

SECTION LIBRARY
LACM

BULLETIN, SO. CALIF. ACADEMY OF SCIENCES

Vol. 57, Part 2, 1958

10321

DESCRIPTION OF A NEW ISOPOD
FROM CALIFORNIA,
*EXOSPHAEROMA INORNATA*¹

By THOMAS G. DOW

INTRODUCTION

The specimens examined in this study were collected by Dr. John L. Mohr, along the California coast at Palos Verdes, Los Angeles County. Several hundreds of the animals were found. The assistance of Dr. Robert J. Menzies in the preparation of this article is sincerely appreciated.

ORDER - FLABELLIFERA
FAMILY - SPHAEROMIDAE

Exosphaeroma inornata n. sp.

HOLOTYPE = LACM 48-74.1
ALLOTYPE = LACM 48-74.2
PARATYPES = LACM 48-74.3

(= *E. media* George & Stromberg, 1968)

DIAGNOSIS: First antenna with 13 segments, second with 17. Rostrum of cephalon touching clypeus in midline. Maxillipedal palp with 5 articles; middle three produced medially into lobes. Peraeonal somites smooth, pleon smooth. Peraeopods all ambulatory, with small dactyli. Apex of pleotelson truncated, with minute marginal setae. Appendix masculinum of male extending beyond margin of pleopod, apex smooth and pointed. Exopod of uropod shorter than endopod by $\frac{1}{4}$ of its length.

DESCRIPTION:

CEPHALON: Rather small in comparison with body, eyes lateral. Front with pointed rostrum touching clypeus in midline.

FIRST ANTENNA: Composed of 13 articles; first twice the length of the second; the narrower third subequal to the first, and twice the length of the remaining segments.

SECOND ANTENNA: with 17 articles; the first three subequal and half the length of the fourth and fifth. The fifth three times the length of the narrower sixth.

MANDIBLES: Right and left similar, except that left has a lacinia mobilis with two teeth. This is lacking from right. Incisor slightly pigmented, right and left with four stout teeth. About twelve smaller teeth and setae on setal row, which extends out some distance from the mandible. Protruded, cup-shaped molar, containing about 50 stout setae. Palp with three articles, outer two setiferous.

FIRST MAXILLA: Bi-lobed; inner lobe with 9 setae, outer with 5, four of which are larger than the fifth and are plumose.

¹Contribution No. 503 Lamont Geological Observatory; Biology Program No. 24.

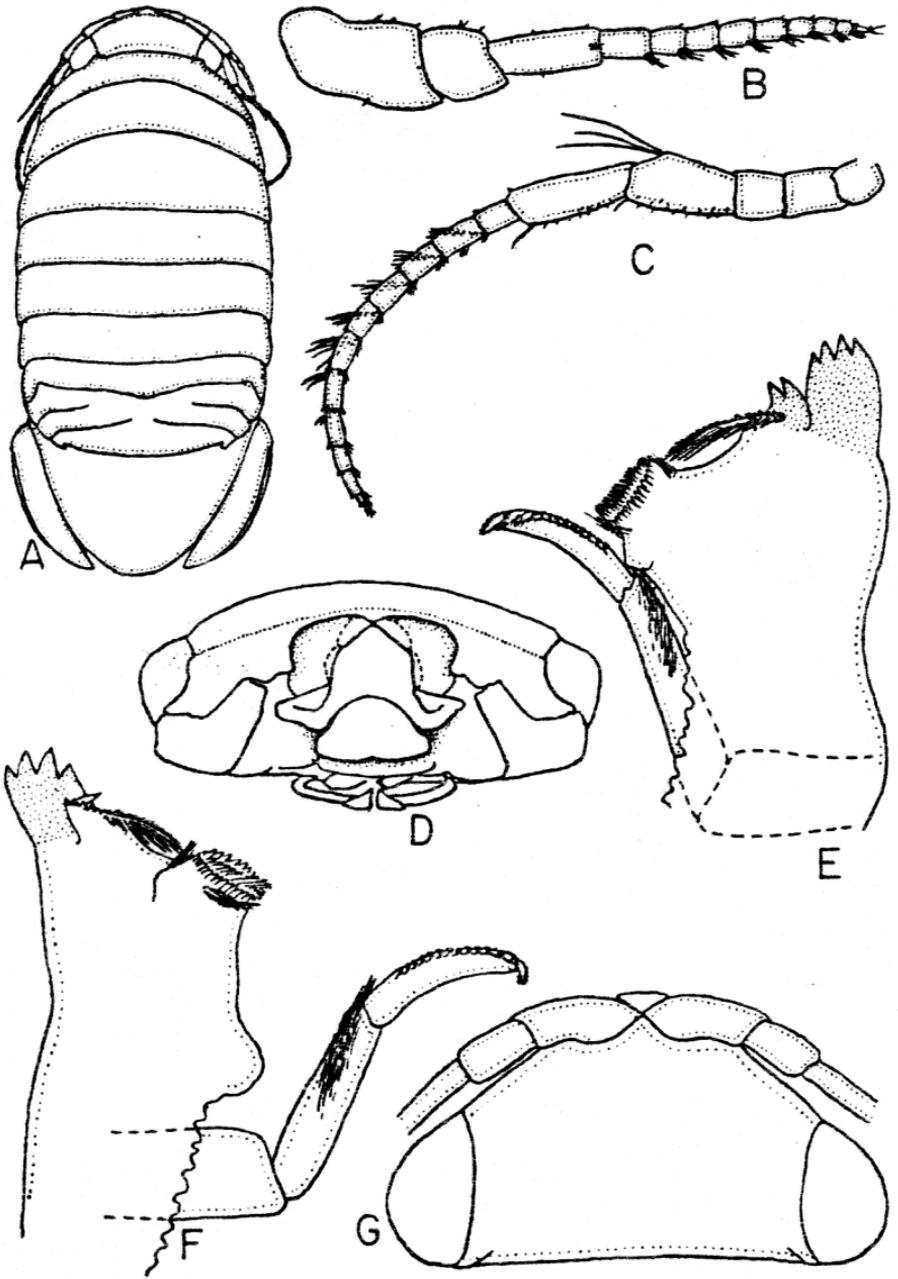


PLATE 30

Exosphaeroma inornata n. sp.; A, adult male; B, first antenna; C, second antenna; D, front of cephalon; E, left mandible; F, right mandible; G, top of cephalon.

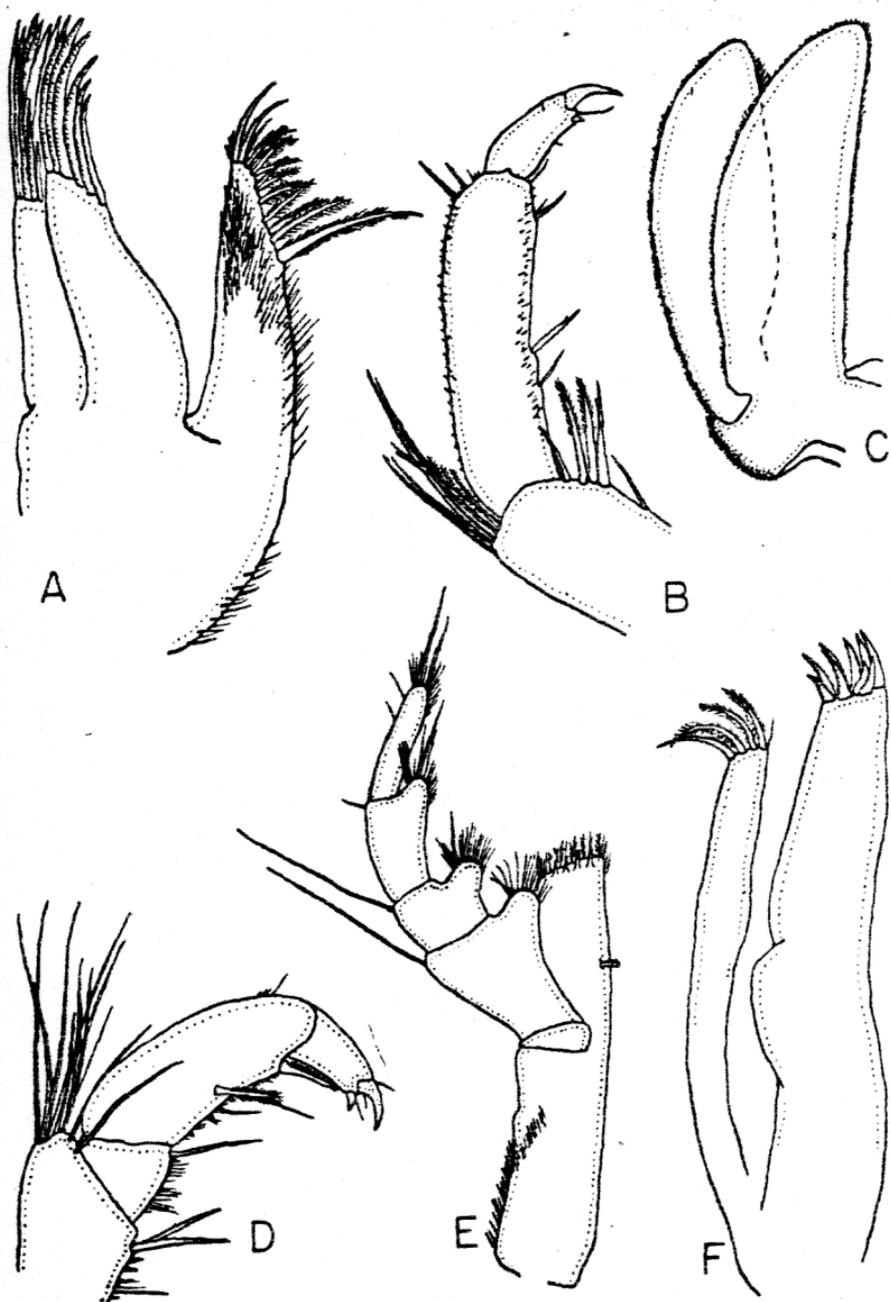


PLATE 31

Exosphaeroma inornata n. sp.: A, second maxilla; B, outer articles of seventh pereopod; C, uropod; D, outer articles of first pereopod; E, maxilliped; F, first maxilla.

SECOND MAXILLA: Tri-lobed; outer lobe with 9 setae, middle with 6, inner with 14.

MAXILLIPED: Palp composed of 5 setiferous articles; the middle three are produced into lobes, Sympod with 4 stout setae on end, in addition to many small setae.

PERAEON: Coxal plates present on all somites except first; in dorsal view they are folded under and are inconspicuous. All somites smooth.

PERAEOPODS: First leg half the length of the seventh. All terminated by small curved dactyli, all ambulatory.

PLEON: With 3 distinct segments including pleotelson. Middle segment broad, with two suture lines. Pleotelson convex and smooth. Apex of pleotelson truncated, with minute setae along margin.

PLEOPODS: Endopod of first pleopod with 19 plumose marginal setae, exopod with 39. Endopod of second pleopod with 17 setae, exopod with 42. Endopod of third with 17 setae, exopod with 37. Exopod of fourth with 3 plumose apical setae, both endopod and exopod with small marginal setae. Fifth pleopod also with numerous small setae, plus two apical setiferous lobes on exopod. Appendix masculinum of second pleopod of male pointed and extending beyond margin of pleopod; apex without setae or teeth.

UROPOD: Exopod shorter than endopod by $\frac{1}{2}$ of its length. Both rami with minute marginal setae.

MEASUREMENTS: Holotype, male, 5.2 mm in length, 1.4 mm wide; allotype, female, 5.3 mm in length, 1.4 mm wide; paratypes ranging in length from 2.5 mm to 6.0 mm.

ECOLOGY: Found under holdfasts of kelp (*Macrocystis*).

TYPE LOCALITY AND TYPES: A series of 232 paratypes has been examined. These, with the holotype and allotype, have been sent to the Southern California Academy of Science for deposit in the Los Angeles County Museum.

AFFINITIES: *Exosphaeroma inornata* most closely resembles *Exosphaeroma octoncum* Richardson and *E. crenulatum* Richardson as described in Richardson (1905). *E. inornata* differs from *E. octoncum* in having no tubercles on the pleotelson, which is also less convex than in *E. octoncum*. The lobes of the three middle articles of the maxillipedal palp of *E. inornata* are considerably more pronounced than in *E. crenulatum* and the exopod of the uropod of *E. inornata* is not crenulated as in *E. crenulatum*.

LITERATURE CITED

Richardson, H. E.

1905. A monograph on the isopods of North America, Bull. of the U. S. Nat. Mus. 54, Washington, 727 pp.

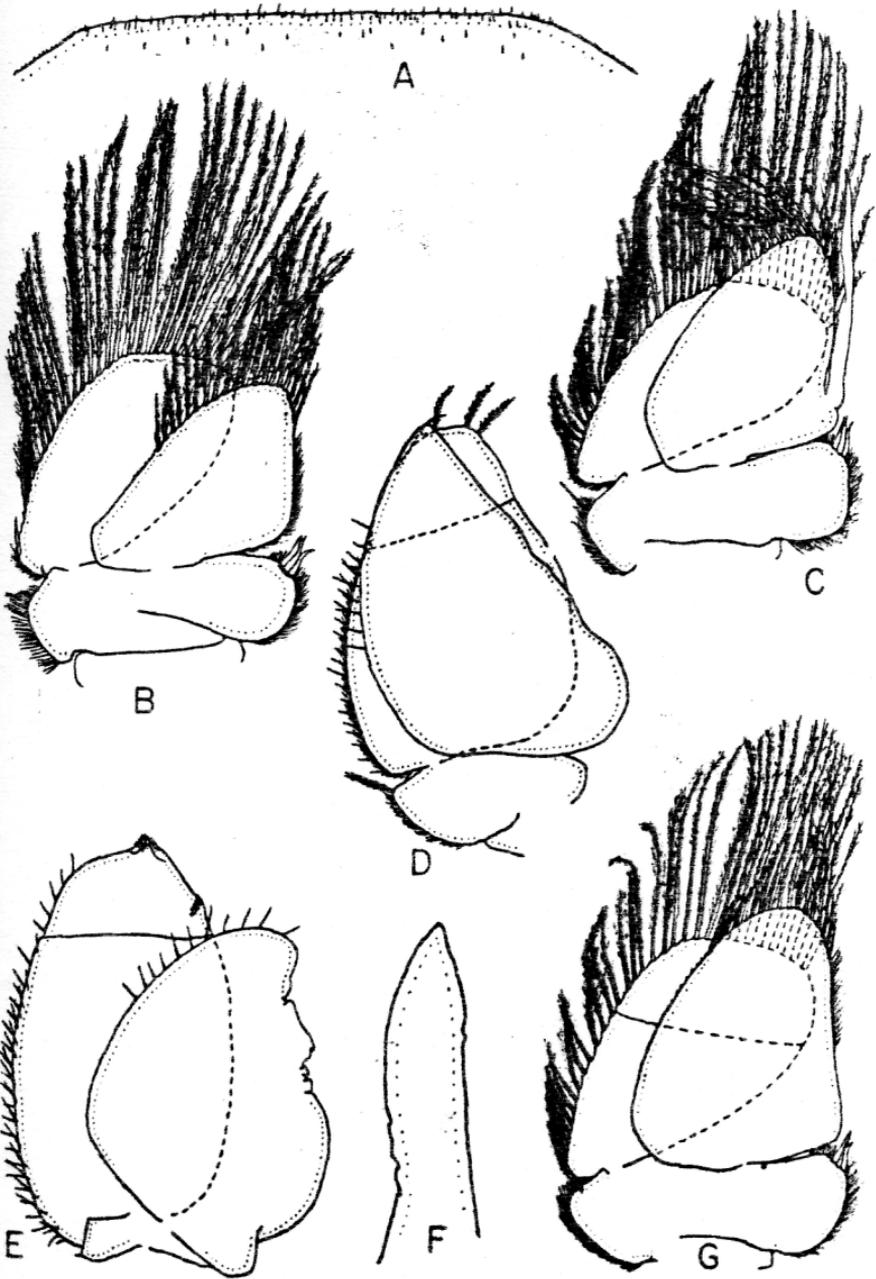


PLATE 32

Exosphaeroma inornata n. sp.: A, apical margin of pleotelson; B, first pleopod; C, second pleopod; D, fourth pleopod; E, fifth pleopod; F, apex of appendix masculinum of second pleopod; G, third pleopod.