FOUR NEW SPECIES OF THE GENUS DISCOLAIMUS COBB, 1913
(NEMATODA: DORYLAIMOIDEA) FROM SOUTH AFRICA, WITH A
DESCRIPTION OF THE MALE OF D. SIMILIS THORNE, 1939 1)

BY

J. P. FURSTENBERG AND JUAN HEYNS

Plant Protection Research Institute, Pretoria, South Africa

Four new Discolaimus species are described and figured: D. bicorticus n. sp. is distinguished by
conspicuous sheaths surrounding the basal enlarged part of the oesophagus and D. levinae n. sp.
by the number and arrangement of the supplements; D. krugeri n. sp. differs from D. major Thorne,
1939 in length, number of cells in lateral chords and the presence of males; D. acuticapitus n. sp.
is distinguished by the tapered head and the exceptionally wide uterus and oviduct. The male of
D. similis Thorne, 1939 is described for the first time. A key to the known Discolaimus species
is given.

The species described were collected from cultivated and uncultivated fields
in South Africa. Measurements and drawings were made from specimens killed
by heat, fixed in F.A.A. and mounted in glycerine. Slide numbers refer to the
collection of the Plant Protection Research Institute, Pretoria.

DISCOLAIMUS BICORTICUS N. SP.
(Figs. 1-11)

Holotype (female): L = 2.07 mm; a = 46; b = 4.0; c = 71; V = 7.4 52.0 9.9.
Allotype (male): L = 2.37 mm; a = 53; b = 4.2; c = 73.
Paratypes (females, n = 2): L = 1.77, 2.07 mm; a = 39, 46; b = 3.5, 4.0;
c = 68, 71; V = 7.4. 10.7 49.7, 52.0 9.9. 11.6.

Body assuming a ventrally curved position when relaxed. Body of uniform width
over most of its length, tapering only towards the extremities. Cuticle and sub-
cuticle with transverse striae, the striae slightly more prominent at head and tail
regions. Lip region typical; lips slightly angular. Lip region one and two-
thirds as wide as head constriction and two-thirds as wide as the body at the
base of the oesophagus. Lips with the usual complement of 16 papillae. Spear
length 23 μ or seven-tenths lip region width; spear aperture 11 μ, or almost half
spear length. Spear extension 38 μ long and thus more than one and a half times
as long as the spear. Guiding ring appearing single. Amphids stirrup-shaped; the

1) Adapted from a thesis presented by the senior author to the Department of Zoology, Potchef-
stream University for C.H.E., Potchefstream in partial fulfilment of the requirements for the degree
of Master of Science.

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Fig. 1-11. Discolaimus bicorlicus n. sp. 1. Cross section of oesophagus at anterior portion of the enlarged basal part. 2. Cross section of oesophagus near cardiac region. 3. Head. 4. Cardiac region, showing sheaths around oesophagus. 5. Female reproductive organs, posterior branch. 6. Female. Natural position when relaxed. 7. Female tail. 8. Male tail. 9. Lateral guiding pieces. 10. Male posterior portion. Natural position when relaxed. 11. Surface view of head, showing amphid and papillae.