PHANODERMOPSIS INGRAMI n.sp.

(Fig. 6a–c.)

B.A.N.Z.A.R.E. Stations 39, 41.

♀ (1x) L 7.0 mm. ; $\alpha = 35$; $\beta = 7.3$; $\gamma = 28$; V = 57%.

♂ (2x) L 7.0–7.3 mm. ; $\alpha = 35$–36 ; $\beta = 6.6$–7.3 ; $\gamma = 25$–28.

B.A.N.Z.A.R.E. Stations 105, 107.

♀ (3x) L 6.7–7.7 mm. ; $\alpha = 24$–26 ; $\beta = 4.5$–5.1 ; $\gamma = 24$–27 ; V = 58–61%.

This species appears, by reason of the absence of eyes and of the preanal organ, to belong either to *Phanodermopsis** or to *Crenopharynx*. The development of the cephalic capsule is rather stronger than has been described for *Crenopharynx* spp., so it has been allotted to the former genus. The shape of the tail is very close to that of *P. groenlandicum* Ditlevsen (syn. *P. citronicaudas*) (Filipjev, 1925)), but it differs in being longer ; the excretory pore is further back, and the cephalic setae rather longer.

Of the six worms listed above, the tail shape varies with the sex, and the α and β indices with the locality. Other characters are constant, and they all appear to belong to the one species.

The body width is constant from tail to the base of the oesophagus. The cuticle is very thick, about 7μ in the nuchal region. The head is set off by a constriction as in *Micoletskyia* species. The cephalic capsule is slightly developed, mostly as an anterior cap. The length of the cephalic setae is about half the head breadth. The amphids are seen only in dorso-ventral view, and lie close behind the lateral cephalic setae. The nerve ring lies at about the end of the anterior two-fifths of the oesophagus, and the excretory pore nearly half this distance from the anterior end. The posterior part of the oesophagus presents the crenulated appearance characteristic of members of the Phanodermatidae. The ventral gland lies a very short distance in front of the base of the oesophagus.

The tail is conical for most of its length, tapering more rapidly in the female than the male, and ending in a short digitiform process which is swollen near the tip in the male, but relatively thinner and not swollen in the female. The tail length in the female is 1.8–2.5, and in the male 2.5–2.6, anal breadths. The caudal glands lie a short distance in front of the anus.

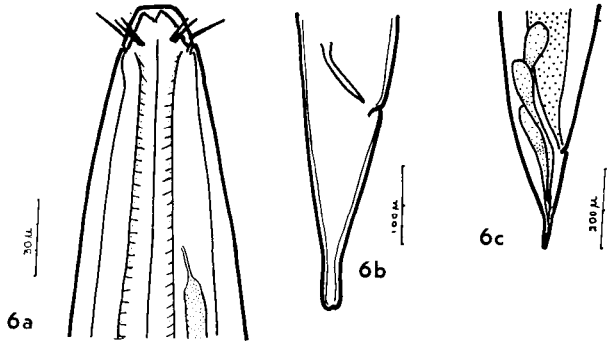
The spicules are 75–80μ long, less than the anal breadth. Gubernaculum and preanal organ are absent, and no caudal setae were seen.

STATION 39 : 66° 10′ S., 49° 41′ E., T M L : 300 M.

Big haul characterized by silicious sponges with glass rope spicules. *Synapta*—like Holothurian common ; many Polyzoa of different species.

STATION 41 : 65° 48′ S., 53° 16′ E., T M L : 193 M.

Large haul. Trawl full of sponges and sponge mud : glass rope sponge predominant. Much mud with very many molluscs : many ophiuroids. Later, operating at this station with the Large Otter Trawl (O.T.L.), the catch comprised a striking haul of alcyonarians, holothurians " many ", compound ascidians " common ".



6. *Phanodermopsis ingrami*, a, head ; b, tail of male ; c, tail of female.

STATION 105 : 67° 46′ S., 67° 03′ E., D R L : 163 M.

No mud, only a few small erratics. Dominant forms listed as :—(1) Large club-like compound ascidians ; (2) Large simple free ascidians with hairy test ; (3) Transparent ascidian-like *Clavellina* ; (4) Several spp. of sponges. Pycnogonids, asteroids, and ophiuroids abundant. Nematodes very abundant in test of a large ascidian.

STATION 107 : 66° 45′ S., 62° 03′ E., D R L : 219 M.

Dredging on an off-shore submarine bank. Fine grey mud. Ophiuroids and Polyzoa chief animals. Nematodes among sponge spicules. Later the Large Otter Trawl brought up a catch with Polyzoa as the dominant group : calcareous and chitinous species.