

DASYRHYNCHUS PACIFICUS ROBINSON, 1965 (TRYPANORHYNCHA: DASYRHYNCHIDAE) DESCRIPTION OF THE ADULT FORM

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One out of four specimens of sharks, *Carcharhinus brachyurus* (Günther, 1860), captured off the southern Brazilian Coast, harboured cestodes identified as *Dasyrhyinchus pacificus* Robinson, 1965, of which the adult form is now described and referred as occurring in Brazil.

Key words: *Dasyrhyinchus pacificus* – Trypanorhyncha – Dasyrhyinchidae – adult form – *Carcharhinus brachyurus* – shark – Brazil

Cestodes from sharks, *Carcharhinus brachyurus* (Günther, 1860), captured off the southern Brazilian Coast, were collected by one of us (SCSC). Examination of adult specimens allowed their identification to the genus *Dasyrhyinchus* Pintner, 1928. The only Brazilian species of this genus so far described, is *Dasyrhyinchus giganteus* (Diesing, 1850), from *Oligoplites saliens* (Bloch), based on the immature form.

The present work is the 1st report of *Dasyrhyinchus pacificus* Robinson, 1965 in Brazil, and presents the first description of the adult form of this species.

MATERIAL AND METHODS

One of the four specimens of *C. brachyurus* captured off the southern Brazilian Coast (30°40'S-33°40'S, 53°20'W-50°40'W), was positive for cestodes. The material was fixed in alcohol-formalin-acetic acid (AFA), stained with Mayer's Carmalum, cleared with beechwood creosote and preserved in Canada balsam. The drawings were made with a drawing tube. All measurements are in millimeters, unless otherwise indicated. Ranges are in parentheses. Voucher specimens were deposited in the Helminthological Collection of the Instituto Oswaldo Cruz (CHIOC), Rio de Janeiro.

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RESULTS

Dasyrhyinchus pacificus Robinson, 1965 (Figs 1 to 6)

Host: *Carcharhinus brachyurus* (Günther, 1860).

Habitat: Spiral valve.

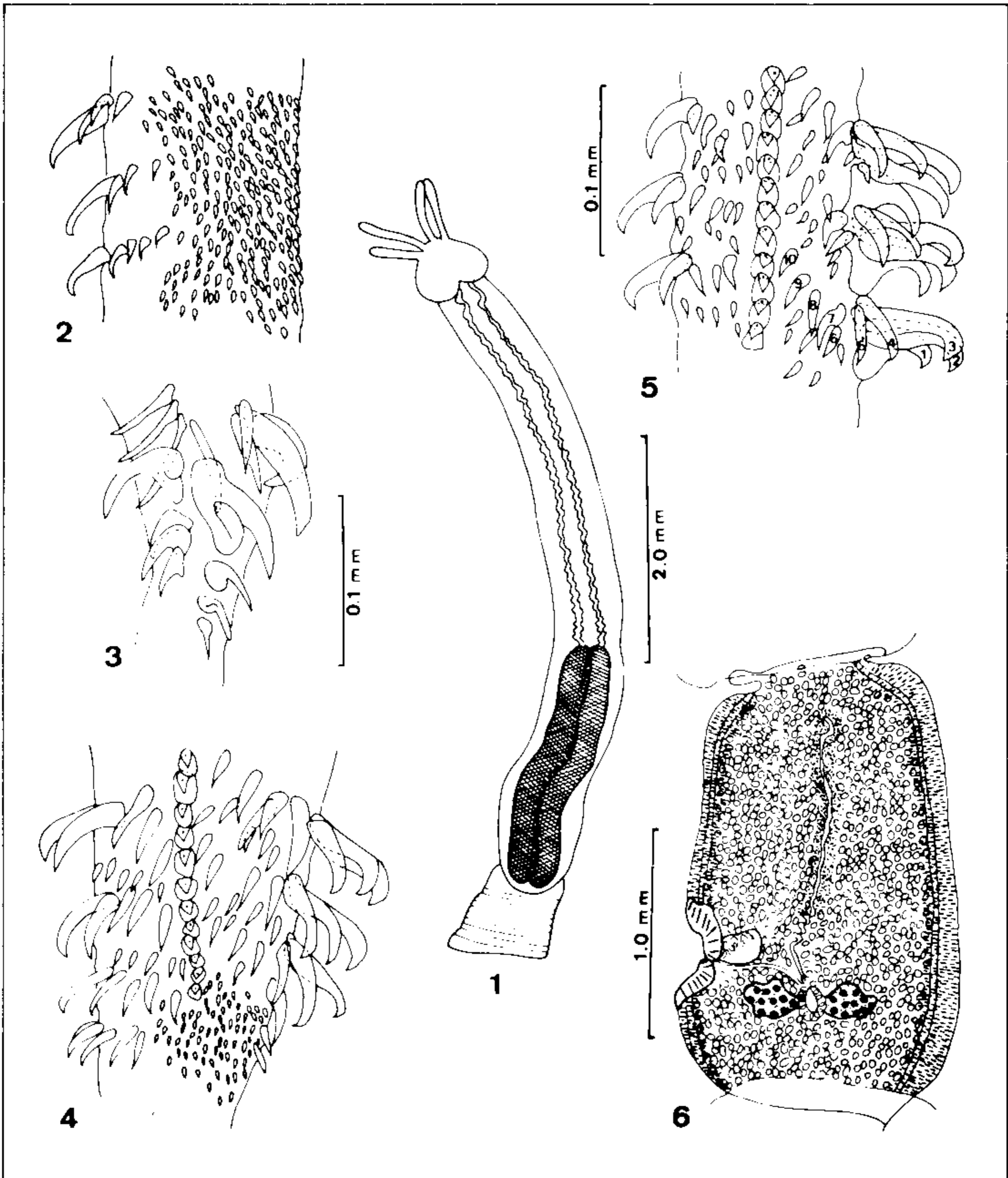
Locality: Southern Brazilian Coast.

Specimens deposited: CHIOC no. 32486a-b.

Description: (Based on two uncompressed adult specimens without the gravid proglottid): Scolex (Fig. 1) long, cylindrical, 6.46 (5.88-7.04) in length by 0.66 (0.59-0.73) wide. Maximum width at the bothridial region. Pars bothridialis with two cordiform bothridia, presenting reversed extremities and a notch in the posterior region, 0.52 (0.51-0.53) long, by 0.66 (0.59-0.73) wide. Pars vaginalis with coiled tentacle sheaths, 4.07 (3.66-4.48) long. Pars bulbosa long, 2.27 (2.10-2.44) in length, by 0.50 (0.49-0.51) wide, retractor muscle deeply inserted into the bulbar cavity. Tentacular armature poeciloacanthous. Basal region, external surface (Fig. 2) well defined, with an area covered with minute hooks 8 μ m long. Basal region, internal surface (Fig. 3) with hooks of characteristic shape, there are two stout ones, each of them enlarged, in its somewhat irregular base, being the largest, 78 μ m long. Posterior to these larger hooks there are two rows of narrow, smaller hooks 26-29 μ m long. The "chaînette" begins in the metabasal region (Fig. 4). The hooks are, at first, very small, 10 μ m in

length, but increase in size gradually and reach $23\ \mu\text{m}$ in length. They have a large rectangular base and a sharp point turned abruptly over the base. Tentacles with 10 hooks in each semi-circle in the main oblique rows (Fig. 5); hooks 1 and 1' stout, with large base (internal surface view), $68\text{--}78\ \mu\text{m}$ long; hooks 2 and 2', with narrow base, $60\text{--}68\ \mu\text{m}$ long; hooks 3 and 3',

$47\text{--}52\ \mu\text{m}$ long; hooks 4 and 4', $42\text{--}44\ \mu\text{m}$ long; hooks 5 and 5', $27\text{--}34\ \mu\text{m}$ long; hooks 6 and 6', $23\text{--}27\ \mu\text{m}$ long; hooks 7 and 7', $21\text{--}27\ \mu\text{m}$ long; hooks 8 and 8', $18\text{--}23\ \mu\text{m}$ long; hooks 9 and 9', $16\text{--}21\ \mu\text{m}$ long; hooks 10 and 10', $16\text{--}18\ \mu\text{m}$ long. Among the rows of the main hooks, there is one row with five to six smaller and thinner hooks.



Dasyrynchus pacificus Robinson, 1965 — Fig. 1: scolex. Fig. 2: basal region, external surface. Fig. 3: basal region, internal surface. Fig. 4: origin of the "chainette". Fig. 5: metabasal region showing the 10 hooks. Fig. 6: mature proglottid. (Figs. 2, 3, 4 and 5 in same scale).

Strobila: hiperapolytic, 51-100 long. Proglottids large than wide, at first, increasing gradually in length. Genital pores marginal, irregularly alternate postequatorial. Mature proglottid acraspedote (Fig. 6) 1.69 in length by 1.25 wide. Testes numerous, more than 1.000, irregular in shape, scattered through the proglottid and separating ovary from posterior extremity border of segment. Cirrus pouch oval, 0.19 (0.14-0.24) long, by 0.15 (0.12-0.18) wide. Ovary located in the posterior third of the proglottid, with two wing-shaped lobes, 0.64 (0.59-0.69) in total length by 0.19 (0.17-0.21) wide. Ootype well defined, posterior to the ovary. Vagina ending in the genital atrium. Uterus tube-shaped, longitudinal, extending from the center, to the anterior extremity of the proglottid. Vitellaria disposed in lateral bands, extending along the entire proglottid length and exceeding the osmoregulatory canals to the lateral margin of each segment. Gravid proglottid was not observed.

REMARKS

The finding of species under *Dasyrhynchus* Pintner, 1928 may be regarded as quite unusual, since previous reports of Trypanorhyncha in Brazil, except for Diesing (1850, 1856), do not refer to *Dasyrhynchus* (Carvajal & Rego, 1983, 1985; Rego et al., 1974; Rego, 1977, 1987 and São Clemente, 1986).

The original description of *D. pacificus* by Robinson (1965) was based on a larval form recovered from *Sciaena antarctica* Castelnau, captured in McKenzie Bay, Australia. The specimens now examined have smaller scolex than the type material (Robinson, 1965). Examining plerocerci, Robinson presented 11.5 in length for the scolex, when compared to the present data, 5.88-7.04 and there is no indication on the way original measurements were accomplished, i.e., with or without appendix.

The only report on *D. pacificus* occurring in South America is that of Escalante & Carvajal (1984), based on three larval specimens, parasitizing *Sciaena deliciosa* (Tschudi, 1844) from Salaverry, Peru. The authors emphasized the presence of rows with 10 main and six intercalary hooks, between them, and a "chainette" of special hooks on the external surface, characteristic of *D. pacificus*, which are identical to those of the specimens here studied. Even without the gravid proglottid this is the

first description of the adult form of the species, and also a new geographical record.

RESUMO

Descrição da forma adulta de *Dasyrhynchus pacificus* Robinson, 1965 (Trypanorhyncha: Dasynrhynchidae) – Um entre quatro espécimes de *Carcharhinus brachyurus* (Günther, 1860), coletados na costa sul brasileira, estava parasitado por cestóides pertencentes ao gênero *Dasyrhynchus* Pintner, 1928. Os espécimes foram identificados como *D. pacificus* Robinson, 1965, sendo este o primeiro registro da ocorrência desta espécie no Brasil. Nesta oportunidade, é pela primeira vez apresentada a descrição da forma adulta, embora sem o proglótide grávido.

Palavras-chave: *Dasyrhynchus pacificus* – Trypanorhyncha – Dasynrhynchidae – forma adulta – *Carcharhinus brachyurus* – tubarão – Brasil

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