Frequent occurrence of nematode parasites in moontail bullseye

*Livi Wilson, P. K. Seetha, P. U. Zacharia, T. M. Najmudeen, Rekha J. Nair, K. T. S. Sunil, M. Radhakrishnan, T. G. Sumithra, C. Archana and N. K. Sanil ICAR-Central Marine Fisheries Research Institute, Kochi *e-mail: liviwilson@gmail.com

Nematodes infect various organs of fish such as stomach, intestine, liver, gonads, swim bladder, fins, orbits of the eye and brain. This parasitic infestation is known to cause growth retardation and impaired gonadal development in fishes. Bullseve belonging to the family Priacanthidae is a major demersal fishery resource in India and mainly caught by multiday trawlers operated at 20-150 m depths. Nematode parasites were found in moontail bullseye Priacanthus hamrur landed at Cochin Fisheries Harbour during May-September, 2017 period. Both testis and ovary of the fishes were found infected. However the infestation was more common in female fishes. Among 112 fishes examined (81 female, 31 male), 17 were infected, of which 14 were females. Within the same gonad, the size of



Fig. 1. Parasitic infestation seen in the testis of moontail bullseye

the parasite ranged from 20 to 70 mm and the number of parasite infesting each gonads varied from one to ten. In some cases, due to heavy infestation, the whole ovary was occupied by the parasites rendering the ovary black and occurrence of ova atrophy. Even though the parasites were present in all gonadal stages immature, maturing, mature and spent/recovering the infestation was more predominant in the mature and spent/ recovering stages. Among the males infected with the parasite, all gonads were in the spent/ recovering stages. The highest prevalence of the nematode parasite during the period of study was recorded in September (32%) and lowest (8.8%) in

August. Although the fish looks healthy, the occurrence of the parasite in the gonad can cause great harm to the stock by destroying the eggs. There have been earlier reports of nematode infection in flatfishes (Biju kumar, 1996, J. Mar. Biol Ass. India., 38: 34 - 39). The identification of parasite using CO1 gene was complete and the nucleotide sequence was subjected to homology search. The nematode parasite was found belonging to the genera *Philometroides*. Further studies are in progress.