REPORT OF *LEPTOCARIS BREVICORNIS* (VAN DOUWE, 1904) (COPEPODA, HARPACTICOIDA) FROM INDIA

WHILE engaged in the study of the systematics and ecology of free-living freshwater copepods of Guntur and its environs (Andhra Pradesh), the author came across the representatives of both sexes of *Leptocaris brevicornis* (Van Douwe, 1904) in Lake Kolleru and also in a pond near Vengalayapalem village, located on the outskirts of Guntur town (16° 18′ N latitude and 80° 29′ E longitude). This is the first report of the species from the Indian subcontinent. In all, 26 specimens (10 ♀♀, 7 ♂♂ in Lake Kolleru in the months of August and November 1973, April, May and July 1974; 6 ♀♀, 3 ♂♂ in the pond in January, March and July 1974) were encountered in the surface and subsurface plankton collections, obtained with the aid of ordinary plankton net made of No. 24 bolting silk. The ranges of various physico-chemical conditions prevalent at the time of collection are: pH 8·2–8·9, air temperature 22·5–31·0° C, surface water temperature 25·0–32·0° C, water turbid, dissolved oxygen 2·52–9·27 ppm, free carbon dioxide 3·98–35·95 ppm, alkalinity 141–283 ppm, total hardness 55–964 ppm. The association of this species with freshwater forms like *Heliodiaptomus contortus*, *Mesocyclops leuckarti*, *M. hayalinus* and *Ectocyclops phaleratus medius*, and also with predominantly brackish water forms such as *Halectinosoma* sp., *Tachidius discipes*, *Cletocamptus deitersi*, *Pseudodiaptomus tollingerae*, *P. annandalei*, *Acartia chilkaensis*, *Oithona brevicornis*, etc., suggests its euryhaline nature. The lake specimens are somewhat smaller than the pond's as shown below:

	Range of total length in mm	Average length in mm	No. of specimens measured
Lake specimens ♀	0·45–0·56	0·50	10
♂	0·41–0·49	0·43	7
Pond specimens ♀	0·51–0·60	0·57	6
♂	0·47–0·49	0·48	3

The specimens in question are assigned to *L. brevicornis* on the basis of the following salient features: Caudal setae long and normal. First segment of antennule devoid of strong spines. First segment of endopodite of leg 1 has one inner seta. Terminal segment of endopodite of legs 3 and 4 bears 3 normal and 2 spiniform setae each. Leg 5 of female has 2 setae. *In male:* the inner spine of basis of leg 1 hook-like; the inner seta of terminal segment of endopodite of legs 2 and 3 slightly modified and the same of endopodite of leg 4 long and spiniform. The male specimens exhibit, however, a few differences: presence of a short slender spine at the distal internal angle of the proximal endopodite-segment of leg 4 (Fig. 1 *a*); leg 5 bears only 3 setae instead of 4 (Fig. 1*b*).

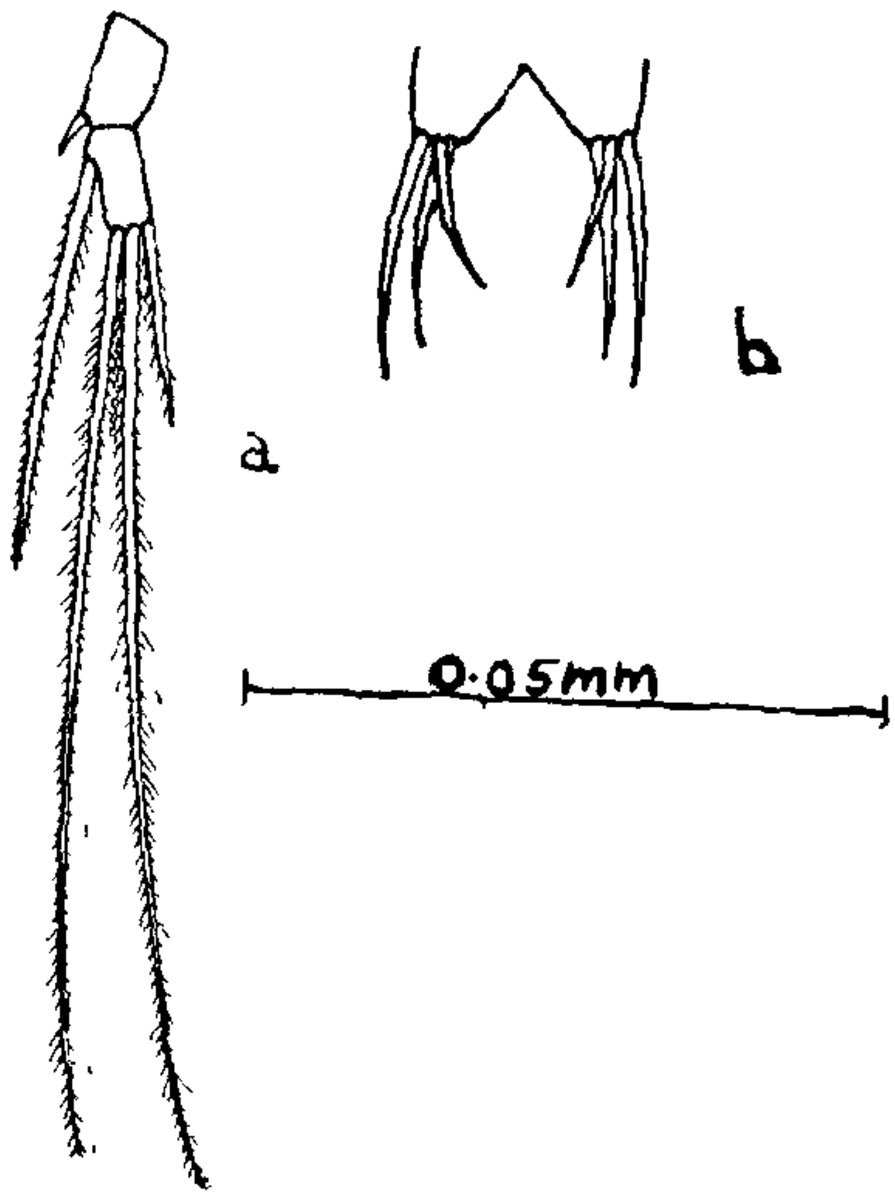

FIG. 1 *a–b*

The latter anomaly was also noticed by Marcus and Por[4] in the Black Sea specimens, as mentioned by Lang[3] and Kunz[1]. Further, the internal seta of the distal endopodite-segment of leg 1, which appears as an insignificant spinule in female, is seen distinctly as a short slender seta in male. The above differences seem to suggest that the present specimens may, in all probability, represent a different local race of *L. brevicornis*. Lang[2] and Kunz (*op. cit.*) already provided the distribution records of this species from other parts of the world. The present report extends its distribution to the Indian subcontinent.

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1. Kunz, H., *Crustaceana*, 1977, **35**, 41.
2. Lang, K., *Monographi der Harpacticiden*, Hakon Ohlsson, Lund., 1948, 2 vols, 1683.
3. —, *Kungl. Svensk. Vetensk. Akad. Handl.*, 1965, **10**, 1.
4. *Marcus, A. and Por, F. D., *Acta Mus Macedon. Sci. Nat.*, 1961, **7**, 105.

* Not referred to in original.

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