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**SPECIMENS OF THE DEEP-SEA FISH *HOLTBYRNIA ANOMALA* KREFFT
AND *PELLISOLUS FACILIS* PARR (TELEOSTEI, SALMONIFORMES,
PLATYTROCTIDAE) FROM OFF MADEIRA**

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With 1 table

ABSTRACT. *Holtbyrnia anomala* KREFFT and *Pellisolus facilis* PARR are reported for the first time off Madeira. The record of *P. facilis* is the first for the north-eastern Atlantic.

RESUMO. *Holtbyrnia anomala* KREFFT and *Pellisolus facilis* PARR são assinaladas pela primeira vez ao largo da Madeira. O assinalamento de *P. facilis*, constitui o primeiro registo da espécie para o oceano Atlântico nordeste.

Among the fish collected in a series of midwater trawl tows taken in the area 32°32'N to 32°21'N and 17°2'W to 16°34'W during October 1983 by the British research vessel 'Challenger' were two species of platytroctids not previously known from the vicinity of Madeira, *Holtbyrnia anomala* KREFFT, 1980 and *Pellisolus facilis* PARR, 1951. Both were caught in a rectangular midwater trawl with a mouth area of 50m² and cod-end mesh of 4.5mm. Further details of the gear used and its operation are given by CLARKE & PASCOE

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(1985) and SWINNEY (1990). Capture data for the specimens, which have been deposited in the Natural History collections of the National Museums of Scotland (NMSZ), are as follows:

Holtbyrnia anomala, NMSZ 1994.076.1, 101. mm SL., 32°24'N 16°38'W, 0-1800m, 'Challenger' cruise 14/83, haul 54, 24 October 1983, 06.35-11.10hr GMT.

Pellisolus facilis, NMSZ 1994.076.2, 87.5mm SL., 32°24'N 16°36'W, 0-1800m, 'Challenger' cruise 14/83, haul 64, 26 October 1983, 06.30-11.07hr GMT.

Meristic data for the two specimens are presented in Table 1.

H. anomala is known from the north-eastern Atlantic [i.e. the CLOFNAM/FNAM area as defined by HUREAU & MONOD (1973) and WHITEHEAD *et al.* (1984-86)] but has not been reported previously south of about 50°N, although it is known to occur in the eastern tropical Atlantic, from about 22°N south to about 18°S (MATSUI & ROSENBLATT, 1987; QUÉRO *et al.*, 1984; 1990). On the basis of the two dozen specimens then known, MATSUI & ROSENBLATT (1987) tentatively recognised two forms, distinguished by the number of fin-rays in their paired fins. Specimens from between 62°N and 22°N, had 13-15 pectoral rays and 8-9 pelvic rays, and were referred to the northern form; those occurring south of about 14°N had 15-17 pectoral rays and 9 pelvic rays and were distinguished as the tropical Atlantic form. Fin-ray counts (Table 1) indicate that the 'Challenger' specimen is of the tropical Atlantic form making it the most northerly record of this form.

P. facilis has a circum-global generally equatorial distribution (MATSUI & ROSENBLATT, 1987). It has been reported from the eastern tropical Atlantic between about 27°N and 21°S (KREFFT, 1976; MATSUI & ROSENBLATT, 1987; QUÉRO *et al.*, 1990) but not previously from the north-eastern Atlantic.

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	<i>H. anomala</i>	<i>P. facilis</i>
Dorsal fin rays	19	19
Anal fin rays	16	16
Pectoral fin ray	16(right)/15(left)	19/19
Pelvic fin rays	9/9	7/8
gill rakers	8+19	6+18
Lateral line scales	approx. 112	56
Lateral line pores	51	-

TABLE 1 - Meristic data for *H. anomala* and *P. facilis* captured during 'Challenger' cruise 14/83 off Madeira.

LITERATURE

CLARKE, M. R. & PASCOE, P. L.:

1985. Influence of an electric light on the capture of deep-sea animals by a mid-water trawl. *Journal of the Biological Association of the United Kingdom* **65**, 373-393.

HUREAU, J.-C. & MONOD, T.:

1973. *Check-list of the fishes of the north-eastern and of the Mediterranean*. 2 vols. Paris: UNESCO.

KREFFT, G.:

1976. Distribution patterns of oceanic fishes in the Atlantic Ocean. Selected problems. *Revue des travaux Institut des Pêches Maritimes* **40**, 439-460.

MATSUI, T. & ROSENBLATT, R. H.:

1987. Review of the deep-sea fish family Platytroctidae (Pisces: Salmoniformes). *Bulletin of the Scripps Institution of Oceanography* **26**, 1-159.

QUÉRO, J.-C., MATSUI, T., ROSENBLATT, R. H. & SAZANOV, Y. I.:

1984. Searsiidae. pp. 256-267 in *Fishes of the North-eastern Atlantic and the Mediterranean* **3** (Whitehead, P. J. P., Bauchot, M.-L., Hureau, J.-C., Nielsen, J. & Tortonese, E. (Eds.)). Paris: UNESCO.
1990. Platytroctidae. pp. 265-274 in *Check-list of the fishes of the eastern tropical Atlantic* **1**, (Quéro, J. C., Hureau, J. C., Karrer, C., Post, A. & Saldanha, L. (Eds.)). Paris: UNESCO.

SWINNEY, G. N.:

1990. Fishes of the genus *Eustomias* Vaillant (Stomiiformes, Stomiidae) from off Madeira. *Bocagiana* **136**, 1-4.

WHITEHEAD, P. J. P., BAUCHOT, M.-L., HUREAU, J.-C., NIELSEN, J. & TORTONESE, E., (Eds.):

- 1984-1986. *Fishes of the North-eastern Atlantic and the Mediterranean* 3 vols. Paris: UNESCO.