



EXPLANATION OF FIGURES

*Argyropelecus hemigymnus* (after SANZO)

Fig. 1. Adult specimen 24,7 mm.

Fig. 2. Postlarva 10,2 mm.

**DIAGNOSIS.** — Body short and compressed. Telescopic eye. Maximal height of body to total length (excl. C.) 1 : 1 3/4-2 ; length of head to total length 1 : 3-3 1/2, and diameter of eye to length of head 1 : 2 1/4-3. Pre-opercular spines two, one directed downwards and the other backwards and outwards. Abdominal ridge ending in a long backwardly directed serrated spine, with a small spur-like spine above it. D : VII+7-8 ; A : 6+5 ; P : 11 ; V : 6. Adipose dorsal present.

Upper part of head and abdominal region dark sepia ; remainder of abdominal region of body and head silvery. Caudal region of body colourless and semi-transparent except for a dark band at base of caudal fin and a dark patch above anal fin.

Attains a length of about 45 mm. without caudal.

**Photophores.** — A single antorbital organ and 1+2 organs on the operculum. Six photophores on the isthmus and the same number on the branchiostegal membrane. Two series of organs on each side of the abdomen. Lower series consisting of 12 organs in front of pelvic. In the upper series there are 8 photophores, the two anterior ones

higher than the others. Postabdominal photophores in three groups (prae-anal, supra-anal, and caudal). The supra-anal photophores separated from prae-anals by a distance of more than half the length of the supra-anal series, and from the caudal by a distance which is greater than the length of the supra-anal series. Prae-anal photophores : 4, supra-anal : 6, and caudal : 4.

**Postlarval stages.** — The length of the larval stages prior to metamorphosis ranges from 4-9 mm. (excl. C.) and in the course of metamorphosis, the total length is reduced by 2-3 mm. The reduction affects mainly the forepart of the body and simultaneously with the reduction in total length of the postlarvae, there is an alteration and expansion of the head and forepart of the body, which gradually assume more and more of the very characteristic adult appearance. Metamorphosis occasions a marked alteration in the eye, which is gradually transformed from a forwardly directed eye into a telescopic organ. The metamorphosis is connected with a pronounced ontogenetic vertical migration.

**DISTRIBUTION.** — Pelagic, deep-sea species found in all parts of the Mediterranean with the exception of the Sea of Marmora and the Black Sea, and in the Atlantic north to Faroe Islands and south of Iceland. Occasionally cast ashore on the coasts of Norway.

Adolescent and adult specimens are met with especially in depths from about 300-600 m., while the postlarvae mainly are found in depths from about 100-300 m.

**PROPAGATION.** — The species has no definitely restricted spawning season in the Mediterranean, but appears to spawn rather more during winter and early spring than during the remainder of the year. In the northern part of the Atlantic the species has a distinctly restricted spawning season whereas it appears to spawn all the year round in the warmer Atlantic water. Maturity attained at a length of about 33 mm. (excl. C.).

#### SYNONYMY

*Sternoptyx mediterranea* Cocco 1838.

#### LITERATURE

1829. — COCCO, Giorn. Sc. Sicil., fasc. 77, p. 146.  
1838. — COCCO, Osservazioni intorno taluni Pesci del Mare di Messina. Giorn. il Faro IV; p. 7, fig. 2.  
1906. — BRAUER, Die Tiefsee-Fische. Wiss. Ergebn. Deutsch. Tiefsee-Exped. «Valdivia» XV; p. 106, fig. 45.  
1913. — HOLT and BYRNE, Sixth Report Fishes Irish Atlantic Slope. Fisheries, Ireland, Sci. Invest. 1912, I and II (1913); p. 21, figs. 7-8.  
1915. — JESPERSEN, Sternoptychidae (*Argyropelecus* and *Sternoptyx*). Rep. Danish Ocean. Exped. 1908-10, II, A 2; p. 7.  
1928. — SANZO, Uova, sviluppo embrionale, etc. Sternoptychidae I. *Argyropelecus hemigymnus* Cocco. R. Com. Talassogr. Italiano, Sec. Monogr.

P. JESPERSEN, 1934.