STUDIES OF PLANT AND SOIL NEMATODES. 1. TWO NEW SPECIES FROM QUEENSLAND.

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SUMMARY.

Two new nematodes, Hemicycliophora truncata and Trichodorus minor, are described.

A number of new nematode species closely related to known plant parasites have been found in Queensland in the course of a survey, and two are described in this paper.

Hemicycliophora truncata n.sp.

(Fig. 1.)

Female. L = 0.6-0.8 mm.; a = 21-22, b = 4.3-4.5, c = 55-60; V = 5098.

Males absent; females numerous.

Body arcuate when killed by gentle heat and surrounded by a loose larval cuticle attached closely to the body at the head and anus and reflexed behind the tail. Larval cuticle coarsely striated except over the head and tail. Lateral field present. Lip region rounded, with the labial disc only slightly elevated above the head contour. Head offset, rounded on the anterior margins, and with a prominent posterior annule. Body cylindrical, and constricted posterior to the vulva. Tail conical, and bluntly rounded in adults; more pointed in larvae.

Spear dorsally arcuate, $84-103\mu$ long, with well developed basal knobs practically flat at the base. Oesophagus with a well developed precorpus about five-ninths as wide as the body; precorpus joined by a narrow isthmus, crossed by a nerve ring, to the small corpus about one-third as wide as the body. Excretory pore opening on the ventral surface adjacent to the middle region of the terminal oesophageal bulb. Intestine vacuolated, with coarse colourless granules and opening via the anus situated immediately posterior to the vulva. Vagina deep, parallel to body axis. Gonad single, prodelphic, outstretched, narrow. Spermatheca absent.

Type locality.—Archerfield (Brisbane).

Diagnosis.—*H. truncata* is distinguished by the presence of the loose cuticle reflexed behind the tail, and the posterior position of the vulva.

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