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Physiography

ON A COLLECTION OF FISHES FROM LAKSHADWEEP ISLANDS

RYBY Z WYSP LAKSHADWEEP

ZOOLOGICAL SURVEY OF INDIA

The authors present data on 16 fish species occurring the Lakshadweep Islands off the Kerala coast (India).

INTRODUCTION

The following account is based on a collection of fishes brought by the senior author (T.V.) during an extensive survey of the area in 1978. Some of the important works which deal with fish fauna of the Lakshadweep Islands are by Ayyangar (1922), Balan (1959), Burton (1940), Gardiner (1903), Hornell (1910), Jones (1969), Jones and Kumaran (1980) and Mathew and Ramachandran (1956) although Jones and Kumaran (1980, p.x.) state "For some reason or other, the Zoological Survey of India also had not made any attempts for a study of this area".

Sixteen species were collected one of which is a new record (Venkateswarlu and Verhese, 1980). The taxonomy followed is after Berg (1940). The genera and species are arranged in alphabetical order.

The data given for each species include its first reference, number of specimens collected with their range of size, locality, date of collection, collector's name and lastly geographical distribution in India and elsewhere.

TOPOGRAPHY

The Lakshadweep group of coral islands consist of 10 inhabited islands and 5 attached islets. The inhabited islands are Minicoy, Kalpeni, Androth, Agatti, Kavaratti, Amini, Kadmat, Kiltan, Chetlat, Bitra which lie about 192 to 320 km, off the Kerala coast, between 8° and $12^{\circ}30'N$ and between 71° and $74^{\circ}E$. It is believed that these coral islands were built up over the continuation of Aravallis of Rajasthan and Gujarat through the banks of the Gulf of Cambay and through the Agaria banks further south. Except for Androth, all the islands extend generally from north to south and are marked by shallow and saucer shaped lagoons on their western side encircled by a coral reef and storm beach on its eastern side.

The area is only 32 sq. km and this is the smallest territory in the Indian Union; the capital Kavaratti extends over an area of 3.6 sq. km. The largest island is Androth with an area of 4.8 sq. km and the smallest one is Bitra with an area of 0.1 sq. km.

The islands experience the both monsoons and get an average annual rainfall of 1600 mm. The south – west monsoon which sets in the islands during the months of May to September is the major source of rainfall. The temperature varies from 24.3° to $31.2^{\circ}C$.

The islands are dotted with dense coconut plantations.



Fig. 1. Coast of Kavaratti

COLLECTING STATIONS

The fishes were collected from three islands, Kavaratti Suheli-Cheriyakara and Suheli-Valiyakara; the details of the localities are given below.

Kavaratti: This is the capital of Lakshadweep group of island with an area of 3.6 sq. km. It is a coral island surroundet by a reef.

Suheli-Cheriyakara: Suheli-par consists of two uninhabited islands viz. Cheriyakara and Valiyakara which lie inside a big lagoon of about 10 km diameter surrounded by a extensive reef. The lagoon has beds of corals of an growing up luxuriantly the bottom to a foot or two below the surface.

Cheriyakara is low island (a little more than a meter above high water mark), fertile with a thick growth of cocoanut trees. There is a rich tuna fishing going on off the island. Dense populations of hermit crabs also occur on the island which is uninhabited.

Suheli-Valiyakara: This is also an uninhabited island. This island also is low, about a meter above high water Hermit crabs are abundant.

SYSTEMATIC ACCOUNT

Order: *SCOPELIFORMES*

Family: *Synnodidae*

1. *Synodus variegatus* (Lacépède)

syn. 1803. *Salmo variegatus*, Lacépède, H.N. Poiss., 5: 157, pl. 3, Fig. 3.

Material: One ex., 128 mm, Kavaratti, 1.3.1978, T. Venkastewarlu coll.

Distribution: Tropical, Indo-Pacific from the Red Sea and east coast of Africa to the Laccadives, Andamans, Indonesia, Philippines, north to Ryuku and Japan, east to Hawaiian, Society and Tuamotu Islands.

Order: *ANGUILLIFORMES*

Family: *Muraenidae*

2. *Gymnothorax pictus* (Ahl.)

syn. 1789, *Muraena picta* (Ahl. Dissert. de Muraena et Ophichtho: 6, pl 2, (Fig. 2).

Material: one ex., 425 mm, Suheli-Valiyakara, 27.2.1978, T. Venkateswarlu, coll.

Distribution: Red Sea, east coast of Africa? seas of India to the Malay Archipelago and Pacific Ocean.

Order: *PERCIFORMES*

Sub Order: *PERCOIDEI*

Family: *Carangidae*

3. *Caranx melampygus* Cuvier

1844. *Caranx melampygus*. Cuv. et Val. H.N. Poiss. 9: 116.

Material: thirteen exs., 100–105 mm, Suheli-Cheriyakara, 26.2.1978. T. Venkateswarlu coll.

Distribution: Red Sea, seas of India to the Malay Archipelago and Pacific.

4. *Naucrates ductor* (Linnaeus)

syn. 1758. *Gasterosteus ductor*. Linn. Syst. Nat. 1: 489.

Material: one exs., 80 mm. Kavaratti, 1.3.1978, T. Venkateswarlu coll.

Distribution: seas of temperate and tropical regions.

Family: *Lutjanidae*

5. *Lutjanus kasmira* (Forskal)

syn. 1775. *Sciaena kasmira*. Forsk. Desc. Anim.: 46

Material: five exs., 170–180 mm, Suheli-Cheriyakara, 26.2.1978. T. Venkateswarlu coll.

Distribution: Red Sea, seas of India, Malay Archipelago and beyond.

Family: *Chaetodontidae*

6. *Chaetodon auriga* Forskal

1775. *Chaetodon auriga*. Forsk. Desc. Anim.: 60, No 81.

Material: three exs., 90–140 mm, Kavaratti, 21.2.1978. T. Venkateswarlu coll.

Distribution: from the Red Sea, through the seas of India to Polynesia.

7. *Chaetodon falcula* Bloch

1793. *Chaetodon falcula*, Bloch, Ich. 9: 102, fig. 2.

Material: one ex., 150 mm, Kavaratti, 21.1.1978, T. Venkateswarlu coll.

Distribution: seas of India to the Malay Archipelago and beyond.

Family: *Labridae*

8. *Gomphosus coeruleus* Lacépède

1844. *Gomphosus coeruleus*. Lacépède, H.N. Poiss. 3: 101, t. 5, fig. 1 and t. 6, fig. 1.

Material: one ex., 143 mm, Suheli-Cheriyakara, 26.2.1978, T. Venkateswarlu coll.

Distribution: seas of India to the Malay Archipelago.

9. *Leptoscarus vaigiensis* (Quoy et Gaimard)

syn. 1824. *Scarus vaigiensis*. Quoy and Gaimard. Voy. Usanil. Zoologie: 26.

Material: Three exs., 120–195 mm, Kawaratti, 1.3.1978, T. Venkateswarlu coll.

Distribution: Red Sea, east coast of Africa, seas of India and Malay Archipelago.

10. *Scarus dubius* (Bennett)

syn. 1877. *Pseudoscarus aeruginosus*, Day, Fish India: 142, pl. 49, fig. 3.

Material: one ex., 95 mm. Kavaratti, 21.2.1978. T. Venkateswarlu coll.

Distribution: Madras, Andamans, Malay Archipelago.

11. *Stethojulis strigiventer* (Bennett)

syn. 1832. *Julis strigiventer*. Bennett, P.Z.S.: 184.

Material: two exs., 93–110 mm, Kavaratti, 1.3.1978. T. Venkateswarlu coll.

Distribution: East Africa, seas of India, Malay Archipelago and coll. China, Nicobars and Andamans.

12. *Thalassoma hartwickii* (Bennett)

syn. 1832. *Sparus hartwickii*. Bennett, Fisch. Ceylon: 12, pl. XII.

Material: one ex., 160 mm, Suheli-Cheriyakara, 26.2.1978. T. Venkateswarlu coll.

Distribution: east coast of Africa, seas of India, Malay Archipelago, China and Polynesia.

Family: *Mullidae*13. *Mullidichthys auriflamma* (Forskal)

syn. 1775. *Mullus auriflamma*. Forskal Desc. Anim.: 30

Material: Thirteen exs., 110–129 mm, Kavaratti, 1.3.1978. T. Venkateswarlu coll.

Distribution: Red sea and east coast of Africa to the Laccadives, coast of India, Ceylon, Indonesia, Philippines, China, Japan, south to Australia and east to Marquesas and Hawaiian Islands.

Sub Order: *STROMATEOIDEI*Family: *Stromateidae*13. *Pampus argenteus* (Euphr.)

syn. 1788. *Stromateus argenteus*. Euphrasen, Kon. wet. Akad. Nya. Handl. Stockholm, 9: 49.

Material: two exs., 165–190 mm, Suheli-Valiyakara, 27.2.1978, T. Venkateswarlu coll.

Distribution: seas of India to the Malay Archipelago and beyond.

Sub Order: *BLENNIOIDEI*Family: *Blennidae*15. *Salarias dussumieri* Cuv. et Val.

1844. *Salaris dussumieri*. Cuvier et Vallenciennes H.N. Poisson 11:310.

Material: one ex. 115 mm, Kavaratti, 21.2.1978. T. Venkateswarlu coll.

Distribution: east coast of Africa, seas of India to the Andaman Islands.

Order: *PEGASIFORMES*Family: *Pegasidae*16. *Pegasus draconis* Linnaeus

1758. *Pegasus draconis*. Linn. Syst. Nat. 1: 418.

Material: one ex., 70 mm, Kavaratti, 28.2.1978. T. Venkateswarlu coll.

Distribution: seas of India to the Malay Archipelago and beyond.

Remarks: details were published elsewhere (Venkateswarlu and George Verghese, 1980). Jones and Kumaran (1980) did not record this species from Lakshadweep Islands. This species is a new record.

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KOLEKCJA RYB Z WYSP LAKSHADWEEP

Autorzy dają przegląd gatunków ryb z grupy wysp koralowych Lakshadweep, składającej się z 10 zamieszkałych i 12 niezamieszkałych drobnych wysepek przy brzegach stanu Kerala. Największa

wyspa Androth mierzy 4,8 km² a najmniejsza 0,1 km². Dane pochodzą z trzech wysp a mianowicie: Kavaratti, Suheli-Cheriyakara i Suheli-Valiykara.

Autorzy dają opis 16 gatunków z rodzin: *Synodontidae*, *Muraenidae*, *Carangidae*, *Lutjanidae*, *Chaetodontidae*, *Labridae*, *Mullidae*, *Stromateidae*, *Blennidae* i *Pegasidae*. Jeden gatunek *Pegasus draconis* L. notowany po raz pierwszy.

Венкatesварлу Т. и Иланго К.

КОЛЛЕКЦИЯ РЫБ ОСТРОВОВ ЛЕКШЕДВИП

Р е з ю м е

Авторы дают перечень видов рыб из района группы коралловых островов Лекшедвип, в состав которых входит 10 обитаемых и 12 необитаемых мелких островков у берегов штата Керала. Самый большой остров Андроз имеет 4,8 кв. км., а самый маленький 0,1 кв. км. Представленные данные касаются 3 островов а именно: Каваратти, Сухели-Чериякара и Сухели - Валиякара. Авторы приводят описание 16 видов из семейств: *Synodontidae*, *Muraenidae*, *Carangidae*, *Lutjanidae*, *Chaetodontidae*, *Labridae*, *Blennidae*, *Pegasidae*, *Mullidae*, *Stromateidae*, Один вид *Pegasus draconis* L. отмечается впервые.

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