**Tetrameres (Tetrameres) spiropsiculum** n. sp.  
(Nematoda, Tetrameridae) from the Buff-necked Ibis,  
*Theristicus caudatus caudatus* (Boddart) (Aves,  
Threskiornithidae)

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**Tetrameres (T.) spiropsiculum** n. sp. is proposed, taking into account the very unusual aspect of the  
longer spicule, which is slender and progressively spiralled from its middle, towards the distal end,  
that promptly distinguishes it from all the species of the genus.

Key words: nematodes – *Tetrameres (Tetrameres) spiropsiculum* n. sp. – Ciconiiformes – birds – Brazil

This paper refers to the proposal of a new species of nematode parasite of a Brazilian ciconiid  
bird. The present findings add new data to partial results previously reported during a study regarding  
nematode parasites of Ciconiiformes avian hosts (Vicente et al. 1995).

**MATERIALS AND METHODS**

Six samples of nematodes recovered from *Theristicus caudatus caudatus* (Boddart) between 1922 and 1940 during institutional scientific expeditions to the State of Mato Grosso do Sul, Brazil, were studied.

The samples were deposited in the Helmintological Collection of the Oswaldo Cruz Institute (CHIOC), preserved in vials with Railliet & Henry’s solution (0.85% NaCl solution: 93 ml; formaldehyde: 5 ml; glacial acetic acid: 2 ml) and were processed for study as described elsewhere (Pinto et al. 1993).

The preparation of **en face** mounts was made according to the method of Anderson (1958). Photomicrography was obtained in a Zeiss mod. Axioscope microphotographic system. Illustrations were made with a drawing tube connected to an Olympus light microscope. Measurements are in micrometers, unless otherwise indicated.

Classification of the nematodes regarding generic and subgeneric diagnoses follow Chabaud (1975) and confirmation of the taxonomic status of the host was based on Sick (1984).

**DESCRIPTION**

*Tetrameres (Tetrameres) spiropsiculum* n.sp.  
(Figs 1a-h, 2)

Morphometrics: based on nine specimens, seven males and two females; Habronematoidea,  
Tetrameridae, Tetramerineae.

Males (Figs 1a, d, f, h): body 2.52-4.06 mm long, 110-150 wide, with thinly dispersed, feeble  
developed spines, easily overlooked. Mouth oval-elongate, lips absent, with three pairs of small teeth  
surrounding mouth; four small papillae in inner circle, two amphids and four large, globose papillae  
in outer circle. Buccal capsule with thick sclerotized lining, 10-14 long. Muscular and glandular  
esophagus 230-320 and 730-860 long, respectively. Nerve ring and excretory pore 140-210 and  
190-250 from anterior extremity, respectively. Spicules very unequal in size and dissimilar in  
shape. The longer spicule is slender and presents from its middle, towards the distal end, a progressive  
twisting that increases gradually in a cork-screw spiral (Figs 1f, 2) and is 0.82-1.08 mm long.  
The shorter spicule is stout, alate, 150-160 long. Gubernaculum absent. Caudal papillae not observed.  
Cloacal aperture 10-14 from posterior extremity.

Females (Figs 1b, c, e, g): body ( uncompressed) globose in midregion, tapering to a very  
small diameter at anterior extremity and bluntly rounded posteriorly, 3.23-5.00 mm long, 2.14-3.50  
mm wide. Mouth round-oval, lips absent. Buccal capsule with tick sclerotized lining, 14 in diameter.  
Muscular and glandular esophagus 210-220 and 0.98-1.20 mm long, respectively. Nerve ring  
120-140 from anterior extremity. Excretory pore

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Fig. 1: *Tetrameres (T.) spirospiculum* n. sp. a: anterior extremity of male, lateral view. b: anterior extremity of female, lateral view. c: egg. d: oral aperture of male, en face view. e: anterior portion of female, lateral view. f: posterior portion of male, lateral view. g: posterior portion of female, lateral view. h: anterior portion of male, lateral view. Bars: 0.02 mm in Figs a-d; 0.1 mm in Figs e-h.

not observed. Uterus coiled, filling most of the body. Vulva 210-230 from anus, 350 from posterior extremity. Eggs oval-elliptical, embryonated, without polar filaments, 39-43 long, 25 wide. Tail, not always visible, may be confined within body folds, is 97-110 long. Anus 140 from posterior extremity.

Taxonomic summary

Type host: *Heristicus caudatus caudatus* (Boddart); common name: buf-necked ibis ("curicaca")

Site of infection: gizzard (females in proventricular glands, males free in the lumen)

Type locality: Salobra, State of Mato Grosso do Sul, Brazil

Etymology: the specific name derives from the Latin *spira + spiculum*, meaning "spiralled spicule"

Specimens studied: CHIOC no. 33, 173 a (holotype), 33, 186 c (alotype), 33, 173 b-c (paratypes), 33, 185 a-b, 33, 186 a, b, d-f, 33, 267 a-e (whole mounts), 8, 466, 11, 501, 11, 710, 11, 959 (wet material) (vouchers).

**REMARKS**

Actually, the genus *Tetrameres* Creplin, 1846, is represented by species grouped in two subgenera, namely *Tetrameres* and *Microtetrameres*, according to Chabaud (1975) on basis of the body shape in females, globular or twisted in tight spi-

The referred papers provide complete morphometric data on these species.

For the peculiar and unusual shape of the longer spicule, *Tetrameres (T.) spirospiculum* n. sp. is very remarkable and differs from all the species of the genus, including those reported in other birds than the Ciconiformes.

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**REFERENCES**


Fig. 2: *Tetrameres (T.) spirospiculum* n. sp.: posterior portion of male, lateral view. Bar: 0.05 mm.