THE GENUS DIOGENELLA (COPEPODA, CYCLOPOIDA) PARASITIC IN
HOLOTHURIANS IN THE WEST INDIES

BY

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In a recent study of copepods endoparasitic in tropical holothurians, Stock (1968) described from the West Indies a new genus Diogenella (Lichomolgidae) with two new species, D. spinicauda from Holothuria mexicana Ludwig in Curaçao and D. seticauda from Halodeima surinamensis (Ludwig) and Holothuria impa-tiens (Forskål) in Puerto Rico. As a result of collections made in the West Indies by the first author and Dr. Richard U. Gooding, we have had available for study both of Stock's species, including the male of D. seticauda, and also the two new species described below.

The field work in 1959 was made possible by a grant (G-8628) from the National Science Foundation of the United States. The study of the copepods has been aided by another NSF grant (GB-8381X).

All figures have been drawn with the aid of a camera lucida. The letter after the explanation of each figure refers to the scale at which it was drawn. The abbreviations used are: A₁ = first antenna, A₂ = second antenna, MXPD = maxilliped, and P₁ = leg 1.

The measurements of the length of the body have been made in all cases from specimens in lactic acid and do not include the setae on the caudal rami. The lengths of the segments of the first antenna have been measured along their posterior non-setiferous margins.

We are greatly indebted to Dr. Elisabeth Deichmann of the Museum of Comparative Zoology, Harvard University, for the identifications of the host holothurians.

This paper comprises the following:

1) a redescription of Diogenella spinicauda Stock, 1968, and a new host record of this species from Actinopyga agassizii (Selenka),
2) a redescription of the female of Diogenella seticauda Stock, 1968, and a description of the male for the first time, and
3) descriptions of Diogenella deichmannae n. sp. and Diogenella impar n. sp. (male only) from Brandlotothuria arenicola (Semper).

Diogenella spinicauda Stock, 1968 (figs. 1-27)

The following redescription is intended to supplement Stock's original description, and unless otherwise stated is based upon specimens from Ludwigothuria mexicana from Jamaica.
Material examined (collected in 1959).

From *Ludwigothuria (= Holothuria) mexicana* (Ludwig). BAHAMAS: 2 ♀♂, from 3 hosts, in 1 m, southern end of Pigeon Cay, North Bimini, 4 June; and 2 ♀♀, 1 ♂, from 10 hosts, in 1 m, near ferry landing, South Bimini, 7 June. PUERTO RICO: 1 ♀, 2 ♀♂, from 6 hosts, in 0.5 m, eastern end of Maguayes Island, near La Parguera, 29 July; 1 ♂, from 8 hosts, in 0.5 m,

Figs. 1-10. Diogenella spinicauda Stock, 1968, female. 1, dorsal (A); 2, urosome, dorsal (B); 3, segment of leg 5 and genital segment, lateral (C); 4, area of attachment of egg sac, dorsal (D); 5, caudal ramus, dorsal (E); 6, caudal ramus, dorsal (E); 7, egg sac, lateral (A); 8, rostrum, ventral (E); 9, first antenna, ventral (E); 10, second antenna, anterior (D).