



EXPLANATION OF FIGURES

- 1 : adult male.
2 : postlarva 10.5 mm. excl. C.

DIAGNOSIS — Body fusiform, slightly compressed. Maximal height to total length (excl. C.) 1 : $4\frac{1}{4}$ - $4\frac{1}{3}$; length of head to total length (excl. C.) 1 : $2\frac{4}{5}$ - $3\frac{1}{4}$; diameter of eye to length of head 1 : $2\frac{1}{2}$. Maxilla with a broad distal end, not or nearly not reaching beyond posterior margin of eye. Insertion of dorsal fin nearer to snout than to origin of caudal fin; anal fin originating below posterior end of dorsal fin. Scales large, cycloid, with a silvery lustre. D : 12-14; A : 19-21; P : 14-15; V : 8. Number of scales in lateral line abt. 39; number of vertebrae 35-37. Maximal length attained abt. 65 mm. (?)

Photophores : two postero-lateral organs in an oblique line to the posterior of the anterior anal organs; two precaudal organs of which the upper one is abt. equidistant from lateral line and ventral line, nearest the latter. The supra-ventral organ is abt. equidistant from lateral line and ventral fin. Number of anal organs 4-7+6-8.

Adult male has a large elongated supra-caudal *luminous plate*, adult female 1-4 small infra-caudal plates. The plates develop in males at a length of 17-20 mm. in the females at a length of 24-25 mm. excl. C.

The postlarval stage has an oblong eye with a small pigmented "eye-taper"; snout not unusually flattened in the smaller stages; no or very faint pigment on the posterior border of the operculum or in other places of the head. A little pigment ventrally, a melanophore on the anal papilla, and a little pigment on the caudal fin and at the base of this fin. The postlarva is difficult to distinguish from young postlarvæ of *Myctophum hygomi*. Metamorphosis takes place at a length of 10-12.5 mm.; during metamorphosis the postlarvæ seek out deeper water layers (ontogenetic vertical migration).

DISTRIBUTION — Pelagic, true oceanic species. Occuring especially in the subtropical parts of the Atlantic, as far north as abt. 47° N. Lat. Penetrating into the Mediterranean as far east as the Levantine Sea and the Marmora Sea.

Propagation: Maturity attained at a length of abt. 40 mm. Spawning probably at its highest from spring to autumn in the Mediterranean.

SYNONYMY

Scopelus benoiti (*benoisti*) Cocco 1838.

LITERATURE

1838. — COCCO, Su di alcuni Salmonidi del Mare di Messina; p. 172. Bologna.
1892. — LÜTKEN, Scopelini Mus. Univ. Hauniensis. "Spolia Atlantica". Vidensk. Selsk. Skr. 6. R., mat. math. Afd. VII. 6; p. 256. Kjöbenhavn.
1895. — GOODE and BEAN, Oceanic Ichthyology, p. 74. Cambridge.
1906. — BRAUER, Die Tiefsee Fische. Syst. T. Wiss. Ergeb. Deutsch. Tiefsee-Exp. "Valdivia". 15. Bd. 1; p. 183. Jena.
1918. — TÄNING, Mediterranean Scopelidæ. Rep. Danish Oceanogr. Exp. 1908-10. Vol. II. A. 7; p. 45. Copenhagen.

Å. VEDEL TÄNING — 1932.