

Measurements

Australian specimens:

♂ (n=2): L=500-535, hd=26×25-26, cs=28-33, sd₁=30-38, sd₃=27-33, sd₅=27-32, sd₁₁=28-36, sd₁₃=26-, sd₁₆=31-, sd₁₇=42-45, sv₂=20-22, sv₄=24-26, sv₁₀=27, sv₁₂=25-28, sv₁₄=21-23, sv₁₅=23-25, t=110-123, tmr=66-79, spic.=52-59, gub.=25-, oes.=58, mbd=68-80, (mbd)=45-54.

♀ (n=1): L=540, hd=25×26, cs=23, sd₁=31, sd₃=28, sd₅=28, sd₁₁=29, sd₁₃=30, sd₁₆=32, sd₁₇=40, sv₂=21, sv₄=24, sv₁₀=27, sv₁₂=27, sv₁₄=25, sv₁₅=28, t=125, tmr=75, oes.=57, mbd=76, bd. vulva=48.

Male. Stout body with 17 large main rings consisting of many coarse and opaque concretion particles, partly extending on the interzones. The somatic setae are arranged according to the typical pattern of 17-ring species (Timm, 1970).

The pear-shaped head tapers anteriorly towards a naked, narrow, slightly offset, snout-like region.

Dorso-ventral and lateral views of the head allowed a more detailed study of the amphidial structure. The amphids are apparently bipartite, consisting of (1) a pear-shaped posterior part, almost reaching the posterior border of the head, and (2) an anterior, narrower, elongated portion. The two parts join at the level of the cephalic setae. The anterior amphidial part becomes wider in the region of the buccal cavity, giving off a small extension towards the dorsal and ventral side of the head; here, both amphids come very close to each other. A small, rounded, amphidial pore is situated at the level of the insertion of the cephalic setae.

The stoma is very small and leads to the oesophagus. The latter is narrow in the head region but widens posteriorly and extends till the end of the 2nd main ring. The intestine is of the general type (cf. Decraemer, 1974a), overlapping the rectum dorsally.

The nerve ring is very obscure, probably lying just anterior to the oesophago-intestinal junction.

A long, narrow gubernaculum with thickened distal part lies parallel to the long and slender spicules.

Female. Similar to males for most characteristics.

The amphids are similarly built, but nevertheless differ somewhat in shape from those of the males. The amphids are shorter in females due to a shorter, pear-shaped, posterior part which extends to just behind the insertion of the cephalic setae; the anterior amphidial part becomes only slightly wider in the region of the buccal cavity.

Locality and habitat. Lizard Island (sample 1).

Discussion. The Australian specimens correspond to the type specimens of *D. gerlachi* Timm, 1970, for most items. They

have a similar general habitus, an identical setal pattern, similar spicules, an elongated terminal main ring and similar shape and length of the somatic setae.

The individuals from Lizard Island, however, show some differences from the type material. Their head seems to have a more pronounced snout-like part. In the type specimens this snout-like anterior part is somewhat obscured by the enlarged amphids, which nearly surround the anterior head-end.

Although the amphids have the same basic structure, there are some differences in shape between the Australian and the type specimens. In the latter, the posterior amphidial part is a large, raised, thick-walled oval sac covering a great part of the head, reaching the posterior head-end; the smaller anterior part covers the anterior head-region, slightly passing the extremity.

The structure of the digestive tract and the position of the nerve ring, not mentioned in the original description, are similar to those of the Australian specimens.

Because of the great similarities, the Australian specimens are regarded as *D. gerlachi* Timm, 1970.

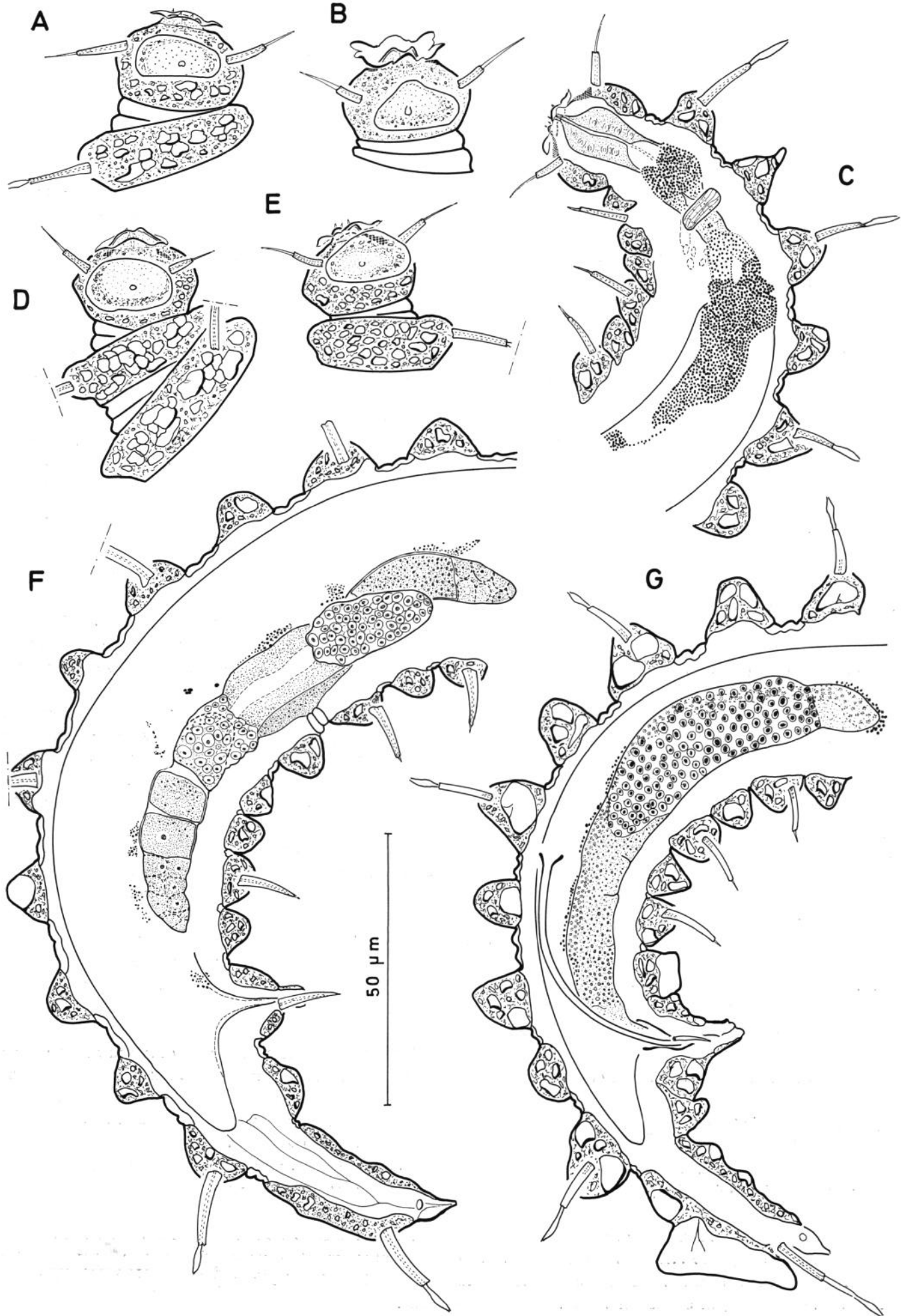


Fig. 4. Desmoscolex gerlachi. — *A*, surface view of male head (σ_1 from Lizard Island); *B*, surface view of ventral side of head (σ_2 from Lizard Island); *C*, surface view of head (♀ from Lizard Island); *D*, anterior body region (♀ from Lizard Island); *E*, surface view of head (holotype σ); *F*, posterior body region with tail in surface view (σ_1 from Lizard Island).