SHORT COMMUNICATION

New Host and Locality Records for *Tetrameres* (*Gynaecophila*) *spirospiculum* Pinto & Vicente, 1995 (Nematoda: Tetrameridae), with New Morphological Data

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We report the finding of Tetrameres spirospiculum *Pinto & Vicente, 1995 from* Theristicus melanopis melanopis *(Threskiornithidae) from Patagonia, Argentina. These constitute new host and locality records. We propose the assignation of this species to the subgenus* T. (Gynaecophila) *Gubanov, 1950, based on the presence of labia and the absence of cuticular flanges at the anterior end. Some new morphological data are provided, such as the arrangement of cuticular spines and the presence of a pair of somatic papillae at beginning of posterior third of body length.* T. (G.) spirospiculum *may probably be regarded as specific to birds of the genus* Theristicus.

Key words: *Tetrameres* (*Gynaecophila*) *spirospiculum* - Nematoda - *Theristicus melanopis melanopis* - Threskiornithidae - Patagonia - Argentina

Tetrameres (*Tetrameres*) *spirospiculum* Pinto & Vicente, 1995 (Nematoda: Tetrameridae) was described from specimens collected from the proventriculus of *Theristicus caudatus caudatus* (Boddaert) (Aves: Threskiornithidae) from the State of Mato Grosso do Sul, Brazil (Pinto & Vicente 1995). This is one of the numerous species of *Tetrameres* (Creplin, 1846) reported from Brazilian birds (Vicente et al. 1995). Conversely, there are few reports of *Tetrameres* spp. from Argentina: *T.* (*T.*) *tinamicola* Pence, Mollhagen & Prestwood, 1975 from *Eudromia elegans* Geoffroy (Tinamidae) (Pence et al. 1975), *T.* (*Gynaecophila*) *aspicula* Digiani, 2000 from *Plegadis chihi* (Vieillot) (Threskiornithidae) (Digiani 2000), and *T.* (*T.*) *megaphasmidiata* Cremonte, Digiani, Bala & Navone, 2001 from *Charadrius falklandicus* Latham (Charadriidae) and *Calidris fuscicollis* Vieillot (Scolopacidae) (Cremonte et al. 2001).

The aim of this communication is to report the finding of *T. spirospiculum* in *Theristicus melanopis melanopis* (Gmelin) (Threskiornithidae) (new host record) from Patagonia, Argentina (new locality record). Moreover, we propose a different subgeneric assignation to the species based on cephalic structures, and provide some morphological details observed (under light and scanning electron microscopes).

In January 2000, two specimens of *T. m. melanopis* were found dead at Rahue (39°21´S-70°55´W), in the province of Neuquén, Patagonia, Argentina. After dissection, the digestive tract was fixed in the field with 10% formalin. From the proventriculus of one of the birds two adult worms were recovered, preserved in 70% alcohol and cleared in glycerine-alcohol for examination. Both specimens were identified as males of *T. spirospiculum*. Paratypes and voucher specimens of *T. spirospiculum* from the Helminthological Collection of the Instituto Oswaldo Cruz (CHIOC), Rio de Janeiro, Brazil, were examined with comparative purposes. One of our specimens and one voucher from CHIOC were dehydrated in an acetone series, dried by the critical point technique, coated with gold and examined under a JEOL JSM T100 scanning electron microscope (SEM). Classification of the nematodes regarding subgeneric diagnosis follows that proposed by Mollhagen (1976). Sensitive papilliform structures located posteriorly to deirids were referred to as somatic papillae following Digiani (2000) and Cremonte et al. (2001). Taxonomic status and nomenclature of the hosts follow Matheu and del Hoyo (1992).

Morphological characters and measurements (in micrometers) for each of our two specimens, sepa-

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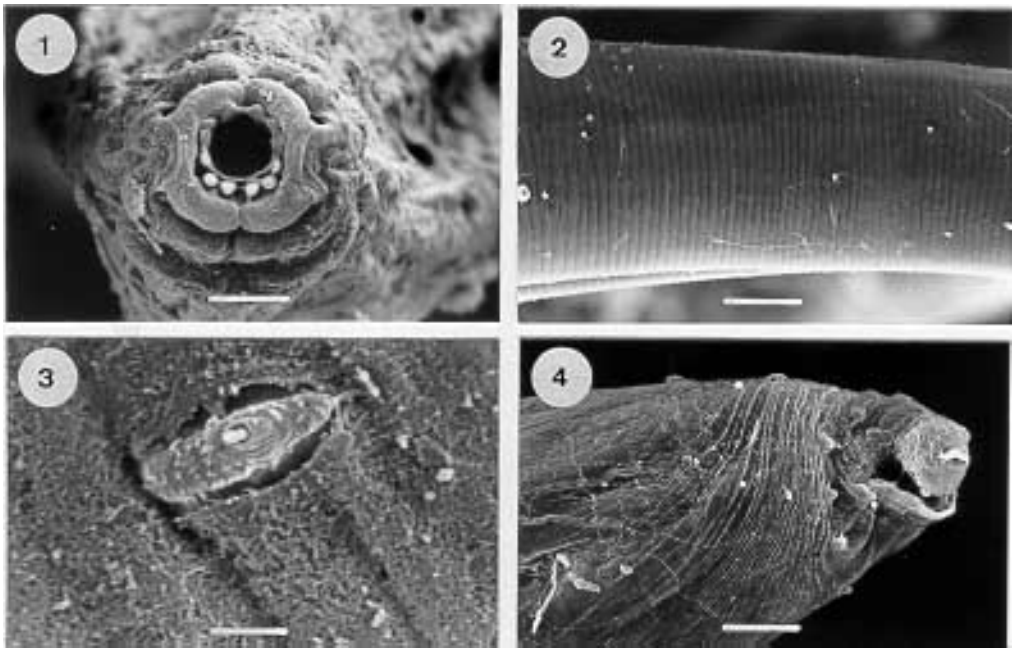
rated by commas, are as follows: cuticle with fine transverse striations. Lateral alae absent. Total length 4050, 6090; maximum width 125,130. Mouth surrounded by two lateral crescent-shaped pseudolabia and dorsal and ventral labia (Fig. 1). Three bifid, blunt teeth are present on each pseudolabia (Fig. 1). Buccal capsule 17, 22 long; 13, 21 wide. Muscular oesophagus 282, 270; glandular oesophagus 742, 840 long. Nerve ring and excretory pore at 170, 190 and 211, 247 from anterior end, respectively. Deirids simple 128, 138 from anterior end. Cuticular spines in two subventral rows, arising at about midbody, ending in front of the cloaca. Spines minute, 2-4 long, arranged in diagonally aligned pairs (Fig. 2) at a distance of 120-190 at midbody and gradually diminishing towards posterior extremity (15-67). Pair of somatic papillae at beginning of posterior third of body length, only seen with SEM (Fig. 3, photograph corresponding to voucher specimen from CHIOC). Left spicule 1015, 930 long; straight portion 465, 448; loosely twisted portion 200, 242; tightly twisted portion 350, 240 long. Right spicule 145, 157 long. Tail 16, 15 in length. Some rounded adanal papillae (at least four, exact number could not be established), only seen with SEM (Fig. 4).

Specimens are deposited in the Helminthological Collection of the Museo de La Plata (no. 4600/2), La Plata, Argentina.

Morphology and dimensions of the Argentine specimens of *T. spirospiculum* closely conform to the original description (Pinto & Vicente 1995). There are, however, some differences concerning the interpretation of the cephalic structures. Both specimens from Brazil and Argentina were found to possess dorsal and ventral labia (Fig. 1). Labia are stated as absent in the text of the original description and consequently not figured in the apical view drawing (Pinto & Vicente 1995: fig. 1d, p. 616), although they are clearly seen in the lateral view drawing (Fig. 1a, p. 616).

Authorities of *T. spirospiculum* followed the subgeneric classification by Chabaud (1975), who proposed the subgenera, *T.* (*Tetrameres*) Creplin, 1846 and *T.* (*Microtetrameres*) Travassos, 1915, mainly based on the female body shape and the presence or absence of spines in males. However, a later classification proposed by Mollhagen (1976) and adopted by many other authors (Mawson 1979, Bergan et al. 1994, Digiani 2000, Cremonte et al. 2001), considers *Microtetrameres* as a separate genus and recognises three subgenera of *Tetrameres* based upon the presence or absence of dorsal and ventral labia and lateral cuticular flanges at the cephalic end. According to this, we suggest *T. spirospiculum* Pinto & Vicente, 1995 to be included in the subgenus *T.* (*Gynaecophila*)



Tetrameres (*Gynaecophila*) *spirospiculum* - Fig. 1: apical view of male, showing pseudolabia, bifid teeth and dorsal and ventral labia. Bar: 10 µm. Fig. 2: detail of cuticular spines (arrows), ventral view. Bar: 20 µm. Fig. 3: somatic papilla (photograph corresponding to voucher specimen from CHIOC). Bar: 2 µm. Fig. 4: posterior extremity of male showing cloaca, short tail and adanal papillae (arrows). Bar: 10 µm

Gubanov, 1950 in the light of the presence of labia and the absence of cuticular flanges at the anterior end.

The two host subspecies recorded hitherto for this nematode are alopatric, indicating that the parasite is present in a wide geographical range from Mato Grosso do Sul to northern Patagonia. It would be desirable to confirm this distribution range by examining *Theristicus* spp. from the province of Buenos Aires (Argentina), an intermediate region between southern Brazil and southern Argentina. Another threskiornithid bird present in the mentioned area is *Plegadis chihi* (Vieillot), which in some environmental conditions, overlaps in its food habits with *Theristicus* spp., thus becoming a potential host for *T.* (*G.*) *spirospiculum*. However, Digiani (1999) never found this species in an extensively surveyed population of *P. chihi* (n=86) in the province of Buenos Aires and thus, *T.* (*G.*) *spirospiculum* may probably be regarded as specific to birds of the genus *Theristicus* Wagler.

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