Hoplolaimus puertoricensis n.sp. (*Nematoda: Hoplolaimidae*)

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INTRODUCTION

Large numbers of parasitic nematodes are frequently found associated with our sugarcane soils. Among them, lance nematodes of the genus *Hoplolaimus* are sometimes encountered. On a recent collection of soil samples made in the Luce & Co. sugarcane fields at Santa Isabel, P.R., some specimens of *Hoplolaimus* were found, showing characters which make them different from all other described species.

The specimens were killed by gentle heat, fixed in FAA, and passed through Thorne's method of desiccating and mounting in glycerin. Permanent mounts were made and added to the Nematode Collection of the Agricultural Experiment Station of the University of Puerto Rico. The description of the new species is as follows:

HOPLOLAIMUS PUERTORICENSIS N.SP.

Measurements

Females: 1.3–1.7 mm.; *a*—28–35; *b*—7.2–10.8; *c*—32–63; *V*—*17–32*/46–56/*18–31*

Holotype: 1.4 mm.; *a*—32; *b*—7.2; *c*—53; *V*—*32*/53/*30*

Males: Not observed.

Description

Female: Body cylindroid, slightly arcuate when relaxed by gentle heat. Lip region distinctly offset, with 3 annules marked by 6–9 longitudinal striae. In face view 6 lips are seen with 1 papilla on each submedian lip. Amphids slitlike. Cephalic framework prominent with 6 segments, the ventral and dorsal ones bifurcated. Spear, massive, 41–45 μ long with tulip-shaped knobs. Cuticle annules, about 1 μ apart, continous around body except on tail (fig. 1,K). Hemizonid, 3–9 μ posterior to excretory pore. Deirids not observed. Scutellum ovate, migratory but always anterior to vulva. Outlet of dorsal esophageal glands 4–6 μ from spear. Median

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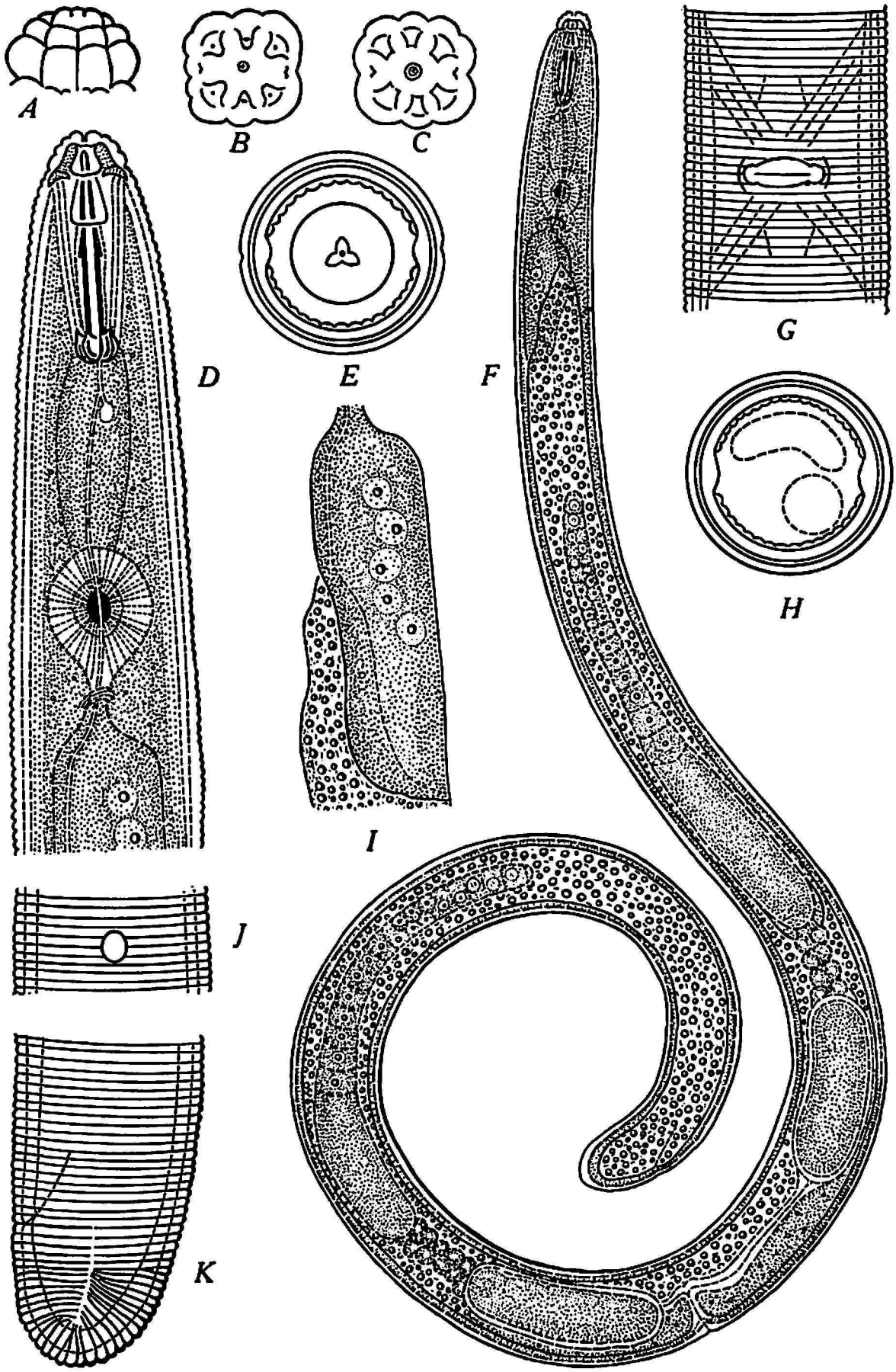

FIG. 1.—*Hoplolaimus puertoricensis:* A, B, C, × 3000; D, E, G, H, I, J, K, × 2000; F, × 600. A–K, Female: A, Lip region; B, face view; C, basal cephalic framework; D, anterior end; E, cross-section midway between stylet and middle bulb of esophagus; F, entire body; G, ventral view of vulva; H, cross-section midway between vulva and tail-end; I, esophageal glands showing 5 nuclei; J, scutellum; K, tail.

bulb ovate with prominent valvular apparatus. Isthmus short. Esophageal glands, overlapping intestine dorsolaterally, containing 5 prominent nuclei. Intestine granulated, extending into tail cavity. Terminus broadly rounded, annulated. Vulva, transverse, slitlike, equatorial. Ovaries paired, outstretched. Oöcytes in single file except for a short region of multiplication close to distal end. Spermathecae not present. Some specimens were observed attacked by *Duborcquia*, a sporozoan parasite.

Male: Not observed.

Holotype: Female from soil collected by G. Thorne and J. Román on October 31, 1962. Slide *Hoplolaimus* 1,b, Nematology Permanent Collection, Entomology Department, Agricultural Experiment Station, Río Piedras, P.R.

Paratypes: Same data as for holotype. Slides *Hoplolaimus* 1 through 1 h.

Type locality: Luce & Co. sugarcane field, Santa Isabel, P.R.

Type host: Sugarcane, *Saccharum officinarum* L.

Diagnosis

Hoplolaimus puertoricensis is distinguished from all other members of the genus by the presence of only three cephalic annules and five esophageal glands nuclei.

SUMMARY

Among the parasitic nematodes found on sugarcane soils in Puerto Rico, a new species of the genus *Hoplolaimus* was found on soil samples from the Luce & Co. sugarcane fields, in Santa Isabel. A description of the nematode *Hoplolaimus puertoricensis*, as well as figure 1 illustrating it, are given in this article.

RESUMEN

Entre los nemátodos parasíticos que abundan en los suelos de caña de azúcar de Puerto Rico se encontró una nueva especie perteneciente al género *Hoplolaimus*, en campos de Luce & Company, en Santa Isabel. En este artículo se describe y se ilustra esta especie, fig. 1.

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