**Etmopterus sentosus** Bass, d’Aubrey & Kistnasamy, 1976


**Synonymy**: None.

**FAO Names**: En - Thorny lanternshark; Fr - Sagre épineux; Sp - Tollo lucero espinudo.

**Field Marks**: Two spined dorsal fins, no anal fin, blade-like unicuspulate teeth in lower jaw and teeth with cusps and cusplets in upper jaw, two longitudinal rows of enlarged denticles on flanks.

**Diagnostic Features**: A slender-bodied lanternshark with a moderately long tail, distance from pelvic insertions to ventral caudal origin about as long as head and about equal to distance between pectoral and pelvic bases and to interdorsal space; distance between pectoral and pelvic bases moderately long in adults, about equal to head length; distance from snout tip to first dorsal spine about equal to distance from first dorsal spine to second dorsal insertion. Head width slightly greater than preoral snout; prespiracular length slightly greater than distance from spiracles to pectoral origins; gill openings moderately long, wider than spiracle, about 1/3 eye length; upper teeth with 3 or 4 pairs of cusplets. Origin of first dorsal fin over inner margins of pectoral fins, dorsal fin base much closer to pectoral bases than pelvic; interdorsal space short, about equal to head length; second dorsal fin much larger than first, over twice its area; distance between second dorsal base and upper caudal origin about 1.5 in interdorsal space; caudal fin moderately long and broad, length of dorsal caudal margin about equal to head length. Lateral trunk denticles with low, short, pointed crowns with a dorsal depression, wide-spaced but not arranged in regular longitudinal rows; snout largely covered with denticles; two rows of greatly enlarged hook-like denticles on flanks above pectoral fins. Distal margins of fins largely naked and more or less fringed with ceratotrichia. Colour greyish-black above and below, with underside of snout and abdomen inconspicuously black, an elongated broad black mark running above, in front and behind pelvic fins, and other elongated black marks at caudal fin base and along its axis.

**Geographical Distribution**: Western Indian Ocean: South Africa, Mozambique, Kenya, Tanzania.

**Habitat and Biology**: A little-known lanternshark from the southeastern Indian Ocean, at depths of perhaps 200 to 500 m, at or near the bottom.

**Size**: Maximum total length recorded 27 cm for an immature male, size of adults unknown.

**Interest to Fisheries**: None.

**Literature**: Bass, d’Aubrey & Kistnasamy (1976); G. Bianchi-Schmidt & P.C. Heemstra (pers. comm.).
Etmopterus spinax (Linnaeus, 1758)


Synonymy: Squalus niger Gunnerus, 1762; Etmopterus aculeatus Rafinesque, 1810; Squalus (Acanthias) infernus Blainville, 1825; Spinax gunneri Reinhardt, 1825 (1828?); Spinax vitalinus de la Pylaie, 1835; Spinax linnei Malm, 1877.

FAO Names: En - Velvet belly; Fr - Sagre commun; Sp - Negrito.

Field Marks: Two spined'dorsal fins, no anal fin, bladelike unicuspidate teeth in lower jaw and teeth with cusps and cusplets in upper jaw, denticles not in lines and with long slender cusps, abdomen long, tail short, black markings on underside of body and sides of tail prominent.

Diagnostic Features: A moderately stout-bodied lanternshark with a fairly long tail, distance from pelvic insertions to ventral caudal origin about as long as from tip of snout to first gill openings, slightly less than 1.5 times in distance between pectoral and pelvic bases, and slightly less than interdorsal space; distance between pectoral and pelvic bases moderately long in adults, about 1.2 times head length; distance from snout tip to first dorsal spine about equal to distance from first dorsal spine to second dorsal midbase. Head width about equal to preoral snout; prespiracular length slightly greater than distance from spiracles to pectoral origins; gill openings very short, about as wide as spiracle, 1/3 eye length or less; upper teeth generally with less than 3 pairs of cusplets. Origin of first dorsal fin behind free rear tips of pectoral fins, dorsal fin base much closer to pectoral bases than pelvic; interdorsal space short, about as long as distance from snout tip to pectoral midbases; second dorsal fin much larger than first and about twice its area; distance between second dorsal base and upper caudal origin about 2 in interdorsal space; caudal fin moderately long, length of dorsal caudal margin about equal to distance from snout tip to pectoral insertions. Lateral trunk denticles with very slender, hooked conical crowns, wide-spaced but not arranged in regular longitudinal rows; snout largely covered with denticles; no rows of greatly enlarged denticles on flanks above pectoral fins. Distal margins of fins largely covered with skin, not fringed with naked ceratotrichia. Colour brown above, with underside of snout and abdomen abruptly black, an elongated narrow black mark running above and behind pelvic fins, and other elongated black marks at caudal fin base and along its axis.

Geographical Distribution: Eastern Atlantic: Iceland and Norway to Morocco, Senegal, Sierra Leone, Ivory Coast to Nigeria, Cameroon to Gabon; Azores, Cape Verde Islands; western Mediterranean; Cape Province, South Africa.

Habitat and Biology: A common lanternshark found on, near or well above the bottom on the outer continental shelves and upper slopes at depths of 70 to 2000 m, mostly between 200 and 500 m. Ovoviviparous, litter size from 6 to 20. Feeds on small fishes, squids and crustaceans.

Size: Maximum total length about 60 cm, rare above 45 cm, maturing between 33 and 36 cm, and born at about 12 to 14 cm.

Interest to Fisheries: Caught offshore in the eastern Atlantic with bottom and pelagic trawls, and utilized for fishmeal and prepared dried salted for human consumption. Probably relatively unimportant, but statistics for catches of this species are lacking.

Literature: Bigelow & Schroeder (1957); Krefft (1968); Wheeler (1978); Cadenat & Blache (1981); Compagno (1981).
**Etmopterus unicolor** (Engelhardt, 1912)


**Synonymy:** None.

**FAO Names:** En - Brown lanternshark; Fr - Sagre brun; Sp - Tollo lucero marrón.

**Diagnostic Features:** A stout-bodied lanternshark with a moderately long tail, distance from pelvic insertions to ventral caudal origin about as long as from tip of snout to spiracles, about 2 times in distance between pectoral and pelvic bases, and about 1.5 times interdorsal space; distance between pectoral and pelvic bases moderately long in adults, about 1.2 times head length; distance from snout tip to first dorsal spine about equal to distance from first dorsal spine to second dorsal rear tip. Head width about 1.5 times preoral snout; prespiracular length about equal to distance from spiracles to pectoral origins; gill openings fairly large, wider than spiracle, 1/2 eye length; upper teeth generally with less than 3 pairs of cusplets. Origin of first dorsal fin behind free rear tips of pectoral fins, dorsal fin base somewhat closer to pectoral bases than pelvics; interdorsal space short, almost equal to head length, to pectoral midbases; second dorsal fin larger than first, its area about half again that of first; distance between second dorsal base and upper caudal origin about 2 in interdorsal space; caudal fin moderately long, length of dorsal caudal margin about equal to head length. Lateral trunk denticles with slender hooked conical crowns, wide-spaced but not arranged in regular longitudinal rows; snout largely covered with denticles; no rows of greatly enlarged denticles on flanks above pectoral fins. Distal margins of fins largely covered with skin, not fringed with naked ceratotrichia. Colour dark brown or grey-brown, with inconspicuous dark lower surface and a broad, elongated mark on tail above pelvic fins.

**Geographical Distribution:** Western North Pacific: Japan (southeastern Honshu).

**Habitat and Biology:** A little-known lanternshark, biology almost unknown.

**Size:** Maximum total length at least 53 cm, adult males to 48 cm, adult females to 53 cm.

**Interest to Fisheries:** None at present.

**Literature:** Abe (1965).

**Remarks:** The account of this species is based on Abe's (1965) redescription.

**Synonymy:** None.

**FAO Names:** En - Hawaiian lanternshark; Fr - Sagre diablotin; Sp - Tollo lucero de Hawaii.

**Diagnostic Features:** A stout-bodied lanternshark with a short tail, distance from pelvic insertions to ventral caudal origin about as long as from tip of snout to spiracles, slightly less than 1.5 times in distance between pectoral and pelvic bases, and about 0.8 of interdorsal space; distance between pectoral and pelvic bases short in holotype, about equal to prebranchial length; distance from snout tip to first dorsal spine almost equal to distance from first dorsal spine to upper caudal origin. Head width about 1.2 times preoral snout; prespiracular length 1.5 times distance from spiracles to pectoral origins; gill openings moderately long, wider than spiracle, but about 1/4 eye length; upper teeth with less than 3 pairs of cusplets. Origin of first dorsal fin over inner margins of pectoral fins, dorsal fin base much closer to pectoral bases than pelvic; interdorsal space short, slightly less than prespiracular length; second dorsal fin much larger than first, somewhat less than twice its area; distance between second dorsal base and upper caudal origin about 1.2 in interdorsal space; caudal fin fairly short and broad, length of dorsal caudal margin about equal to distance from snout tip to first gill slits. Lateral trunk denticles with slender, hooked conical crowns, wide-spaced and arranged in regular longitudinal rows on rear of trunk and tail; snout covered with denticles; no rows of greatly enlarged denticles on flanks above pectoral fins. Distal margins of fins largely covered with skin, not fringed with naked ceratotrichia. Colour dark brown or blackish above and below, with underside of snout, mouth and abdomen somewhat darker, with an indistinct black mark running above pelvic fins.

**Geographical Distribution:** Central Pacific: Hawaiian Islands (Molokai).

**Habitat and Biology:** A poorly-known lanternshark from the insular slopes of the Hawaiian Islands, on or near bottom at 406 to 911 m.

**Size:** The holotype is immature at 17 cm; other specimens have been collected, with a maximum total length of at least 46 cm for adults.

**Interest to Fisheries:** None at present.

**Literature:** Bigelow & Schroeder (1957); Clarke (1972).

**Remarks:** Illustration and account based on the holotype.
**Etmopterus virens** Bigelow, Schroeder & Springer, 1953

**Synonymy**: None.

**FAO Names**: En - Green lanternshark; Fr - Sagre vert; Sp - Tollo lucero verde.

**Diagnostic Features**: A moderately slender-bodied lanternshark with a long tail, distance from pelvic insertions to ventral caudal origin about as long as head, about equal to distance between pectoral and pelvic bases, and about 1.4 times interdorsal space; distance between pectoral and pelvic bases moderately long in adults, slightly less than head length; distance from snout tip, to first dorsal spine about equal to distance from first dorsal spine to second dorsal insertion. Head width about equal to preoral snout; prespiracular length about equal to distance from spiracles to pectoral origins; gill openings very short, about as wide as spiracle, 1/3 eye length or less; upper teeth generally with less than 3 pairs of cusplets. Origin of first dorsal fin opposite inner margins of pectoral fins, dorsal fin base much closer to pectoral bases than pelvics; interdorsal space short, about as long as distance from snout tip to first gill slits; second dorsal fin much larger than first, over twice its area; distance between second dorsal base and upper caudal origin about 1.4 in interdorsal space; caudal fin long and narrow, length of dorsal caudal margin about equal to head length. Lateral trunk denticles with very short, stout, hooked, conical crowns, wide-spaced but not arranged in regular longitudinal rows; snout largely covered with denticles; no rows of greatly enlarged denticles on flanks above pectoral fins. Distal margins of fins largely covered with skin, not fringed with naked ceratotrichia. Colour dark brown or grey-black, with underside of snout and abdomen black, an elongated broad black mark running above and behind pelvic fins, and other elongated black marks at caudal fin base and along its axis.

**Geographical Distribution**: Western North Atlantic: Northern Gulf of Mexico, Texas to Florida (USA), Nicaragua.

**Habitat and Biology**: A common lanternshark of the upper continental slopes at depths of 348 to 465 m. Caught in considerable numbers sporadically, suggesting that this shark occurs in schools. Pieces of rather large squid found in the stomachs of these sharks suggest that they may feed communally, with an entire school attacking and demolishing squid that would be normally too large for a single individual to overcome.

**Size**: Maximum total length about 23 cm; adult males 20 to 23 cm, adult females 23 cm.

**Interest to Fisheries**: None at present.

**Literature**: Bigelow, Schroeder & Springer (1953); Bigelow & Schroeder (1957); Springer (1967); Cadenat & Blache (1981).