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## Remarks on the genus *Severinia* Finot 1902 and a description of two new genera of Oxyothespinae (Insecta Mantodea)

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A resolution of the confusion surrounding the genus *Severinia* Finot 1902 is proposed. It is suggested that the males, presently attributed to *Severinia lemoroi* (Finot 1902), be transferred to the new genus, *Paraseverinia*, and that the genus *Amblythespis* Chopard 1943 be considered a synonym of *Severinia*. In addition, a description is provided of a new genus *Somalithespis* (Oxyothespini), characterised by the presence of a pre-apical lobe on the mid femurs, a character found for the first time among the tribe of Oxyothespini.

KEY WORDS: Mantodea, Oxyothespinae, *Paraseverinia*, *Somalithespis*.

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The genus *Severinia* has raised a series of problems, due to misinterpretations on the part of several authors which studied this genus in the past.

In 1893, FINOT described a new species, *Heterochaeta lemoroi* on a female specimen from Algeria, characterised by subconical eyes armed with an ocular spine, a characteristic common to both sexes of all species of the genus *Heterochaeta* Westwood 1843. He did not ascribe this new species to the genus *Oxyothespis* Saussure 1870, in which both sexes are also equipped with an ocular spine, because at that time it was not known that *Oxyothespis* bore long, flattened cerci like *Heterochaeta*, a finding which BOLIVAR was to describe in 1913. FINOT, in 1902, published the results of his study on material from the Sahara which included a second female specimen of *H. lemoroi* as well as a male. Although the male lacked an ocular spine, it was very similar to the female *H. lemoroi*, and consequently he attributed it to the same species. However, as this kind of sexual dimorphism does not exist in all species of the genus *Heterochaeta*, FINOT erected the new genus *Severinia* for *H. lemoroi*, based on this characteristic.

When, in 1913, BOLIVAR discovered that the cerci in *Oxyothespis* were long and flattened, he considered *Severinia* to be a synonym of *Oxyothespis*. However, GIGLIOTOS (1915) thought that *Severinia* should remain a separate genus because examination of two specimens of a new species of *Severinia* (*S. minor*), revealed differences of such

entity (shape of pronotum, lack of antennal pubescence, etc.) that in his opinion the two genera, *Oxyothespis* and *Severinia* should remain distinct.

Later, CHOPARD (1943) demonstrated that the two specimens (male and female) which FINOT had re-named *S. lemoroï* in 1902, really belonged to two different genera, but he failed to take into account the new species described by GIGLIO-TOS. Thus he included the specimens with an apical spine (i.e. the females) in the new genus *Amblythespis*. This genus had originally been created by the author in the same paper for *A. granulata*, a species previously included in *Oxyothespis*, on account of its smaller sized cerci. Since CHOPARD (1943) had described also the true males of this species, with small cerci and ocular spine, discovered in Paris Museum, *S. lemoroï* is transferred to the genus *Amblythespis*.

CHOPARD left the male with muticous eyes in the genus *Severinia*, and correctly recognised them as a new species to which he gave the name *S. finoti*.

Thus the six genera attributed to the subfamily Oxyothespinae, are divided into two groups. In the first, the species are characterised by eyes with a spine, prismatic pronotum, metazone with a distinct carina and copulatory organ with elongated phalloid apophysis without a mucro; in the second the eyes lack a spine, the pronotum is semi-cylindrical and the phalloid apophysis has a distinct mucro. On the basis of these differences LA GRECA & LOMBARDO (1987) distinguished two separate phyletic lines, which have been recognised as tribes: Oxyothespini (*Oxyothespis*, *Amblythespis*, *Acithespis* and *Heterochaetula*) and Severiniini (*Lobothespis* and *Severinia*).

While agreeing with CHOPARD that the male and the females described by FINOT as *S. lemoroï* should be assigned to different genera, in my opinion some of the changes the author made were incorrect: there was no need to establish the new genus *Amblythespis* since the genus *Severinia* already existed which had specifically been instituted for the female on the type species *S. lemoroï*. Had CHOPARD considered the position of *lemoroï* before creating the genus *Amblythespis* for *granulata*, he surely would not have adopted the solution he did, which contradicts the rules of nomenclature. Thus *Amblythespis* should be considered as a synonym of *Severinia*, whose type species remains *Severinia lemoroï* (*sensu* CHOPARD, *nec* FINOT) and includes *S. granulata*. A new genus, which here I call *Paraseverinia*, remains to be instituted for the species which CHOPARD named *Severinia finoti*.

#### ***Paraseverinia* n. gen.**

*Type species. Severinia finoti* Chopard 1943.

Body elongated and slender. Broad head, spherical eyes lacking ocular spine, long hairless antennae.

Elongated pronotum with semi-cylindrical aspect, with the metazone bearing a distinct median longitudinal carina.

Anterior femurs armed with four external and four discoidal spines: the second segment is more developed than the others in both the external and discoidal spines. The anterior tibiae are armed with five small external spines. The middle and posterior legs are long and slender.

Flying organs are well developed but shorter than the abdomen.

The abdomen is narrow and long, the supra-anal plate with a rounded posterior margin; cerci are flattened and just longer than the subgenital plate with the last element slightly longer than the others.

Copulatory organ with phalloid apophysis of the left phallomere with pronounced lateral mucro.

As a result of these changes, the tribe Severiniini, proposed by LA GRECA & LOMBARDO (1987), should be re-named Paraseveriniini, with the genera *Lobothespis* and *Paraseverinia*, while the Oxyothespini includes *Oxyothespis*, *Severinia*, *Acithespis* and *Heterochaetula*.

Finally, examination of the two type-specimens of *Severinia minor* Giglio-Tos 1915 reveals that they belong to two different genera. The male should be allocated to the genus *Miomantis* (subfamily Mantinae) but until the genus is revised it is difficult to attribute it to a nominal species; for the female, a new genus must be erected which I shall call *Somalithespis*.

### *Somalithespis* n. gen.

*Type species.* *Severinia minor* Giglio-Tos 1915 (partim: female specimen).

Body slender. Head much broader than the supracoxal dilatation, eyes conical, very protruding laterally with robust apical spine; antennae strongly pubescent in the male but smooth in the female; transverse frontal shield.

The pronotum is more slender in the male and the dentation of its lateral margins are less than in the female; the metazone is prismatic with a well defined median ridge: coxal dilatation well defined.

In the male tegmina and wings are well developed but do not reach the tip of the abdomen; they are shorter in the female.

The legs are slender; the internal apical lobes of the anterior coxae are divergent; the groove of the claw is situated slightly distal to the mid-length of the anterior femur; there are four external spines on the anterior femurs and seven external spines on the anterior tibiae; the mid and hind legs are slightly pubescent: the mid femurs have a slight but well defined pre-apical lobe. The abdomen is narrow and cylindrical.

Because of the prismatic aspect of the metazone and the presence of an ocular spine, this genus is considered as belonging to the tribe Oxyothespini; it is distinguished from the other genera in the tribe by the presence of a pre-apical lobe on the mid femurs.

### *Somalithespis minor* (Giglio-Tos 1915)

*Severinia minor* GIGLIO-TOS 1915: 24 (partim: female specimen only).

*Type material examined.* Bass Narok (L. Rodolfo, Etiopia) IX.96, 1 ♀ (leg. Bottego) (Mus. Genova).

*Material examined.* Bud Bud (Somalia) 1/4.12.1982, 1 ♂ (leg. Baccetti) (Coll. La Greca).

♀. The female is considerably more strong than the male and has a more greyish hue.

The head, as in the male, is transverse but richer in minute black spots; the eyes are conical with a robust apical spine; the face has four deep longitudinal grooves initiating at the fastigium of the vertex; the antennae are filiform and not pubescent; the frontal shield is transverse.

The pronotum is generally more strong in the female and the dorsal surface is covered with numerous blackish granules; the lateral margins are furnished with conspicuous and black teeth; the supracoxal dilatation is very marked; metazone: prozone ratio is 2:4.

The front legs are strong, the coxae are prismatic and with thick, stumpy black spines at the margins; the external surface of the femurs is covered with numerous black granules and bears two transverse blackish stripes, a broader one in the middle and a narrower one at the tip.

Tegminae and wings are not well developed and hardly reach first segment of the abdomen: the tegminae, with slightly rounded apex, are ochraceous with brown spots, particularly in the distal portion; the wings are completely brown with the exception of a large yellow spot at the base of the venation and some small yellow cells spread on the anal region.

The mid and hind legs are similar to those of the male.

The long, cylindrical abdomen is greyish in colour and densely spotted with black.

♂. The male is slender with a slightly flattened, greyish body. The markedly transverse head (Fig. 1) is about 1.8 times broader than long, with a curved fastigium of vertex; the eyes are conical, very protruding laterally and furnished with a strongly conical spine lightly smoothed apically; the ocelli are large and situated on the sides of a strong protrusion in the middle of the vertex; the antennae are long, filiform and strongly pubescent with the grey scape spotted with brown, and rather ochraceous flagellum. The frontal shield is transverse, about 4 times broader than long, with the upper margin laterally concave and the tip markedly rounded.

The pronotum (Fig. 2) is long, slender, and slightly granulated; its lateral margins are finely but distinctly toothed. A distinct median longitudinal ridge runs along the metazone, partly obliterated along the prozone; the supracoxal dilatation is well marked and its lateral margins rounded; the prozone is slightly narrower than the metazone which is about 2.4 times as long as the prozone.

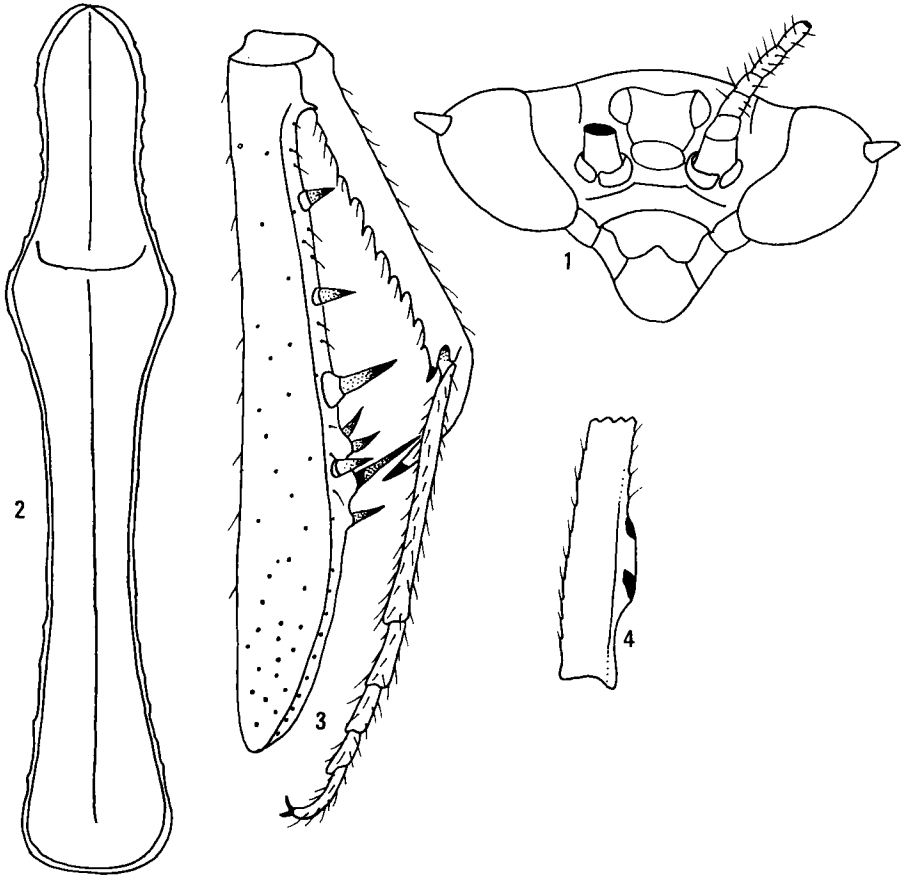
The front legs are slender, with the coxae 0.6 times as long as the pronotum, prismatic in shape and with very small spines on the posterior margin; the femurs (Fig. 3), are as long as the metazone and their external surface moderately granulated; they are armed with four external discoidal spines, the first of which is situated laterally to the second, whilst the third is the longest of the group; there are 12 equally long internal spines. The tibiae exceed half the length of the femurs and the first tarsomere of the tarsi is 1.4 times as long as the total length of the others.

The mid and hind legs are long and slender; the mid legs are shorter than the hind legs and have a slight but well marked preapical rectangular lobe (Fig. 4).

The flying organs are developed but do not reach the tip of the abdomen; the tegminae are slightly shorter than the wings; the wings are hyaline but transverse venations are dark in some places and paler in others.

The abdomen is narrow, with parallel margins. Unfortunately damage to the tip of the abdomen did not allow examination of the copulatory organ.

Dimensions of the male: width of head 3.8 mm; length of pronotum 9.5 mm; length of metazone 6.6 mm; width of prozone 1.3 mm; length of anterior coxae 5.7 mm; length of anterior femurs 6.6 mm; length of tegminae 20 mm.



Figs 1-4. — Male of *Somalithespis minor*: Fig. 1, head; Fig. 2, pronotum; Fig. 3, anterior leg; Fig. 4, tibiae middle.

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