## Report on occurrence of Purple back flying squid in hook and line fishery off Vizhinjam, Kerala

P. Gomathi\*, M. K. Anil, N. K. Mithunraj, K. K. Suresh, P. K. Raheem and B. Raju Vizhinjam Research centre of ICAR-Central Marine Fisheries Research Institute, Vizhinjam P.O., Thiruvananthapuram - 695 521, Kerala

\*E-mail: gomathimfsc@gmail.com

Three specimens of Purple back flying squid, *Sthenoteuthis oualaniensis* (Lesson, 1830) were landed on 23.3.18.They were caught by hook and line operated at a distance

of 25-30 km from the shore with the aid of LED lights from multiday gill netter unit based at Vizhinjam Fisheries Harbour. This fast growing oceanic species belongs to

Table 1: Morphometrics (in mm) of Purple back flying squid specimens landed at Vizhinjam Fisheries Harbour

Characters	Sample -1	Sample -2	Sample -3
Dorsal mantle length	220	221	214
Ventral mantle length		215	205
Mantle width	110	95	90
Head length	56	48	56
Head width	38	42	40
Tentacle length	360	405	322
Fin length	103	Damaged fins	86
Fin width	90		66
Weight (g)	590	437	359

the family Ommastrephidae typically occuring in the depth range of 200-400 m. (FAO Species Catalogue for Fishery Purposes No. 4, Vol. 2). Previously, on 15.2.2018, landing of 17 kg of Purple back flying squid was reported by the Fishery Resources Asssessment Division (FRAD) during routine Random Stratified Multi-stage Survey of fish landings at Vizhinjam Fisheries Harbour.

Sucker on the manus had 4 large, pointed teeth on each quadrant which is characteristic feature of purple

back flying squid. Based on dorsal photophore and cladius morphology and size differences in matured specimens, these squids are grouped into 5 different forms. Present specimens belonged to typical middle sized form, characteristic yellow chromatophore on the dorsal mantle surface. All three specimens were females in partially spent condition indicated by flaccid nidamental gland with remnant eggs. Dorsal mantle length varied between 214-221 mm and their weight ranged between 359-590 g.







Fig.1. Purple back flying squid, *S. oualaniensis* a) dorsal view b) ventral view (c) cut open to show flaccid nidamental gland, oviducal gland and ovary