

The systematic position of *Californidorus* Robbins & Weiner, 1978 (Nematoda: Dorylaimida)

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Robbins & Weiner (1978) described an interesting dorylaim nematode, *Californidorus pinguicaudatus*, and placed it in a new subfamily, Californidorinae under the family Longidoridae Thorne, 1935, presumably because of its long body, odontostyle, odontophore and also, possibly, because of the shape of its lip region, and the amphids. The genus was differentiated from other Longidoridae by its comparatively longer basal enlarged portion of the oesophagus and in the absence of the anterior pair of subventral oesophageal glands. The authors also synonymized Xiphinematinae Dalmasso, 1969 with Longidorinae Thorne, 1935.

The genus *Californidorus* certainly appears unusual in the Longidoridae. A study of the type material of *C. pinguicaudatus* obtained from Rothamsted Experimental Station, Harpenden, England, shows that the anterior subventral oesophageal gland nuclei (S₁N) are present although poorly developed and also that the vaginal wall is sclerotized. A comparative study of *Californidorus* was made with the following genera: *Longidorus*, *Paralongidorus* (Longidorinae), *Xiphinema* (Xiphinematinae) and *Pungentus* Thorne & Swanger, 1936 and *Enchodelus* Thorne, 1939 (Pungentinae Siddiqi, 1969 of the family Nordiidae Jairajpuri & Siddiqi, 1964). It differs from the members of Longidorinae in the shape of the amphids, in having a forked odontostyle base, a much longer basal enlarged portion of the oesophagus, five oesophageal glands, sclerotization of the vaginal wall, loss of the anterior gonad, and in the shape of the tail. From Xiphinematinae it differs in the nature of the

odontophore base (flanged and set off from the oesophagus in *Xiphinema* but surrounded by an ellipsoidal swelling in *Californidorus*), characters of the oesophagus and oesophageal glands and in the sclerotization of the vaginal wall.

Californidorus is strikingly similar to *Enchodelus* and *Pungentus*. The lip region, amphids, the junction of the odontophore base and the oesophagus, the nature of the oesophagus and oesophageal glands and the sclerotization of the vaginal wall are all similar to those of *Enchodelus*. The species of *Enchodelus* grouped under the subgenus *Nephalus* Ahmad & Jairajpuri, 1980 also have a long body, odontostyle and odontophore similar to *Californidorus*. The anterior shifting of the vulva, the loss of the anterior genital branch, the sclerotization of the vaginal wall and the shape of the tail of *Californidorus* show similarities to some species of *Pungentus* (Ahmad & Jairajpuri, 1979). The anterior subventral oesophageal gland nuclei are poorly developed both in *Californidorus* and *Enchodelus*. The anterior shifting of the posterior subventral oesophageal gland nuclei (S₂N) and their orifices (S₂O) in *Californidorus* is also found in species of both *Enchodelus* and *Pungentus*.

It is concluded that *Californidorus* is not a member of the Longidoridae but belongs to the family Nordiidae, subfamily Pungentinae, mainly because of the characters of its oesophagus (fairly long with five oesophageal glands), the nature of the ellipsoidal swelling at the base of the odontophore and oesophagus and the sclerotization of the vagina. The subfamily Californidorinae Robbins & Weiner, 1978 thus becomes a synonym of Pungentinae. Pungentinae and Xiphinematinae, although super-

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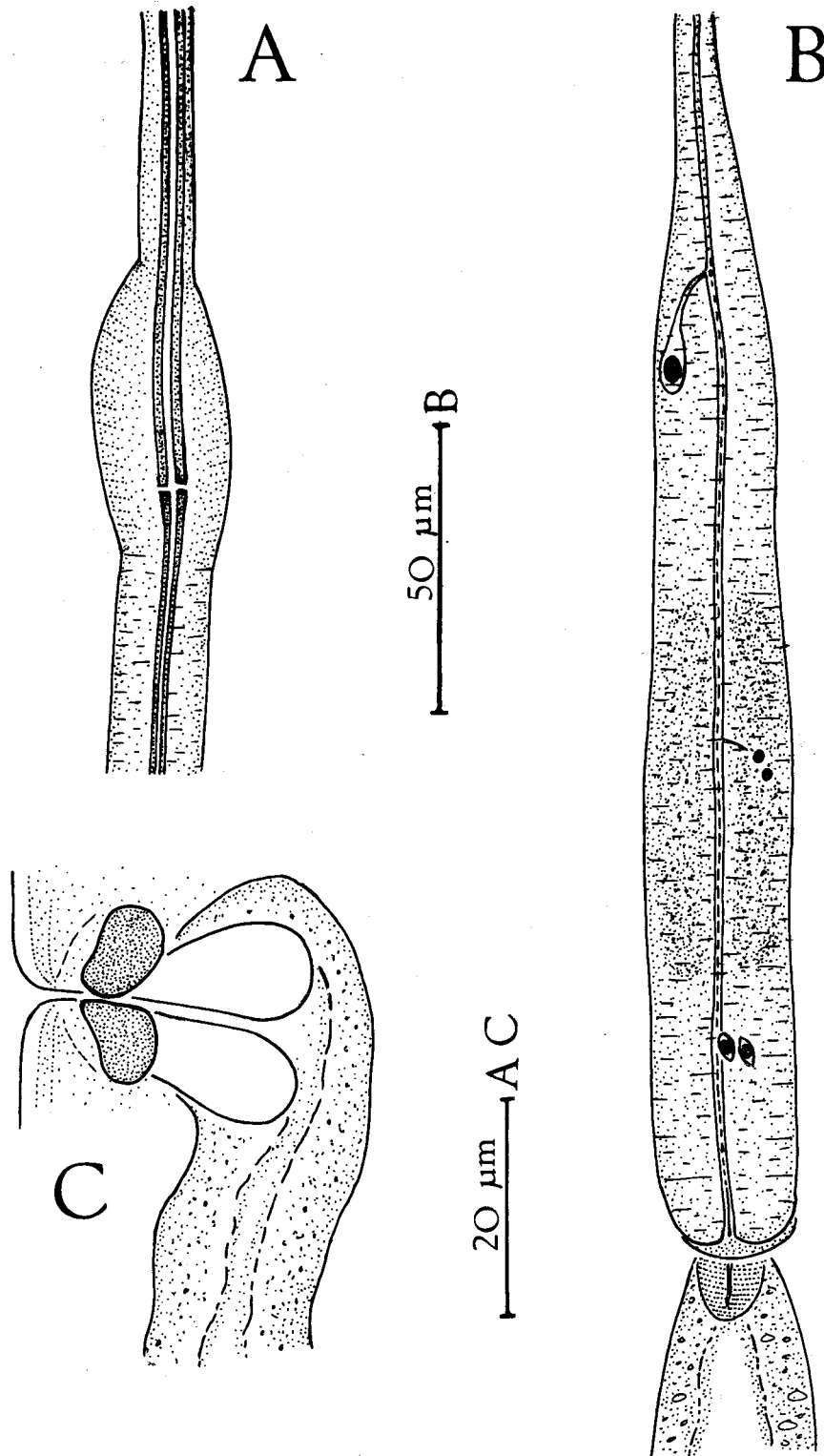


Fig. 1. *Californidorus pinguicaudatus* Robbins & Weiner, 1978 A. Junction of odontophore and oesophagus; B. Basal enlarged portion of oesophagus; C. Vulvar region showing sclerotization of vaginal walls.

ficially close to each other may be differentiated by the nature of the junction of the odontophore base and oesophagus (surrounded by an ellipsoidal swelling in the former and set off in the latter), and by the characters of the oesophagus and the oesophageal glands (the basal expanded portion of the oesophagus being large and having five glands in Pungentinae, but small and with only three glands in Xiphinematinae). The subfamily Xiphinematinae of the family Longidoridae is therefore restored as valid.

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The Commission hereby gives six months' notice of the possible use of its plenary powers in the following cases, published in the *Bulletin of Zoological Nomenclature*, volume 39, part 1, on 11 March, 1982, and would welcome comments and advice on them from interested zoologists. Correspondence should be addressed to the Secretary at the above address, if possible within six months of the date of publication of this notice.

Case No

- 1393 *Lychnoculus mirabilis* Murray, 1877 (Pisces): proposed suppression of both generic and specific names.
- 1782 Revised proposals for stabilization of the names of certain genera and species of HOLOTHURIOIDEA.
- 2067 *Thrips rufa* Haliday, 1836 (Insecta, Thysanoptera, Thripidae): proposed ruling that this is a nomenclaturally valid name for the type species of *Aptinothrips* Haliday, 1836.
- 2169 *Phrynus* Lamarck, 1801 (Arachnida, Amblypygi): proposed conservation.
- 2248 *Globigerina cerroazulensis* Cole, 1928, and *Globigeraspis tropicalis* Blow & Banner, 1962 (Foraminiferida): proposed conservation.
- 2249 *Diademodon tetragonus* Seeley, 1894 (Reptilia, Therapsida): proposed conservation of generic and specific names.
- 2305 *Agrotis redimicula* Morrison, 1875 (Insecta, Lepidoptera): proposed conservation from 1874.
- 2335 *Indodorylaimus* Ali & Prabha, 1974 (Nematoda, Dorylaimida): proposed designation of a type species by use of the plenary powers.
- 2346 *Byrrhastis nana* Paykull, 1799, non Gmelin, 1790 (Insecta, Coleoptera): proposed conservation.
- 2351 *Papilio fatima* Fabricius, 1793 (Insecta, Lepidoptera): request for conservation under the plenary powers.
- 2355 *Attus otiosus* Hentz, 1846 (Araneae, Salticidae): proposed conservation under the plenary powers.
- 2364 *Simulium amazonicum* Goeldi, 1905 (Diptera, Simuliidae): proposed suppression of syntypes and designation of neotype.
- 2369 *Damalis* Fabricius, 1805 (Insecta, Diptera): request for designation of type species.
- 2320 *Aphelinus mytilaspidis* Le Baron, 1870 (Insecta, Hymenoptera, Aphelinidae): proposed conservation.

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Secretary