

ON A NEW SPECIES OF *LAOPHONTE* (COPEPODA :  
HARPACTICOIDA) FROM MADRAS

By

S. KRISHNASWAMY

*Zoology Laboratory, Madras University, Madras*

In the course of the study of the harpacticoids of the Madras Coast, fifteen females and eight males of a Laophontid were collected from floating logs which were infested with shipworms. On close examination these proved to be a new species referable to the subgenus *Mesolaophonte* Nicholls. Hence it is described here fully and the types have been deposited in the Zoological Survey of India, Calcutta.

***Laophonte (Mesolaophonte) pseudo-oculata*, sp. nov.**

*Type specimen*.—Reg. No. C 3520/1, Zoological Survey of India, Calcutta.

*Female* (Text-fig. 1a—m)

*Body*.—Slender, much depressed and tapered posteriorly; length 1.25—1.4 mm. The rostrum is obtusely triangular and carries two slender setae. The cephalosome is as long as broad, the outer edge of which is hirsute. A pair of prominent cuticular lenses are found on the dorsal side (Text-fig. 1b) as in *Laophonte oculata* Gurney.<sup>1</sup> In the living condition, the eye is deep red. The metasome segments are narrow with their outer posterior edges slightly drawn out, which bear a bunch of spinules (Text-fig. 1c). The outer margins are hirsute. The anal segment is broader than long, the length and breadth being 16 : 25. The furcal ramus, which is nearly as long as the anal segment, is longer than broad, the length and breadth being 17 : 10. Each ramus carries one outer seta, two long apical setae and two setae on the inner side. A seta arises a little further away from the base of the outer apical seta (Text-fig. 1d).

*Appendages*.—The antennule (Text-fig. 1e), which is composed of six segments, is short, scarcely reaching the end of the cephalosome. The outer margins of the first three segments are fringed with fine hair. The setae are distributed as follows :—

Segments	1	2	3	4	5	6
No. of setae	—	5	5	2	1	5

The fourth joint is produced towards its distal outer corner and carries an aesthete.

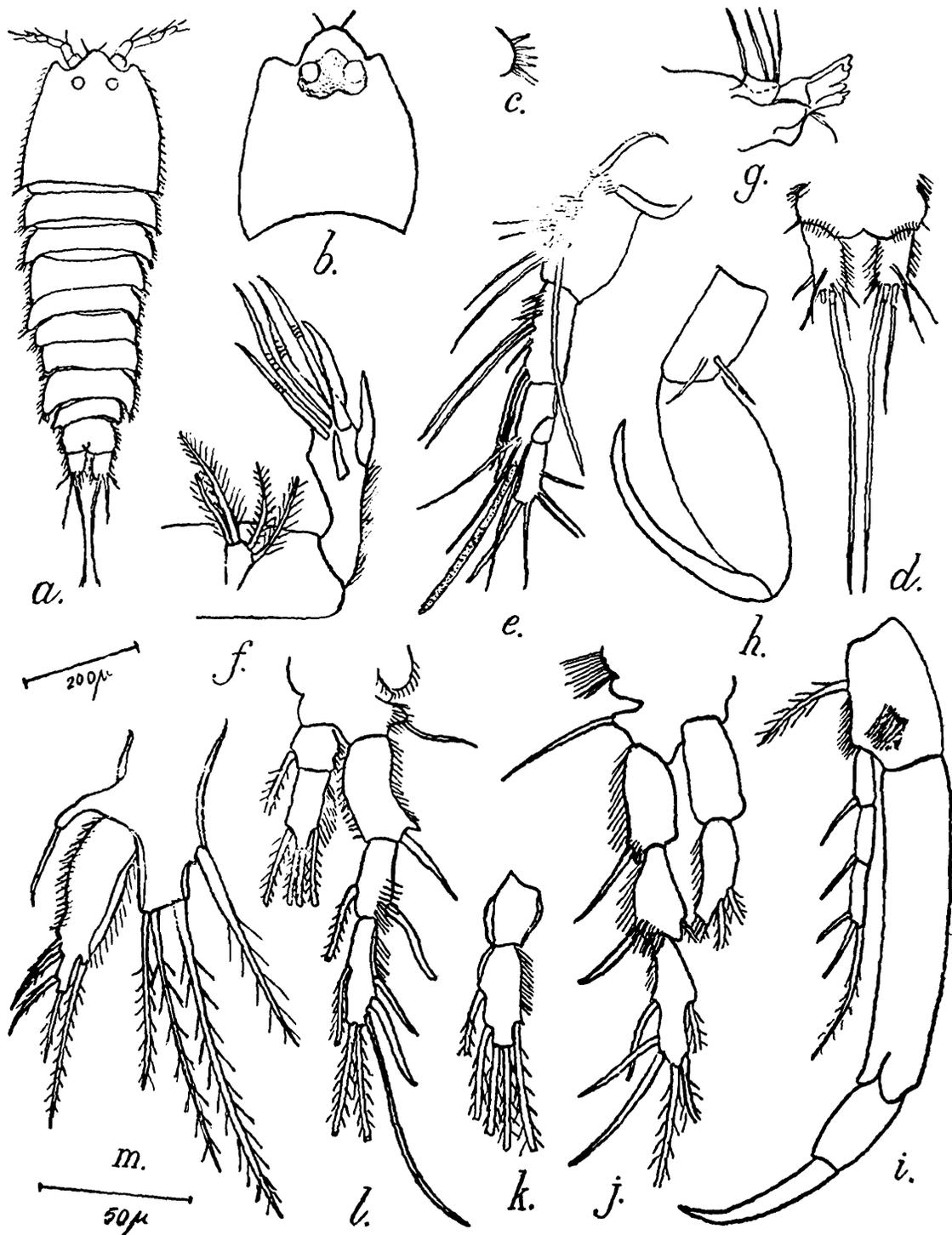
The antenna (Text-fig. 1f) is well built. The basal joint of the endopod carries the one-jointed exopod which has four plumose setae. The distal joint of the endopod is long and slender, its outer margin is

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<sup>1</sup> Gurney, R., *Trans. Zool. Soc. Lond.* 22, pp. 451-577 (1927).

hirsute and carries three spines and four "hastate" setae. The mouth parts are as in other members of the genus (Text-fig. 1*g, h*).

The first leg (Text-fig. 1*i*) has the usual shape of the Laophontids. The basal<sub>2</sub> is longer than broad and carries an outer plumose seta. Its outer margin is hirsute. A bunch of slender hairs arises at the region between the bases of the exopod and the endopod in the joint. The three-jointed exopod is short and slender, the first and second joints

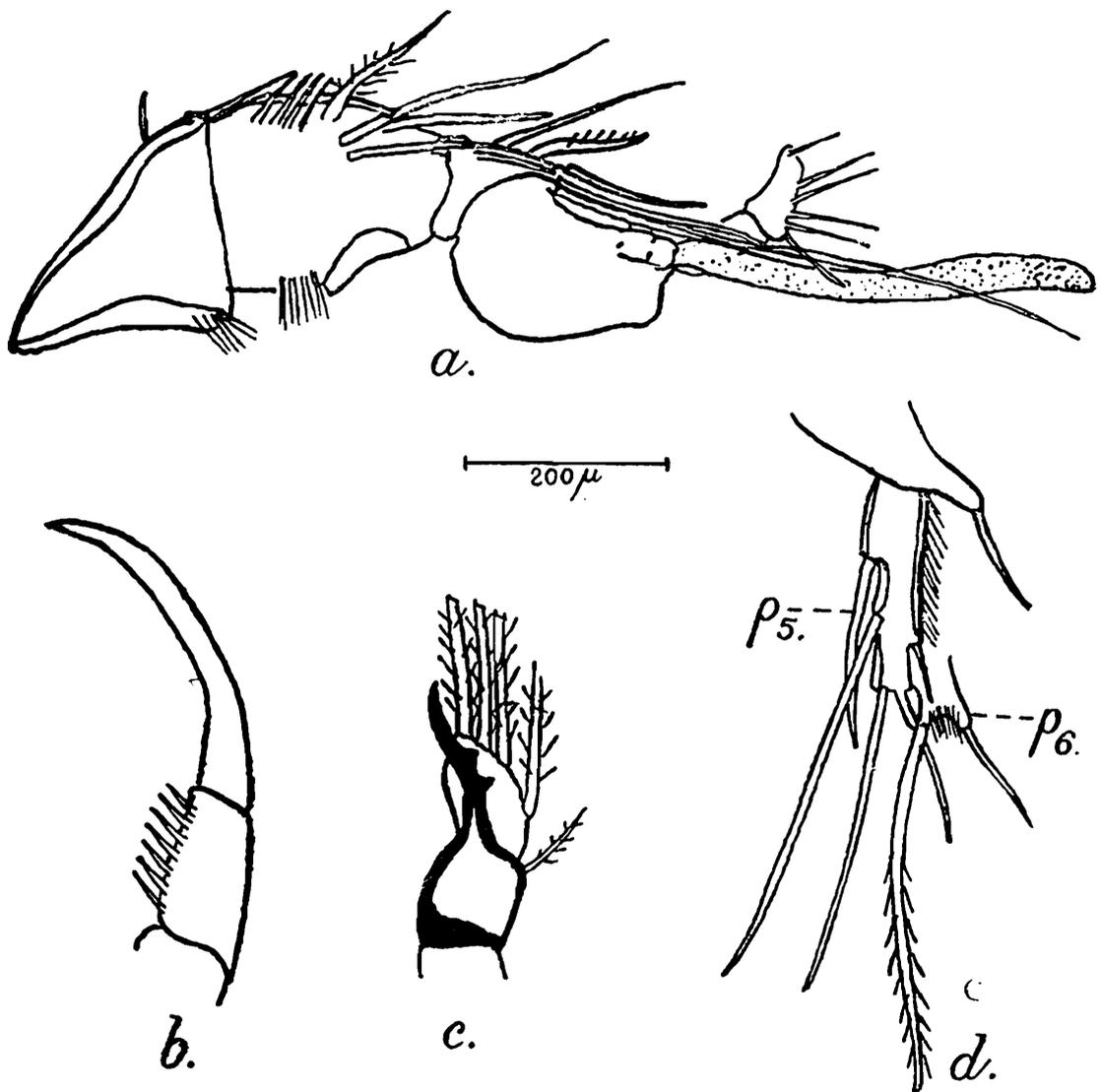


TEXT-FIG. 1.—*Laophonte* (*Mesolaophonte*) *pseudo-oculata*, sp. nov.

*a.*, female, dorsal view; *b.*, cephalosome with cuticular lens; *c.*, bunch of spinules on the outer posterior edges of metasome segments; *gd.*, furcal rami; *e.*, antennule; *f.*, antenna; *g.*, mandible; *h.*, maxillipede; *i.*, first leg; *j.*, second leg; *k.*, third leg; *l.*, leg; *m.*, fifth leg.

carrying an outer spine and the terminal joint two outer spines and an apical plumose seta. In the endopod, the first joint is nearly four times longer than broad and twice as long as the exopod. The second

endopod joint is only a fourth in length of the first joint and carries a long slender claw. In the second leg (Text-fig. 1j) the basal<sub>2</sub> has a bunch of hairs on the outer side and a plumose seta. The exopod is three-jointed, whereas the endopod is only two-jointed. The first and the second joints of the exopod carry an outer spine each and have their outer margins hirsute. The second joint carries an inner seta also. The third joint has three outer spines, one inner and two apical plumose setae. The endopod is very short and the first joint is devoid of setae. The second joint carries two apical and two inner setae and its outer margin is hirsute. In the third leg, the exopod resembles the second one, but the endopod (Text-fig. 1k) differs in having one outer, two apical



TEXT-FIG. 2.—*Laophonte (Mesolaophonte) pseudo-oculata*, sp. nov. ♂  
 a., antennule; b., claw in the endopod of first leg; c., endopod of the third leg; d., fifth and sixth legs.

and two inner setae. In the fourth leg, the exopod is as in other legs but the endopod differs in the first segment having one inner seta and the second segment having one seta on the inner as well as the outer side and two setae apically. All the legs are hirsute. In the fifth leg (Text-fig. 1l), the basal expansion carries one outer seta and four setae on the inner side. The distal joint is long and narrow, slightly tapered posteriorly, with the outer as well as the inner margin hirsute. It has one inner, one apical, and three outer setae.

*Male* (Text-fig. 2a—d)

Resembles the female in the general shape of the body, but is smaller in size; (length: 0.95—1.0 mm.). The urosome is composed of five joints as in other members of this genus. The six-jointed antennule (Text-fig. 2a) is geniculate and powerfully built. The fourth joint is swollen and the fifth and the sixth joints are hinged to it. It also carries a stout aesthete. The setae are distributed as follows:—

Joints	1	2	3	4	5	6
No. of setae	2	4	3	3	—	6

The first leg resembles that of the female in general shape, but differs in the second joint of the endopod carrying spinules on the inner side (Text-fig. 2b).

The second and the fourth legs resemble those of the female. In the third leg, the endopod shows the usual modification. The distal end of the second segment is produced into a spinous projection extending beyond the joint as in *L. nordgaardi* Sars and *L. adduensis* Sewell<sup>3</sup>. The projection itself carries two outer ridges. The distal joint carries four setae. In the fifth leg (Text-fig. 2c) the basal joint has only an outer spine and there is no inner expansion. The distal joint which is long and slender has a hirsute outer margin and carries one outer, two apical, and two inner setae. The sixth leg (Text-fig. 2d) is represented by a small lamina with a slender outer seta and a thick plumose inner seta.

*Remarks.*—Since the inception of the genus *Laophonte* by Phillip in 1840, over a hundred species have been described by various authors. Nicholls<sup>1</sup> as well as Lang<sup>2</sup> in their revision of the genus have split it into a number of sub-genera or have grouped the species in different genera. In the present paper the writer has accepted and followed the classification suggested by Nicholls (*loc. cit.*), according to which the present form is referable to his subgenus *Mesolaophonte* on account of the presence of only two inner setae on the end segment of the third endopod. Among the members of the *Mesolaophonte* the present form belongs to the *exigua* group (*vide* Nicholls, 1941) in the presence of four setae on the end segment of the exopod (1.2.1), but differs from all the other forms of this group. It closely approaches *L. gracilipes* Brady in the presence of four setae on the basal segment of the fifth leg, but differs in other structural details. The presence of corneal lens is a characteristic feature of this species, and has been recorded only in *Laophonte (L.) oculata* Gurney.

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<sup>1</sup>Nicholls, *Rec. S. Aust. Mus.*, 8, No. 1 (1941).

<sup>2</sup>Lang, K., *Monographie der Harpacticiden*, Lund. (1948).

<sup>3</sup>Nicholls, *Ann. Mag. nat. Hist.*, 11, p. 495, fig. 5 (1944).