

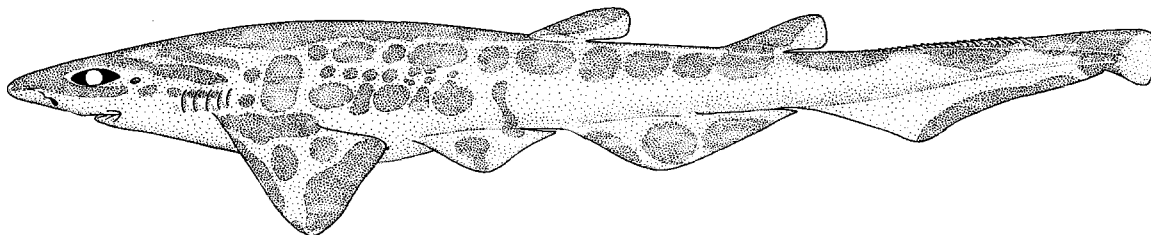
Galeus melastomus Rafinesque, 1810

SCYL Gal 1

Galeus melastomus Rafinesque, 1810, Caratt.gen.sp.anim.piant.Sicilia, Palermo, pt. 1:13. Holotype: None. Type Locality: Sicily.

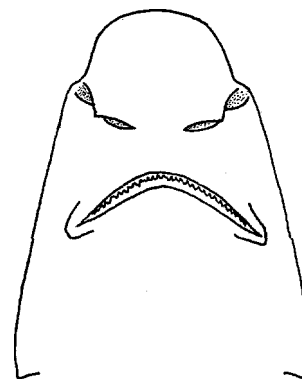
Synonymy : Squalus (Scyliorhinus) delarochianus Blainville, 1816 (name only) also Blainville, 1825; Scyllium artedii Risso, 1820; Squalus prionurus Otto, 1821; Squalus annulatus Nilsson, 1832; Scyllium melanostomum Bonaparte, 1834; Pristiurus souverbiei LaFont, 1866 (1868?); ? Pristiurus atlanticus Vaillant, 1888.

FAO Names : En - Blackmouth catshark; Fr - Chien espagnol; Sp - Pintarroja bocanegra.



Field Marks : A large Galeus with long anal fin, compressed precaudal tail, striking colour pattern of numerous dark saddles and circular spots.

Diagnostic Features : Precaudal tail with base noticeably compressed. Snout moderately long and pointed, preoral length about 6 to 9% of total length; prenarial snout equal or less than eye length; eyes lateral on head, subocular ridges obsolete; mouth fairly large and short, very broadly arched, its width 6 to 8% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins small, low, and angular; interspace between pelvic and anal bases much shorter than anal base; anal base long, 13 to 18% of total length, much greater than interdorsal space; its origin well in front of midlength of interdorsal space; no subcaudal crest of enlarged denticles on preventral caudal margin. A colour pattern of well-defined, variegated dark saddle blotches and circular spots on body and caudal fin; saddles over 15 on back and tail; dorsal fins and caudal tip white; mouth lining dark. Monospondylous precaudal centra 37 to 43. Size moderate, adults up to 90 cm.



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Geographical Distribution: Eastern North Atlantic: Faeroe Islands and Trondheim, Norway southward to Senegal, also Mediterranean Sea.

Habitat and Biology: A common deepwater bottom-dwelling shark found on the outer continental shelves and upper slopes, mainly between 200 and 500 m, but occasionally up to 55 m and down to 1000 m depth.

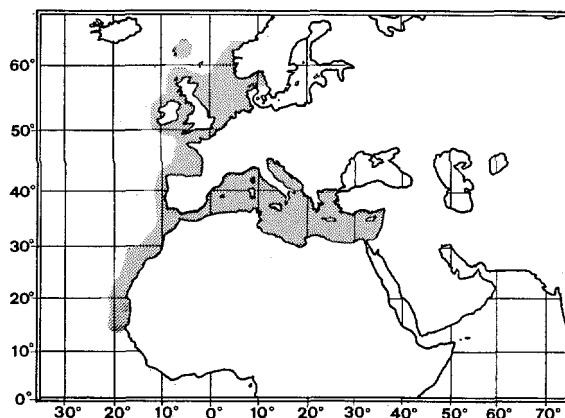
Oviparous, with up to 13 eggs present in the oviducts of a female at one time; egg-cases about 6 by 3 cm.

Feeds mainly on bottom invertebrates, including shrimps and cephalopods, but also on small mesopelagic bony fishes (lanternfishes) and other small elasmobranchs.

Size : Maximum 90 cm; males maturing between 34 and 42 cm and reaching at least 61 cm, females maturing between 39 and 45 cm and reaching 90 cm.

Interest to Fisheries : Limited, in the eastern North Atlantic caught in bottom trawls and utilized fresh and dried-salted for human consumption, and for leather.

Literature : Tortonese (1956); Springer & Wagner (1966); Wheeler (1978); Springer (1979); Compagno (1981).



Galeus murinus (Collett, 1904)

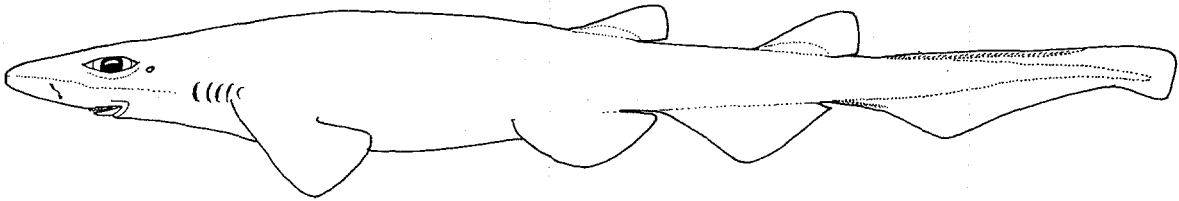
SCYL Gal 5

Pristiurus murinus Collett, 1904, Christiania Vidensk.Selsk.Forhand., 1904, (9):4. Holotype: Zoologisk Museum, Oslo, Norway, ZMO Michael Sars stn. 76, 222 mm, immature female. Type Locality: Eastern Atlantic, Faerøe Channel at 1200 m.

Synonymy : Pristiurus jenseni Saemundsson, 1922.

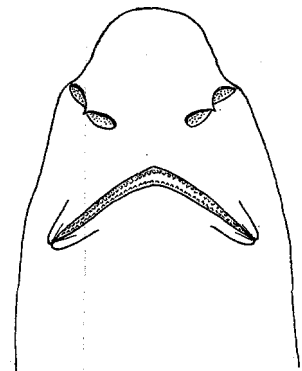
Other Scientific Names Recently in Use : Galeus melastomus murinus (see Springer, 1979).

FAO Names : En - Mouse catshark; Fr - Chien islandais; Sp - Pintarroja islandica.



Field Marks : A Galeus with large round pelvic fins, a cylindrical precaudal tail, a subcaudal crest of denticles, and no colour pattern.

Diagnostic Features: Precaudal tail not noticeably compressed at base. Snout moderately long and parabolic, preoral length about 7 to 8% of total length; prenarial snout less than eye length; eyes slightly dorsolateral, subocular ridge very narrow; mouth fairly large and long, broadly arched; its width 7 to 8% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins very large, high, and broadly rounded; interspace between pelvic and anal bases much shorter than anal base; anal base short, about 12 to 13% of total length, but much greater than interdorsal space; anal origin just behind first dorsal insertion; a strong subcaudal crest of enlarged denticles on preventral caudal margin and underside of caudal peduncle. Colour uniform brown above, slightly lighter below, without black tips on dorsal and caudal fins; mouth lining dark. Size moderate, adults to at least 63 cm.



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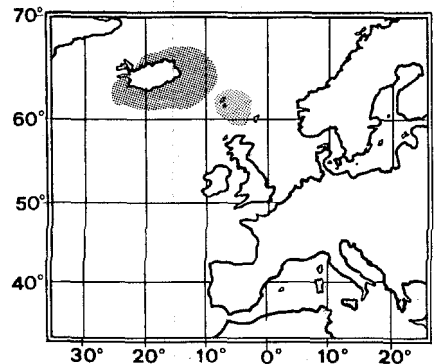
Geographical Distribution : Eastern North Atlantic: Iceland and Faeroes.

Habitat and Biology : A little-known, but moderately common deepwater shark of the eastern Atlantic continental slopes, on or near the bottom at depths from 475 to 1200 m.

Size : Maximum at least 63 cm (adult male).

Interest to Fisheries: None.

Literature : Springer & Wagner (1966); Springer (1979).



Remarks : Springer (1979) recently placed this species in synonymy of G. melastomus, ranking it as a subspecies (G. melastomus murinus). However, the author's examination of series of murinus in the collections of the Institut für Seefischerei, Hamburg, and comparison of them with G. melastomus indicates that these two species are distinct. Adult G. murinus differs from adult G. melastomus in having longer labial furrows, a broader internarial space, a broader and blunter head, smaller pectoral fins, less elongated, more broadly rounded anal and pelvic fins, a more anterior first dorsal origin, a longer trunk and shallower caudal peduncle, a second caudal crest of enlarged denticles on the preventral caudal margin (as in G. boardmani but unlike other species of Galeus), and no dark blotches on sides. The author follows Springer (1973, 1979) in synonymizing G. jenseni with this species.

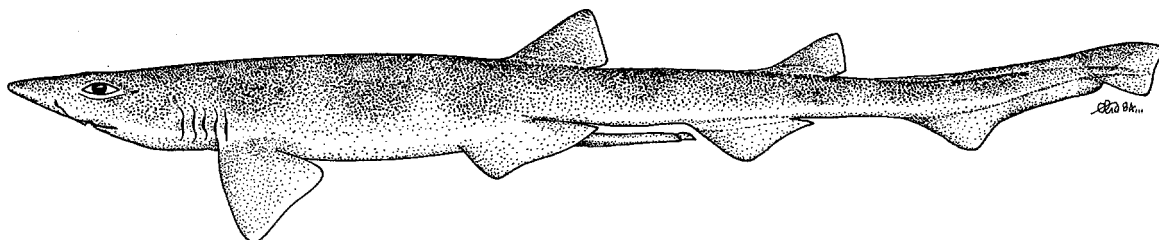
Galeus nipponensis Nakaya, 1975

SCYL Gal 6

Galeus nipponensis Nakaya, 1975, Mem.Fac.Fish.Hokkaido Univ., 23(1):51, figs. 26-28. Holotype: Hokkaido University Laboratory of Marine Zoology, HUMZ 40012, 596 mm adult male. Type Locality: Mimase, Kochi Prefecture, Honshu, Japan.

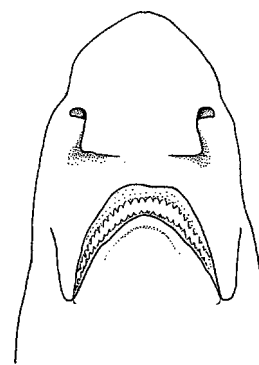
Synonymy : None.

FAO Names : En - Broadfin sawtail catshark; Fr - Chien planeur; Sp - Pintarroja nipona.



Field Marks: A large Galeus with an unusually short anal fin, long space between anal and pelvic bases, prenarial snout longer than the eyes, and, in males, slender, greatly elongated claspers.

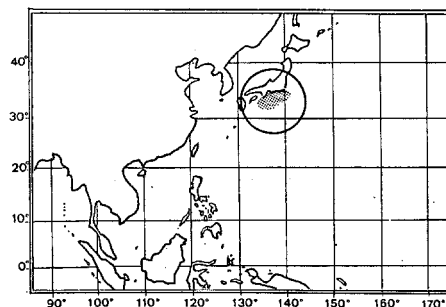
Diagnostic Features: Precaudal tail not noticeably compressed at base. Snout moderately long and pointed, preoral length about 7% of total length; prenarial snout greater than eye length; eyes probably nearly lateral, with subocular ridges obsolete; mouth fairly large and long, broadly arched, its width 6 to 8% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins large, low, and angular; interspace between pelvic and anal bases considerably longer than anal base; anal base short, 8 to 10% of total length, much less than interdorsal space; its origin varying from below to behind midlength of interdorsal; no subcaudal crest of enlarged denticles on preventral caudal margin. A variegated colour pattern of obscure and poorly defined dark saddle blotches on body and caudal fin; dorsal and caudal fins without black tips; mouth lining light. Monospondylous precaudal centra 33 to 36. Size moderate, adults up to about 66 cm.



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Geographical Distribution : Western North Pacific: Southeastern Honshu, Japan.

Habitat and Biology : A common, probably deepwater bottom shark of Japan. Oviparous, possibly with a single egg laid per oviduct. There is an interesting sexual dimorphism in adults of this shark, the anal fins of males being about 2% of total length shorter than females, which was thought by Nakaya (1975) to be related to the function of the unusually long claspers of this shark, which presumably need more clearance of the anal fin than such species as G. eastmani and G. sauteri, which have much shorter claspers and lack the sexual dimorphism in anal length.



Size : Adults maturing at about 53 to 55 cm; largest reported 65.6 cm.

Interest to Fisheries: Not known.

Literature : Nakaya (1975); Springer (1979).

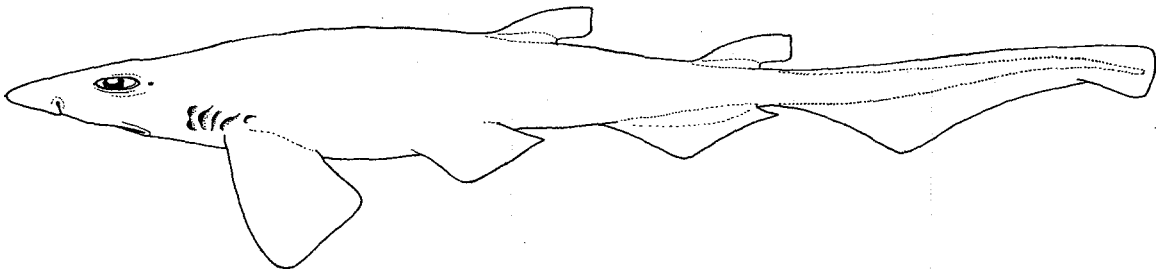
Galeus piperatus Springer & Wagner, 1966

SCYL Gal 7

Galeus piperatus Springer & Wagner, 1966, *Contrib.Sci.L.A. County Mus.*, (110):1, fig. 1-2. Holotype: Los Angeles County Museum of Natural History, LACM 7552, 302 mm adult female. Type Locality: 28°55'N, 112°50.5'W, midway between Tiburon and Angel de la Guardia Island, Gulf of California, probably 402 to 412 m depth.

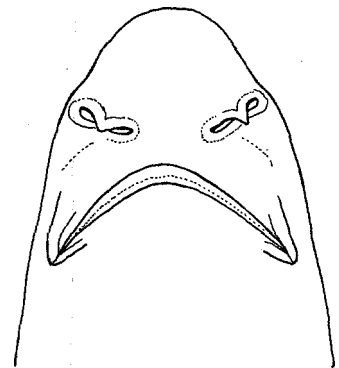
Synonymy: None.

FAO Names : En - Peppered catshark; Fr - Chien poivré; Sp - Pejegato pimienta.



Field Marks : See diagnostic features and key to species.

Diagnostic Features : Precaudal tail noticeably compressed at base. Snout moderately long and pointed, preoral length about 5.8 to 8.6% of total length; prenarial snout equal or greater than eye length; eyes virtually lateral, subocular ridge obsolete; mouth fairly large and long, broadly arched, its width 8.3 to 13.2% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins small, low, and angular; interspace between pelvic and anal bases much shorter than anal base; anal base short to long, 10.8 to 13.4% of total length, less than, or slightly greater than interdorsal space, its origin under first third of interdorsal; no subcaudal crest of enlarged denticles on preventral caudal margin. Colour plain in adults, variegated dark saddle blotches with white edging on body and caudal fin of young; dorsal fins and caudal without black tips; mouth lining usually dark. Monospondylous precaudal centra 30 to 33. Size small, adults up to about 30 cm.



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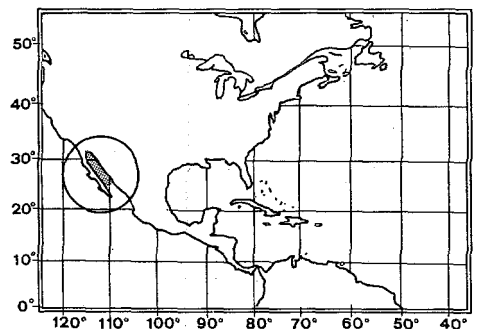
Geographical Distribution : Eastern North Pacific: Northern Gulf of California.

Habitat and Biology : A deepwater bottom-dwelling shark of the northern Gulf of California, at depths of 402 to 1326 m. Possibly oviparus.

Size : Maximum 30 cm; adult males 28 to 29 cm, adult females 26 to 30 cm; size at hatching below 7 cm.

Interest to Fisheries: None at present.

Literature : Springer & Wagner (1966); Hubbs & Taylor (1969); Springer (1979).



Remarks: *G. piperatus* is hardly separable from the *G. arae* complex of subspecies from the western Atlantic, though the author follows Springer (1979) in retaining it on vertebral count and colour differences.

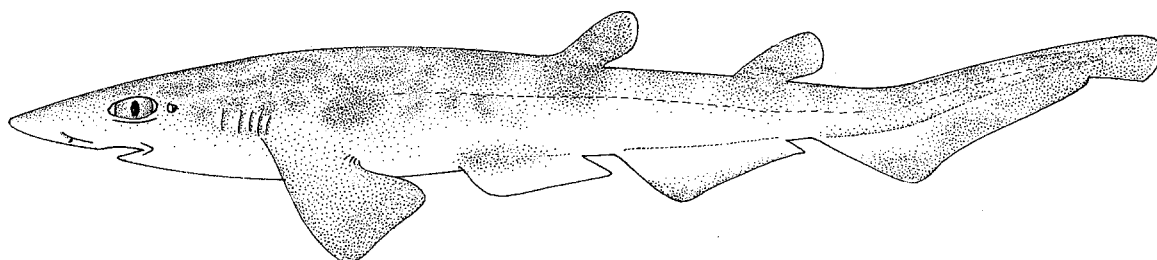
Galeus polli Cadenat, 1959

SCYL Gal 8

Galeus polli Cadenat, 1959, Bull.Inst.Fondam.Afr.Noire (A.Sci.Nat.), 21(1):396, figs 1-4, 7-17. Holotype: In Museum National d'Histoire Naturelle, Paris? Paratypes or syntypes, MNHN 1959-44 and 1959-45. Type Locality: Senegal.

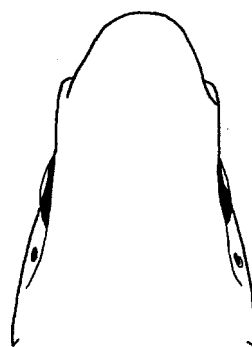
Synonymy : ? Pristiurus atlanticus Vaillant, 1888.

FAO Names : En - African sawtail catshark; Fr - Chien râpe; Sp - Pintarroja africana.

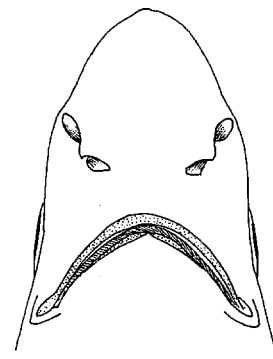


Field Marks : See diagnostic features and key to species.

Diagnostic Features : Precaudal tail with base somewhat compressed. Snout long and pointed, preoral length about 7 to 9% of total length; pre-narial snout virtually equal to eye length; eyes lateral on head, subocular ridge virtually obsolete; mouth fairly large and long, broadly arched, its width 7 to 8% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins small, low, and angular; interspace between pelvic and anal bases much shorter than anal base; anal fin long, 14 to 17% of total length, much greater than interdorsal space; its origin just behind first dorsal insertion; no subcaudal crest of enlarged denticles on preventral caudal margin. A colour pattern of variegated dark saddle blotches on body and caudal fin, saddles well-defined and outlined with whitish, usually about 11 or less on back and tail; dorsal fins and caudal fin without black tips; mouth lining dark. Monospondylous precaudal centra 32 to 35. Size small to moderate, adults up to about 40 cm.



dorsal view of head



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Geographical Distribution : Eastern central Atlantic: Southern Morocco to Namibia.

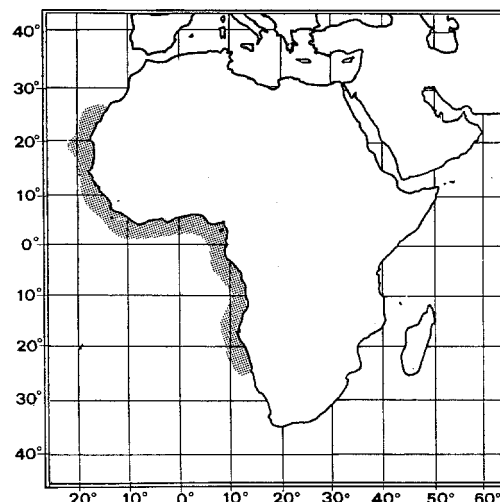
Habitat and Biology : A tropical deepwater bottom-dwelling shark, on the upper continental slope at 200 to 720 m depth.

Size : Maximum about 42 cm, adult males 35 to 39 cm, adult females 41 to 42 cm, size at birth about 12 cm.

Interest to Fisheries : Limited, caught in bottom trawls and utilized fresh for human consumption and for fishmeal.

Literature : Poll (1951); Springer (1966, 1979); Springer & Wagner (1966).

Remarks: Vaillant's (1888) description of his Pristiurus atlanticus from off Cape Sparte, Morocco suggests this species rather than G. melastomus in certain features, including its coloration and narrower internarial space; however, the type locality is somewhat north of the northernmost known occurrence of G. polli and the holotype of P. atlanticus (a female) is slightly larger (44 cm) than the largest reported G. polli Garman (1913) synonymized P. atlanticus with G. melastomus, but the validity of this action is questionable pending a reexamination of the type of P. atlanticus, MNHN 84-387.



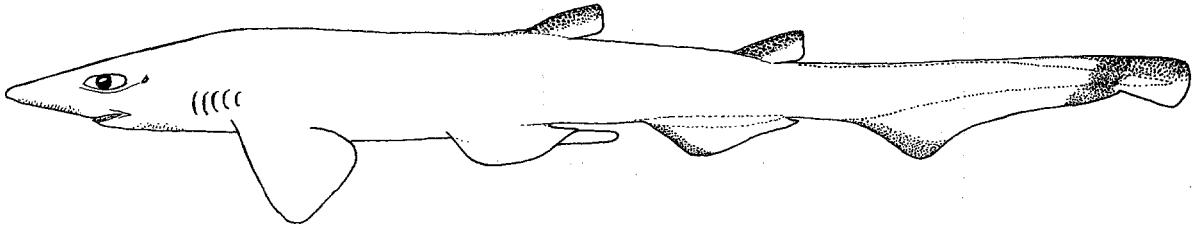
Galeus sauteri (Jordan & Richardson, 1909)

SCYL Gal 9

Pristiurus sauteri Jordan & Richardson, 1909, Mem.Carnegie Mus., 4(4):160, pl. 63, fig. 1. Syntypes: Of 6 specimens mentioned in the original description of this species, 4 are apparently still extant: Stanford University, SU 21261, 4 adult males, 364, 367 (2) and 370 mm long. Type Locality: Takao (Taiwan Island).

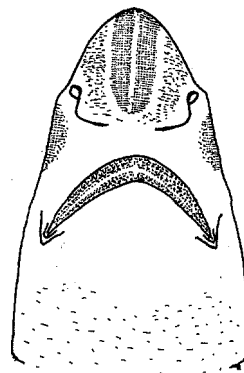
Synonymy : None.

FAO Names : En - Blacktip sawtail catshark; Fr - Chien lime; Sp - Pintarroja rabonegro.



Field Marks : A Galeus with black-tipped dorsal and caudal fins.

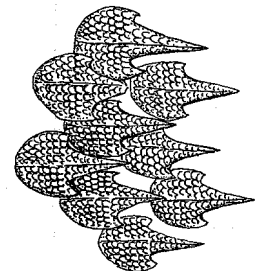
Diagnostic Features : Precaudal tail somewhat compressed at base. Snout moderately long and pointed, preoral length about 6 to 7% of total length; prenarial snout less than eye length; eyes virtually lateral on head, subocular ridges obsolete; mouth fairly large and long, broadly arched, its width 6.2 to 9.1% of total length; labial furrows moderately long, not confined to mouth corners. Pelvic fins small, low and angular; interspace between pelvic and anal bases much shorter than anal base; anal base long, 12 to 15% of total length, less than or slightly greater than interdorsal space; origin just behind first dorsal insertion; no subcaudal crest of enlarged denticles on preentral caudal margin. No colour pattern of dark saddle blotches on body and caudal fin; dorsal fins and caudal tip with black terminal marking; mouth lining light. Monospondylous precaudal centra 31 to 34. Size small to moderate, adults up to about 40 cm.



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teeth



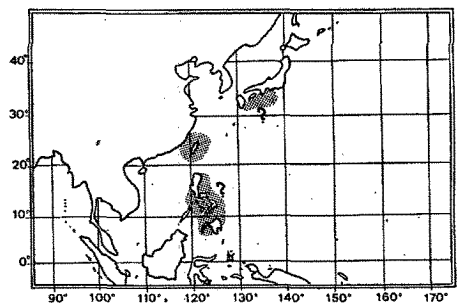
dermal denticles

Geographical Distribution : Western North Pacific: China (Taiwan Island only), possibly the Philippines and Japan.

Habitat and Biology : A little-known bottom-dwelling catshark of the continental shelves, offshore at depths of 60 to 90 m in the Taiwan Straits, but possibly deeper elsewhere. Apparently oviparous.

Size : Maximum 45 cm, adult males 36 to 38 cm, adult females 42 to 45 cm.

Interest to Fisheries : Limited, taken by bottom trawlers in Taiwan Straits.



Literature : Fowler (1941); Teng (1962); Chen (1963); Nakaya (1975); Springer (1979).

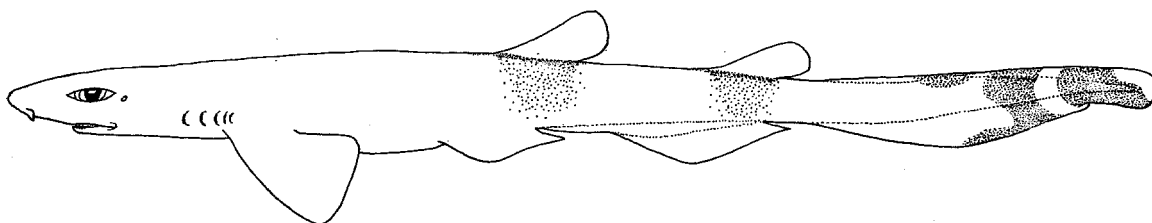
Galeus schultzi Springer, 1979

SCYL Gal 10

Galeus schultzi Springer, 1979, NOAA Tech.Rep.NMFS Circ., (422):67. Holotype: U.S. National Museum USNM-122312, 297 mm adult male. Type Locality: Balayan Bay, Luzon, the Philippines, western Pacific, 329 m depth.

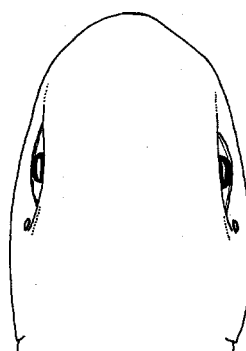
Synonymy : None.

FAO Names : En - Dwarf sawtail catshark; Fr - Chien nain; Sp - Pintarroja enana.

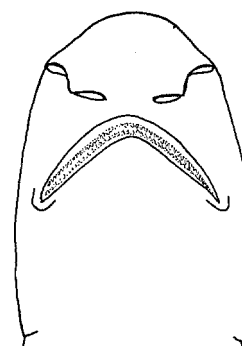


Field Marks : A Galeus with an unusually short and rounded snout and very short labial furrows, confined to mouth corners.

Diagnostic Features: Precaudal tail not noticeably compressed at base. Snout short and rounded, preoral length about 5 to 6% of total length; prenarial snout much less than eye length; eyes dorsolateral, with low subocular ridges below them; mouth fairly large and long, broadly arched, width 6.2 to 9.1% of total length; labial furrows extremely short, essentially confined to mouth corners. Pelvic fins small, low, and angular; interspace between pelvic and anal bases much shorter than anal base; anal base short, 10 to 11% of total length, greater than interdorsal space; its origin just behind first dorsal insertion; no subcaudal crest of enlarged denticles on pre-ventral caudal margin. A colour pattern of obscure dark saddle blotches at first and second dorsal bases, and two bands on the tail; dorsal fins and caudal tip without black terminal marking; mouth lining light or dusky. Monospondylous precaudal centra 32 to 33. Size very small, adults less than 30 cm.



dorsal view of head



underside of head

Geographical Distribution : Off Luzon, the Philippines, western Pacific:

Habitat and Biology: A little-known bottom-dwelling shark of the continental slopes at depths of 329 to 431 m.

Size : One of the smallest sharks, females mature at 26.8 to 29.7 cm, males at 25.4 cm.

Interest to Fisheries: None.

Literature : Springer (1979).

