

**STUDIES OF PLANT AND SOIL NEMATODES. 10.
PARATYLENCHUS CORONATUS N. SP. (NEMATODA:
CRICONEMATIDAE), A PIN NEMATODE ASSOCIATED
WITH CITRUS**

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SUMMARY

Paratylenchus coronatus n.sp. from Queensland is described. The species is characterized by the presence of a labial ridge similar to that of *P. arcuatus* Luc and de Guiran, a stylet 31.2-38.9 μ long in females and males without a stylet.

In 1958 numerous males and females of the species of *Paratylenchus* described in this paper were found in soil around declining Late Valencia orange trees at Koah, North Queensland. The species has since been found in soil from a planting of slash pine (*Pinus elliotii* Engelm.) at Beerwah and from around the roots of *Baloghia lucida* Endl. in rain-forest at Cunningham's Gap.

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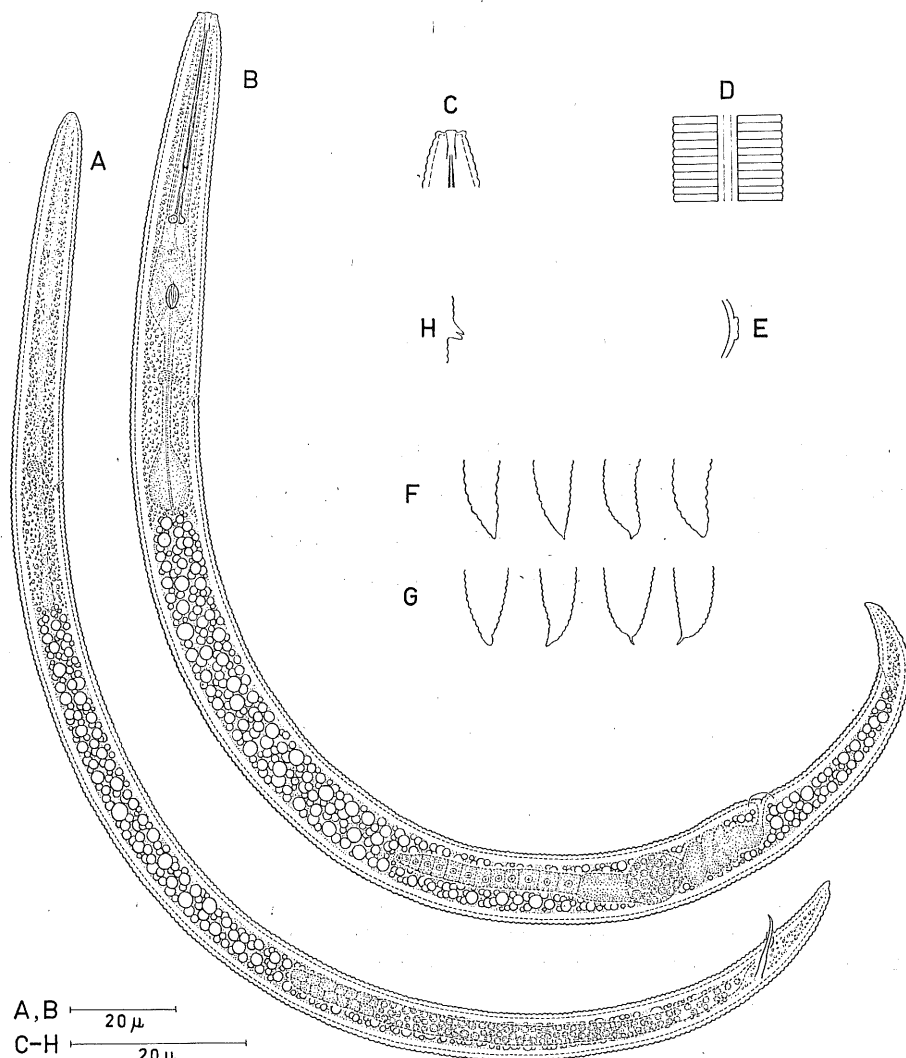
Paratylenchus coronatus n.sp.

Fig. 1.—*Paratylenchus coronatus* n. sp. A, male; B, female; C, female lip region; D, female lateral field; E, cross-section of female lateral field; F, female tails; G, male tails; H, male anal lips.

Females (15).—L = 268–298 μ ; a = 17.8–26.0; b = 3.0–3.6; c = 14.0–17.8; V = 78.2–82.4; stylet = 31.2–38.9 μ ; prorhabdion = 25.6–29.4 μ ; P.E. = 23.4–25.0.

Holotype.—L = 297 μ ; a = 22.8; b = 3.6; c = 16.2; V = 79; stylet = 38.0 μ ; prorhabdion = 28.4 μ ; P.E. = 25.

Cuticle with transverse striae about 1.2 μ apart. Lateral fields 2.6 μ wide in mid-body, marked by four incisures, the inner pair less distinct than outer pair. In cross-section each lateral field consists of a single longitudinal ridge

with two shallow involutions. Lip region with truncate anterior margin bordered by conspicuous ridge. Stylet knobs $3\ \mu$ wide, rounded. Dorsal oesophageal gland orifice $5\ \mu$ behind stylet ($4.5\ \mu$ – $5.5\ \mu$ in paratypes). Nerve ring crossing anterior portion of isthmus. Excretory pore opposite middle of isthmus. Hemizonid immediately behind excretory pore. Vulva bordered by sublateral cuticular flaps. Body slightly constricted behind vulva. Ovary single, prodelphic, outstretched. Spermatheca subspherical, $11\ \mu$ in diameter, $21.5\ \mu$ from vulva. Post-vulval uterine sac absent. Anus about 34 annules from vulva. Tail 2.7 anal body widths long, conoid-arcuate; terminus subacute (considerable variation in paratypes).

Males (10).—L = 244–312 μ ; a = 20.2–30.2; c = 16.2–17.7; spicules = 15.3–15.6 μ ; gubernaculum = 3.0–3.2 μ ; P.E. = 21.3–24.6.

Allotype.—L = 253 μ ; a = 30.2; c = 17.3; spicules = 15.6 μ ; gubernaculum = 3.1 μ ; P.E. = 23.5.

Body slenderer than female, slightly curved when relaxed. Cuticle with transverse striae $1.1\ \mu$ apart. Lateral fields $2\ \mu$ wide in mid-body region, marked by four incisures, inner pair less distinct than outer pair. Lip region without marginal ridge. Stylet and oesophagus not developed. Hemizonid immediately behind excretory pore (anterior to pore in some paratypes). Spicules slightly curved near distal end; gubernaculum simple. Tail short, conoid-arcuate; terminus subacute (considerable variation in paratypes). Anal lips prominent.

Types.—Holotype (female) and allotype (male) slides Reg. No. G.3567 and G.3568 respectively in the Queensland Museum; paratypes in the Queensland Department of Primary Industries Nematology Collection.

Type habitat.—Soil about the roots of *Baloghia lucida* Endl., a rain-forest tree known as "blood-in-the-bark".

Type locality.—Queensland: near the waterfall about 50 yards from the Cunningham Highway, half a mile east of the summit at Cunningham's Gap.

Other records.—Soil around slash pine (*Pinus elliottii* Engelm.), Coochin logging area 4, Beerwah, and around Late Valencia orange trees at Koah.

Diagnosis.—*Paratylenchus coronatus* n. sp. is distinguished from other species of the genus except *P. arcuatus* Luc and de Guiran 1962 by the conspicuous ridge around the anterior edge of the lip region.

P. coronatus is separated from *P. arcuatus* by the longer body and stylet, abundance of males and greater number of annules between vulva and anus.

ACKNOWLEDGEMENT

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REFERENCE

- LUC M., and DE GUIRAN, G. (1962).—Deux nouveaux *Paratylenchus* (Nematoda-Criconematidae) de Cote d'Ivoire. *Nematologica* 7:133-8.

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