new species has two humeral bristles instead of one as in *tridactylus*; other minor differences are included in the description below. The trivial name is derived from the Greek, *anthelionos*, a diminutive of "plume of a reed" and has specific reference to the plumed tips of the sensillus and notogastral hairs.

DESCRIPTION.— Color dark brown; prodorsum broadly triangular; rostrum rounded, rostral hairs shorter than lamella hairs, curved, slightly barbed, inserted in margins of rostrum posterior to tip; lamellae narrowed, with sinuate lateral margins, pitted, lamellar cusps narrower than lamellae, with slight dentes at anterolateral corner; lamellar hairs twice as long as interlamellar hairs, sinuous and serpentine in appearance, smooth, inserted in distal ends of lamellar cusps; interlamellar hairs longer than rostral hairs, but shorter than lamellar hairs, barbed, with slightly plumed ends, inserted at middle of length of lamellae; tatoria prominent flanges at lateral margins of prodorsum, pitted, confluent with anterior margin of pedotecta I; surface of prodorsum between lamellae smooth, not pitted as are lamellae and tatoria; pseudostigmata cup-shaped, with robust circu-

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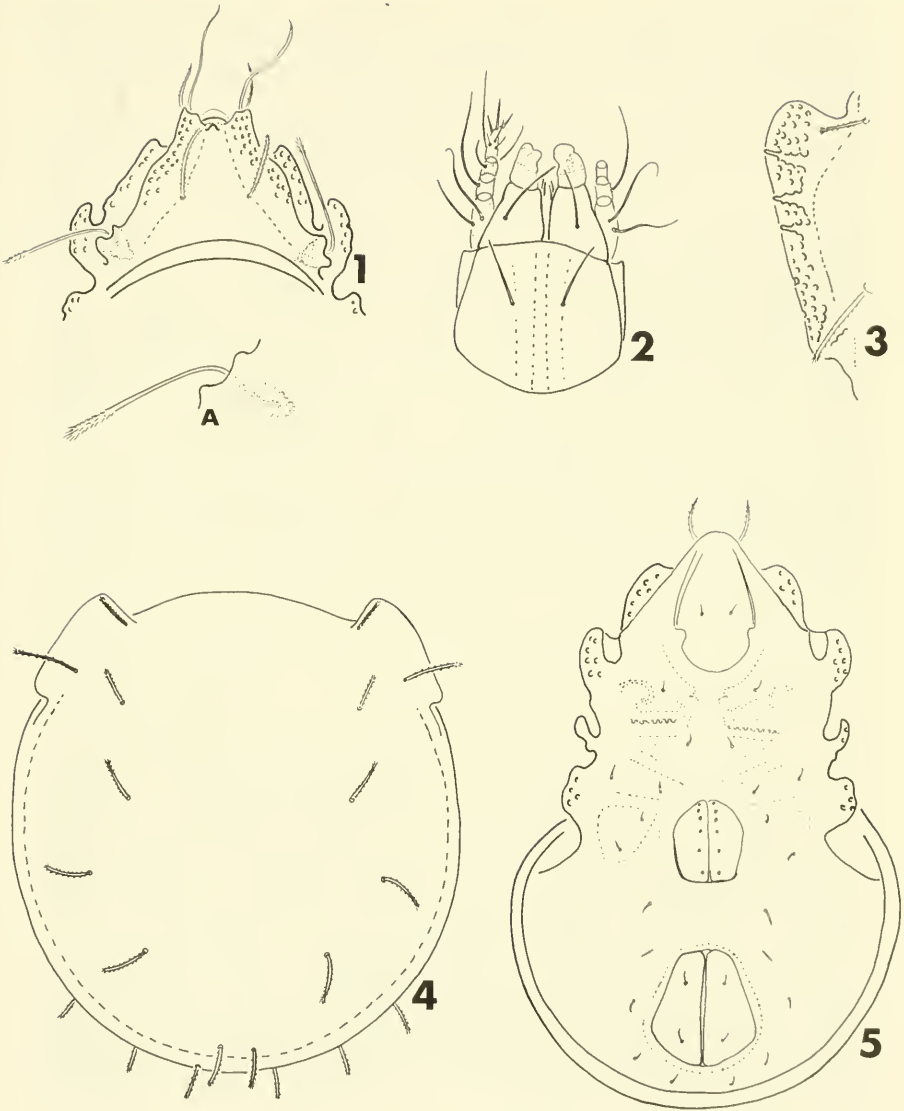


Fig. 1. Prodorsum of *Sphydrocepheus anthelionus*; A, enlarged view of pseudostigmata and tufted sensillus.
Fig. 2. Infarcapitulum of *S. anthelionus* from the ventral view.
Fig. 3. Enlarged view of humeral process and bristles of *S. anthelionus*.
Fig. 4. Dissected dorsal plate of *S. anthelionus*, showing notogastral bristles.
Fig. 5. Venter of *S. anthelionus*, legs omitted.

lar, raised margin, wide, open cup internally; sensillus longer than interlamellar hairs, tufted at distal tip (Figs. 1, 1A); pedotecta I large, robust, pedotecta II smaller. surfaces pitted similarly to lamellae and tatoria.

Hysterosoma smooth, nearly circular in outline, with roughened, sclerotized humeral processes at shoulders, pits, apodemes and shoulder bristles as in Figs. 1, 3; ten pairs of tufted, barbed notogastral setae (Fig. 4) anterior humeral seta not as long as width of shoulder, posterior humeral hair about a fourth longer, closer in length to other notogastral setae (Fig. 4; humeral processes rough, sclerotized, with large pits and sclerotized external apodemes (Fig. 3).

Camerostome ovoid, with lateral articulating condyles; infracapitulum as in Fig. 2; rutella with scoop-like membranous tips, rutellar teeth dorsal to membranous structures; palp. genal and mental setae as in figures; palp tarsus with three acanthions at distal end; apodemata and ventral setae as in Fig. 5; apodemata II with transverse, serrated, external ridge; genital opening elongated, each cover with six setae; aggenital setae posterior and lateral; anal opening about a fourth larger than genital, more elongated, each anal cover with two setae; fissure *iad* obliquely angled and remote from anterior margin of anal opening by about three times its length; adanal setae as in Fig. 5.

Legs heterotridactylous, medial claw larger and heavier than laterals.

MEASUREMENTS.— The dissected type specimen is 870μ long and 624μ wide; prodorsum is 234μ long.

COLLECTION DATA.— The type specimen, a female, was collected from moss, near the summit of Snoqualmie Pass, Washington, 27 June 1968, by H. Higgins; seven additional specimens (5 males, 2 females) from Washington were collected near Easton, 27 June 1968, by H. G. Higgins. Two females were collected near Suttle Lake, Deschutes National Forest, Oregon, Mar. (?) 1965, by W. B. Grabowski; one male specimen was taken from moss on rotting log, near Spirit Lake, Uintah Mountains, Utah, 7 August 1963, by H. G. Higgins; one female specimen was taken under conifers near Vancouver, B. C., 9 June 1962, by H. G. Higgins.

DISCUSSION.— The most striking differences between this species and *S. tridactylus* are in the lengths of the various hairs. In *tridactylus* the interlamellar hairs are longest of the prodorsal hairs, the rostral hairs shortest and lamellar hairs intermediate. In *S. anthelionus* the lamellar hairs are longest, the interlamellar hairs intermediate and the rostral hairs shortest.

The notogastral setae in the new species are shorter than in *S. tridactylus*, but are also finely barbed on the shaft of the hair and tufted at the tips; the new species also has two humeral bristles where *S. tridactylus* exhibits only one.

LITERATURE CITED

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