

***Parabuthus cimrmani* sp. nov. from Somalia (Scorpiones: Buthidae)**

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Abstract. *Parabuthus cimrmani* sp. nov. is described and compared with other species of the genus known from Somalia. The base color is uniformly yellow to yellowish brown, only the fourth and fifth metasomal segments and the telson are dark. This distinguishes the new species from *P. heterurus* Pocock, 1897 and *P. eritreensis* Kovařík, 2003, which have the fifth metasomal segment yellow. The pedipalps of both sexes are very narrow and the movable finger is more than twice as long as the manus, which distinguishes *P. cimrmani* sp. nov. from *P. heterurus*, *P. granimanus* Pocock, 1895 and *P. leiosoma* (Ehrenberg, 1828). Furthermore, the male of *P. cimrmani* sp. nov. has an unusually high number of pectinal teeth (61–62).

Taxonomy, new species Scorpiones, Buthidae, *Parabuthus*, Afrotropical region

***Parabuthus cimrmani* sp. nov.**

(Figs 1–5, Table 1)

TYPE LOCALITY AND TYPE REPOSITORY. **Somalia**, Maxaans env.; author's collection (FKCP).

TYPE MATERIAL. **Somalia**, Maxaans env., 1972, male holotype and female allotype preserved in 75% alcohol. Collector uncertain, in my opinion Jára Cimrman during one of his trips to Somalia. No additional material studied.

ETYMOLOGY. Named after Jára Cimrman, a well known Czech renaissance man.

DIAGNOSIS. Adults from 83 mm (male holotype) to 85.3 mm (female allotype) long. Base color uniformly yellow to yellowish brown, only fourth and fifth metasomal segments and telson dark. Pectinal teeth number 32–33 in female and 61–62 in male. Stridulatory area on dorsal surface of first and second segments, on third segment absent in female and small, on disc only, in male. Metasoma densely hirsute. Movable finger of pedipalp more than twice as long as manus, bears 14 rows of granules which include external and internal granules. Manus of pedipalp smooth and very narrow in both sexes. Tarsomere I of all legs with bristlecombs.

DESCRIPTION OF HOLOTYPE. The adult male holotype is 83 mm long. Measurements of the carapace, telson, segments of the metasoma and segments of the pedipalps, and numbers of pectinal teeth are given in Table 1.

Coloration. The base color is uniformly yellow to yellowish brown, only the fourth and fifth metasomal segments and the telson are dark.

Carapace. The carapace lacks carinae but bears sparse and scattered pointed granules. The anterior margin is straight except for a minor median convexity.

Mesosoma. The first to sixth tergites are largely smooth, only posteriorly tuberculate, and bear median keels. The seventh tergite is granulated and bears four carinae. The seventh segment is ventrally without keels and granules, but has an uneven, bumpy surface. The pectinal tooth count is 61 and 62.

Metasoma and telson. The first to fourth metasomal segments bear a total of 10 carinae. The fifth segment has four or five carinae, its ventral surface is granulated, and the median carina may not be always noticeable among the granules. All the segments are variously granulated. Dorsolateral keels of

Table 1. Measurements (in millimetres) of types of *Parabuthus cimrmani* sp. nov.

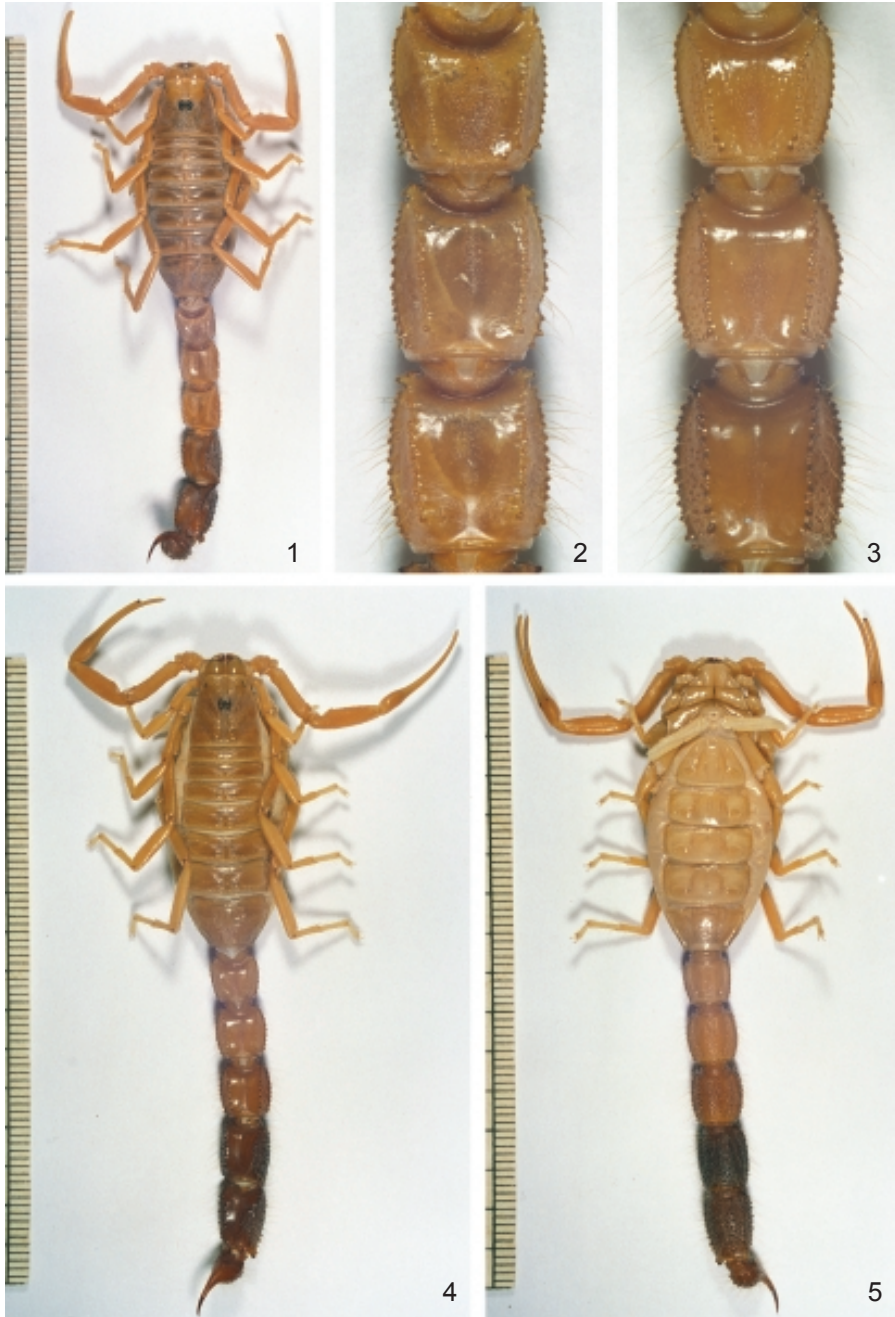
		<i>Parabuthus</i> <i>cimrmani</i> sp. nov. male, HT	<i>Parabuthus</i> <i>cimrmani</i> sp. nov. female, AT
total	length	83.0	85.3
carapace	length	8.1	8.6
	width	9.5	8.6
metasoma	length	48.0	48.2
segment I	length	6.1	6.0
	width	5.8	6.0
segment II	length	6.6	6.6
	width	5.8	6.4
segment III	length	6.7	6.8
	width	5.9	6.5
segment IV	length	7.8	7.8
	width	6.0	6.4
segment V	length	8.4	9.1
	width	5.5	5.9
telson	length	9.2	8.9
pedipalp			
femur	length	7.1	7.7
	width	1.9	2.0
patella	length	7.9	9.2
	width	2.4	2.4
tibia	length	13.0	14.1
manus	width	2.2	1.9
finger mov.	length	9.2	11.0
pectinal teeth		62 : 61	33 : 32

the third and fourth segments terminate in sharp teeth of which the last one is the largest, and those of the fifth segment bear four large teeth. The stridulatory area is located on the dorsal surface of the first and second segments. On the third segment the stridulatory area is small, developed only on the disc. The entire metasoma, but especially the third to fifth segments, and the telson are densely covered by long hairs. The ventral surface of the telson is granulated.

Pedipalps. The trichobothrial pattern is of type A, orthobothriotaxic (Vachon 1974). The dorsal trichobothria of the femur are arranged in the basic alpha pattern (Sissom 1990: 70, fig. 3.3). The movable finger is more than twice as long as the manus and bears 14 rows of granules which always include external and internal granules. The manus is smooth and very narrow.

VARIATION. In the female the stridulatory area on the second metasomal segment reaches the posterior margin, whereas in the male it does not. On the third segment the stridulatory area is absent in the female, and in the male it is small, developed only on the disc (see Figs 2 and 3). In the male the telson is bulbous, whereas in the female it is elongate. Also, in the male the metasomal segments are narrower than in the female (see Table 1 and Figs 2 and 3).

DISCUSSION OF VARIATION. The just noted variation surprisingly concerns characters that are fairly stable, which brings to mind the possibility of two species. Although one specimen is a male and the other a female, the said variation cannot be regarded as sexual dimorphism. Since in all other characters the two specimens are identical and come from the same locality, and since they are the only specimens known, I find it preferable to regard them as one species but note that additional material may prove me incorrect.



Figs 1–5. *Parabuthus cimrmani* sp. nov. 1 – male holotype, dorsal aspect; 2 – male holotype, metasoma, stridulation area; 3 – female allotype, metasoma, stridulation area; 4 – female allotype, dorsal aspect.; 5 – female allotype, ventral aspect.



Figs 6–9. 6 – *Parabuthus eritreensis* Kovařík, male from Somalia, dorsal aspect; 7 – *Parabuthus leiosoma* (Ehrenberg), live male (bottom) and female from Ethiopia; 8 – *Parabuthus granimanus* Pocock, male lectotype, dorsal aspect; 9 – *Parabuthus heterurus* Pocock, male paralectotype, dorsal aspect.

AFFINITIES. The described features distinguish *Parabuthus cimrmani* sp. nov. from all other species of the genus. They are recounted in the key below. *P. cimrmani* sp. nov. seems to be closest to *P. heterurus* and *P. leiosoma*, from which it differs in proportions and longer chela, namely in the male. From *P. heterurus* it also differs in having the fifth metasomal segment black; in *P. heterurus* it is yellow. The new species has pedipalps similar to *P. eritreensis* (see Kovařík 2003), but differs from that species in having the fifth metasomal segment black, pectinal teeth in the male much more numerous, movable finger with 14 rows of granules, and dorsolateral keels of the fifth metasomal segment with four large teeth (*P. eritreensis* has only two teeth, which are relatively larger than those in *P. cimrmani* sp. nov.).

Key to species of *Parabuthus* from Somalia

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|----|--|--|
| 1 | All metasomal segments yellow or yellowish brown | <i>Parabuthus pallidus</i> Pocock, 1895 |
| – | Fourth metasomal segment black (Figs 1 and 7) | 2 |
| 2 | Fifth metasomal segment yellow or yellowish brown (Fig. 6) | 3 |
| – | Fifth metasomal segment black (Fig. 7) | 4 |
| 3. | Movable finger more than twice as long as manus. Male manus very narrow (Fig. 5) | <i>Parabuthus eritreensis</i> Kovařík, 2003 |
| – | Movable finger only slightly longer than manus. Male manus broad (Fig. 8) | <i>Parabuthus heterurus</i> Pocock, 1897 |
| 4 | Movable finger more than twice as long as manus. Male manus very narrow (Fig. 1) | <i>Parabuthus cimrmani</i> sp. nov. |
| – | Movable finger only slightly longer than manus. Male manus broad (Fig. 7) | 5 |
| 5 | Male fingers with a tubercle on inner side of base | <i>Parabuthus granimanus</i> Pocock, 1895 |
| – | Male fingers with inner side of base plain, no trace of tubercle | <i>Parabuthus leiosoma</i> (Ehrenberg, 1828) |

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