

Dolichodoros nigeriensis n. sp. (Nematoda: Dolichodoridae)

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During the year 1960, one of the authors (F.E.C.) found in Nigeria some specimens of a *Dolichodoros* which appeared to be similar to *D. profundus* Luc, 1960. Examination revealed important differences from described species, so the individuals found in Nigeria are considered as belonging to a new species described here under the name of *Dolichodoros nigeriensis* n. sp.

This species seems to be quite rare for, in spite of the sieving of many kilograms of soil from the type locality only three females, four males and some juveniles could be found.

Dolichodoros nigeriensis n. sp.

DIMENSIONS: Females (3): L: 1.80-1.95 mm. a: 62.8-72.8. b: 7.3-7.9. c: 21.4-27.1. V: $16-20.351.4-53.5^{15.8-18.4}$ Stylet: 89-95 microns.

Holotype (female): L: 1.95 mm. a: 62.8. b: 7.3. c: 24.0. V: $18.652.5^{17.4\%}$. Stylet: 95 microns.

Males (4): L: 1.75-1.92 mm. a: 61-70.2. b: 7-7.8. c: 51.5-55.5. T: ?. Stylet: 89-105 microns. Spicules: 42-49 microns. Gubernaculum: 27-31 microns.

Allotype (male): L: 1.83 mm. a: 61. b: 7.3. c: 52.3. T: ?. Stylet: 105 microns. Spicules: 42 microns. Gubernaculum: 27 microns.

DESCRIPTION: Females: Body of females, when killed by gentle heating, straight to slightly curved. Body long and cylindrical, tapering gradually in the anterior part, more abruptly in the posterior part. Cuticle marked by annules 1.3 microns wide in the middle part of the body. Lateral field 8-8.5 microns wide ($3/10$ of the body diameter), bearing three lines, entirely crossed by body annules. The three lines begin at the level of stylet base; the lateral lines terminating before the central line which does not reach the level of the anus. Tail of variable length (75-87 microns), first conical then abruptly tapering to a long attenuated posterior part. Phasmids very small and situated $1/2$ to $3/4$ anal body diameter posterior to anus.

Lip region expanded, flattened anteriorly, with a large constriction at the junction with rest of body. Four lips bearing four annules on the expanded part and six to eight smaller annules on the constriction. Cephalic sclerotization distinct, but its organization rather obscure. Stylet thin, often slightly curved, 89-95 microns long (prohabdion: 52-63 microns); three rounded basal knobs directed posteriorly.

Opening of the dorsal oesophageal gland at 8 microns from the stylet base. Procorpus massive, with a coiled lumen, expanded more or less regularly to the median bulb. Median bulb thick, roughly oval; valvular apparatus well developed. Isthmus thin and long. Oesophageal glands forming a clavate basal bulb with three nuclei: two small, in the posterior part, and one anterior much bigger. Intestine without any peculiar characteristic.

Nerve ring encircling the isthmus at its middle. Excretory pore located at the level of the median bulb (134-156 microns from the anterior end). Hemizonid located at the level of the base of the isthmus (180-204 microns from the anterior end); hemizonid flat, extending on 3 to 4 body annules.

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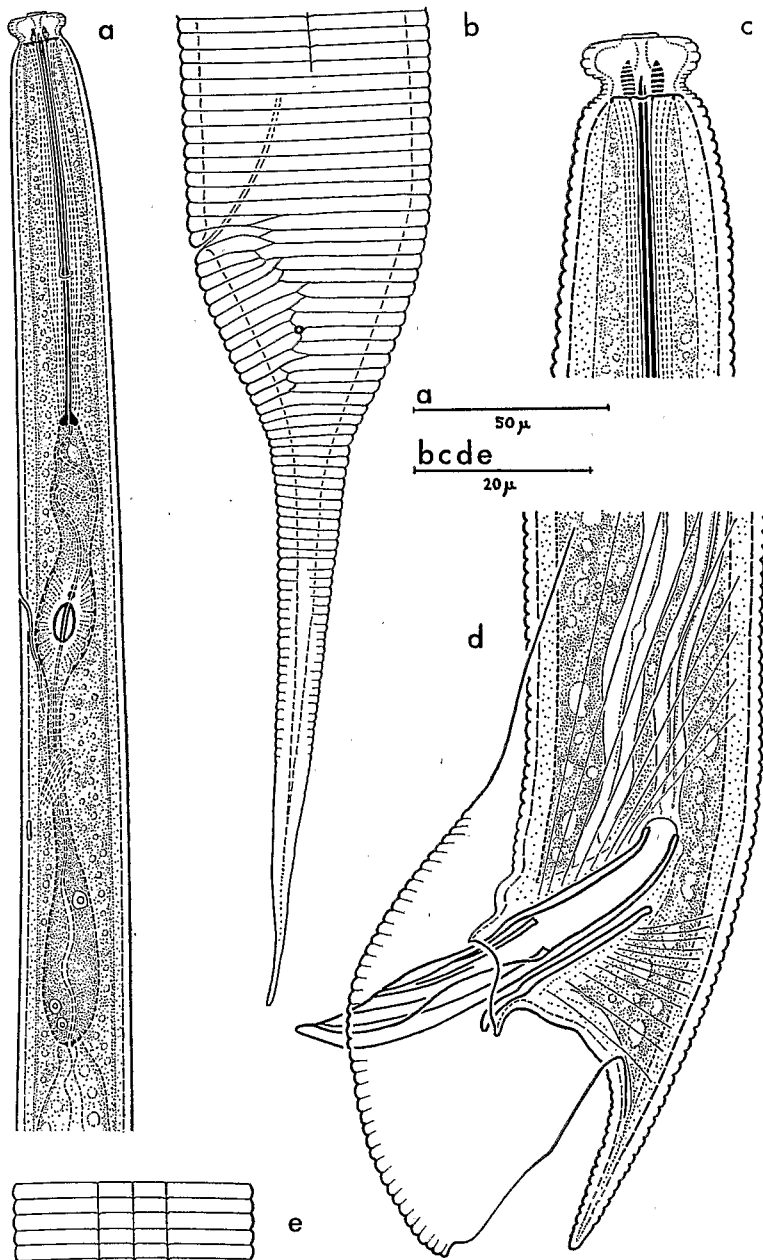


Fig. 1. *Dolichodoros nigeriensis* n. sp. a—anterior end, b—tail, and c—head of female; d—posterior end and spicules of male; e—lateral field of female.

Vulva a deep transverse slit located posterior to the middle of the body. Gonads straight; oocytes arranged in a single row. Spermatheca roughly rounded. Eggs not seen.

Males: similar to the females for anterior part, digestive tract, nerve ring, excretory pore, annulation and lateral field.

Caudal alae lobed, bearing striations and enveloping the terminus of the tail. Phasmid appearing as small dots located near the groove of the caudal alae. Spicules massive, heavily sclerotized, almost straight, measuring 42-49 microns. Gubernaculum 27-31 microns in length, straight. Tail pointed.

HOLOTYPE: Female—Slide 995—Laboratoire de Nématologie—I.D.E.R.T. Abidjan—Côte d'Ivoire.

ALLOTYPE: Male n° 1—Slide 948—Laboratoire de Nématologie—I.D.E.R.T. Abidjan—Côte d'Ivoire.

TYPE LOCALITY: Around roots of undetermined grasses—15 miles west of Ilugun—Orile, on the Ilugun-Igbo-Ora road. Ibadan Province—W. Nigeria (Rec. F. E. Caveness, May 30, 1960).

DIAGNOSIS: *Dolichodorus nigeriensis* n. sp. is characterized by having females with a long pointed tail, a lip region flattened anteriorly and separated from body by a deep constriction; and an excretory pore located at the level of the median oesophageal bulb. The combination of these three characters is sufficient to separate *D. nigeriensis* n. sp. from the species previously described, except *D. profundus* Luc, 1960 and *D. silvestris* Gillespie and Adams, 1962. From the first of these two species *D. nigeriensis* n. sp. is distinguished by the greater length of the female tail (75-87:54-72 microns) and in not having a cuticle divided in little squares in the anterior part of the body. From *D. silvestris* it is distinguished mainly by the smaller stylet (89-105:132-162 microns).

LITERATURE CITED

- GILLESPIE, W. H. and R. E. ADAMS. 1962. An awl nematode, *Dolichodorus silvestris* n. sp., from West Virginia. *Nematologica*, 8:93-98.
- LUC, M. 1960. *Dolichodorus profundus* n. sp. (Nematoda: Tylenchida). *Nematologica*, 5: 1-6.