

Histrio histrio (Sargassum Fish)

Family: Antennariidae (Frogfish)

Order: Lophiiformes (Anglerfish and Frogfish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Sargassum fish, *Histrio histrio*.

[https://www.flickr.com/photos/artour_a/3668148849, downloaded 31 October 2016]

TRAITS. Sargassum fish are equipped with appendages that resemble the *Sargassum* seaweed that they inhabit (Fig. 1). They also have an upturned mouth. The surface of their skin is rather smooth, and the gill openings behind the pectoral fins are small and look like pores. An adult sargassum fish can grow up to 20cm.

DISTRIBUTION. Sargassum fish can be found in tropical and temperate regions worldwide, such as the Caribbean Basin, Sargasso Sea, western Pacific and Indian Oceans (McEachran et al., 2015).

HABITAT AND ECOLOGY. They usually find refuge in the floating *Sargassum* seaweed mats which can cover a depth of 0-5m. In these *Sargassum* mats adults and eggs can be found but the larvae of the species usually develop in water columns between 50-600m (McEachran et

al., 2015). Sargassum fish can be ferocious predators. They often prey on the shrimp and fish that inhabit the *Sargassum* seaweed. Sargassum fish are the host of an ectoparasite classified as *Pennella sagitta* (Fig. 2).

REPRODUCTION. In courtship the male closely follows the female, rushing to the surface to spawn. Spawning is frequent and regular for more than a two week period. At the surface of the water the female produces an egg mass or raft. The eggs have an appearance of being blunt at both ends with a slightly larger middle. After the female releases her eggs the male externally fertilizes them. Juveniles (Fig. 3) move to depths of 500m or more, where they feed and become adults, then return to the *Sargassum* weeds above. Juveniles feed on other fish eggs and small crustaceans, amphipods, decapods, euphausiids and shrimps, whereas adults feed on other fish and shrimps among the seaweed at the surface.

BEHAVIOUR. Being able to rapidly undergo colour change from dark browns and greens to light browns and greens as well as vice versa contributes to their predator attributes. As they share the *Sargassum* weed with other organisms this is usually done to camouflage themselves to capture unaware prey.

APPLIED BIOLOGY. The sargassum fish can hold the ciguatera toxin, accumulated from its food, and can cause ciguatera poisoning in humans. The species is of Least Concern on the IUCN Red List (McEachran et al., 2015).

REFERENCES

- McEachran, J.D., Polanco Fernandez, A. & Russell, B. 2015. *Histrio histrio*. IUCN Red List.
<http://www.iucnredlist.org/details/190183/0>
Sharpio, L. 2013. *Histrio histrio*. Encyclopedia of Life.

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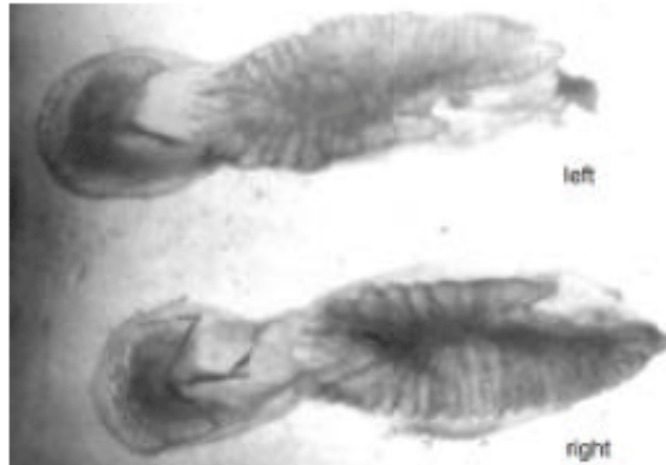


Fig. 2. *Pannella sagitta*, an ectoparasite of the sargassum fish.

[<http://www.scialert.net/fulltext/?doi=jfas.2006.157.170&org=10>, downloaded 31 October 2016]



Fig. 3. Juvenile sargassum fish (inset: adult).

[<http://nfchroniclesnoaa.blogspot.com/2013/05/fish-findings.html>, downloaded 31 October 2016]

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