

ON SOME CASES OF STRUCTURAL ABNORMALITY IN *SCOLOPENDRA* (CHILOPODA, SCOLOPENDROMORPHA).

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INTRODUCTION

Among the large quantities of centipedes studied during the last years we have found several specimens with malformed structures. Minelli and Pasqual (1986) described eight structurally abnormal centipedes and listed the previously recorded cases; they distinguished three principal types of abnormality: spiral segmentation, homeotic mutations and schistomely.

Lewis (1987) states that each anomalous structure on centipedes cannot fit into Minelli and Pascual's (1986) classification because in most cases the anomalous structures are due to problems in the animal's development or to regeneration of structures after damage.

DESCRIPTION OF STUDIED CASES

A: Abnormal size of left antenna in *Scolopendra cingulata* Latreille, 1829.

A female *Scolopendra cingulata* collected on 5.iii.1993 from a pine tree at El Pardo (province of Madrid); we can see that the antennae are of different dimensions (Fig. 1). The two antennae have a complete number of articles, but the left is smaller than the right; both show all the antennal articles but the left antennal is smaller than the right because from the eleventh article down to the last they are smaller than their equivalent on a normal antenna. We think that it is due to a developmental abnormality.

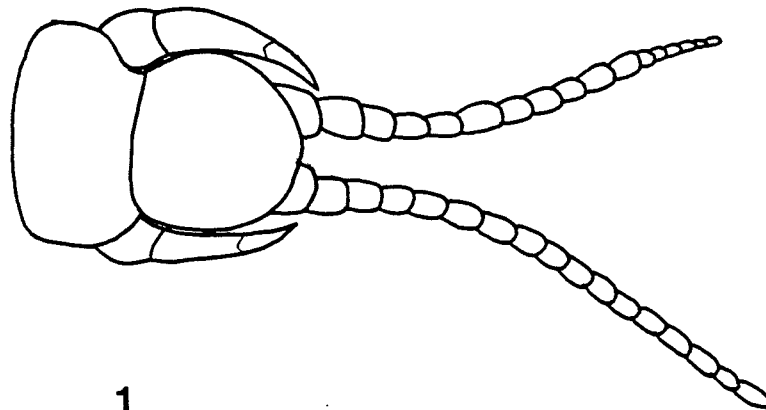


Figure 1. Dorsal view of head and antennae of a *Scolopendra cingulata* from El Pardo.

B: Abnormal prefemur in the last pair of legs in *Scolopendra cingulata*.

In a male of *Scolopendra cingulata* collected on 19.iv.1991 from a field at Moral de Calatrava (province of Ciudad Real), we see the prefemurs of the last pairs of legs are of different sizes although they are the same length (Fig. 2). The prefemur on the left is much larger overall than that on the right. We have not found any previous reference to centipedes with a malformed structure of this type and think that it is due to developmental abnormality.

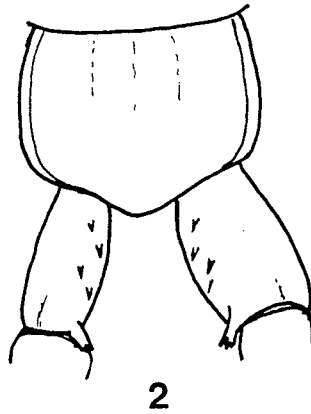


Figure 2. Dorsal view of last pair of legs of a *Scolopendra cingulata* from Moral de Calatrava.

C: Abnormal forcipular coxosternite in *Scolopendra canidens oraniensis* (Lucas, 1846).

A female *Scolopendra canidens oraniensis* collected on 15.v.1992 from a field at Valdemoro (province of Madrid) shows the anterior border of the left forcipular coxosternite almost straight, without teeth (Fig. 3).

Lewis (1987) reported a similar case in a female *Lithobius borealis* and Garcia Ruis (1994) in a female *Lithobius gadarramus*. Again, we think that it is due to a developmental abnormality.



Figure 3. Forcipular coxosternite of a *Scolopendra canidens oraniensis* from Valdemoro.

REFERENCES

Garcia Ruiz, A., (1994): On some cases of structural abnormality in *Lithobius* (Chilopoda, Lithobiomorpha). *Bull. Br. Myriapod Grp.*, **10**: 31-33.

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.