

Trophurus longimarginatus n.sp. (Tylenchida: Nematoda) from Puerto Rico

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INTRODUCTION

Loof (3)², in 1956, established the genus *Trophurus* with the description of two species, *T. imperialis* and *T. sculptus*. He stated that these nematodes have a weakly sclerotized labial framework and the female tail ends in a rounded tip which is not annulated. Caveness (1), in 1958, describing *T. minnesotensis* (as *Clavaurotylenchus minnesotensis*) stated that a sclerotized labial framework is lacking and the annulation in the female tail does not extend around the terminus. Recently some nematodes were found with characters different from the ones described above, thus suggesting a new species of this genus. The specimens were gradually killed by gentle heat and studied in 2½-percent formaldehyde.

TROPHURUS LOGIMARGINATUS N.SP.

MEASUREMENTS: 11 females: L = 844–1052 μ ; a = 40.9–50.1; b = 6.7–7.9; c = 26.0–33.0; stylet 14–16 μ ; V = 54–61 percent.

6 males: L = 730–835 μ ; a = 45.6–53.8; b = 6.3–7.1; c = 22.1–25.1; stylet 12–14 μ ; spicules 11–15 μ ; gubernaculum 3–6 μ .

FEMALE (HOLOTYPE): L = 863 μ ; a = 43.1; b = 7.0; c = 26.9; stylet 14 μ ; V = 61 percent.

MALE (ALLOTYPE): L = 730 μ ; a = 45.6; b = 6.5; c = 22.8; stylet 13 μ ; spicules 15 μ ; gubernaculum 6 μ .

DESCRIPTION:

Female: Body tapering at anterior end. Head continuous with body contour, annules wanting. Cephalic framework conspicuous, with long and prominent outer margins, which extend down to the 8 to 10th annule. Spear-guiding apparatus extends backwards approximately one height of lip region, with its diameter greater at the posterior end. Stylet moderate, 14 to 16 μ long, with rounded knobs. Outlet of dorsal pharyngeal gland 2 to 3 μ behind stylet. Median pharyngeal bulb elongate-ovate with a conspicuous valvular apparatus. Excretory pore opening at 12 to 21 μ behind valve of median pharyngeal bulb. Hemizonid at 5 to 14 μ posteriad of excretory pore. Basal pharyngeal bulb elongate-ovate. Vulva slightly postequatorial. Ovary one, outstretched anteriorly to vulva. Oocytes in single file except for a short region close to the distal end. Conspicuous ovoid spermatheca. Postuterine sac approxi-

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² Italic numbers in parentheses refer to Literature Cited, pp. 271.

mately one body width in length. Tail with cuticle swollen forming a broadly rounded terminus, annulation following tail contour. Cuticle finely striated. Lateral fields with four widely spaced incisures, beginning slightly posteriad to stylet and ending in front of tail end. Phasids distinct, opening 16 to 23 μ from tail tip.

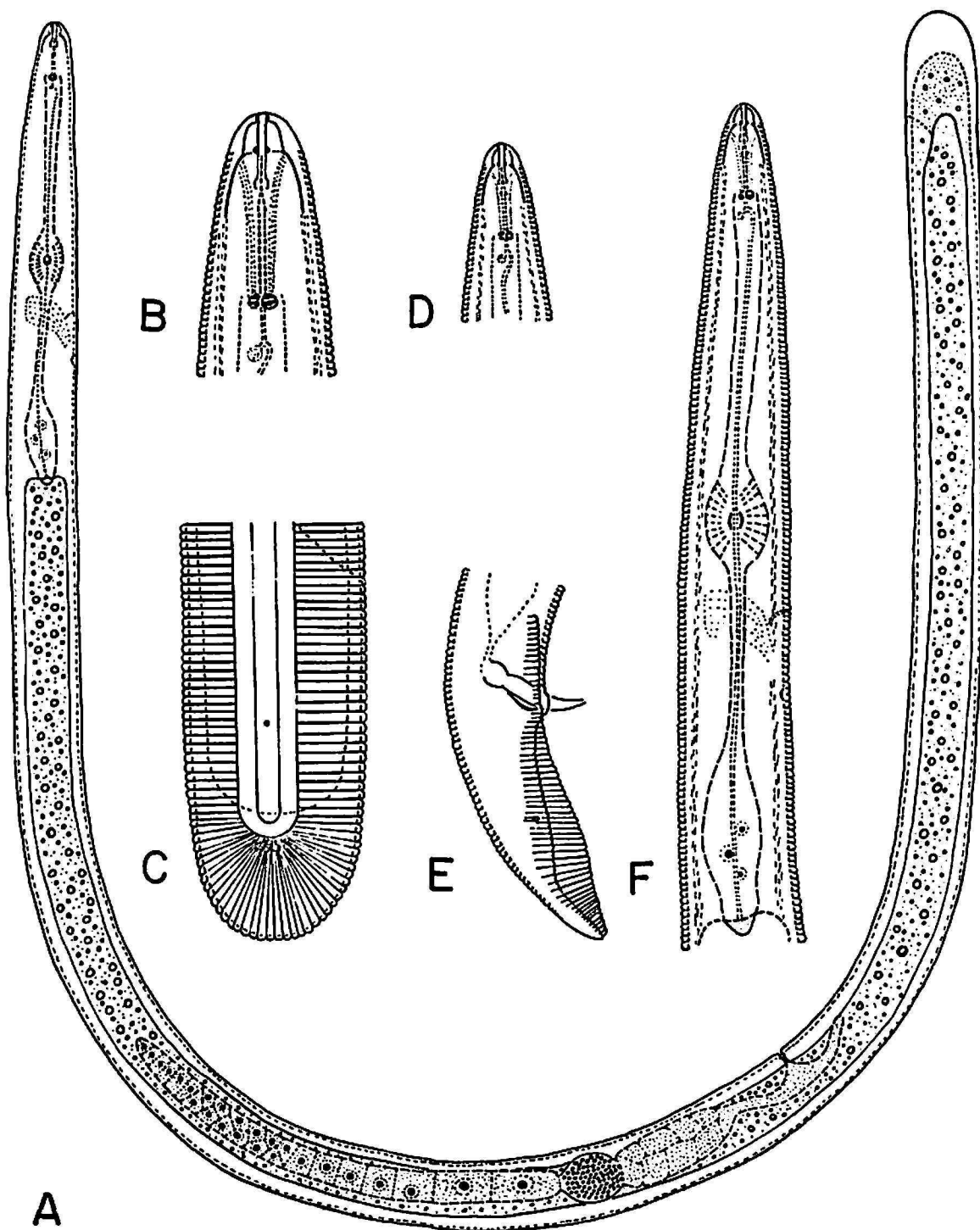


FIG. 1.—*Trophurus longimarginatus*: A, Female, $\times 320$; B, female head end, $\times 1,080$; C, female tail end, $\times 1,080$; D, male head end, $\times 720$; E, male tail end, $\times 720$; F, female pharyngeal region, $\times 540$.

Male: Resembling female. Bursa encloses tail tip. Annulation of tail gradually disappearing towards the tip. Stylet 12 to 14 μ . Phasmids 15 to 21 μ from tail tip. Spicules curved, cephalated proximally, 11 to 15 μ long. Gubernaculum curved, slightly thickened near middle, 3 to 6 μ long.

Holotype—Female: Collected on April 25, 1962, in the grounds of the Agricultural Experiment Station, Río Piedras, P.R. Slide No. 6, author's collection.

Allotype—Male: Same data as for holotype. Slide No. 7 author's collection.

Paratypes—Slides Nos. 8, 9, 10, and 11, author's collection, also vial No. 2 deposited in the collection of the Section of Nematology, Department of Entomology, of this Station.

Type locality—Grounds of the Agricultural Experiment Station, close to the Nematology Laboratory.

Habitat—Soil about roots of West Indian mahogany, *Swietenia mahagoni* Jacq.

Diagnosis—*Trophurus longimarginatus* is distinguished from all other members of the genus by the conspicuous cephalic framework with long prominent outer margins, and by the annulation which follows the tail contour in the female.

Trophurus longimarginatus derives its specific name from the characteristically long outermargins.

SUMMARY

Nematode specimens found in soil about West Indian mahogany roots belonging to the genus *Trophurus* Loof, 1956 were found to have specific characters different from those of the three species which are included in the genus at present. A description of the new species of nematode, *Trophurus longimarginatus*, as well as figure 1 illustrating the same, are given in this article.

RESUMEN

Se encontró un nuevo nemátodo en el suelo, alrededor de las raíces de la caoba Antillana, con caracteres específicos que lo separan de las tres especies incluídas actualmente en el género *Trophurus* Loof, 1956. En este artículo se describe y se ilustra (fig. 1) la nueva especie.

LITERATURE CITED

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3. Loof, P. A. A., *Trophurus*, A new Tylenchid Genus (Nematoda), *Versl. en Meded. Planteng. K. Dienst* 129, Jaerboek 1955, 191-5.