

A NEW DEEP-SEA NYMPHON (PYCNOGONIDA) COLLECTED BY THE "GALATHEA" OFF KENYA

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With eight text-figures

ABSTRACT

Description of *Nymphon residuum* spec. nov., a blind, uniungiculate deep-sea species, collected by the Galathea Expedition at Station 241, off Kenya, in 1510 meters.

Dr. Torben Wolff of the Zoologisk Museum, Copenhagen, sent me a single specimen of a deep sea *Nymphon*, collected by the Galathea Expedition at Station 241. However, it was not treated along with the other Pycnogonida from the Galathea Expedition (Fage, 1956; Stock, 1968), since it was only recently discovered by Dr. Jensenius Madsen, who found it amongst the arms of some brittle-stars.

The pycnogonid proved to be a new species of *Nymphon*, which I have called for obvious reasons *residuum* (= left-over). I thank both Dr. Wolff and Dr. Madsen for making the specimen available to me.

***Nymphon residuum* spec. nov. (figs. 1-8)**

Material. — 1 ♀ (holotype), Galathea Station 241, 04°00'S, 41°27'E (= off Kenya), 1510 m, bottom pure globigerina-ooze, 15 March 1951. Type in Zoologisk Museum, Copenhagen.

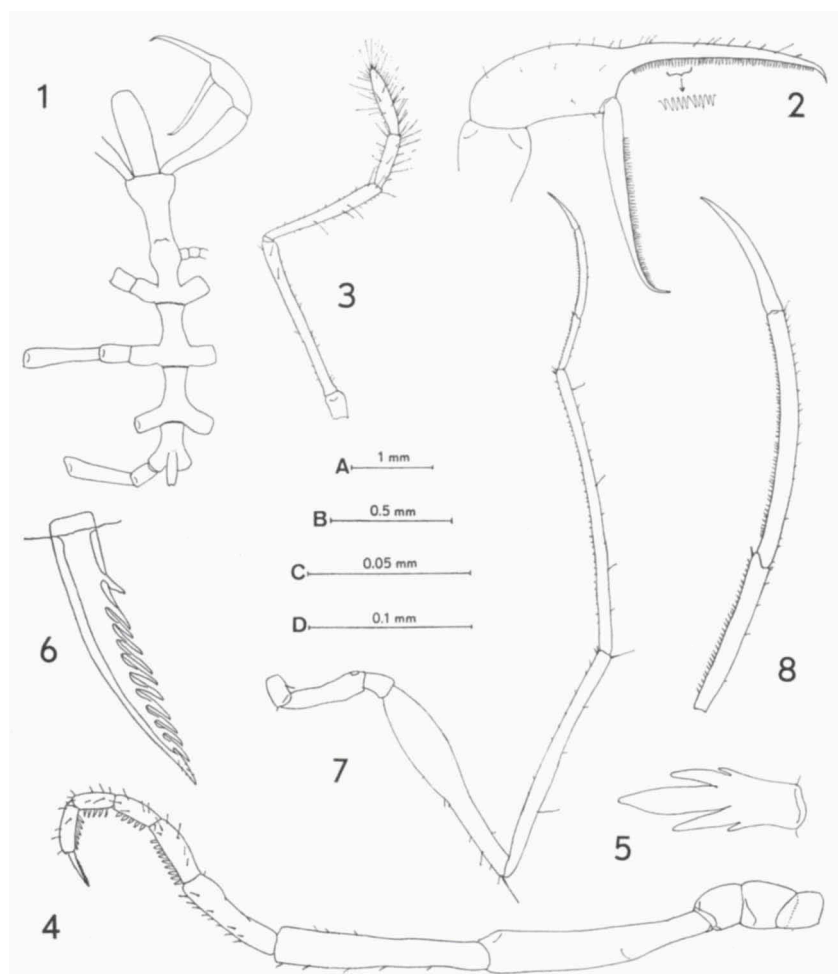
Description. — Slender, blind, uniungiculate. The narrow neck bears a slight swelling, well in front of the first pair of lateral processes indicating the oviger bases. Slightly in front of the oviger bases, a hardly perceptible dorsal swelling provided with 2 minute tubercles, represents the rudiment of the ocular tubercle. Lateral processes separated by very great intervals. Trunk unarmed. Abdomen attaining about the middle of coxa 1 of leg 4. Proboscis slender, almost cylindrical.

Chelifore with a long scape, increasing distally in diameter. Chela slightly longer than the scape; fingers longer than the hand, nearly straight but with incurved tips. Immovable finger with about 66 small, almost regular, teeth; movable finger with about 57 such teeth.

Palp with slender 2nd segment. Segments 4 and 5 combined about equal to segment 3. Segment 5 slightly longer than 4. Numerous long setae, in particular on segment 5.

Oviger without peculiarities. Terminal claw long and slender, armed with 11 teeth. Compound spines comparatively simple, with 2 lateral teeth only (the distal one the largest) on either side. Compound spine formula 9:5:5:6.

Legs long and slender. Coxa 2 three times as long as coxa 1 or coxa 3. Genital pores at the ventrodistal end of coxa 2 of all legs. Femur strongly



Figs. 1-8. *Nymphon residuum* spec. nov., ♀ holotype. 1, dorsal view of trunk (scale A); 2, chela (B); 3, palp (B); 4, oviger (B); 5, compound oviger spine (C); 6, terminal oviger claw (D); 7, third leg (A); 8, distal segments of third leg (B).

swollen in its proximal half, due to the presence of the ovaries. Tibia 2 the longer segment. Only a few short setae adorn the legs. Tarsus clearly shorter than propodus. Tarsal sole with about 30 small, regular spinules; propodal sole slightly curved, without heel. Claw slender, much shorter than the propodus; no auxiliary claws.

Remarks. — This species belongs to the *hamatum*-group in the genus *Nymphon*, characterized (as Fage, 1956: 165 emphasized) by the absence of eyes and auxiliary claws, as well as by the forward implantation of the ovigers (i.e., in front of, and well-separated from, the first pair of lateral processes). The members of this group can be identified as follows:

1. Terminal oviger claw unarmed *N. abyssale* Stock, 1968¹⁾
- Terminal oviger claw toothed 2
2. Coxa 1 longer than coxa 2 *N. primacoxa* Stock, 1968
- Coxa 2 longer than coxa 1 3
3. Femur, tibia 1, and tibia 2, provided with exceedingly long setae
- *N. tenuimanum* Hodgson, 1914
- Setae on the long segments of the legs, if present, shorter than the diameter of the segments 4
4. Terminal oviger claw with 4 to 6 teeth 5
- Terminal oviger claw with more than 10 teeth 7
5. Femur with distal spur. Chela with 50-55 teeth on the immovable, 60-65 teeth on the movable finger *N. hamatum* Hoek, 1881
- Femur without distal spur. Chela with less than 40 teeth on the fingers 6
6. Trunk segments, lateral processes, and first coxae with dorsal tubercles
- *N. galathea* Fage, 1956
- Trunk, lateral processes, and first coxae unadorned
- *N. profundum* Hilton, 1942 (= *N. noctum* Hilton, 1942)
7. Fifth palp segment shorter than the fourth. Compound oviger spines with 3 to 4 pairs of lateral teeth 8
- Fifth palp segment longer than the fourth. Compound oviger spines with 2 pairs of lateral teeth *N. residuum* spec. nov.
8. Tarsus longer than the propodus. Terminal oviger claw with 13 teeth
- *N. femorale* Fage, 1956
- Tarsus much shorter than the propodus. Terminal oviger claw with 18-19 teeth
- *N. procerum* Hoek, 1881

Measurements of the holotype (in mm).

Length proboscis (dorsal)	1.11
Length trunk segment 1	1.93
Length trunk segment 2	0.71

1) Turpaeva, 1970, considers this feature so important, that she classifies this taxon with the genus *Heteronymphon*.

Length trunk segment 3	0.68
Length trunk segment 4 (incl. abdomen)	0.79
Width across 2nd lateral processes	1.14
Length scape	1.18
Length chela	1.50
Third leg — coxa 1	0.32
coxa 2	1.00
coxa 3	0.32
femur	2.18
greatest diameter femur	0.50
tibia 1	2.50
tibia 2	3.03
tarsus	0.68
propodus	1.00
claw	0.57

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