

Lionfish Fishing in Turkish Seas

Dr. Zafer Tosunođlu & Seren Emirmustafaođlu

Ege University Faculty of Fisheries Department of Fishing
35100 Bornova İzmir Turkey

zafer.tosunoglu@ege.edu.tr



Lionfish *P. miles* was first seen on the coast of Turkey in 2014, then it has spread rapidly westward and recently northward.

On 26 August 2019, a specimen of *P. miles* was captured by a spear-fisher from Kokar Bay - **Izmir** at depth of 15 m on rocky area. According to spear-fisher the species also has been sighted in Kokay Bay (18 m; September 2019), Sığacık Bay (17 m, September 2019) and also Foça (15 m, October 2018) on the coast of **Aegean Sea**. These observations also indicate that *P. miles* are successfully and **rapidly expanding from the Mediterranean coasts northward to the Aegean Sea** (Özgül, 2020).

Lionfish aggregations have been intensively observed especially in rocky areas, and intersection area of the rocky and *Posidonia* since summer 2020 in the southern part of Turkish coasts (*Personnel com.* Murat Draman and Ulman *et al.*, 2020).



Fishing gears such as bottom contact purse seine and trawl, gill and entangling nets, longline, handlines and others, commonly used in Turkish Seas, are not effective catching and removal of the lionfish. Lionfish are rarely caught incidentally in these fishing gear.

So far, only thick trammel nets (targeted dentex, groupers, breams etc.), larger mesh size and thicker twine diameter, are effective in catching lionfish as bycatch or discard.

The most important reason for this net to be effective in lionfish catching is that it can be placed around reef areas where lion fish are settled.



Trammel net

42-56 mm inner mesh size
140-180 mm outer mesh size

Target species

Groupers, dentex, leerfish,
lobster, scorpionfish, red
porgy, larger size breams

Discard species

Puffer fish, lionfish,
sharks, skates and rays

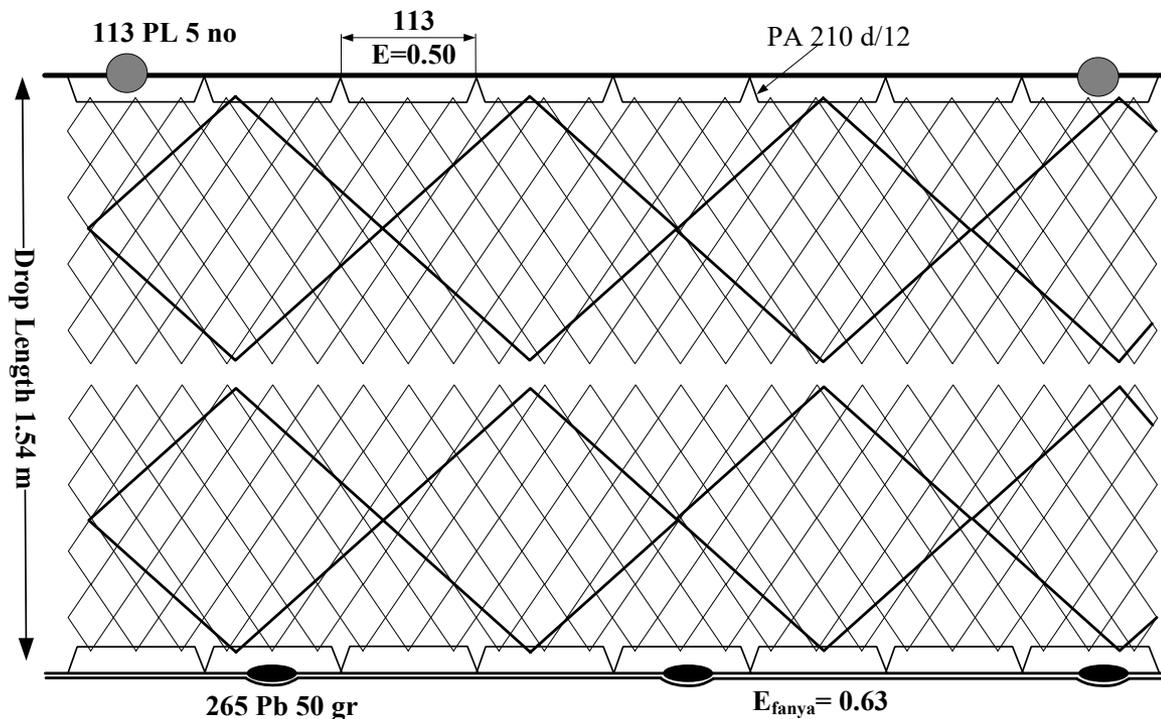
Personal communication

Professional fisher
Alim AYDIN stated that he
caught about 400 kg lionfish in
4 days with 3 000 m nets in
Kalkan (Kaş) between 20-25
August 2020 and returned home
because he was tired of cleaning
lionfish from these nets.

		100.00 PP Ø 5	E=0.50		
5-5.5	360 mm	397		PA 210d/18	5-5.5
		397			
35-40	84 mm	2381		PA 210d/12	35-40
		2381			
5-5.5	360 mm	397		PA 210d/18	5-5.5
		397			

102.00 PP Ø 4-4

E=0.51



In summer months, higher percentage of the catch composition of the trammel net consist of lionfish



If the lionfish market demand occurs, fishing can be done successfully with these nets



Fishing of lionfish with the trammel net begins in April, reaches its maximum yield in July-August, declines in September and ends in November (Kalkan-Kaş Area). Based on a monitoring study of the Mediterranean Conservation Society (AKD), over half of the total catch was lionfish in the nets in summer months of 2020. Maximum yield is supplied around 30-50 m depths and catch up to a depth of 100 m.



We (Ege University) started two projects.

One of them was planned to reveal the catching efficiency of the "purse trap" for the lion fish population concentrated in Kaş-Göcek Area, and the other was planned to investigate the distribution, biology and population dynamics of lion fish replacing Bodrum Peninsula.

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