

RECORD OF *HALOPTILUS AUSTINI* GRICE (COPEPODA: CALANOIDA) FROM THE INDIAN OCEAN

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ABSTRACT

Haloptilus austini Grice is reported for the first time from the Indian Ocean and the systematics and distribution are discussed.

Grice (1959) described a new species, *Haloptilus austini* based on three female specimens collected from the equatorial and subtropical waters of the east central Pacific Ocean. From the equatorial Pacific Ocean Grice (1962) recorded two more specimens of the same species. The species was later reported by Grice and Hart (1962) and Calef and Grice (1967) from the central and western Atlantic. The present study is based on 60 females, including 10 immature specimens, encountered with the Indian Ocean Standard Net (Currie 1963) during the International Indian Ocean Expedition. This forms the first record of this species from the Indian Ocean.

Haloptilus austini Grice

Haloptilus austini Grice, 1959.

Haloptilus austini Grice, 1962.

Haloptilus austini Grice and Hart, 1962.

Haloptilus longiceps Tanaka, 1964.

Haloptilus austini Calef and Grice, 1967.

Diagnostic characters of the female:-

Forehead long and rounded. Cephalothorax longer than abdomen. Gnathal lobe of mandible with three teeth. The two anterior teeth with one additional spine each and the posterior tooth with two additional spines. Endopod of maxillule with five setae, second basal with four or five, third inner lobe with four or sometimes three setae. Maxilla without spine.

Out of 442 samples examined, all from the upper 200 m in the Indian Ocean, *H. austini* was present in 51 samples (station locations shown in Fig. 1). In the Arabian Sea the species was observed off the Arabian coast, at the mouth of gulf of Oman, in the Gulf of Aden and off the southern and central west coast of India. It was comple-

tely absent in the area along the south east coast of Africa, in the Bay of Bengal and in the central Arabian Sea. South of equator, upto about 32°S this species shows a scattered distribution. No significant variations in the occurrence of this species were observed between night and day samples. Neither do they exhibit any marked seasonal differences. The hydrographic condition of the localities from where the specimens have been collected were correlated and it was found to occur at a temperature range of 11.2 — 30.0°C, salinity 34.09 — 36.25‰ and dissolved oxygen 0.25 — 6.22 ml/litre.

A comparison of the figures of *H. austini* (Grice 1959) and *H. longiceps* (Tanaka 1964) discloses the marked similarities between the two species. The unique shape of the cephalosome with long and rounded forehead, structure of the gnathal lobe of the mandible and of the maxillae and 4 pairs of swimming legs are common characters. Variations were noticed in the number of setae on the 3rd inner lobe of maxillule and in the length of the setae on the second basal segment of the 5th leg. Examination of the present material shows that the number of setae of maxillule are variable from 3 — 4. The only specimen examined by Tanaka had 3 setae on the third inner lobe of maxillule while those of Grice had 4 setae. The length of the setae on the second basal segment of the 5th leg in *H. longiceps* (Tanaka) extends up to the tip of the exopod. The seta in *H. austini* is very long and exceeds the length of the terminal spine of the exopod. In the present specimen the length of the seta is same as in *H. austini*.

The similarities between the two species *H. austini* and *H. longiceps* are obvious enough to consider *H. longiceps* as a syno-

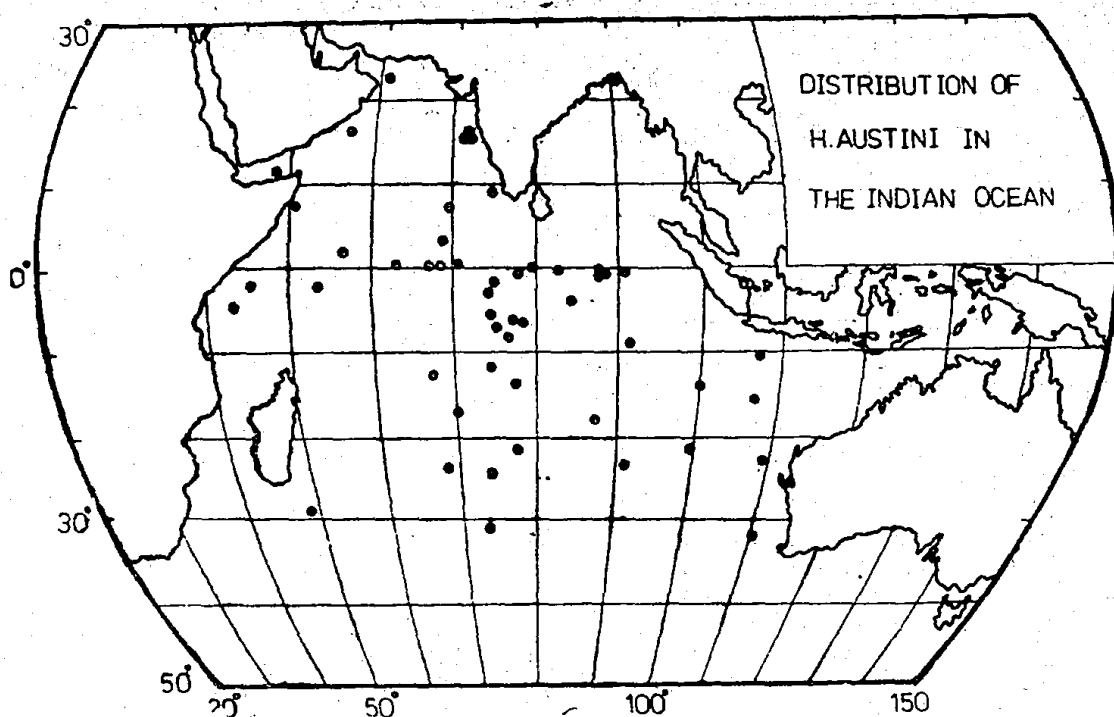


Fig. 1. Distribution of *Haloptilus austini*.

TABLE - 1
Records of *H. austini*

Author	Locality	Depth. m.	No. of specimens	Length mm.
Grice 1959	Equatorial and subtropical waters of the east central Pacific Ocean.	0-146	3	3.06-3.33
Grice 1962	Equatorial Pacific	72-146	2	3.16-3.30
Grice and Hart 1962	Central and western Atlantic	—	—	—
Tanaka 1964	Izu region	0-1000	1	3.02
Calef and Grice 1967	Central and western Atlantic	—	—	—
record Present	Indian Ocean	0-200	60	2.42-3.33

nym to *H. austini*. Mathews (1972) in the review of the genus *Haloptilus* included *H. austini* and *H. longiceps* as two distinct species. Grice confirmed (in. lit.) that *H. longiceps* is a junior synonym of *H. austini*.

H. austini has so far been reported only from the northern hemisphere — from the

central and western Atlantic between 0 and 40°N and from the central Pacific between 0 and 28°N (Table 1). This species is reported here for the first time from the Indian Ocean occurring between 24°N and 32° 03'S latitude.

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