

109-

FAMILY POLYNEMIDAE AND ITS IMPORTANCE

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Family *Polynemidae* is an important group *Central Fisheries Department, Karachi*

of fishes which contributes to a large extent to our fisheries. This group may briefly be described as of "fishes with elongated body with two dorsal fins, mouth moderately large with small teeth, pectoral fin in two parts, the lower rays filamentous and used as feelers". Owing to the presence of long free pectoral filaments these are commonly called "Threadfins," and sometimes known as

"Indian Salmon". In reality these have no relation with true salmon and the latter name is erroneous.

The family is divided into two genera, *Eleutheronema* and *Polynemus*. The main distinctive characters are the number of elongated free pectoral fin rays and the condition of lips. Three important species of the family *Polynemidae*, found in our water, are described briefly.

1. *Eleutheronema tetradactylum* Shaw.

D¹. VIII; D². I. 13-15; A. II. 15-17; P. 17+

IV; L. 1.78-80; L.tr. 9-10/14.

Upper lip absent, lower lip only developed near the angle of mouth. Upper and lower jaws with broad band of small villiform teeth, extending to outside. Four free pectoral filaments.

Colour: Silvery-green above, becoming creamy below.

Distribution: Common in the Bay of Bengal and Arabian Sea; young ascend the rivers. Reported from Ceylon and Indonesia also. Length 6 ft. (Fig. 1).

Local names: Rishi, Cuchchia.

2. *Polynemus plebeius* Brouss.

D¹. VIII; D². I. 13; A. II. 11; P. 17-18+V;

L. 1. 60-65; L.tr. 7/13.

Upper lip absent, lower well developed. Upper and lower jaws with villiform teeth, not extending to outside of the jaws. Five or more free pectoral filaments.

Colour: Dusky golden-olive above with narrow dusky stripes. Fins greyish.

Distribution: Bay of Bengal, Arabian Sea and India Ocean. Ascend estuaries. Growing to about 18 inches in length. (Fig. 2).

Local names: Karo seeri; Sahal.

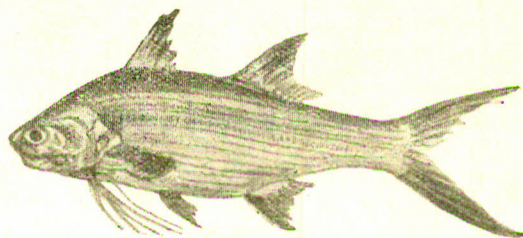


Fig. 1.—*Eleutheronema tetradactylum*.

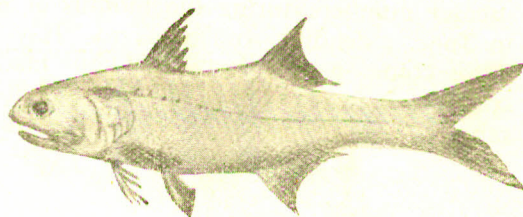


Fig. 2.—*Polynemus plebeius*.

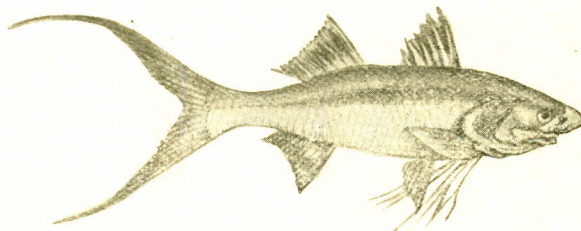


Fig. 3.—*Polynemus indicus*.

3. *Polynemus indicus* Shaw.D¹. VIII; D². I.13-14; A. II-III. 11-12; P.

15-16+V; L.1. 70-75; L.tr. 7/13.

Upper lip absent, lower lip well developed. Small teeth in both jaws but not extending outside, teeth on palatines and vomer. Five free pectoral filaments.

Colour: Body golden, with faint lines along rows of scales. Fins yellowish.

Distribution. One of the most common species in the waters of Pakistan, India and Ceylon. Attains 4 feet in length and much esteemed as food. (Fig. 3).

Local name. Lackwa; Ranwas.

In the Bay of Bengal, the fishing season starts in early October and lasts till March. The bulk of the catch of sea fish comprises *Polynemus indicus* and *Eleutheronema tetradactylum*, which are popularly known as 'Lackwa'. These fishes are caught on the Kalidaha banks and other places with stake nets and since there is no satisfactory transport arrangement, the fish is dried in the sun and brought to the market in that condition.

On the west coast, these fishes appear in schools from August to October and again in greater numbers during the months of March to June, extending sometimes to July. The more common gear is the gill-net made of cotton twine and of parachute cord, but when schools are contacted, the fishermen join

their gill-nets and form a sort of improvised purse seine.

Although thread-fins are found everywhere on the west coast, the concentration is towards the Cutch border, and their distribution confined mostly upto the south-east of the river Indus. Owing to the distance and lack of transport facilities, the fishes are salted on boats and brought to the market from where they are exported to foreign countries. Only a small quantity is consumed fresh and this is confined to catches which are made near Karachi.

It is estimated that the catch of this group is at least one-tenth of the total landing of sea fish on the west coast. The predominant members of this group are *Eleutheronema tetradactylum*, *Polynemus indicus* and to a lesser extent *Polynemus plebeius*, which is caught on the surf. The threadfins yield swim-bladder or crude isinglass which is simply washed, dried and exported to foreign countries, specially to the United Kingdom and Hong Kong. This group is of great importance and is capable of yielding more food and foreign exchange if the methods of capture and craft are improved and quick transport facilities are provided. Possibilities for refining the crude isinglass and preparing it in the form of gelatin may also be explored.

Other fishes which yield isinglass are the cat-fishes and the Sciaenids. Scales, head and skin of fishes are also good source for the preparation of glue and gelatin.