A report on the occurrence of gear parts in the gut of three spot swimming crab

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Portunus sanguinolentus commonly known as 'three spot swimming crab', or 'Mupottan njandu' in the vernacular in Kerala forms a major portion of commercially important marine crabs landed along Vizhinjam coast. On 13th November 2017, crab samples were obtained from bottom set gill nets operated in 10 m depth, 5 km away from the sea

shore off Vizhinjam. While analyzing gut contents of crabs, 3 specimens of *P.sanguinolentus* were found with multifilament synthetic gill net parts in their entire fore gut. The gut contents were transferred into a petridish and observed under microscope. The green colored multifilaments were clearly visible even without using a microscope.



Fig. 1. Microscopic view of multifilament synthetic gear part found in the crab gut

This species is reported as a carnivore, mainly feeding on crustaceans, molluscs and finfishes (Sukumaran and Neelakantan,1997 *Indian Journal of Marine Sciences*, 26 (1): 35-38). Biological details of crab specimens with ingested synthetic material is given in Table 1.

Table 1. Biological details of the crabs

Carapace width (mm)	Weight (g)	Sex	Synthetic gear part (g)
92	44	female	0.168
95	48	male	0.180
120	110.8	male	0.234

This study indicates the harmful effects of marine pollution in coastal waters off Vizhinjam. It has been noticed that huge quantities of discarded synthetic fishing gears are washed ashore near Vizhinjam Harbour. Status and composition of marine litter along the Indian beaches were given (Kaladharan et al., 2017 J. Mar. Biol. Ass. India,59 (1):19-24; Sulochanan, B., 2011 Mar. Fish. Infor. Serv., T&E Ser., 208: 18-19) has been reported. The effect of ghost nets in the oceanic and coastal ecosystems with suggestions for reducing marine debris (Kripa et al., 2016 Mar. Fish. Infor. Serv., T & E Ser., 228:3-10) is to be given due attention to preserve the quality of the fishing ecosystem.