

***BLOMIA GRACILIPES* (= *CHORTOGLYPHUS GRACILIPES*):
REDESCRIPTION & STATUS (ACARINA: GLYCYPHAGIDAE)¹**

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ABSTRACT: *Chortoglyphus gracilipes* Banks, 1917 is transferred from *Chortoglyphus* to *Blomia* Oudemans, 1928 and redescribed.

DESCRIPTORS: Glycyphagidae, Chortoglyphidae, *Blomia gracilipes* comb. nov., hypopial nymphs, follicular mites, house-dust mites.

Fain and Spicka (1977) have established that mites previously placed in the subfamily Aplodontopinae Fain, 1969 of the family Glycyphagidae should now be placed in the family Chortoglyphidae Berlese, 1897, because of the similarity of the adults of *Aplodontopus* Fain, 1967 with those of *Chortoglyphus* Berlese, 1884. *Aplodontopus* has been described from hypopial nymphs associated with the hair follicles on the tails of North American rodents whose adults live in nesting materials. Tadmowski and Hyland (1974) succeeded in rearing adults of *A. sciuricola* Hyland and Fain, 1968. *Chortoglyphus* has been found associated with floor dust of barns, mills, stables, granaries and houses. The genus *Chortoglyphus* presently contains two species, the cosmopolitan *C. arcuatus* (Troupeau, 1879) and *C. gracilipes* Banks, 1917, known only from North America.

Upon examining the types of *Chortoglyphus gracilipes* we were surprised to find that they were of another genus, namely *Blomia* Oudemans, 1928. We were able to examine these types from the U.S. National Museum of Natural History through the courtesy of Dr. E.W. Baker. The slide contains two female specimens along with a cheyletid mite and two psocids. The specimens were mounted in balsam and are in relatively poor condition. No attempt was made to remount them so there are certain characters which are difficult to verify.

Redescription of *Blomia gracilipes*

(Banks, 1917) nov. comb. (= *Chortoglyphus gracilipes*) (fig. 1-3)

The typical slide contains two female specimens. They measure 300 μ x 172 μ (specimen in ventral view) and 285 μ x 154 μ (specimen in ventro-lateral view) respectively (gnathosoma included). We designate as lectotype the specimen in ventral view. *Dorsum:* The cuticle is typically glycyphagid in that there are numerous spinelet-like projections arising from the surface. Most of the dorsal setae are long and barbed and the *v i* and *v e* setae are also long and barbed, and are situated close together as in the genus *Blomia*. There is a long and narrow copulatory tube at posterior

¹ Accepted for publication: September 3, 1977

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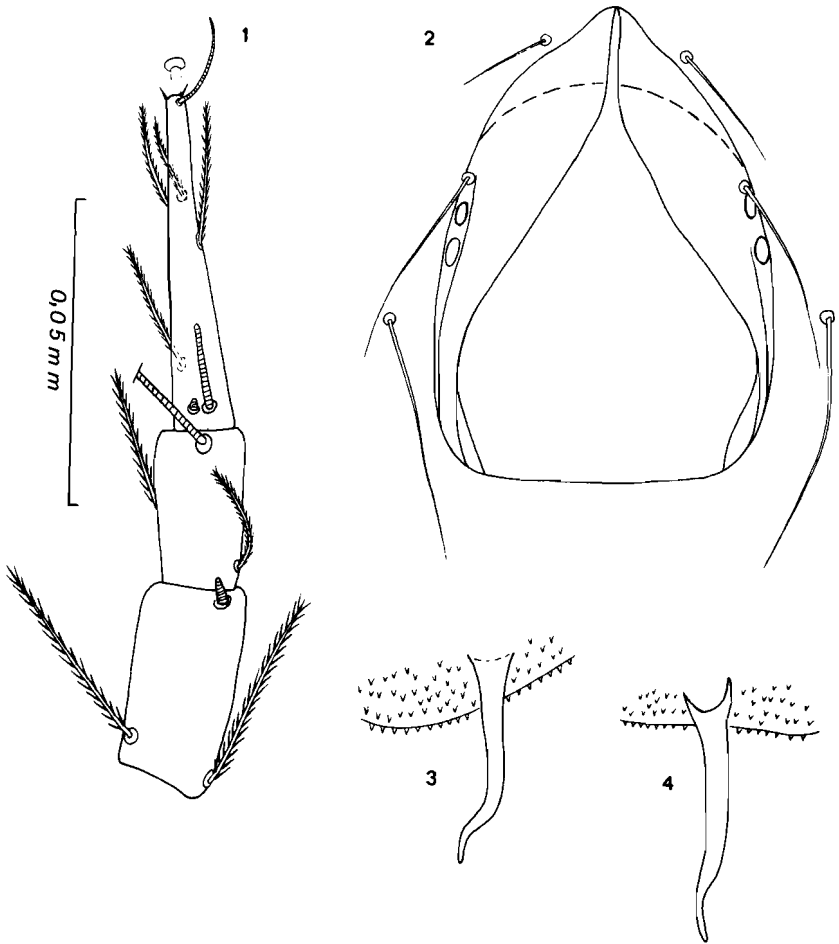


Fig. 1-3. *Blomia gracilipes* (Banks). Lectotype (female). 1. Genu, tibia, and tarsus I dorsally. 2. Vulva. 3. Copulatory tube.

Fig. 4. *Blomia tropicalis* Van Bronswijk et al. Paratype female: copulatory tube.

extremity of body. This tube is 39 μ long and distinctly longer than the genu I (34 μ). It is slightly bent in the larger specimen and strongly curved in the other specimen. The tube is distinctly pointed apically (fig. 3). Banks describes it as follows: "At tip of body is a prominent down-curved spine". *Venter*: Genital region very large, vulva in an inverted Y with a large posterior lip (fig. 2). The legs are long. Tarsi I to IV very narrow; their lengths are 63 μ - 62 μ - 72 μ and 75 μ . Chelicerae 87 μ long. Setae of legs as in other species of *Blomia*. *Solenidia*: Leg I: $\omega 1$ 14-15 μ long, narrow and cylindrical; $\omega 2$ very short (1.5 μ long). The solenidia $\omega 1$ and $\omega 2$ are inserted at the same distance from the base of the tarsus (fig. 1). *Sigma* longer than the tarsus; *phi* is 3.8 μ long and conical.

Habitat: Lectotype and one female syntype from Tampa, Florida, 5 August 1913, in tobacco infested with the cigarette beetle (Runner).

Systematic Position of *Blomia gracilipes*

Van Bronswijk et al. (1973 a,b) have reviewed the genus *Blomia* and recognize six species. *B. gracilipes* belongs to the group which possesses a long copulatory tube and has the solenidia $\omega 1$ and $\omega 2$ of tarsus I situated at the same distance from base of tarsus. These characters are shared by *B. kulagini* Zachvatkin, 1936 and *B. tropicalis* Van Bronswijk et al., 1973.

B. gracilipes lacks the pair of cuticular projections ("wrats" of Van Bronswijk et al.) on the posterior region of opisthosoma but this character might not be visible owing to the poor condition of the specimens. With this exception it appears extremely close to *B. kulagini*. Unfortunately the type of *B. kulagini*, along with others of Zachvatkin, has been lost so it is impossible to decide if it should fall into synonymy with *B. gracilipes*.

Van Bronswijk et al. have chosen what they believe to be specimens representative of *B. kulagini* from Japan but they have noted several differences between the original description and their material. We think therefore that the identity of the true *kulagini* could be ascertained only after examination of new specimens collected from the typical locality (wheat stored in Moscow granaries).

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