Antarcticonema comicapitatum TIMM (Plate VIII, Figs A-E)

Antarcticonema comicapitatum TIMM, 1978, p. 233-234.

Remarks and additional information based on the study of type material:

Cephalic cuticle thickened and sclerotized, forming a kind of helmet provided with numerous spine-like structures (see 'fine radial tubelike elements' in TIMM, 1978, p. 233) with fine material caught between them. Labial region with two crowns of 6 labial sensory papillae each. Amphidial pore situated at posterior head end. In females with a comparable body length as males, the head dimensions are somewhat smaller.

Oesophagus about cylindrical, narrowing posteriorly. Oesophageal glands clearly protruding (see Fig. A of a female specimen). Intestine a broad cylinder.

Female reproductive system didelphic-amphidelphic, with outstretched branches. Two globular spermathecae. Both uteri overlapping in front of the vagina.

Male reproductive system apparently with two testes (distinguishable in a paratype specimen, other type specimens in poor inner condition). On both sides of the vas deferens, a large, conspicuous ejaculatory gland. Gubernaculum parallel to spicules, proximally with a thicker portion (apophyse) in direct line with distal part.

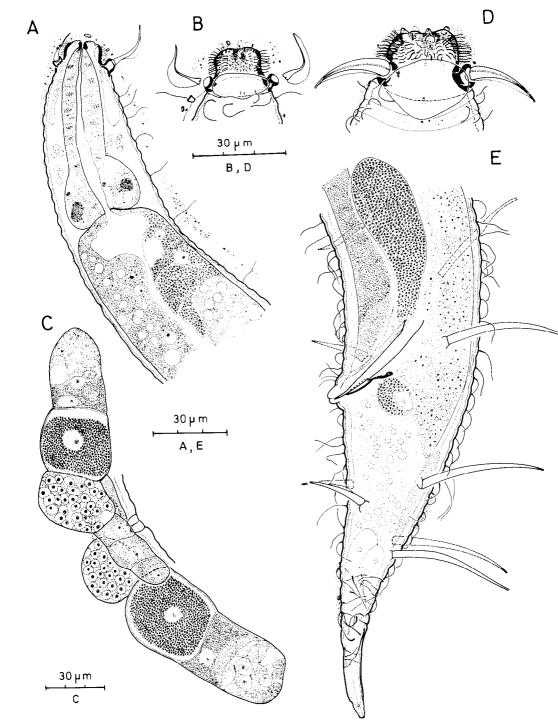
Discussion systematic position of Antarcticonema comicapitatum:

Comparing A. comicapitatum with the other desmoscolecid-species, I found that it resembles the Tricominae-species in the following features:

- general habitus and head-shape,
- arrangement and structure of somatic setae, different from Greef-fiellinae FILIPJEV, 1929,
- cephalic setae inserted on a distinct peduncle, absent in Greefiel-linae,

- head with the primitive arrangement of the sensory organs in three crowns: 2 crowns of 6 labial papillae each and one crown of 4 cephalic setae as observed in several Tricominae-species; until now not observed in the Desmoscolecidae SHIPLEY, 1896,
- tail structure and tail cone,
- the presence of protruding oesophageal glands, common in Tricominae, not in Desmoscolecidae,
 two testes; in Desmoscolecidae (Desmoscolecinae and Greeffiellinae)
- always one testis (see DECRAEMER & JENSEN, 1982, p. 324).

Taking the former features into account, especially the last one, I consider A. comicapitatum to belong to the Tricominae (Meyliidae DE CONINCK, 1965).



Antarcticonema comicapitatum TIMM

PLATE VIII

Fig. A. — Female, anterior body region (paratype slide NMNH 67636).

— Female, surface view of head (paratype slide NMNH 49998). Fig. B.

— Female, reproductive system (paratype slide NMNH 67637). Fig. C.

— Male, surface view of head (paratype slide NMNH 67632). Fig. D.

Fig. E. — Male, posterior body region (paratype slide NMNH 67632).