

Gapers- An important component of the diet matrix of predatory demersal fishes

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Serranids, nemipterids, priacanthids, sciaenids and synodontids forms the major share of demersal fish landings along the northwest coast of India and especially in Gujarat. Fishes forms the major component of diets of these demersal fishes, followed by crustaceans. The juveniles of commercially important fishes as well as several less known taxa form an important component of the diet. Small sized mesopelagic and bottom dwelling groups like myctophids, apogonids, acropomatids

and bregmacerotids were the key groups reported (Thangavelu *et al.* 2012). Our recent investigation (September-December, 2017) in guts of eight commonly occurring demersal fish species along Veraval coast (*Nemipterus japonicus*, *N. mesoprion*, *Saurida tumbil*, *S. undosquamis*, *Epinephelus diacanthus*, *Johnius glaucus*, *Otolithus cuvieri* and *Priacanthus hamrur*) revealed the significant presence of the above mentioned prey groups (Fig. 1a-1d). In addition, the presence of gapers (fig. 1e)

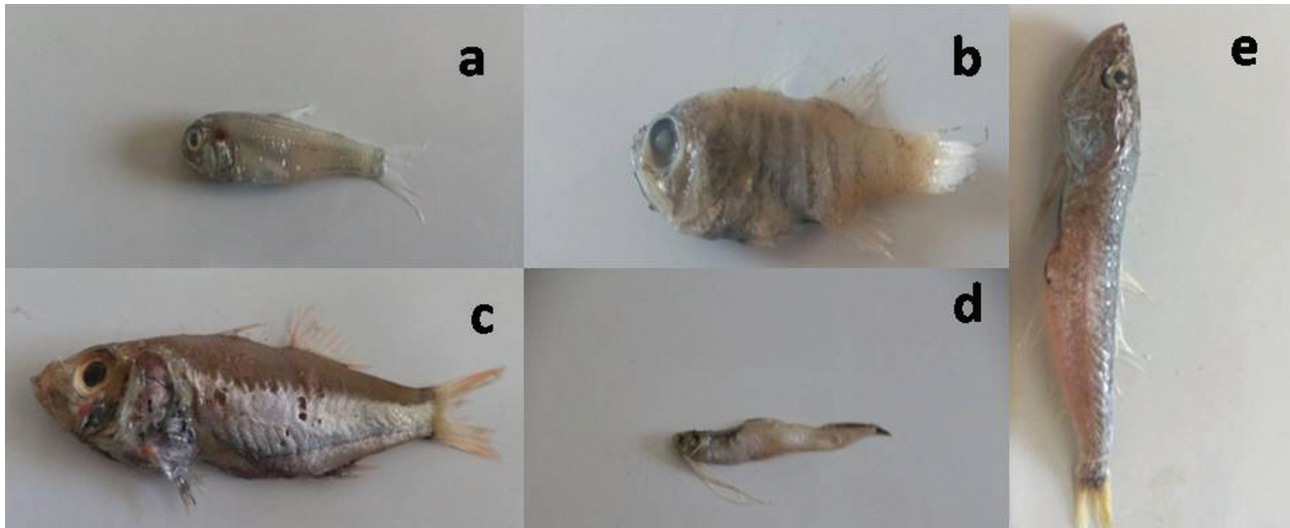


Fig. 1. Selected prey items (a-Myctophid; b-Apogonid; c-Acropomatid; d-Bregmacerotid; e-Champsodontid) from diets of commercially important groups of demersal fishes.

in varying quantity, from the guts of seven out of eight species studied was recorded (Table 1). The gapers are mesopelagic fishes belonging to the family Champsodontidae and three species namely *Champsodon vorax*, *C. nudivittis* and *C. snyderi* were reported from north-eastern Arabian Sea (Ganga *et al.*, 2014; *Indian J. Fish.* 61(4):128-130.). Despite its presence in North-eastern Arabian Sea, the group was rarely recorded in diets of the predatory demersal fishes (Mali *et al.* (2017 *Int. J. Life. Sci. Scienti. Res.* 3(3): 1039-1046) where *Champsodon*

sp. was noted in the diet matrix of lizard fishes. Our present observations of the guts of common demersal fishes suggested the presence of the group in similar intensity as other small mesopelagic groups (Table 1). The earlier report might have included gapers in semi-digested and digested fish category and difficulty in identification of the species. Since several new reports on occurrence of the species of gapers from Indian coast are now available, it will be easier to understand its ecology and role in marine food chains.

Table 1. Presence-Absence matrix of selected prey items in the diet of commercially important demersal fishes

Species/ Groups	Nemipterids		Serranid	Synodontids		Sciaenids		Priacanthid
	<i>N. japonicus</i>	<i>N. mesoprion</i>	<i>E. diacanthus</i>	<i>S. tumbil</i>	<i>S. undosquamus</i>	<i>J. glaucus</i>	<i>O. cuvieri</i>	<i>P. hamrur</i>
Myctophids	+	+	+	++	+	+	+	+
Apogonids	+++	++	+	++	+	-	+	++
Bregmacerotids	++	++	+	+++	+++	++	++	+
Acropomatids	+	+	-	++	+	-	+	-
Champsodontids	+	+	+	++	++	-	+	+

10-25% (+++); 5-10% (++); upto 5% (+) and Absent (-) † calculated after excluding empty guts]