

A NEW *Pycnogonum* FROM BRAZIL

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(with 1 plate)

Pycnogonum gibberum, spec. nov.

LOCALITY — Lage de Santos, about 40 km S off Santos, 32 m.

MATERIAL — Holotype: one male numbered 1089 ARACHNOIDEA. Paratypes: one female in the collection of the "Departamento de Zoologia da Secretaria da Agricultura" of the State of São Paulo, a second female in the collection of the Oceanographic Institute of the University of São Paulo, dredged by Lic. Luiz Roberto Tommasi, and a third female from Alcatrazes I., 36 m, 10/8/61, dredged by the Necton Staff of that Institute.

DESCRIPTION — Trunk compact, completely segmented; lateral processes touching. Three dorsal trunk tubercles taller than eye tubercle and bearing a few bristles. One median small tubercle on fourth segment and one near tip of abdomen. Smaller tubercles on lateral processes and on first and second coxae. Integument heavily reticulated and bearing numerous small warts many of which with setae. Proboscis slightly curved downwards, about two thirds the length of the trunk, tapering from base to tip. Abdomen widened, rounded at the tip.

Oviger 7-jointed, third and fourth joints broader than fifth, but distinctly longer than broad. Terminal claw about two thirds

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the length of the seventh joint. Measurements (in mm): I 0,2; II 0,1; III 0,3; IV 0,35; V 0,35; VI 0,3; VII 0,25; Claw about 0,15.

Leg thick, knobby; femur shorter than sum of coxae; second tibia distinctly shorter than first; terminal claw less than half as long as propodus.

| Measurements in mm: | male | female 1 | female 2 |
|--|------|----------|----------|
| length incl. proboscis and abdomen .. | 5,2 | 7,2 | 6,9 |
| length of trunk | 3,2 | 3,7 | 3,5 |
| length of segment I | 1,0 | 1,4 | 1,45 |
| length of segment II | 0,4 | 0,62 | 0,6 |
| length of segments III + IV | 1,08 | 1,6 | 1,5 |
| breadth of segment I | 2,1 | 2,7 | 2,75 |
| breadth of segment II | 2,2 | 2,2 | 2,7 |
| breadth of segment III + IV | 1,9 | 1,5 | 2,2 |
| maximum breadth of trunk without lateral processes | 1,2 | 1,2 | 1,3 |
| abdomen | 0,9 | 1,1 | 1,1 |
| proboscis, dorsal length | 1,9 | 2,5 | 2,3 |
| proboscis, ventral length | 2,2 | 2,8 | 2,5 |
| proboscis, basal width | 1,0 | 1,2 | 1,2 |
| proboscis, width at tip | 0,4 | 0,54 | 0,54 |
| third leg: coxa 1 | 0,5 | 0,6 | 0,62 |
| coxa 2 | 0,6 | 0,8 | 0,55 |
| coxa 3 | 0,5 | 0,6 | 0,6 |
| femur | 1,3 | 1,6 | 1,4 |
| tibia 1 | 1,2 | 1,4 | 1,5 |
| tibia 2 | 0,8 | 0,7 | 0,8 |
| tarsus + propodus | 0,9 | 1,0 | 1,2 |
| claw | 0,38 | 0,42 | 0,32 |

DISCUSSION — A closely related species is *Pycnogonum reticulatum* Hedgpeth (1948, p. 279), first published as *Pycnogonum* sp. (Hedgpeth 1947, p. 13). The species based on 2 males

and 3 females was found at Key West; Tortugas, Florida; and El Salvador on the Pacific coast of the Isthmus of Panama. Stock (1954, p. 129) added 2 males from Islote Aves, W of Dominica, Lat. 15°41' N, Long. 63° 40' W.

P. gibberum differs from *reticulatum* by higher median and more numerous trunk tubercles. Median processes on the trunk segments exceeding the ocular tubercle in height are rare in reticulated species of *Pycnogonum* (Schmitt 1934, p. 63). The proboscis of *gibberum* tapers more from base to tip than that of *reticulatum*. In *gibberum* the diameter of the tip is less than half (40-45%) that of the base, in the three published figures of *reticulatum* half or more (50-54%) of the basal width. Minor differences between *gibberum* and *reticulatum* refer to the breadth of the middle joints of the oviger and to the second tibiae of the females which are half the length of the first or little more.

A shagreened, not reticulated, *Pycnogonum* from the coast of São Paulo, *P. pamphorum* Marcus (1940, p. 115) is related with *P. cessaci* Bouvier (1911, p. 493) from the Cape Verde Islands. Neither its original description nor a short addition (Bouvier 1917, p. 44) informed sufficiently about this not figured species, not mentioned in the Zoological Record for 1911, where the paper is reported, nor in Schimkewitsch's (1929-30) and Helfer & Schlottke's (1935) monographs.

Fage (1952) re-described the material of Bouvier and studied specimens of *cessaci* from Dakar. We agree with his separation (p. 532) of *pamphorum* from *cessaci*: auxiliary claws (absent in *cessaci*); eye tubercle at a considerable distance from anterior border of first segment (in *cessaci* this distance equal to diameter of eye tubercle); a small knob behind the eye tubercle occurs in *cessaci*, not in *pamphorum*; and the femoral prominence of *cessaci* stronger than that of *pamphorum*. Not mentioned by Fage but evidenced by his text and figure is the cylindrical proboscis of *cessaci* against the nearly barrel-shaped one of *pamphorum*.

Stock (1954, p. 129; also in Hoenigman & Stock 1955, p. 535) does not consider these traits as sufficient for taxonomic separation and so called a male with small auxiliary claws from Los Frailes, N E of Margarita Island (Lat. 11°15' N, Long. 63°42' W)

P. cessaci. The other characteres which separate *cessaci* and *pamphorum* are not indicated for this specimen.

Fage (p. 531) recognized the identity of *P. leticiae* Mello-Leitão (1945, p. 1) from Rio de Janeiro with *P. cessaci*. Three specimens of our collection, from São Vicente near Santos, are *leticiae*, hence *cessaci*, now definable as amphiatlantic.

RESUMO

Pycnogonum gibberum, spec. nov., da Ilha Lage de Santos, 32 m, distingue-se da espécie semelhante, *P. reticulatum* Hedgpeth 1948, pela altura das saliências medianas superior à do tubérculo ocular, gibas dorsais mais numerosas, tromba mais estreita na ponta, e pormenores das dimensões do 3.º e 4.º artigos do ovígero e das tíbias nas fêmeas.

Pycnogonum cessaci Bouvier 1911 e *P. leticiae* Mello-Leitão 1945 são idênticos (Fage 1952). *P. pamphorum* Marcus 1940 difere de *cessaci* pela presença de unhas auxiliares, ausência de proeminência atrás do tubérculo ocular, tromba quase de forma de tonel, não cilíndrica, e outros caracteres indicados por Fage.

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EXPLANATION OF FIGURES

Fig. 1 — Dorsal view of female.

Fig. 2 — Third leg.

Fig. 3 — Termination of same.

Fig. 4 — Oviger.

Fig. 5 — Lateral view of female.

