THREE NEW SPECIES OF CARCHAROLAIMUS
(NEMATODA: DORYLAIMIDAE)

BY

M. R. SAUER

C.S.I.R.O. Horticultural Research Section, Merbein, Victoria, Australia

_Carcharolaimus taurus_ n. sp., about 1.25 mm long, with vulva at 52-55%, has a cuticularised labial framework of 6 sectors, and blunt conoid tail longer than the anal body diameter. The male has 7 ventromedian supplements.

_C. multicostatus_ n. sp., about 1 mm long, with vulva at 53-57%, has a cuticularised labial framework with 48 ribs, blunt conoid tail equal in length to the anal body diameter.

_C. lucidus_ n. sp., about 1.7 mm long, with vulva at 51-55%, has a cuticularised labial framework of 12 sectors with denticles on the walls, blunt conoid tail equal in length to the anal body diameter; male with 5 to 7 ventromedian supplements.

A small muscular bulb is present in the anterior part of the oesophagus of each of these species, most strongly developed in _C. multicostatus._

The genus _Carcharolaimus_ was defined by Thorne (1939), with descriptions of two new species, _C. teres_ and _C. dentatus_, and the transfer of _Actinolaimus rotundicauda_ (de Man, 1880) Steiner, 1916. _C. pizai_ Lordello, 1953 and _C. formosus_ Lordello, 1957 resemble _C. dentatus_ in having a dentate labial cuticularised structure. _C. drepanodon_ Loof, 1964 has a distinctively shaped spear. Specimens representing three new species of the genus have been recovered from soils in the Murray Valley. These are mostly smaller than described species, and have in common a feature not previously recorded in the genus — a small muscular bulb in the slender anterior part of the oesophagus. This bulb is most strongly developed in _C. multicostatus_ n. sp. where it appears associated with a modification of the cuticular lining of the oesophageal lumen.

_CARCHAROLAIMUS TAURUS N. SP._

(Fig. 1, A-H)

3 females: _L_ = 1.20-1.28 mm; _a_ = 29-36; _b_ = 3.0-3.3; _c_ = 39-40; _V_ = 52-53.

Spear: 12-13 μ.

Holotype (female): _L_ = 1.20 mm; _a_ = 30; _b_ = 3.3; _c_ = 40; _V_ = 52.

Spear: 12 μ.

Allotype (male): _L_ = 1.23 mm; _a_ = 33; _b_ = 3.5; _c_ = 38. Spicules (measured on cord): 33 μ. Spear: 12 μ. Ventromedian supplements: 7.

Body cylindroid, tapered more towards the tail than to the lip region, which is more than half as wide as the body at the base of the oesophagus. Cuticle with very fine, faint annulation. Lip region flat, rounded, set off by deep constriction,
Fig. 1. *Carcharolaimus taurus* n. sp. A. Anterior end. B. Amphid. C. Face view. D. Female tail, dorso-ventral. E. Lateral cord. F. Female reproductive system. G. Male tail. H. Female tail.