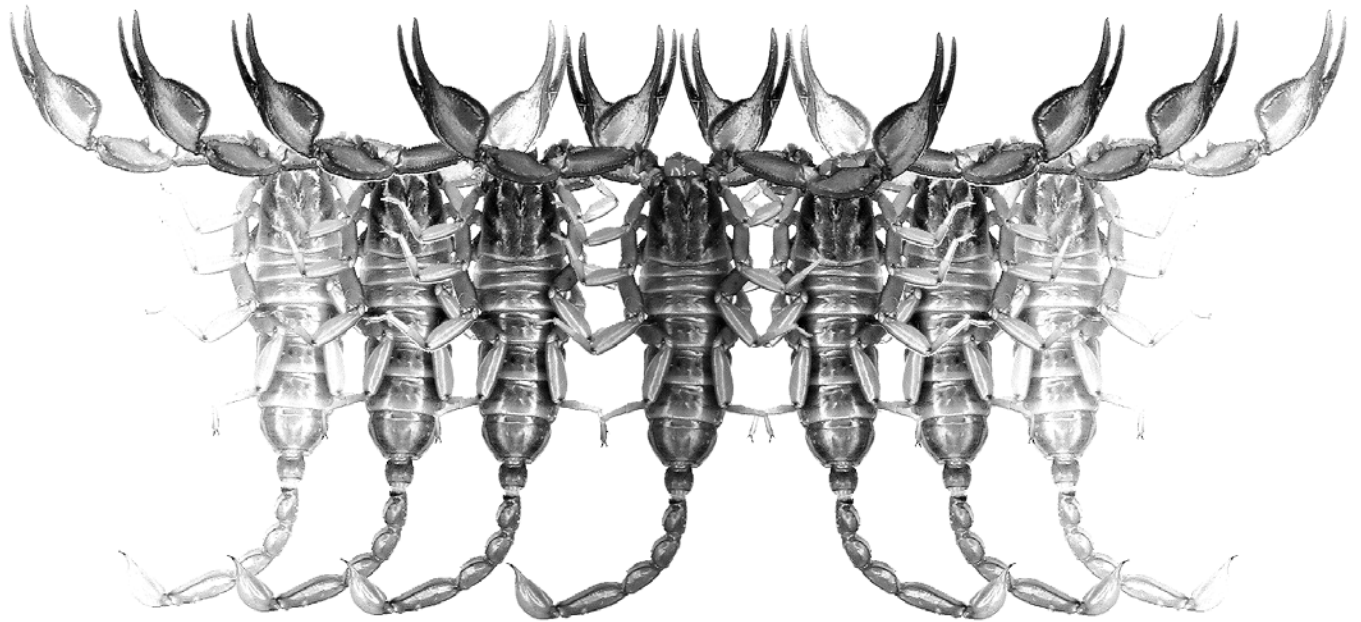


# *Euscorpilus*

Occasional Publications in Scorpiology



***Compsobuthus indicus* sp. n. from Pakistan  
(Scorpiones: Buthidae)**

**František Kovařík & Zubair Ahmed**

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# *Euscorpilus*

## Occasional Publications in Scorpiology

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- **WAM**, Western Australian Museum, Perth, Australia
- **NTNU**, Norwegian University of Science and Technology, Trondheim, Norway
- **OUMNH**, Oxford University Museum of Natural History, Oxford, UK
- **NEV**, Library Netherlands Entomological Society, Amsterdam, Netherlands

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## *Compsobuthus indicus* sp. n. from Pakistan (Scorpiones: Buthidae)

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### Summary

*Compsobuthus indicus* sp. n. of the *werneri* group is described from Pakistan, Sind Province, near the border with India. It is characterized chiefly by densely granulated carapace mesosoma, metasoma, telson, and femur and patella of pedipalps; the first to fourth metasomal segments bear 10 carinae. *C. indicus* sp. n. is closest to *C. rugosulus* (Pocock, 1900) from India and Pakistan, from which it differs chiefly in having the first metasomal segment approximately as wide as long.

### Systematics

*Compsobuthus indicus* Kovařík et Ahmed, sp. n.  
(Figs. 5–15, Table 1)

TYPE LOCALITY AND TYPE REPOSITORY. **Pakistan**, Sind Province, Nagar Parkar, FKCP.

TYPE MATERIAL. **Pakistan**, Sind Province, Nagar Parkar, 1♂ (holotype), 1♀ (allotype), 2♂, 3♀, 1♀im., 1juv. (paratypes), leg. Zubair Ahmed. The types are deposited in the first author's collection (FKCP).

ETYMOLOGY. Named after the province.

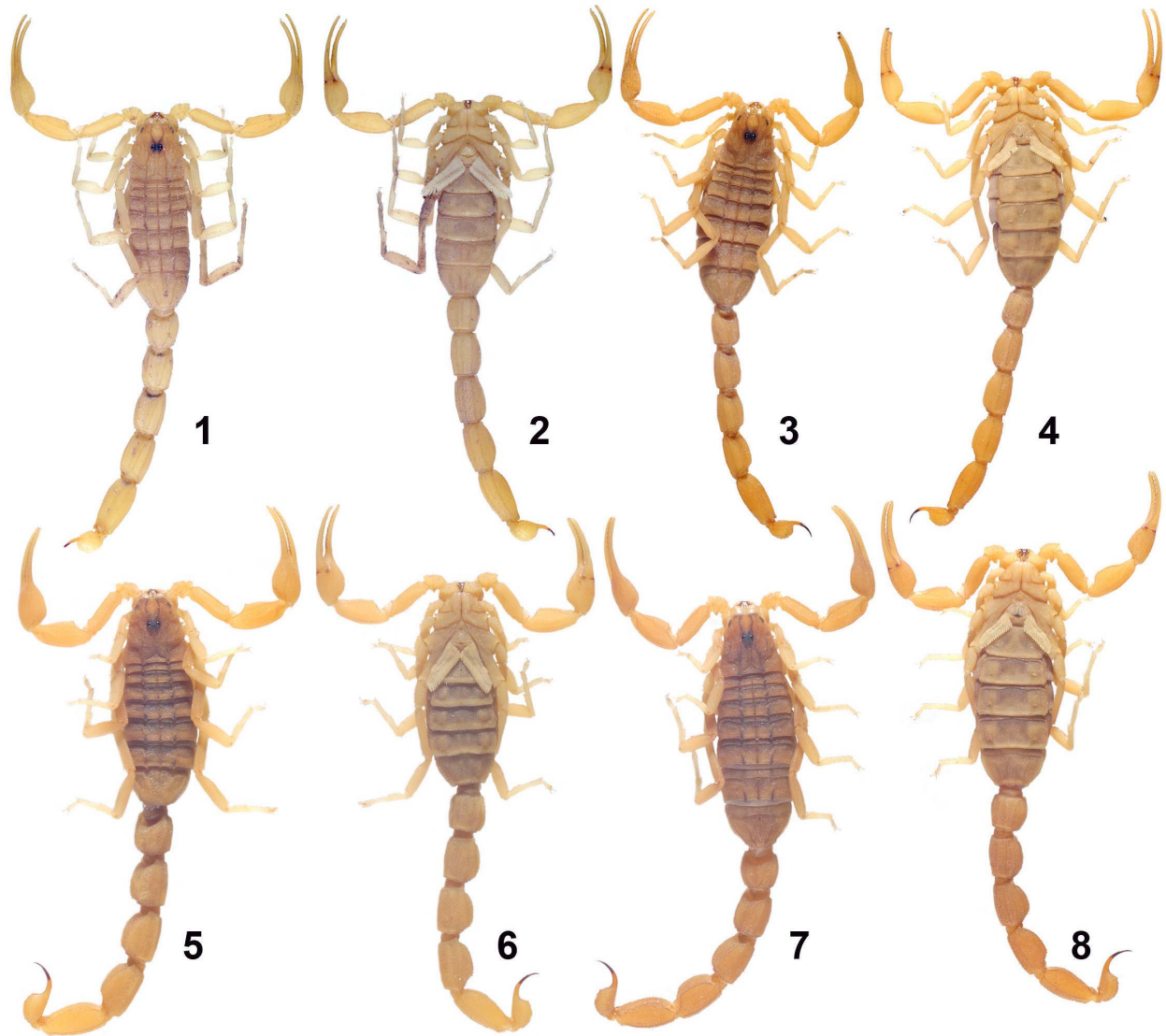
DIAGNOSIS. Total length 30–38 mm. Movable finger of pedipalp bears 10–12 rows of granules, with external and internal granules (the *werneri* group). Sexual dimorphism minor, adult males have fingers of pedipalps proximally flexed and chela robust; there is no difference between males and females in length of pedipalps and metasomal segments. Metasomal segments I to IV bear 10 carinae, intermediate carinae of segment IV may be incomplete. All metasomal segments sparsely setose and densely granulated. Telson elongate, with aculeus longer than vesicle. Carapace mesosoma, metasoma, telson, and pedipalp femur and patella of adults densely granulated. Pectinal teeth number 14–18. Seventh sternite bears four well developed carinae.

DESCRIPTION: The adults are 30–38 mm long. The habitus is shown in Figs. 5–8. Measurements of the carapace, telson, segments of the metasoma and segments of the pedipalps, and numbers of pectinal teeth are given in Table 1. For position and distribution of trichobothria of pedipalps see Figs. 12–15. Sexual di-

		<i>Compsobuthus indicus</i>	
		♂ HT	♀ AT
Total	length	30.0	33.5
Carapace	length	3.3	3.5
	width	3.3	3.7
Metasoma			
and telson	length	17.6	18.4
segment I	length	2.1	2.2
	width	2.1	2.3
segment II	length	2.6	2.7
	width	1.9	2.1
segment III	length	2.7	2.8
	width	1.9	2.1
segment IV	length	3.0	3.1
	width	1.8	1.9
segment V	length	3.4	3.6
	width	1.7	1.9
telson	length	3.3	3.7
	width	1.1	1.3
Pedipalp			
femur	length	2.6	2.9
	width	0.8	0.9
patella	length	3.0	3.4
	width	1.3	1.5
tibia	length	5.5	6.0
	width	1.6	1.5
finger mov.	length	3.6	4.0
Pectinal	length	2.8	2.4
Pectinal teeth		18:18	16:16

**Table 1:** Measurements (in millimeters) of type specimens of *Compsobuthus indicus* sp. n.

morphism is minor, adult males do have fingers of pedipalps proximally flexed and chela robust (Figs. 11 and 12); there is no difference between males and females in length of pedipalps and metasomal segments.

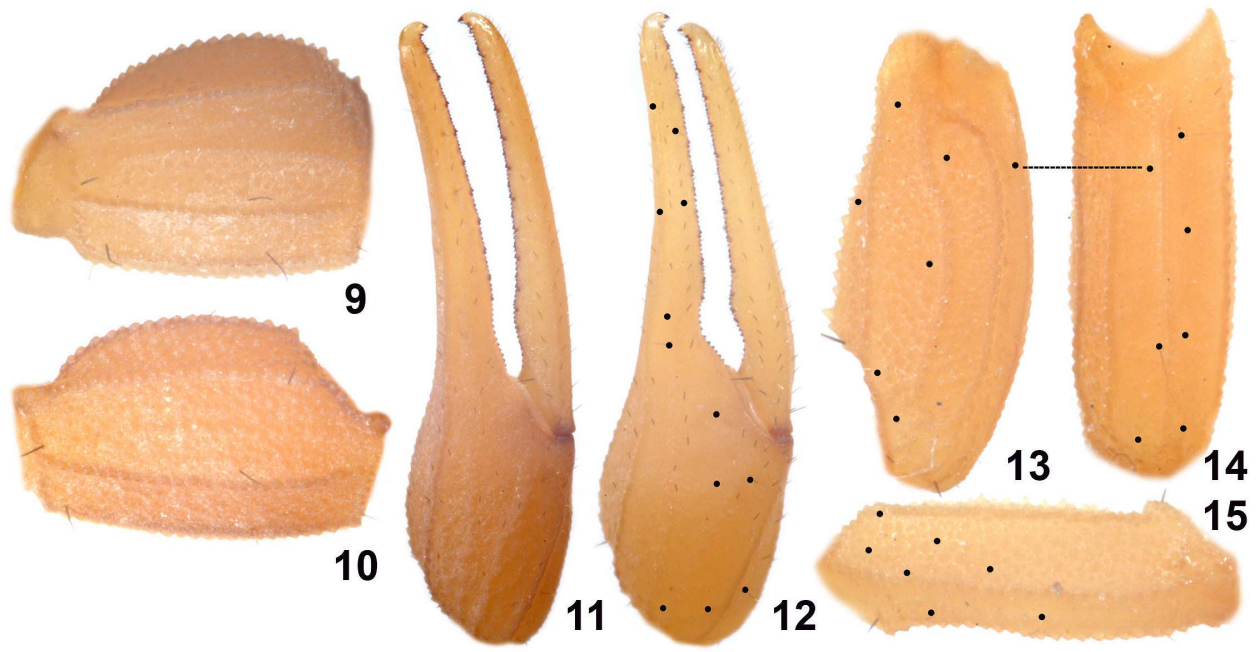


**Figures 1–8:** 1–4. *Compsobuthus rugosulus* (Pocock, 1900). 1–2. Dorsal and ventral views, ♂ (32 mm), Pakistan, Sind Province, Tandojan (Tando Jam), FKCP. 3–4. Dorsal and ventral views, ♀ (38 mm), Pakistan, North West Frontier Province, Dhaki, Dera Ismail Khan, FKCP. 5–8. *Compsobuthus sindicus* sp. n. 5–6. Dorsal and ventral views, ♂ (30 mm) holotype. 7–8. Dorsal and ventral views, ♀ (33.5 mm) allotype.

**COLORATION:** The base color is uniformly yellow to yellowish brown. Carinae on carapace and tergites of adults are usually darker.

**CARAPACE AND MESOSOMA:** The entire carapace is covered by large granules. The carinae are moderately to strongly developed and granular. The anterior margin of the carapace is straight, medially weakly concave, and bears eight short, symmetrically distributed macrosetae. Tergites granulated. Tergites I–VI bear very strong, denticulate lateral carinae. Each carina terminates in a spiniform process that extends well past the posterior margin of the tergite. Tergite VII is pentacarinata, with

lateral pairs strong, serratocrenulate and the median carina moderate, crenulate and present only in the proximal half. The pectinal tooth count is 14–16 in the females and 17–18 in the males. The pectinal marginal tips extend to the proximal end of the third sternite in females and to midlength of the fourth sternite in males. The pectines have three marginal lamellae and six middle lamellae. The lamellae bear numerous dark setae, each fulcrum with two dark setae. All sternites are sparsely to densely granulated, but the granules are smaller than on the tergites. Segments VI and VII bear four ventral crenulate carinae, which are more strongly developed on the segment VII. The other sternites bear two carinae. The



**Figures 9–15:** *Compsobuthus indicus* sp. n. 9–11. Metasomal segments II and IV and chela of female allotype. 12–15. Trichobothrial pattern of chela, patella (dorsal end external aspects) and femur of male holotype.

carinae span two posterior thirds of the sternites and in no case reach the anterior margin.

**METASOMA AND TELSON:** The segments I to IV bear 10 carinae and the segment V bears five carinae. Intermediate carinae of the segment IV may be weak and incomplete. All segments are sparsely setose and densely granulated. The telson is elongate, with the aculeus longer than the vesicle. The ventral surface of the telson is granulated and bears a median carina.

**PEDIPALPS:** The pedipalps are granulated, only the chela may be smooth or granulated. The femur bears four to five carinae; the ventroexternal carina is incomplete, the other carinae are coarsely granular. The patella bears seven coarsely granular carinae. The chela bears five carinae, which may be weak and incomplete. The movable finger bears 10–12 rows of granules, with external and internal granules. The fixed finger bears 10 or 11 rows of granules, with external and internal granules.

**LEGS:** The legs III and IV bear tibial spurs. Retrolateral and prolateral pedal spurs are present on all legs. The prolateral pedal spurs are basally bifurcate. The tarsomeres bear two rows of short macrosetae on the ventral surface and numerous macrosetae on the other surfaces. Bristle combs are absent. The femur bears four carinae and the patella bears four to six carinae. The femur and patella bear only solitary macrosetae and are densely granulated except for external lateral surfaces which are smooth in females and sparsely granulated in males.

**AFFINITIES.** The described features distinguish *Compsobuthus indicus* sp. n. from all other species of the genus. In the *C. werneri* group, only *C. indicus* sp. n. and *C. rugosulus* (Pocock, 1900) from India and Pakistan have the second metasomal segment with 10 carinae and all metasomal segments densely granulated (see Kovařík, 2003; Kovařík & Ahmed, 2007). However, *C. rugosulus* has long and narrow metasomal and pedipalp segments. In *C. rugosulus*, the first metasomal segment of both sexes is longer than wide, whereas in *C. indicus* sp. n. it is approximately as wide as long (Figs. 1–8).

### Acknowledgments

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