Family Etmopteridae "The Lantern Sharks"

Kingdom: Animalia  
Phylum: Chordata  
Class: Chondrichthyes  
Order: Squaliformes  
Family: Etmopteridae  
Genera: 5 (Aculeola, Centroscyllium, Etmopterus, Miroscyllium, Trigonognathus)  
Species: > 50

Diagnostic Characteristics of the Family Etmopteridae
- Small body size (adults 10-107cm)
- Luminous organs usually present on body
- 2 dorsal fins with long, grooved spines (2\textsuperscript{nd} dorsal fin and spine usually larger)
- Caudal fin with subterminal notch
- No anal fin
- Continental and insular slopes (rarely on shelves)
- Benthopelagic bathyal
- Tropical to temperate
- 5 genera, 3 monotypic

Distribution and Habitat
- Occur almost worldwide in deep water
- Some wide-ranging, many endemic
- Most spp. benthic in deep water (200-1500m; range from 50-4500m)
- Some semi-oceanic

Behavior and Biology
- Some are social, forming small to large schools/aggregations
- Reproduction (where known) is ovoviviparous (aplacental viviparous)
- 3-20 pups/litter

Diet
- Macroplankton/micronekton, teleost fish, cephalopods
- Dietary shift between juveniles and adults
- Juveniles feed on eurybathic crustaceans
- Adults feed on teleost fish and cephalopods

Status
- Most common, but poorly known
- Few are large enough to be of commercial value
- When caught, discarded as by-catch

Genus Aculeola – Hooktooth dogfish
- Monotypic A. nigra
- Small hook-like teeth in both jaws
- Very small, equal-size dorsal spines

Genus Centroscyllium – Combtooth dogfish
- Short to moderately long snout
- Comb-like teeth with cusps and cusplets in both jaws
- Strong grooved dorsal spines
Genus *Etmopterus* – Lantern sharks
- Often have photophores on underside
- Upper teeth with a cusp and 1 or more pairs of cusplets
- Lower teeth are blade-like
- Some spp. with lines of denticles along dorsal side of body
- Perhaps the smallest known species of sharks *E. carteri* and *E. perryi* matures and gives birth to live young at 10-20cm TL

Genus *Mirocyllium* – Rasptooth dogfish
- Dark brown dorsally, black ventrally
- Black photomarks on caudal fin and caudal peduncle
- Long, flat snout
- Short mouth with comb-like compressed teeth w/ cusps and cusplets in both jaws

Genus *Trigonognathus* – Viper dogfish
- "triangle mouth"
- Terminal, snake-like mouth
- Huge, curved fang-like teeth
- Body dark brown above, black below
- Black photomarks on caudal fin and caudal peduncle
- Large, diagonally elongated spiracle

Bibliography


Schaaf-Da Silva, JA, and Ebert, DA. 2006. *Etmopterus burgessi* sp nov, a new species of lanternshark (Squaliformes: Etmopteridae) from Taiwan. Zootaxa: 53-64.