

# LABIDOSTOMMA MOTASI N. SP. (NICOLETIELLIDAE) A NEW SPECIES OF MITE FROM ROMANIA

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A new species of Nicolettiellidae, *Labidostomma motasi* — has been described after one female which has been collected from the cave „Peștera de la Movile” — This species is characterised by the total absence of eyes, front-lateral prominences slightly marked, a thinner body and longer fingers.

In this paper we have used Feider's classification of superspecific taxonomic units.

## Family NICOLETIELLIDAE Canestrini 1891

The characteristic of the Nicolettiellidae family is the design of the tegument displaying longitudinal streaks, named teniola given by the arrangement of hairs, pores and alveoli.

The terminal segment of the palp has a varied ketotaxic formula, a characteristic used for delimiting genus.

On both sides of the idiosoma there is a pair of conspicuous lens-like protuberances; there may be one or several such organs and they may also disappear completely.

On the tarsus of the first leg there is a characteristic hair, famulus, that may take different shapes.

## Subfamily NICOLETIELLINAE Canestrini 1891

There is only pair of lens-like protuberances; there is usually a middle eye and side eyes. The movable digit of the chelicera is indented.

The front lateral prominences (*cornuas dorsales*) jut out more or less; they may be round or pointed; sometimes there aren't any.

Within the Nicolettiellinae sub-family, Berlese (1887), Trägårdh (1904), Thor (1929), Willmann (1934), Storkan (1940) apply the term of *Labidostomma* to the species that do not display dorsal prominences and that of *Nicolettiella* to those species that have them.

Other authors, adepts of Grandjean's opinion, group the two together; the presence or absence of side prominences is not considered significant enough to separate the two genera (Grandjean, 1942).

Feider and Vasiliu (1967) establish the relationship between dorsal prominences, the anatomy of famulus and the geographic area; they re-define the *Labidostomma* genus as characterised by; spine-like famulus, the absence of dorsal prominences, palpo-tarse with five hairs, the presence of the middle and lateral eyes.

Our species confirms the above-mentioned generic diagnosis.

### *Labidostomma motasi*\* n. sp.

Studied material: 1 ♀ holotype, cave „Peștera de la Movile”, 19.01. 1991, leg. Șerban Sârbu.

\* Named in honor of Prof. Constantin Motas

The colour of the body is light yellow. Length idiosoma 962 $\mu$ , leg. I 425 $\mu$ , leg. II 792 $\mu$ , leg. III 651 $\mu$ , leg. IV 812 $\mu$ , the index value legs/idiosoma 3.30.

The idiosoma, of an oval shape, has a round posterior end and flat chopped-off front, the cornuas dorsales are slightly prominent; on the dorsal surface there are two rows of hairs: a lateral one, made up of 8 pairs of smooth hairs and a paramedian one, also made up of 8 pairs, two of which are trichobothries (pseudostigmatic organs), far from the median line, and six pairs of smooth hairs (Fig. 1).

The surface of the body is covered by subtilalveoles.

The gland-like organs on the edge of the idiosoma are prominent and rounded; they have a radiary structure.

There is no median eye and there aren't any lateral ones, either.

The surface of the dorsales teniolae is covered by subtilalveoles, without patches of streaks.

The ventral side also displays subtilalveolae; they are to be found on the coxosternae, too.

The coxosternae are unevenly developed, the first pair being the longest, while the third is the shortest.

The genital-anal complex is surrounded by an oval chitinous ring (Fig. 2).

The genital quadrangular sclerites display 14 pairs of long hairs. The anal valves are triangular.

The surface of the two pairs of valves is covered with wellshaped subtilalveolae.

Around the genital — anal complex there are two rows of simple, long hairs, the outer one is made up of 16 hairs, the inner has 8.

Chelicerae have a long body, with streaks on the proximal side and subtilalveolae on the distal one (Fig. 3).

The movable digit is slightly curved and has several regular teeth. The fixed digit has a two-pronged forked end and is devoid of teeth.

The chelicera has two smooth hairs; the front one, curved, is on the distal end of the fixed digit, while the posterior hair is straight and grows out of a small swelling.

The chetotaxy formula of the pedipalp is 1, 1, 2, 5 (Fig. 4).

The solenidion of the first pair of legs are curved and have streaks, the spine-like famulus is in front of the solenidion (Fig. 5).

The legs do not display a subtilalveolar pattern.

From the morphological point of view our species differs from Euro-Asian species by the absence of eyes, the position of pseudostigmatic organs; the chelicera have long, thin digits and the cornuas dorsales are slightly outlined.

#### REFERENCES

- 1967 FEIDER Z., VASILIU N., *Révision critique de la famille Nicoletiellidae*: Proceedings of the 2nd International Congress of Acarology, 201—207, Budapest.

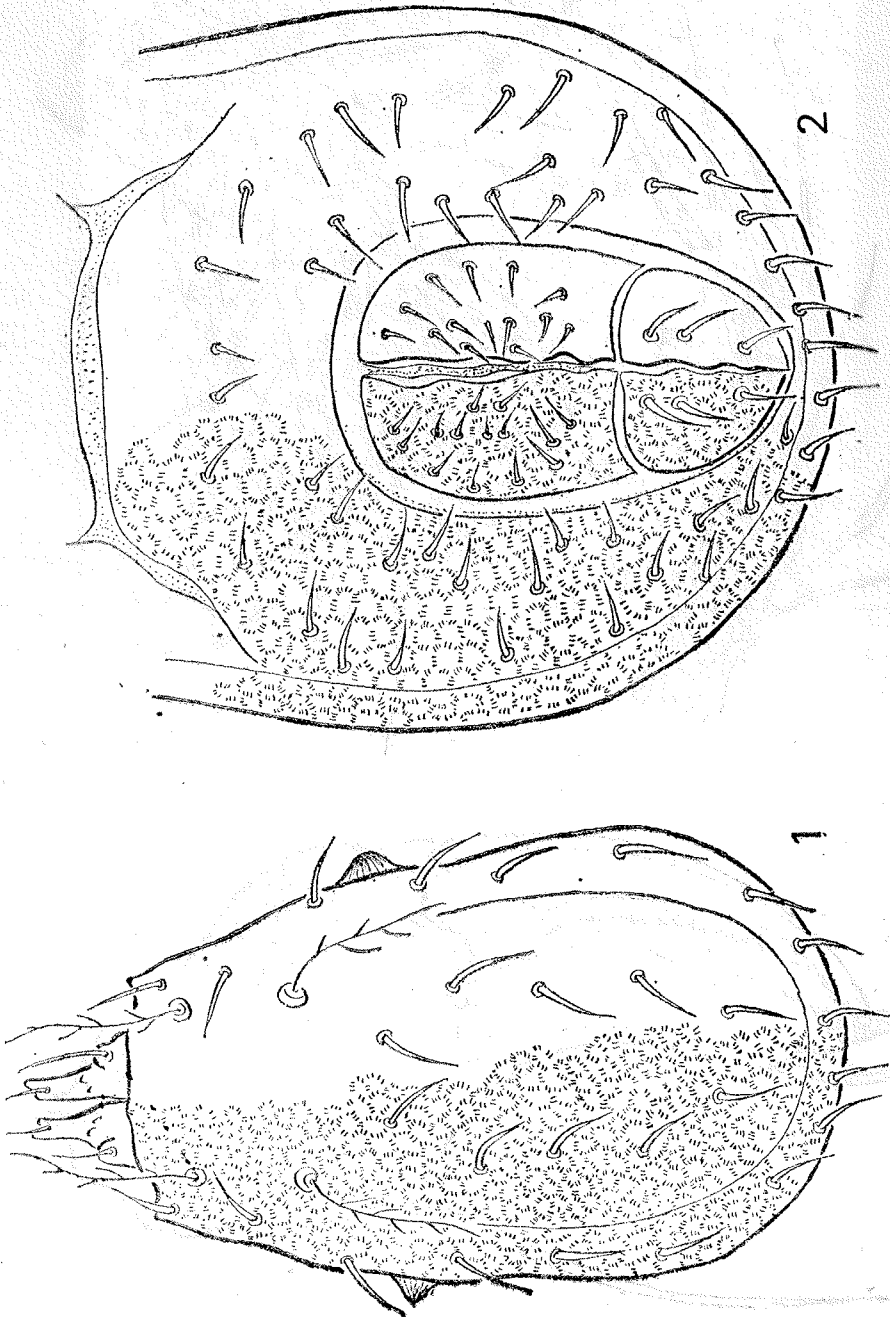


Plate I: Fig. 1 — Dorsal view of the idiosoma; Fig. 2 — Genital-anal complex.

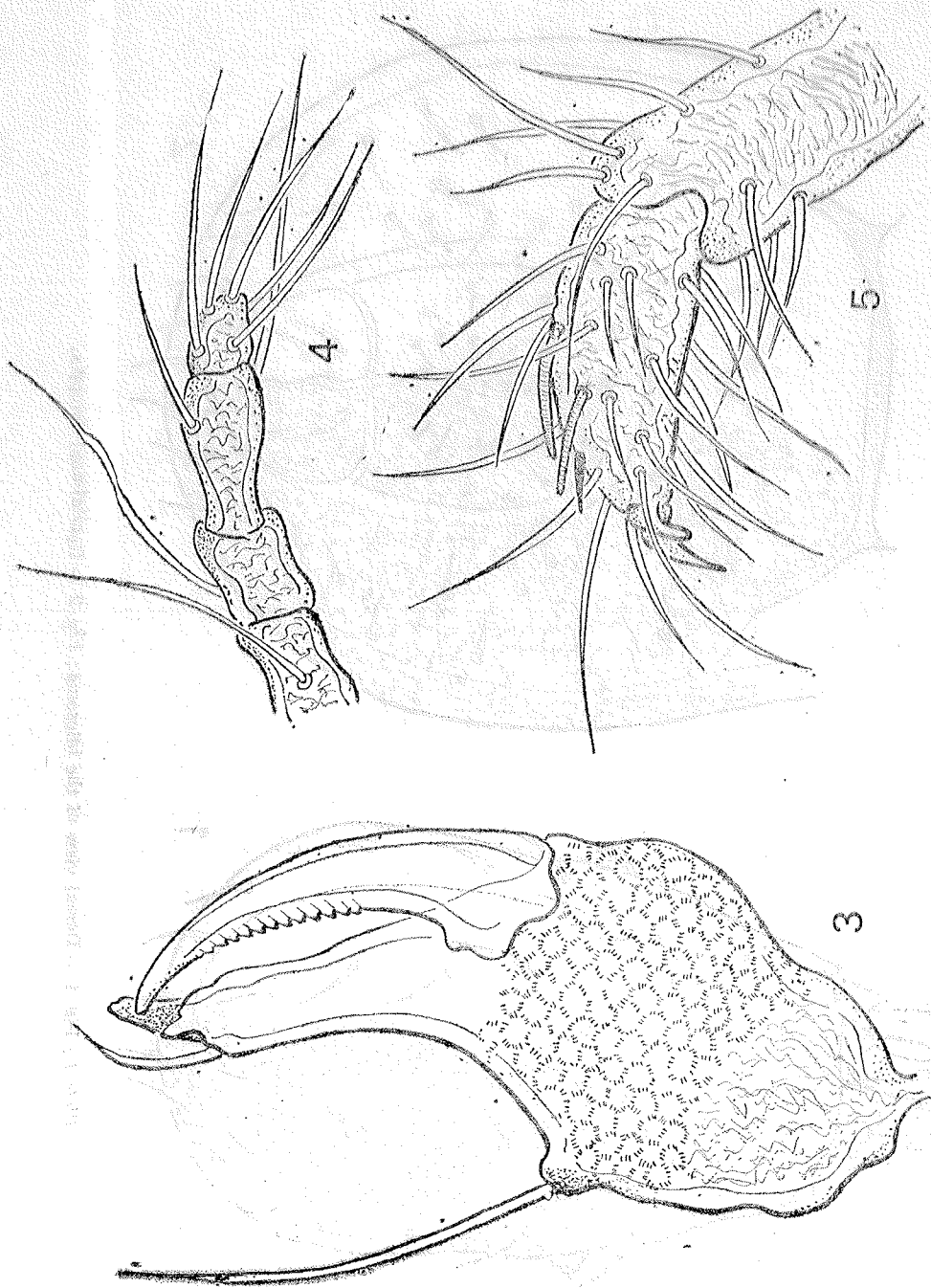


Plate II: Fig. 3. — Chelicera; Fig. 4. — Pedipalp; Fig. 5. — Leg I.

- 1942 GRANDJEAN F., *Observations sur les Labidostomidae (Acariens)* Bull. Mus. Hist. nat. 2<sup>e</sup> Sér. 14(6), 414—418.
- 1952 GREENBERG B., *New Labidostemmidae with Keys to the New World species (Acarina)*. J. New York Entomol. Soc. 60, 197—209, New York.
- 1932 WILLMANN C., *Acari aus südostalpinen Höhlen I*, Mitteilungen über Höhlen — und Karst-forschung, p. 158—161.

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