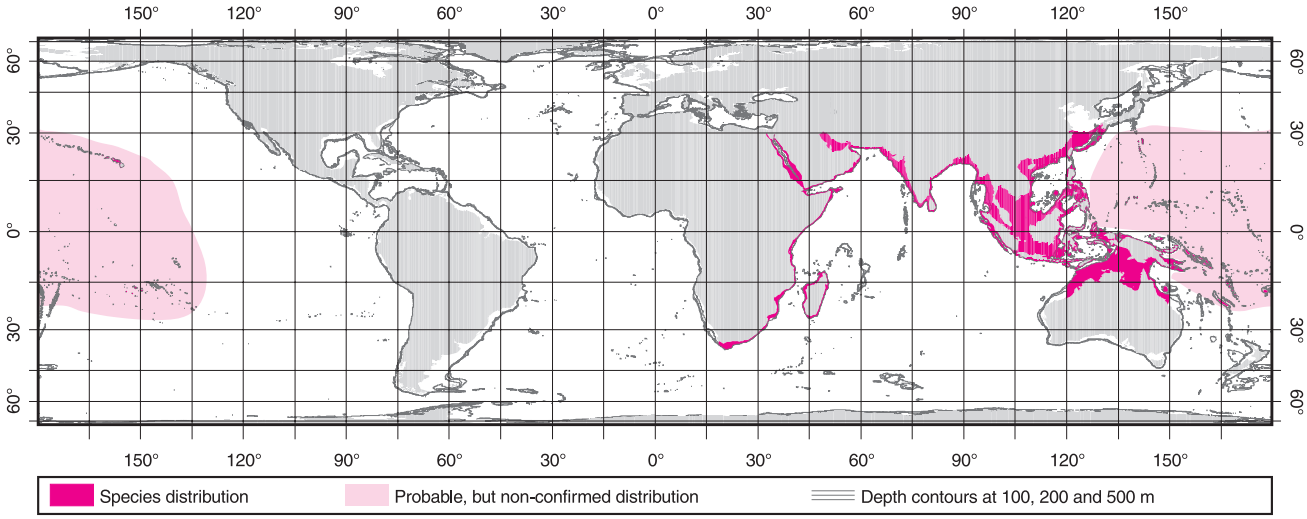
Geographical distribution: From East Africa to Hawaii.



Habitat and biology: Benthopelagic on shelf and upper slope down to 650 m. Larvae found in the epipelagic far off shore.

Interest to fisheries: Of only minor commercial importance. Fishing involves the use of traps, trawls and hooks. Catches are usually consummed fresh.

Local names: Not available.

Size: At least 75 cm.

2.4.2 Subfamily Brotulotaeniinae

Subfamily name: Brotulotaeniinae Cohen and Nielsen (1978).

Number of recognized genera: 1.

Diagnosis and description: See genus.

Brotulotaenia Parr, 1933

Type species: *Brotulotaenia nigra* Parr, 1933 by original designation.

Synonyms: None.

Number of recognized species: 4.

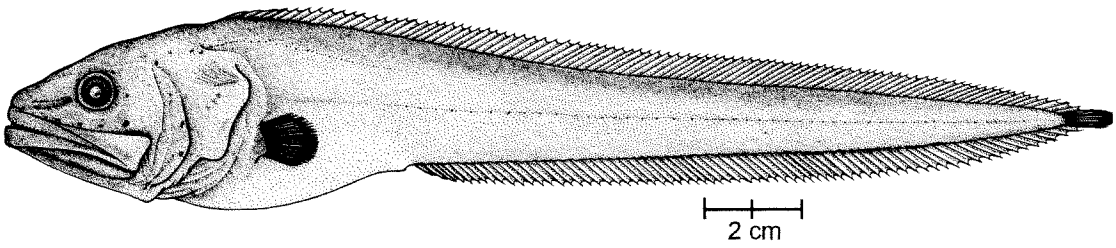


Fig. 28 ***Brotulotaenia nigra*** (from Cohen, 1974)

Diagnosis and description: Scales small non-imbricate prickles (Fig. 29); opercle with no spine; median basibranchial tooth patch absent; **gill rakers are tooth-bearing tubercles**; **otolith very small and rounded**; **pelvic fins absent**; precaudal vertebrae 12 to 15.

Revisions: Cohen (1974), Shcherbachev (1980) and Machida et al. (1997).

Geographical distribution: Tropical and subtropical seas.

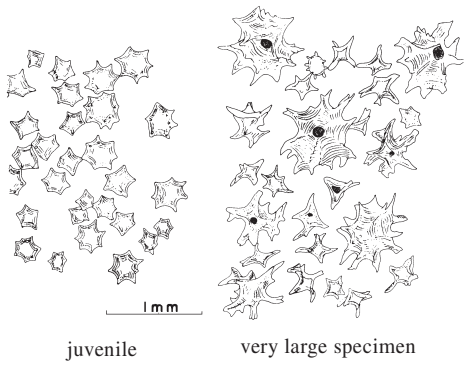


Fig. 29 *Brotulotaenia* body scales
(from Cohen and Nielsen, 1978)

Habitat and biology: Meso- to bathy- and perhaps benthopelagic; caught in midwater and bottom trawls. The largest known example was caught on an espada longline at Madeira. Aboussouan (1980) described and illustrated a larva of 59 mm standard length caught pelagically between the surface and 165 m.

Interest to fisheries: None.

Size: ***Brotulotaenia crassa*** reaches at least 860 cm.

Key to species

1a. Head length 5.3 to 9.9 in standard length; dorsal-fin rays 113 to 134; anal-fin rays 91 to 108; total vertebrae 88 to 96 . . . . . → ***2***

1b. Head length 3.2 to 4.5 in standard length; dorsal-fin rays 79 to 91; anal-fin rays 58 to 72; total vertebrae 67 to 72 . . . . . → ***3***

2a. Head length 9.2 to 9.9 in standard length; dorsal-fin rays 113 to 115; anal-fin rays 91 to 94 . . . . . ***B. nigra***

2b. Head length 5.3 to 8.5 in standard length; dorsal-fin rays 119 to 134; anal-fin rays 98 to 108 . . . . . ***B. crassa***

3a. Dorsal-fin rays 85 to 91; anal-fin rays 62 to 72; total vertebrae 68 to 72 . . . . . ***B. nielseni***

3b. Dorsal-fin rays 79 to 84; anal-fin rays 58 to 64; total vertebrae 63 to 66 . . . ***B. brevicauda***

List of species

Brotulotaenia brevicauda Cohen, 1974. Tropical Atlantic and Indian Oceans. Uncommon.

B. crassa Parr, 1934. Atlantic and Indian Oceans. Uncommon.

B. nielseni Cohen, 1974. Pacific and Indian Oceans. Uncommon.

B. nigra Parr, 1933. Tropical Atlantic Ocean. Uncommon.

2.4.3 Subfamily Ophidiinae

Subfamily name: Ophidiinae Rafinesque (1810).

FAO names: En - Cusk-eels.

Number of recognized genera: 8.

Diagnosis and description: Caudal fin always with 9 (4+5) rays; no barbels on head although nasal region may be fringed in some species of ***Lepophidium*** and subnasal dermal lobes present in ***Ophidion lagocheila*** and to a lesser extent in ***Parophidion*** spp.; body covered with cycloid scales arranged in regular, overlapping rows or imbedded, arranged in a basketweave fashion (anguilloid). **pelvic-fin rays with 2 rays each**, of unequal length except in ***Parophidion***; **branchiostegal rays 7**, 4 attached laterally to epihyal and posterior part of ceratohyal, 3 attached anteriorly to ventral edge of ceratohyal; **ventral arms of the 2 cleithra approximate each other anteriorly under level of preopercle from which point a slender element extends forward below orbital region**; pelvic fins supported between anterior ends of these 2 filamentous bones; lateral line on body incomplete, failing to reach caudal fin by an amount that varies among various genera and species.

Habitat, distribution, and biology: Benthic fishes of shelf and slope waters although the prejuveniles of ***Cherublemma*** and perhaps ***Chilara*** are mesopelagic. Known from all oceans.

Interest to fisheries: See species accounts.

Key to tribes (modified from Cohen and Nielsen, 1978)

1a. All body scales in regular overlapping rows; posterior part of head extensively scaled . . . . . **Lepophidiini**

1b. At least some body scales (frequently all) non-overlapping, arranged in a basket-weave or anguilloid fashion (Fig. 30); head entirely or mostly naked (except in ***Raneya***) . . . . . **Ophidiini**

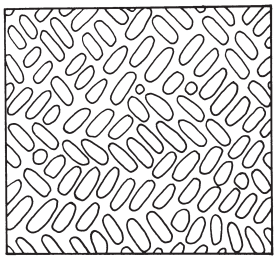


Fig. 30 Ophidiini body scales (from Cohen and Nielsen, 1978)

List of nominal genera

Tribe LEPOPHIDIINI

Brotuloides Robins, 1961 (junior synonym of ***Cherublemma***)
Cherublemma Trotter, 1926
Genypterus Philippi, 1857
Hoplophycis Kaup, 1858 (junior synonym of ***Genypterus***)
Lepophidium Gill, 1895
Leptophidium Gill, 1863b (name preoccupied)
Xiphiurus Smith, 1847 (name suppressed)

Tribe OPHIDIINI

Chilara Jordan and Evermann, 1896
Ophidion Linnaeus, 1758
Otophidium Gill in Jordan, 1885

Parophidion Tortonese, 1954

Raneya Robins, 1961

Rissola Jordan and Evermann, 1896 (junior synonym of ***Ophidion***)

Tribe Lepophidiini Robins, 1961

Number of recognized genera: 3.

Diagnosis and description: Squamation of body in regular, overlapping rows, posterior part of head completely scaled; swimbladder an elongate simple sac in both sexes, without posterior opening or projection and without associated vertebral modifications except in a few species of ***Lepophidium*** (notably ***L. brevibarbe*** and ***L. prorates***); **pyloric caeca present**.

Key to genera (modified from Cohen and Nielsen, 1978)

1a. No well-developed rostral (ethmoid) spine; postorbital part of head long, twice the length of the snout plus eye length . . . . . ***Genypterus***

1b. A well-developed rostral (ethmoid) spine projecting forward to tip of snout . . . . . → ***2***

2a. Peritoneum and guts black; rostral spine straight with a vertical basal component; a narrow row of weak basibranchial teeth . . . . . ***Cherublemma***

2b. Peritoneum pale; rostral spine curved, without basal vertical component; no median basibranchial teeth . . . . . ***Lepophidium***

Cherublemma Trotter, 1926

Type species: ***Cherublemma lelepris*** Trotter, 1926 by monotypy.

Synonyms: ***Brotuloides*** Robins, 1961, type species ***Leptophidium emmelas*** Gilbert, 1890.

Number of recognized species: 1

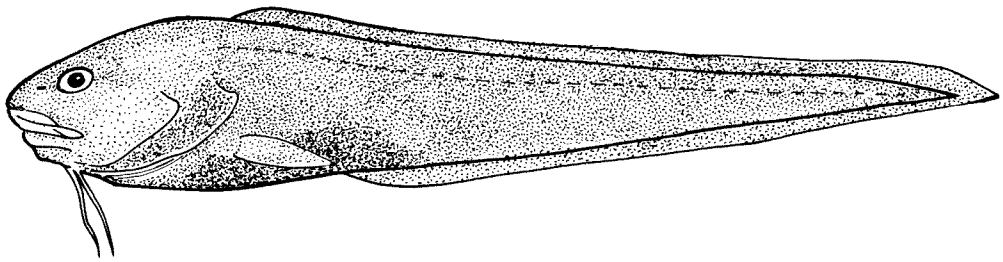


Fig. 31 ***Cherublemma emmelas*** (from Lea, 1995)

Diagnosis and description: Rostral spine well developed with **vertical basal component which projects dorsally,** and a long forward projecting straight component; **peritoneum and guts black; narrow, weak band of basibranchial teeth;** bones thin, weakly developed.

Revisions: Robins (1961).

Geographical distribution: Tropical eastern Pacific from Baja California to northern Chile.

Habitat and biology: Slope bottoms between 500 and 750 m. Prejuveniles with large liver, mesopelagic.

Interest to fisheries: None.

Size: To 25 cm.

List of nominal species

Cherublemma emmelas (Gilbert, 1890). Information see above. Common.
C. lelepris Trotter, 1926 (junior synonym of ***C. emmelas***).

Genypterus Philippi, 1857

Type species: ***Genypterus nigricans*** Philippi, 1857 by monotypy.

Synonyms: ***Xiphiurus*** Smith, 1847, type species ***Xiphiurus capensis*** Smith, suppressed by Opinion 1200 of the International Commission on Zoological Nomenclature (1982); ***Hoplophycis*** Kaup, 1858, type species ***Hoplophycis lalandi*** Kaup, 1858.

Number of recognized species: 5.

Diagnosis and description: No well-developed rostral spine; **postorbital length of head at least twice length of snout plus eye length**; peritoneum pale; basibranchial tooth patches present or absent; **top and sides of head extensively scaled**; **basal quarter to third of pectoral fins scaled on both surfaces**.

Revisions: None.

Geographical distribution: South temperate waters of southern Africa, South America, Australia, New Zealand, and the Chatham Islands.

Habitat and biology: Temperate waters of the deep shelf and upper slope, the adults preferring rocky habitat, the young shallower weedy areas.

Interest to fisheries: All species are of real or potential commercial importance.

Size: At least 2 m.

Key to species: Not possible at present.

List of nominal species

Genypterus blacodes (Schneider in Bloch and Schneider, 1801). See species account.
G. brasiliensis Regan, 1903b (junior synonym of ***G. blacodes***).
G. capensis (Smith, 1847). See species account.
G. chilensis (Guichenot, 1848). See species account.
G. maculatus (Tschudi, 1846) (junior homonym, see comments on species account).
G. microstomus Regan, 1903a (junior synonym of ***G. blacodes***).
G. nigricans Philippi, 1857 (junior synonym of ***G. chilensis***).
G. reedi Reed, 1962 (nomen nudum).
G. tigerinus Klunzinger, 1872. See species account.
Hoplophysis lalandi Kaup, 1858 (junior synonym of ***G. capensis***).

Genypterus blacodes (Forster in Bloch and Schneider, 1801) CUS

Synonyms: ***Genypterus microstomus*** Regan, 1903a; ***Genypterus brasiliensis*** Regan, 1903b.

FAO names: En - Pink cusk-eel; **Fr** - Abadèche rosé; **Sp** - Congribadejo rosé.

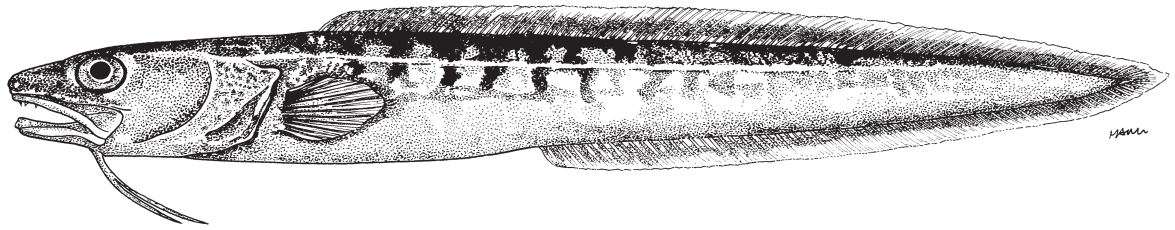
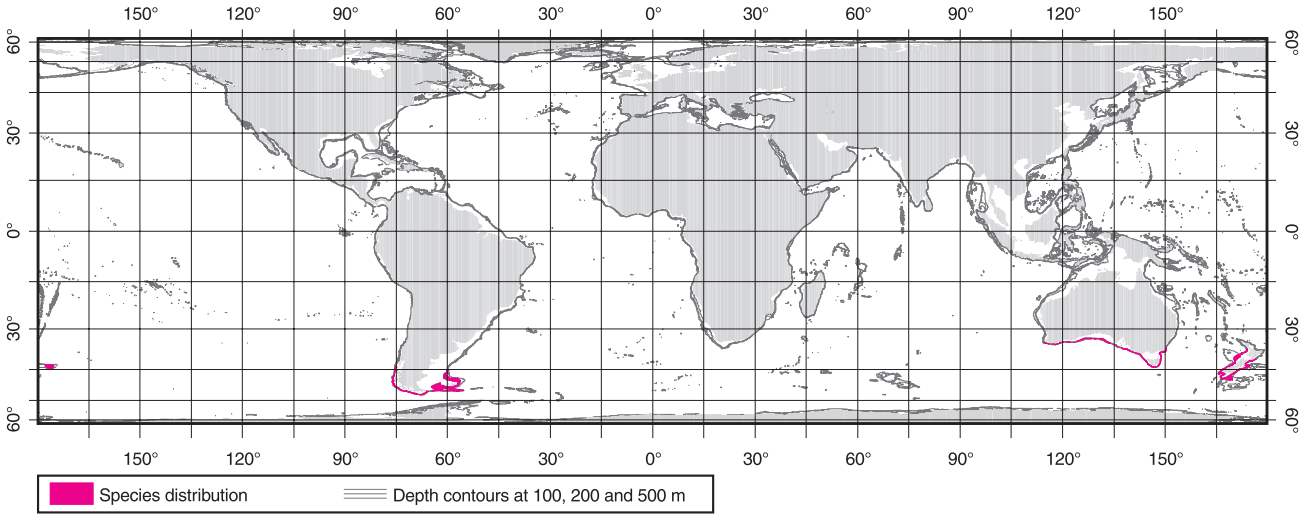


Fig. 32 ***Genypterus blacodes*** (after Last et al., 1983)

Diagnosis: Head and body with pinkish or orangish cast, with dark irregular blotches; dorsal-fin rays 141 to 164; anal-fin rays 101 to 126; pyloric caeca 6 (2+4).

Geographical distribution: New Zealand (including Chatham Islands), southern coast of Australia from New South Wales to Western Australia, and southern South America from southern Chile to Argentina.



Habitat and biology: Benthic in 200 to 650 m, juveniles more common in the shallower part of range, adults below 200 m. Common.

Interest to fisheries: Highly commercial species throughout its geographical range. FAO reports that landings in recent years fluctuate around 30 000 t, the bulk of this amount being caught by the Argentinian fleet in the southwest Atlantic and by Chilean vessels in the southeast Pacific – which landed, respectively, 23 443 t and 5 780 t in 1996. A significant share of the remaining landings comes from the activity of foreign fishing fleets in the southwest Atlantic, mainly Spanish and Korean. Fishing gears involved in the fishery are long lines and trawls. This production is most frequently utilized fresh and frozen as well as smoked. In Japan the meat can even be eaten raw as sashimi. New Zealand catches of ***Genypterus*** spp., reported by FAO to be 12 882 t in 1996, should probably be considered as belonging to this species, which is exploited in New Zealand waters by bottom long lines and bottom trawls. 80% of this harvest is frozen exported to eastern Asia markets. In spite of its high market value only one-third of the limited Australian pink ling catch - not reported at specific level by FAO - is a target fish; most is taken as bycatch of other fisheries such as those of gemfish, blue grenadier and shark. Australian catches in the South East Fishery are locally marketed.

Local names: AUSTRALIA: Pink ling; NEW ZEALAND: Ling, Kingclip, Hokarai; SOUTH AMERICA: Congrio.

Size: At least 2 m and 25 kg.