

Nalepella haarlovi n. sp. (Acarina, Eriophyidae).

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Description:

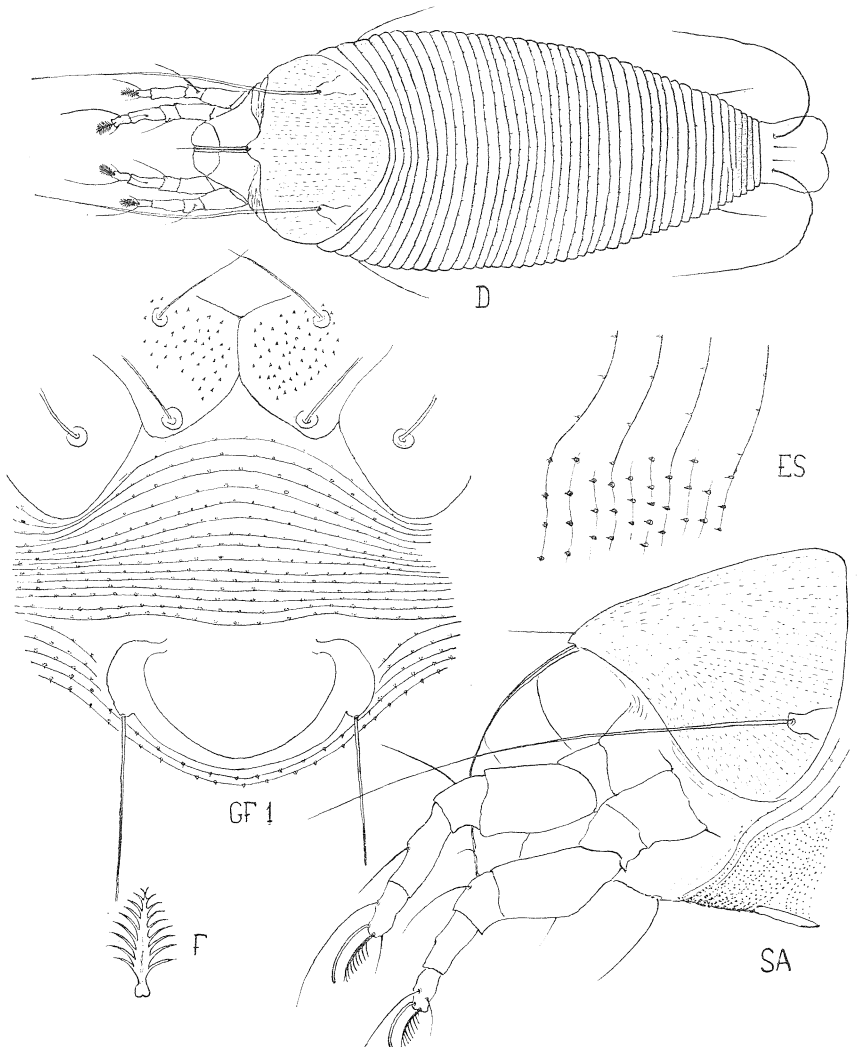
Female 291 μ long (272–340, $\bar{x} = 303,5 \pm 4,7$), 121 μ wide, 112 μ thick, dull yellow. Rostrum 72 μ long, curved down. Dorsal shield 53 μ long, 110 μ wide; anterior lobe projecting a short distance over rostrum, with anterior seta 47 μ long. Shield surface set with fine short longitudinal streaks. Dorsal tubercles 11 μ long, papilla-like, 62 μ apart and somewhat ahead of rear shield margin; dorsal setae 155 μ long, directed forwards. Forelegs 64 μ long; tibia 20 μ long, with seta 16 μ long; tarsus 11 μ long, featherclaw 15 μ long, 9-rayed; claw 15 μ , without knob. Hindlegs 56 μ long; tibia 20 μ long; tarsus 12 μ long, claw 14 μ long. Anterior coxae spinulate proximally, suboral plate and posterior coxae smooth. Abdomen with about 42 tergites and about 105 sternites. Sternites microtuberculate; microtubercles ending in a fine spine. Tergites with very indistinct, pointed microtubercles. No subdorsal setae present. Lateral setae 88 μ long, situated very laterally, on sternite 28; first ventral seta 44 μ long, on sternite 45; second ventral 82 μ long, on sternite 63; third ventral 48 μ long, placed laterally, on sternite 7 from rear. Accessory seta 10 μ long. Female genitalia 33 μ wide, 20 μ long, situated between 14th and 15th sternite. Coverflap smooth; genital seta 64 μ long.

Relation to host: The mites are very common needle vagrants but till now only found upon specimens from forestry nursery, where the mites turned the needles of the trees yellow-brown sometimes with a fatal result for the weaker individuals.

Type locality: Egelund, Denmark. Collected: October 27, 1960, by the forest zoologist Broder Bejer-Petersen and forwarded me by Dr. Niels Haarløv, The Royal Veterinary and Agricultural College, Copenhagen, Denmark, for whom the species is named. Host: *Picea sitchensis* Carr. (Pinaceae), Sitka spruce.

Type material: One female holotype, and 7 female paratypes as well as specimens in liquid. Type and paratypes are located at the Zoological Museum of the University, Copenhagen.

Discussion: This is the second eriophyid species known from Sitka spruce. The first species was described by H. H. Keifer, 1959, as *Trisetacus grosmani*. The new species is the fifth known species of the genus *Nalepella*. *N. triceras* (Börner, 1906) was collected from *Abies veitchi* Lindl., *Abies alba* Mill. and *Larix decidua* Mill. in Germany and in Finland. Roivainen, 1953,



Nalepella haarlovi n. sp. — D: dorsal view of the mite; ES: lateral skin structure; F: featherclaw; GF 1: female genitalia and coxae in ventral view; SA: side view of anterior part of mite.

said it was the only species of *Nalepella* known from Europe. Three further species were described by H. H. Keifer from the U.S. A. as follows: *N. ednae* K., 1951, from *Abies magnifica* Murr; *N. tsugae* K., 1951, from *Tsuga mertensiana* (Bong) and *N. tsugifoliae* K., 1953, from *Tsuga canadensis* Carr. Mites of the species *N. tricerus* (Börner) and *N. tsugifoliae* K. brown the needles causing injuries to the trees. All the four species are needle vagrants.

The new species differs in a number of ways from the genotype, *N. tricerus* (Börner): it has a different shield pattern, featherclaw, genital coverflap and much more tergites.

Key to the species of *Nalepella*:

1. Tergites much broader than sternites 2.
Tergites a little broader than sternites; both tergites and sternites set with distinct microtubercles..... 3.
2. Abdomen with 16—21 smooth tergites; featherclaw 5—6 rayed; female 210—250 μ long *tricerus* (Börner)
Abdomen with about 42 microtuberculate tergites; featherclaw 9-rayed; female 270—340 μ long..... *haarlovi* n. sp.
3. Shield design of longitudinal lines, female 280—320 μ long.. *ednae* K.
Shield design of fine, short longitudinal streaks 4.
4. No spinules on suboral plate; female 300—330 μ long *tsugae* K.
Spinules on anterior coxae and on suboral plate; female 180—250 μ long *tsugifoliae* K.

References cited:

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