

A CHECKLIST OF SNAPPERS (FAMILY: LUTJANIDAE) FROM INDIAN WATERS

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Abstract: A survey of snappers along the coast of India, Lakshadweep and Andaman Islands were done during the period 2010-2013. A total of 35 species under 8 genera of snappers were recorded, of which 3 species are new additions to the Indian waters. Information from these observations and other sources are compiled into the present checklist which includes 49 species in 10 genera as reliable records and presently known snappers from the area.

Key words: Checklist, Snappers, Indian waters.

INTRODUCTION

The family Lutjanidae collectively known as snappers, contains 17 genera and 105 species, which are mainly confined to tropical and subtropical marine waters, with few occurring in estuaries (Allen, 1985; Eschmeyer 2012; Anderson, 2003a). *Lutjanus* Bloch 1790 is by far the largest genus with 70 species, including at least 43 species from the Indo-West Pacific region. In India, snappers constitute important component of artisanal fishery, landings are mainly from hooks and lines operated off rocky slopes or around coral reefs. Lutjanids are also caught in traps in the Gulf of Mannar and contribute to 2.3 % of the total perch landings of India (CMFRI, 2012). They also form mainstay of monsoon fishery off Lakshadweep. Some fishes also contribute to recreational fishery at Havelock Bay in Andaman and Nicobar Islands. The current study compiles observational records of snappers made by the authors from major landing centres of Indian coasts, Lakshadweep and Andaman Islands during the period 2010-2013.

MATERIALS AND METHODS

Regular observations were conducted all along the coastline at major fish landing centres during the period 2009-13. Monsoon fishery at Lakshadweep and fishery at Andaman and Nicobar Islands were also observed (Fig. 1). The snappers landed were collected, brought

to the lab and colour photographs taken in fresh condition. Morpho-meristics were taken, fishes were then identified using standard textbooks and later confirmed with experts. In addition to present study, published information on the occurrence of snappers from Indian waters are also compiled for checklist.

RESULTS AND DISCUSSION

A total of 35 species under 8 genera of snappers were recorded during the present study, of which, 3 species are new additions to the Indian waters. (Table 1). Compilations from already recorded information consolidates the list to 49 species under 10 genera in three subfamilies. Sub family Etelinae is represented by 5 genera worldwide; of this four genera *Aphareus*, *Aprion*, *Etelis*, *Prisitpomoides* are represented in Indian waters with 10 species. While *Aphareus*, *Aprion*, *Etelis* are represented by only two species each, genus *Prisitpomoides* has five species in our waters. Subfamily Apsilinae is represented by genera *Apsilus*, *Lipocheilus* and *Paracaesio* in Indian waters; genus *Parapristipomoides* was not represented in the present sampling; no earlier records were noted. This subfamily was represented by 4 species. The third subfamily Paradichthyinae with two monotypic genera *Symphorichthys* and *Symphorus* was not represented at all in the collections or in literature. The fourth



Fig. 1. Locations where samples were collected

subfamily Lutjaninae with six genera worldwide was represented in India by three genera only *Lutjanus*, *Macolor* and *Pinjalo*. Of this, the genus *Macolor* is represented by two species of which *Macolor macularis* (Fowler, 1931). Highest species diversity was in the genus *Lutjanus* with 29 species.

Taking a statewise breakup, Kerala had the highest diversity with 30 species, followed by Andaman with 25 species. Tamilnadu, Karnataka and Lakshadweep had 16, 11 and 9 species respectively. Highest diversity was on the southwest coast comprising of the states Kerala, Karnataka. Kerala and Andaman had 17 species in common, while Kerala, Andaman and Lakshadweep had 9 species in common. Eleven species recorded from Karnataka were recorded both in Kerala and Tamil Nadu. Of the 16 species recorded from Tamilnadu waters, 15 were recorded in Kerala; the only

one not reported was *L. deccusatus*. *Lutjanus gibbus* was the most common species recorded from Kerala and during the monsoon fishery at Lakshadweep. The most dominant species in the Gulf of Mannar and Palk Bay was *Lutjanus deccusatus* while at Karnataka it was *Lutjanus lutjanus*.

Three species of snappers were recorded for the first time from Indian waters *Macolor macularis*, *Lutjanus coeruleo lineaus* and *Lutjanus dodeca canthoides*. The presence of the three species two to the Indian coastline and one to Andaman may be a pointer to the poleward movement of the species since the earlier records of these species was from south east Asian countries.

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Table 1. Consolidated checklist of snappers from Indian waters with the collection localities

Species	Collection site
<i>Aphareusfurca</i> (Lacepede 1802)	Andaman Islands
<i>Aphareusrutilans</i> Cuvier 1830	Kerala.
<i>Aprion virescens</i> Valenciennes 1830	Andaman Islands, Kerala
<i>Apsilufuscus</i> Valenciennes 1830	Andaman Islands (Rao 2009)
<i>Eteliscarbunculus</i> Cuvier 1830	Andaman Islands (Rao 2009)
<i>Eteliscorascans</i> Valenciennes 1862	India (CMFRI 2011)
<i>Lipocheilus carnolabrum</i> (Chan 1970)	Kerala, Tamil Nadu
<i>Lutjanus argentimaculatus</i> (Forsskal 1975)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh
<i>Lutjanus bengalensis</i> (Bloch 1790)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus biguttatus</i> (Valenciennes 1830)	Andaman Islands
<i>Lutjanus bohar</i> (Forsskal 1775)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus boutton</i> (Lacepede 1802)	Andaman Islands (Talwar 1990; Rao 2009)
<i>Lutjanus carponotatus</i> (Richardson 1842)	Andaman Islands (Talwar 1990; Rao 2009)
<i>Lutjanus coeruleolineatus</i> (Ruppell 1835)	Kerala
<i>Lutjanus decussatus</i> (Cuvier 1828)	Tamil Nadu, Andaman Islands
<i>Lutjanus dodecakanthoides</i> (Bleeker 1854)	Andaman Islands
<i>Lutjanus ehrenbergii</i> (Peters, 1869)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus erythropterus</i> Bloch 1790	Kerala, Tamil Nadu, Andaman Islands
<i>Lutjanus fulviflamma</i> (Forsskal 1775)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh,
<i>Lutjanus fulvus</i> (Forster 1801)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus gibbus</i> (Forsskal 1775)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus guicheri</i> Fourmanoir 1959	Andaman Islands (Talwar 1990; Rao 2009)
<i>Lutjanus indicus</i> Allen, White & Erdmann, 2013	
<i>Lutjanus johnii</i> (Bloch 1792)	Kerala, Andhra Pradesh
<i>Lutjanus kasmira</i> (Forsskal 1775)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands
<i>Lutjanus lemniscatus</i> (Valenciennes 1828)	Kerala
<i>Lutjanus lunulatus</i> (Park 1797)	Andaman Islands.
<i>Lutjanus lutjanus</i> Bloch 1790	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Lakshadweep and Andaman Islands.
<i>Lutjanus madras</i> (Valenciennes 1831)	India (Ansari et al. 2003; Talwar 1990), Tamil Nadu (Varghese et al. 2011).
<i>Lutjanus malabaricus</i> (Bloch & Schneider 1801)	Andaman Islands
<i>Lutjanus monostigma</i> (Cuvier 1828)	Kerala
<i>Lutjanus quinquelineatus</i> (Bloch 1790)	Kerala, Tamil Nadu, Lakshadweep and Andaman Islands
<i>Lutjanus rivulatus</i> (Cuvier 1828)	Kerala, Tamil Nadu
<i>Lutjanus russellii</i> (Bleeker 1849)	India (Talwar and Kacker 1984; Talwar 1990), Tamil Nadu (Varghese et al. 2011; Manisseri et al. 2012), Andhra Pradesh (Sujatha 1995), Lakshadweep (Jones and Kumaran 1980) and Andaman Islands (Rao 2009).
<i>Lutjanus sanguineus</i> (Cuvier 1828)	Kerala
<i>Lutjanus sebae</i> (Cuvier 1828)	India (Talwar and Kacker 1984; Talwar 1990), Tamil Nadu (Lakshmi and Sundaramanickam 2011), Cochin (Manisseri et al. 2012) and Andaman Islands (Rao 2009).

Species	Collection site
<i>Lutjanusvitta</i> (Quoy&Gaiard 1824)	Kerala, Tamil Nadu, Lakshadweep and Andaman Islands
<i>Macolor macularis</i> Fowler 1931	Kerala
<i>Macolorniger</i> (Forsskal 1775)	Lakshadweep (Jones and Kumaran 1980) and Andaman Islands (Rao 2009).
<i>Paracaesiosordida</i> Abe & Shinohara 1962	Kerala
<i>Paracaesioxanthura</i> (Bleeker 1869)	India (Talwar 1990; CMFRI 2008), Andaman Islands (Rao 2009).
<i>Pinjalolewisi</i> Randall Allen & Anderson 1987	Kerala, Andaman Islands.
<i>Pinjalopinjal</i> (Bleeker 1850)	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Andaman Islands
<i>Pristipomoides auricilla</i> (Jordan, Evermann & Tanaka 1927)	Kerala
<i>Pristipomoides filamentosus</i> (Valenciennes 1830)	Kerala, Tamil Nadu
<i>Pristipomoides multidentis</i> (Day 1871)	India (Day 1871).
<i>Pristipomoides seiboldii</i> (Bleeker 1855)	India (Talwar 1990; CMFRI 2009), Cochin (Manisseri et al. 2012) and Andaman Islands (Rao 2009).
<i>Pristipomoides typus</i> Bleeker 1852	Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Andaman Islands.
<i>Pristipomoides zonatus</i> (Valenciennes 1830)	Kerala.

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