

**ON AN INSTANCE OF REDUCED NUMBER OF ANAL SPINES IN
SCOLOPSIS PHAEOPS (BENNETT) (SCOLOPSIDAE—PISCES)**

APART from the principal character of possessing a backwardly directed spine on the suborbital bone, which is also serrated below, one of the features of the family Scolopsidae is the presence of three spines in the anal fin. Occasionally instances are met with in fishes where the number of spines in the anal fin are reduced. Such an instance of abnormality was recorded in *Selaroides leptolepis* (Cuvier and Valenciennes) by Tandon (1959) and, as far as the author is aware, has not been reported in fishes belonging to other genera.

In the course of the examination of the fishes in the collection of the Central Marine Fisheries Research Centre at Port Blair, a male specimen of *Scolopsis phaeops* measuring 202 mm. in standard length (weight 274 g.) was observed to possess only two spines in the anal fin. This specimen as well as a normal specimen with three anal spines, measuring 169 mm. in standard length (weight 131 g.) have been taken by hook and line from the sea in between Aberdeen Jetty, Port Blair and Ross Island. Unfortunately the exact date of collection of these two specimens is not available. An examination of the abnormal specimen reveals that it resembles very closely the normal specimen in all morphometric measurements expressed in thousands of standard length and meristic counts except in the reduced number of spines in the anal fin. No sign of injury or scar was noticed between the vent and the first anal

Spine. Some measurements of the two specimens, converted into thousands of standard length are given below :

	with 3 anal spines	with 2 anal spines
Distance from snout to first anal spine ..	680	678
Distance from vent to first anal spine ..	24	25
Length at base of anal fin ..	148	148
Length of first anal spine ..	47	45
Length of second anal spine ..	83	79
Length of third anal spine ..	95	—

The close similarity of measurements in both the specimens for the distance from snout to first anal spine as well as the distance from vent to first anal spine suggests that it is the third anal spine and not the first one that is missing in the abnormal specimen. It may also be mentioned that in the normal specimen, the third anal spine which is the longest, measures as long as the diameter of the eye whereas in the abnormal specimen the longest anal spine i.e. the second is much shorter than the diameter of the eye.

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Mouth is inferior, the cleft of which extends upto below the middle of eye. Snout is blunt. Upper jaw is longer than lower jaw. No mandibular barbel. Maxillary concealed and extended upto the middle of eye.

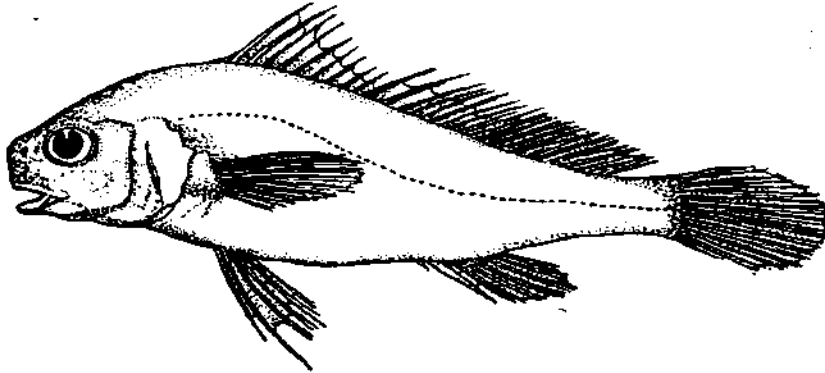


FIG. 1. *Johnius novae-hollandiae* (Steindachner)

Dorsally grayish brown and laterally silvery. Margin of first dorsal is dark, otherwise all fins are more or less light grey in colour.

Scales in opercles and cheeks are cycloid and in other parts of body, including the dorsal part of head, they are ctenoid.

In the upper jaw there is one outer row of stronger and larger teeth and an inner band of villiform teeth. Lower jaw has a broad band of villiform teeth narrowing posteriorly (Fig. 2).

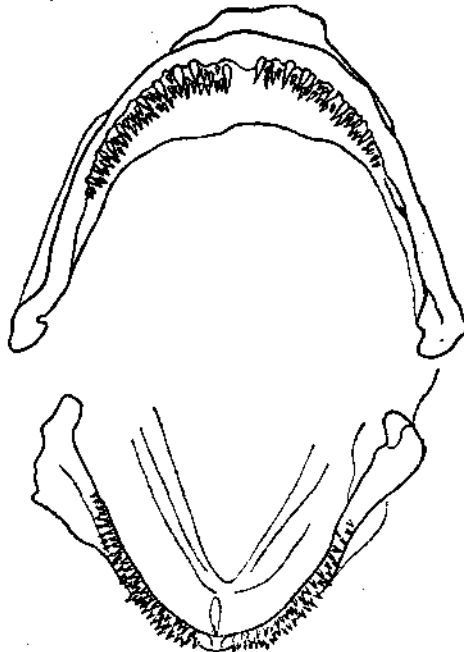


FIG. 2. *Johnius novae-hollandiae* : inside view of upper and lower jaws showing the teeth orientation.

Pectorals originate more or less below the origin of first dorsal fin. Ventrals originate below the first dorsal fin and just behind the pectoral origin. The spinous first dorsal fin is more or less continuous with the second dorsal fin and is not separated by deep notch. 2nd and 3rd spines of first dorsal are largest and are about half of head length. Anal originates below the 10th or 11th ray of the second dorsal. The second anal spine is stronger and about as long as head and about 2/3rd of the length of first anal fin ray.

The frequencies of meristic characters obtained for about fifty specimens are presented in the following. The number in brackets indicates the number of specimens.

Pectoral f.r. : 15(3) 16(34) 17(4).

1st Dorsal spines : IX(3) X(48).

2nd Dorsal rays : 25(1) 26(13) 27(14) 28(17) 29(4) 30(1).

Anal f.r. : 6(1) 7(6) 8(44).

Lateral line scales : 45(3) 46(2) 47(5) 48(15) 49(11) 50(5) 51(1).

Gill rakers (lower arm) : 9(1) 10(16) 11(34).

In meristic characters, teeth arrangement, origin of anal fin and scales, this species can be distinguished from the other sciaenid species (*vide* Weber and de Beaufort, 1936).

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