



Title	ON THE LARVA AND NYMPH OF RADFORDIA LEMNINA (KOCH) FROM A VOLE OF ALASKA
Author(s)	KONNO, Seiji
Citation	Japanese Journal of Veterinary Research, 5(3), 86-88
Issue Date	1957-09-25
DOI	https://doi.org/10.14943/jjvr.5.3.86
Doc URL	https://hdl.handle.net/2115/1711
Type	departmental bulletin paper
File Information	KJ00002373121.pdf



ON THE LARVA AND NYMPH OF
RADFORDIA LEMNINA (KOCH) FROM
A VOLE OF ALASKA

Seiji KONNO

*Department of Parasitology,
Faculty of Veterinary Medicine,
Hokkaido University, Sapporo, Japan*

(Received for publication, July 17, 1957)

The author got many adults, 2 nymphs and a larva of *Radfordia lemnina* from the body of a red-backed vole, *Clethrionomys rutilus*, sent to this department from Alaska for another purpose. The morphological description of this species has been published only on the adult in North America and Leningrad district, USSR. Here the author wishes to describe the morphological aspects of the larva and nymph of this mite.

Larva Body size 0.16×0.12 mm; capitulum with a pair of long ventral bristles; leg I with 3 segments, legs II and III with 4 segments respectively, tarsus II with 2 equal toothless claws, tarsus III without. In leg I, segment II with a densely striated, mushroom-form process located interio-dorsally and a lateral process. A bristle interio-dorsal to the lateral process. Segment III with an inwardly directed, transversely striated and hooklike clasping tubercle, a blunt-ended bristle and 2 short bristles, a striated conical process and a lateral process. A dorsal bristle inside of the lateral process.

Dorsal side: With 11 pairs of setae with 2 segments, blunt apex and striated. Of submedian setae (Ss) Ss I longest, far away from Ss II and each of Ss II~IV extends to the next seta. The bases of lateral setae (Ls) I, II and III closely situated, and Ls II extends near the base of Ls IV. Ls II and III lateral to Ss I. Ls I and III subequal, slightly longer than Ss I; Ls II about one and a half times as long as Ls III and equal to Ls IV. Ls V lateral to Ss V, slightly longer than Ss V. Ls VI inside of Ls V and equal to Ls V. Caudal margin with 2 long bristles, $0.13 \sim 0.15$ mm, closely situated at their bases. Two pairs of short bristles just before the base of caudal marginal bristles.

Ventral side: With 3 pairs of bristles. Ventral bristle (Vb) I interior to the base of leg II; Vb II longest of the ventral bristles, slightly behind the base of leg II; Vb III short, inside of the base of leg III.

Nymph Body size $0.27 \sim 0.29 \times 0.17 \sim 0.20$ mm; similar to larva, excepting

the following characters. Legs 4 pairs; leg I with a ventral bristle at the base of the conical process and an unstriated conical process dorsal to the hooklike clasping tubercle in segment III. Legs II and III with 5 segments; leg IV with 4 segments. Tarsus II with 2 equal toothless, large claws. Tarsus III with a larger claw, but tarsus IV without.

FIG. 1. Larva and Nymph of *Radfordia lemnina*



1. Leg I of larva, dorsal view; 2. Leg I of nymph, dorsal view;
3. Body of larva, dorsal (right) and ventral (left) view; 4. nymph, ditto.

Dorsal side: Dorsal setae similar to those of the larva in arrangement. Ss I~IV subequal. Ss I does not extend at the base of Ss II, but each of Ss II~IV extends beyond the next seta; Ss V one and a half times as long as Ss IV. Ls I and III equal, slightly longer than Ss I; Ls II and IV subequal and far longer than the other setae. Ls V and VI equal, slightly longer than Ss V. Before the caudal margin 2 pairs of bristles, the lateral ones far longer than the interior ones. The caudal marginal bristles 0.25~0.27 mm long.

Ventral side: Similar to the ventral side of larva, excepting the existence of a dentiform process before the base of leg II and a short bristle after leg IV.

REFERENCES

- 1) BREGETOVA, N. G., E. M. BULANOVA-ZAKHVATKINA, V. I. VOLGIN, V. B. DUBININ, A. A. ZAKHVATKIN, A. A. ZEMSKAJA, A. B. LANGE, E. N. PAVLOVSKII, G. V. SERDYUKOVA and E. G. SHLUGER. (1955): *Klyeshchi Gryznov Fauny SSSR*. Moskva-Leningrad.
- 2) EWIG, H. E. (1938): *Proc. ent. Soc. Wash.*, **40**, 180.
- 3) GRANT, C. (1942): *Microentomology*, **7**, 64 [BREGETOVA, N. G. et al.³⁾].
- 4) POPPE, S. A. (1896): *Zool. Anz.*, **19**, 327.