

ON SOME CASES OF STRUCTURAL ABNORMALITY IN *LITHOBIUS* (CHILOPODA, LITHOBIOMORPHA).

A. Garcia Ruiz

Departamento de Biología Animal I (Entomología)
Facultad de Ciencias Biológicas
Universidad Complutense 28040-Madrid (España)

ABSTRACT

Structural abnormalities in several species of *Lithobius* are described and commented on.

RESUMEN

Diversos casos de estructuras anormales en *Lithobius* (Chilopoda, Lithobiomorpha).
Se describen y comentan conformaciones anormales en varias especies de *Lithobius*.

INTRODUCTION

Among centipedes collected in the Iberian Peninsula in recent years, we have found some specimens with malformed structures. Minelli & Pasqual (1986) distinguished three principal types of abnormality shown in centipedes. Although Lewis (1987) remarked that not all cases of malformed structures in centipedes can be included in those listed by Minelli & Pasqual. In most cases the malformed structures are due to some developmental problem or possible regeneration after having suffered some damage.

DESCRIPTION OF STUDIED CASES

A: Abnormalities in the last pair of legs in *Lithobius borealis* Meinert (1868)

A female *Lithobius borealis* was collected on 3/5/1990 from a field at Cebreros (Province of Avila), we can see that the legs of the last pair were of different sizes (Figure 1).

The two legs have all the telopodites, but the left leg is smaller than the right one; the tarsus and pretarsus of the left leg are smaller than those of the right.

We think that the small size of the tarsus and pretarsus of this leg is due to developmental abnormality, because there is no obvious sign that this specimen had been damaged.

B: Abnormality in the last pair of legs in *Lithobius castaneus* Newport, 1844.

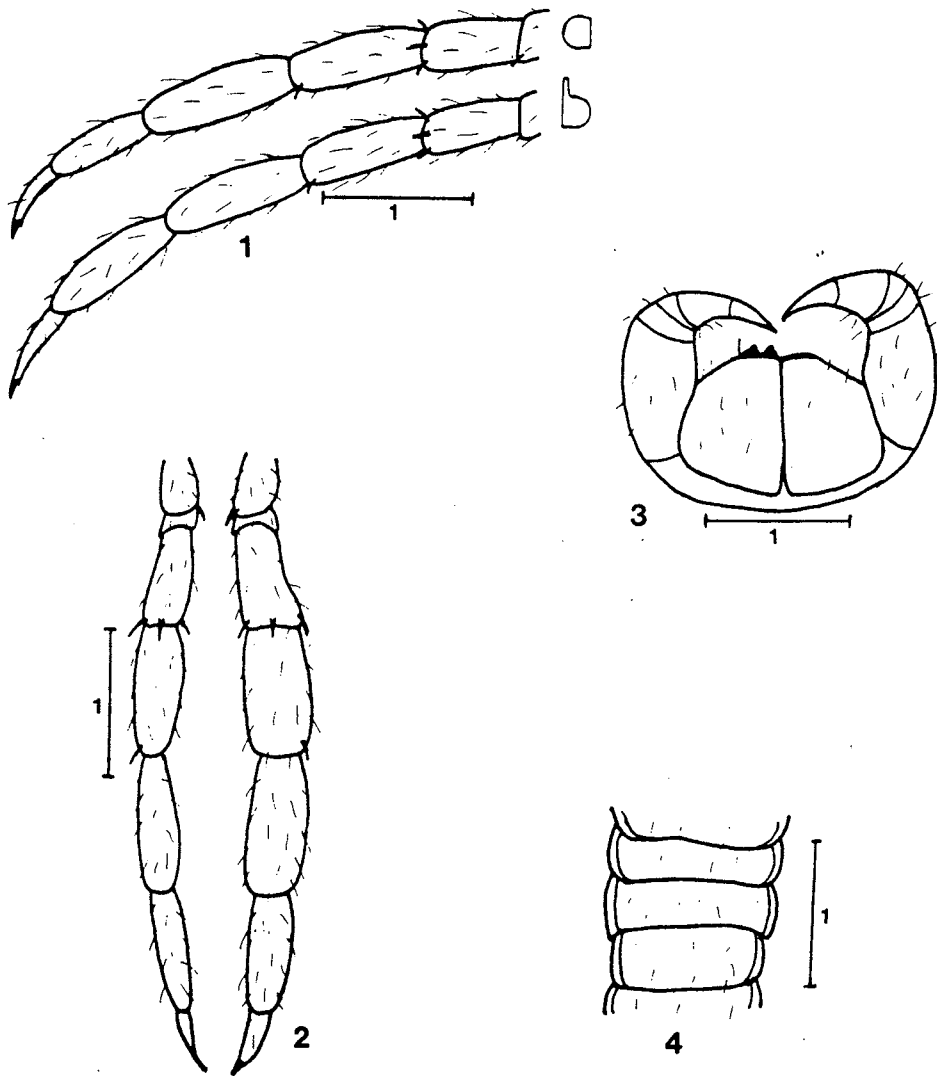


Fig. 1) Last pair of legs of a *Lithobius borealis* Meinert.
 a. Lateral view exterior of left leg.
 b. Lateral view interior of right leg.

Fig. 2) Dorsal view of last pair of legs of a *Lithobius castaneus* Newport.

Fig. 3) Forcipular coxsternite of a *Lithobius quadarramus* Matic.

Fig. 4) Dorsal view of segments XI to XIII of a *Lithobius inermis* (Meinert).

A female of *Lithobius castaneus* was collected on 14/5/1988 from a pine-tree at Puerto de Navacerrada (Province of Segovia), we can see the last pair of legs were of different appearances although the same length (Figure 2).

The telopodites of the fifteenth pair of right legs are larger in all cases than those of the left.

Until now we have not found any reference to centipedes with a malformed structure like this. We think that it is due to developmental abnormality.

C: Abnormal forcipular coxosternite in *Lithobius quadarramus* Matic, 1968.

A female *Lithobius quadarramus* collected on 6/4/1993 from a meadow at Rascafria (Province of Madrid) shows the anterior border of the left forcipular coxosternite almost straight, without teeth (Figure 3).

Lewis (1987) reported a similar case in a female *Lithobius borealis*. Like him, we think this a developmental abnormality.

D: Abnormal segmentation in *Lithobius inermis* (Meinert, 1872).

A female *Lithobius inermis* collected on 20/4/1991 from a field at Almargo (Province of Ciudad Real), shows tergite XII of smaller size than normal; it is the same size as the contiguous ones, i.e. XI and XIII. It also showed two small projections on the posterior border of this tergite, an abnormal occurrence in *Lithobiomorpha* (Figure 4).

We have not found any reference in the literature to a feature such as this.

We think that it is due to developmental abnormality.

REFERENCES

Lewis, J.G.E., (1987) "On some structural abnormalities in *Lithobius* and *Cryptops* (Chilopoda) and their possible significance". *Bull. Br. Myriapod Grp*, 4: 3-6.

Minelli, A & Pasqual, C., (1986) "On some abnormal specimens of centipedes." *Lavori-Soc. Ven. Sc. Nat.*, 11: 135-141