

## On a remarkable *Galeodes barbarus* (Lucas) from Ethiopia (Arachnida, Solifugae)

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During my taxonomic studies on African Solifugae (Simonetta & Delle Cave, 1968; Delle Cave & Simonetta, 1971; Delle Cave, 1971, 1977) I have often noticed anomalies, asymmetries and irregularities in the segmentation and of the spination of the appendages, especially on the 2nd-4th pairs of legs; these, because of their systematic implication must be discussed in a different context. The only instance of anomaly in the chelicerae which I have seen may have a quite different significance and therefore I deem it worthy of description.

Cases of gynandry and of intersexuality have long been known (Cambridge, 1902) and have often been described among the Araneae (Bednarz & Czajka, 1975; Blaszak, 1968; Denis, 1949; Exline, 1938; Hackman, 1951; Hull, 1918; Kaston, 1961; Rabaut & Millot, 1933); in the other arachnid orders they are rare (Powiertowska-Rezmer, 1963; Schulze, 1933) or have escaped notice because of their unpronounced sexual dimorphism.

Only two examples are recorded for the Solifugae by Turk (1960): the first, a *Galeodes medusae* Turk 1960, had the flagellum only on the right chelicera and Turk comments "the left one being in most respects similar to the condition as found in the females of *Galeodes*"; the other one had been published by Turk in 1948 as *?Solpugella asiatica* Roewer 1934, but in 1960 he described it noting that "but I now think that this specimen was, in fact, not a female of that species but a teratological (partially gynandromorphic) example".

The specimen which I shall describe was identified by Di Caporiacco (1936) as *Galeodes barbarus* (Lucas), and it now belongs to the Museo Civico di Storia Naturale "Giacomo Doria", Genoa; it was collected by S. Patrizi at Rorrom (Ethiopia) on 10 April 1929. The flagellum is present only on the left side (Fig. 1); there is no indication that the right flagellum has been lost or broken, and apart from this there are no differences in the denticulation of the chelicerae

which are often constructed differently in the two sexes. An interpretation of this specimen is difficult, and the comprehensive paper by Roberts & Parker (1973) does not help in defining these anomalous examples from the solifugids; in fact we cannot relate them to gynandry, intersexuality or partial gynandry, owing to the uncertainties of the basic arrangement of chromosome material and of sex determination in this order of arachnids, and to the impossibility of studying the specimen at the histological level; the flagellum is known to develop only with the last moult, but this fact gives no indication as to whether the observed abnormality has a genetic origin. It is unlikely that it is an example of intersexuality caused by parasitism.

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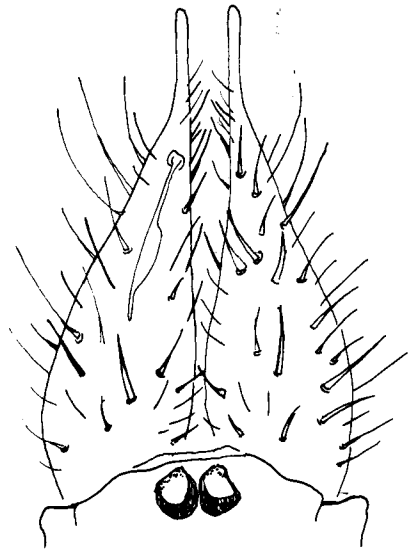


Fig. 1: *Galeodes barbarus* (Lucas). Chelicerae from above (from Rorrom, Ethiopia).

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