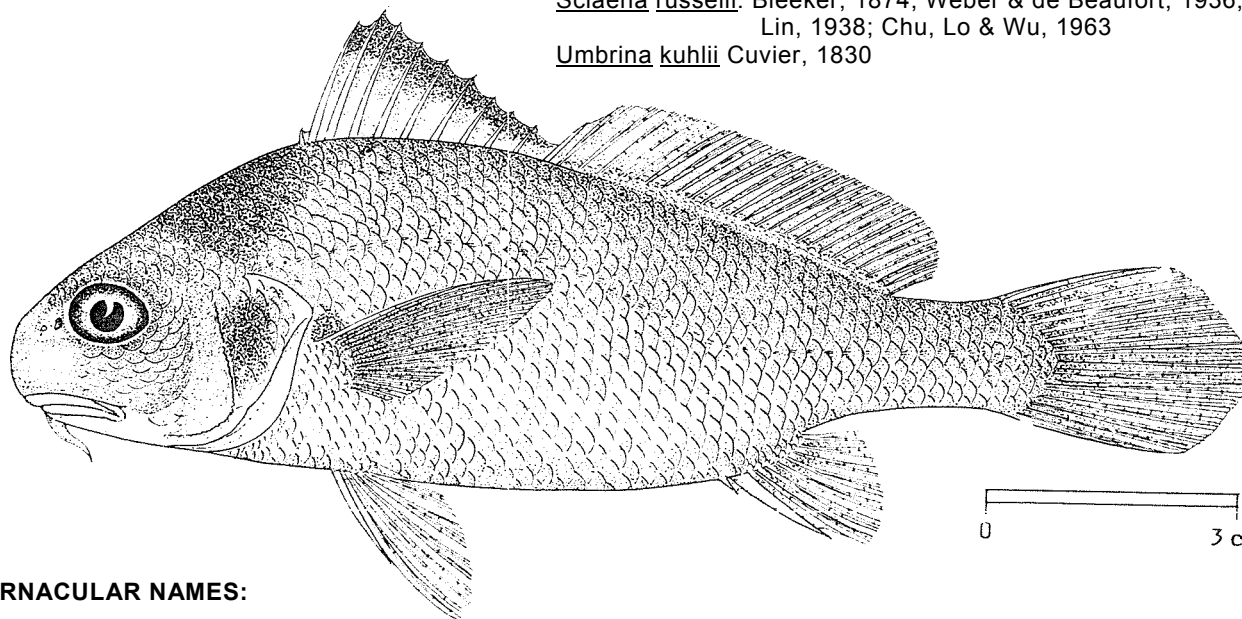


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : SCIAENIDAE

FISHING AREA 51
(W. Indian Ocean)*Dendrophysa russelli* (Cuvier, 1830)

OTHER SCIENTIFIC NAMES STILL IN USE :

Umbrina russelli Cuvier, 1830*Sciaena russelli*: Bleeker, 1874; Weber & de Beaufort, 1936;
Lin, 1938; Chu, Lo & Wu, 1963*Umbrina kuhlii* Cuvier, 1830

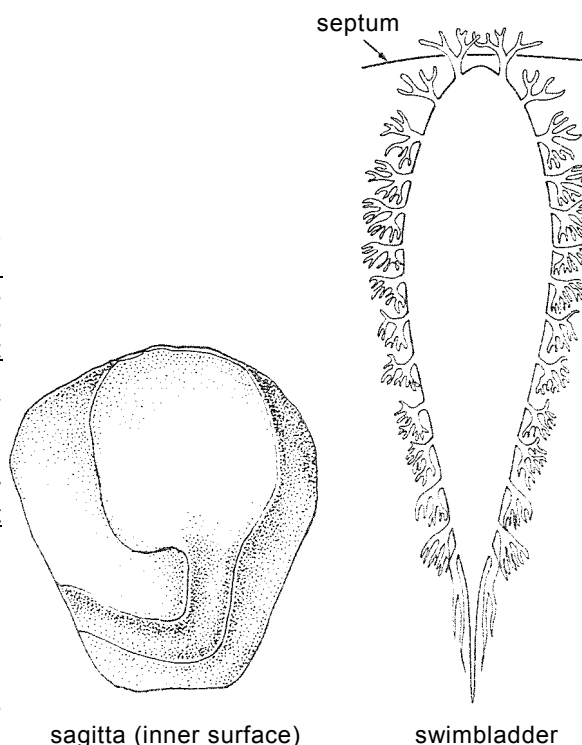
VERNACULAR NAMES:

FAO : En - Goatee croaker
Fr - Bourrugue chèvre
Sp - Lambe chivato

NATIONAL:

DISTINCTIVE CHARACTERS :

A fairly small species with an oblong body, its depth 3 to 4 times in standard length. Snout rounded and projecting slightly beyond tip of upper jaw; mouth inferior; upper jaw less than half of head length; a single barbel on chin; rostral pores 3, marginal pores 5; mental pores 5; median mental pore at the base of the solid, pointed mental barbel; teeth not well differentiated into large and small, the large ones not widely spaced and forming an outer series in upper jaw; no canine teeth; sagitta (large earstone) with a tadpole-shaped impression of which the "tail" is bent at a sharp angle and terminally cutting into the ventral edge; gillrakers on lower limb of first arch 8 to 10. Dorsal fin with 10 spines, followed by a deep notch, second part of the fin with 1 spine and 25 to 28 soft rays; pectoral fins moderately long, about 3/4 of head length; anal fin with 2 spines and 7 soft rays, the second spine strong and a little less than half of head length: caudal fin rhomboid. Scales cycloid (smooth) on front part of head and lower parts of dorsal and anal fins, elsewhere ctenoid (rough to touch); lateral-line scales reaching to tip of caudal fin. Swimbladder carrots-shaped, with about 14 to 17 pairs of arborescent appendages, the first entering the head, the last bifid and parallel to tubular end of bladder.



sagitta (inner surface)

swimbladder

Colour. back grey, shading, to white on belly; a dark brown broad band on nape; opercle with a deep blue blotch; upper edge of spiny part of dorsal fin dark.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Nibea albida: mouth nearly terminal and a pair of barbells on chin.

Johnius dussumieri: swimbladder hammer-shaped and second anal spine shorter; scales cycloid.

Umbrina species: a pore at tip of barbel (not at its base); also, swimbladder without appendages.

SIZE :

Maximum: 25 cm; common to 15 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Southwest coast of India and Sri Lanka. Eastward extending to Australia.

Found in coastal waters, down to 40 m depth.

Feeds on small fishes and invertebrates.

PRESENT FISHING GROUNDS:

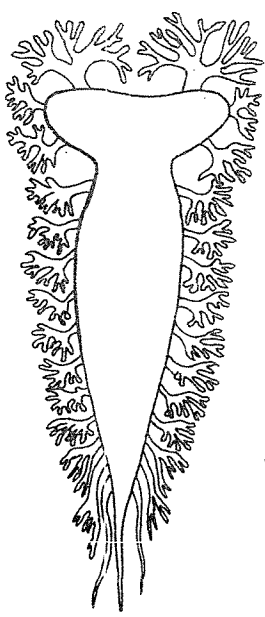
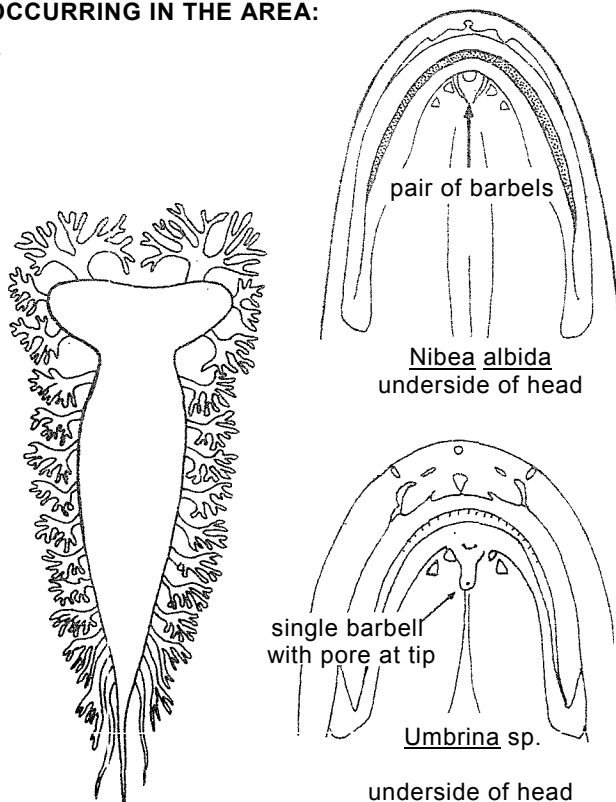
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

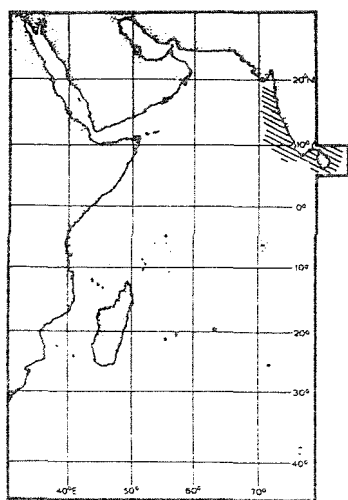
Separate statistics are not recorded for this species within the area.

Caught with bottom trawls, gillnets and traps.

Marketed fresh, also dried salted.



Johnius sp.
swimbladder

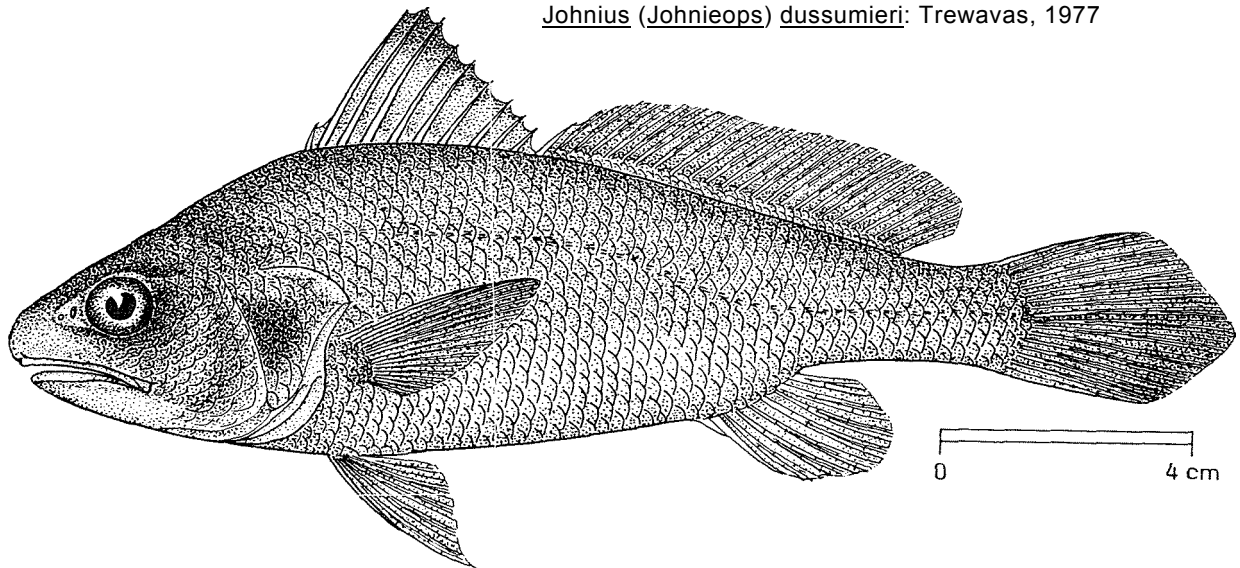


FAO SPECIES IDENTIFICATION SHEETS

FAMILY : SCIAENIDAE

FISHING AREA 51
(W. Indian Ocean)Johnieops dussumieri (Cuvier, 1830)

OTHER SCIENTIFIC NAMES STILL IN USE:

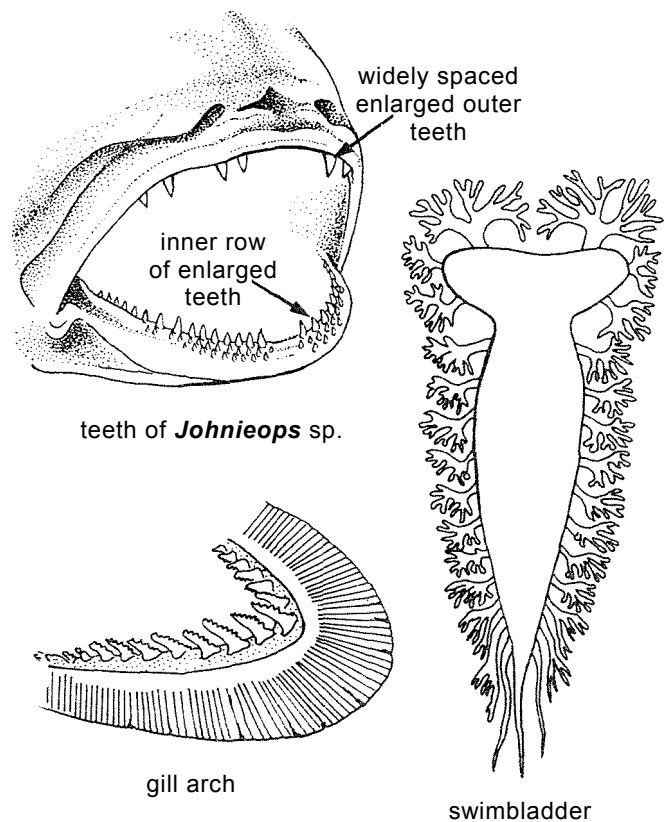
Corvina dussumieri Cuvier, 1830Corvina dorsalis Peters, 1855Johnius (Johnieops) dussumieri: Trewavas, 1977

VERNACULAR NAMES:

FAO : En - Dussumier's croaker:
 Fr - Courbine de
 Sp - Corvina de Dussumier

DISTINCTIVE CHARACTERS:

A fairly small species, with a prominent, swollen snout projecting a little beyond upper jaw. Mouth small and subterminal; rostral pores 5, marginal pores 5; mental pores 5; teeth in narrow bands, moderately differentiated in both jaws into large and small, the large ones forming the outer series in upper jaw and the inner series in the lower; enlarged upper jaw teeth well spaced anteriorly; no canines; sagitta (large earstone) with a tadpole-shaped impression, of which the "head" is obliquely truncate and the "tail" is deepened as a hollow cone; gillrakers short, curved and coarsely toothed, 12 to 16 on lower limb of first arch. Dorsal fin with 9 or 10 spines, followed by a deep notch, second part of fin with 1 spine and 25 to 30 soft rays; pectoral fins moderately long, about 3/4 of head length; anal fin with 2 spines and 7 or 8 soft rays, the second spine moderately long; caudal fin rhomboid. Scales cycloid (smooth) on lower part of head, elsewhere ctenoid (rough to touch); lateral line scales reaching to tip of caudal fin. Swimbladder hammer-shaped, with 14 or 15 arborescent appendages, the first branching in head and sending a palmate branch to the front of pectoral arch.



Colour: dusky brown on back, lighter below; upper part of dorsal fin black and a black spot at base of pectoral fin; opercular opening with a black blotch.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

J. Johnieops vogleri: teeth in both jaws well differentiated, upper jaw with 2 strong teeth anteriorly; lower gillrakers stumpy, 9 to 12 (12 to 16 in J. dussumieri); mouth terminal,

J. sina: teeth well differentiated on both jaws, upper jaw without strong anterior teeth on each side; lower gillrakers slender, 13 to 15; mouth subterminal.

J. aneus: teeth in jaws slightly differentiated, upper jaw without strong teeth anteriorly.

J. macrorhynchus: teeth weakly differentiated; lower gillrakers stumpy, 5 to 8; mouth inferior.

Johnius species: lower jaw teeth uniformly villiform.

SIZE:

Maximum: 40 cm; common to 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

West coast of India and southeast coast of Africa; outside Fishing Area 51, in the Andaman Sea (other records doubtful).

Found in inshore and coastal waters, down to 40 m depth.

Feeds on invertebrates and small fishes.

PRESENT FISHING GROUNDS:

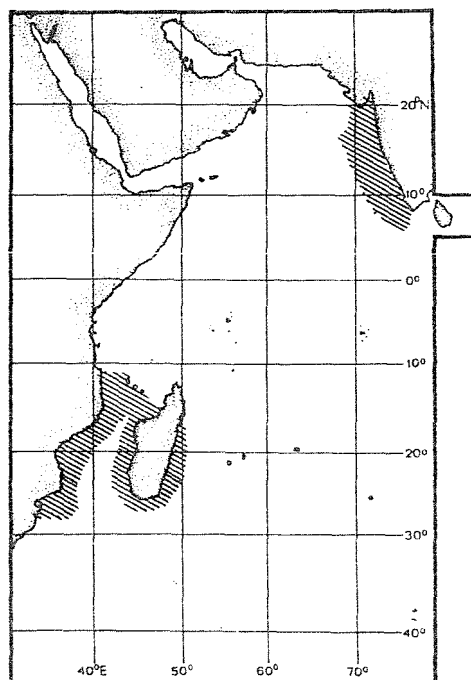
Coastal waters throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species within the area.

Caught with bottom trawls, gillnets and bag nets.

Marketed fresh, also dried salted.



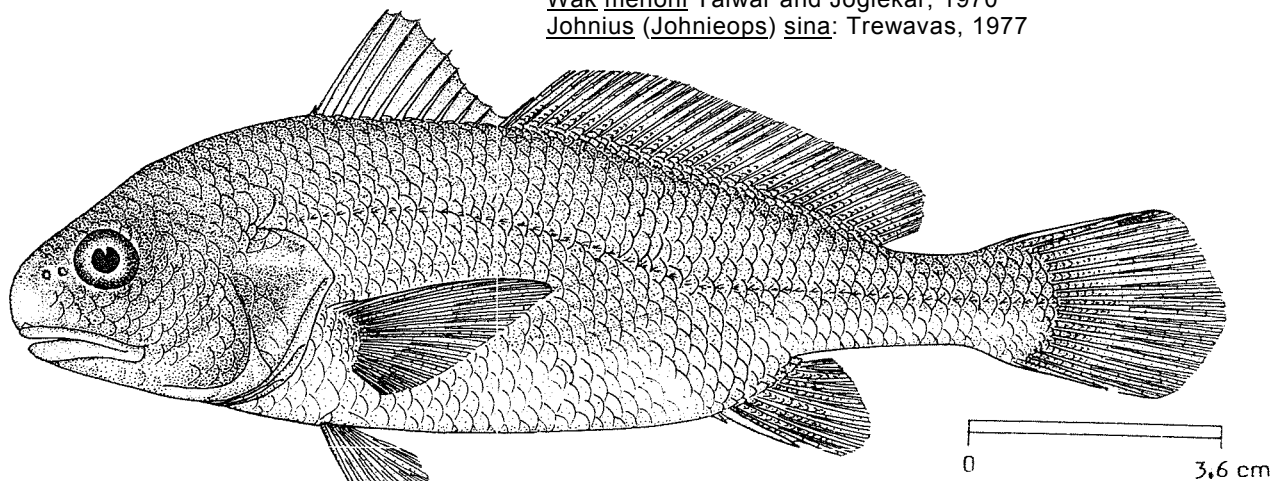
FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCIAENIDAE

FISHING AREA 51
(W. Indian Ocean)

Johnieops sina (Cuvier, 1830)

OTHER SCIENTIFIC NAMES STILL IN USE:

Corvina sina Cuvier, 1830*Sciaena parva* Gilchrist & Thompson, 1908*Wak sina*: Chu, Lo & Wu, 1963*Wak menoni* Talwar and Joglekar, 1970*Johnius (Johnieops) sina*: Trewavas, 1977

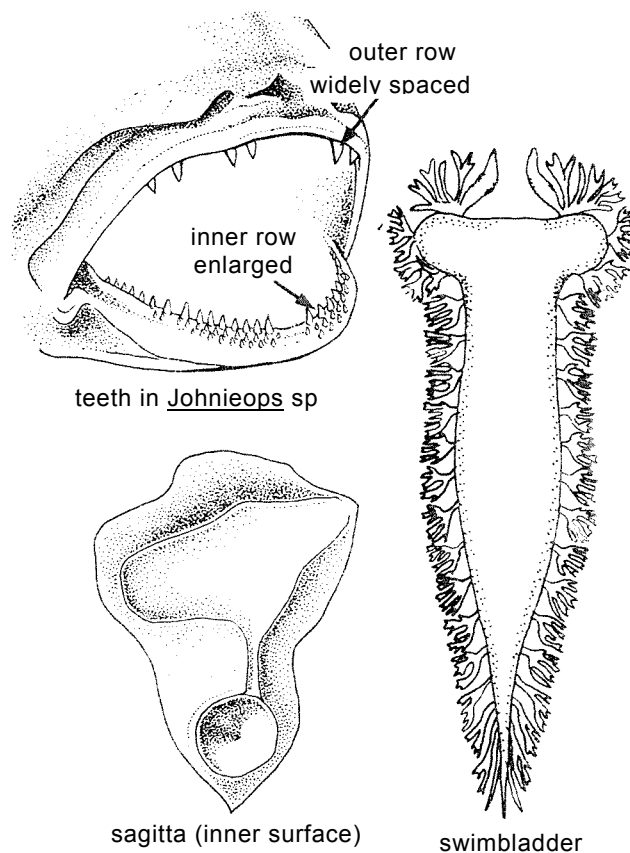
VERNACULAR NAMES:

FAO : En - Sin croaker
 Fr - Courbine chinoise
 Sp - Corvina china

NATIONAL:

DISTINCTIVE CHARACTERS:

A fairly small species. Snout rounded by rostr projecting, not greatly swollen; mouth large, a little inferior; upper jaw extending to below hind margin of pupil and about 2/5 of head length, lower jaw not quite 1/2 of head length; rostral pores 5, marginal pores 5; mental pores in 3 pairs, the anterior close together in a pit or joined by a groove ("false five"); teeth in very narrow bands moderately differentiated into large and small in both jaws, the large ones forming the outer series in upper jaw, and the inner posterior series in lower jaw; enlarged teeth in both jaws well spaced; no canines; sagitta (large earstone), with a tadpole-shaped impression, of which the "head" is obliquely truncate and the "tail" is deepened as a hollow cone; gillrakers slender and finely toothed, 13 to 15 on lower limb of first arch. Dorsal fin with 9 or 10 spines, followed by a deep notch, second part of fin with 1 spine and 26 to 29 soft rays; pectoral fins moderate, about 3/4 of head length; anal fin with 2 spines and 7 soft ray: the second spine moderately long, about 1/3 of head length; caudal fin rhomboid. Scales cycloid (smooth) on head, elsewhere ctenoid (rough to touch); lateral line scales reaching to tip of caudal fin. Swimbladder hammer-shaped, with 12 to 17 pairs of arborescent appendages, the first branching into head and sending a palmate branch to the front of pectoral arch.



Colour: no distinctive coloration, a steel blue blotch on opercle. Upper 2/3 of first dorsal dark grey.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

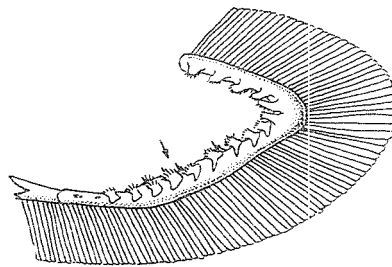
Johnieops vogleri: teeth well differentiated in both jaws; upper jaw with 2 strong anterior teeth; lower gillrakers stumpy, 4 to 12 (13 to 15 in J. sina); mouth terminal (a little inferior in J. sina).

J. dussumieri: teeth in both jaws not well differentiated, upper without strong anterior teeth; lower gillrakers slender, 12 to 16; mouth subterminal, snout swollen.

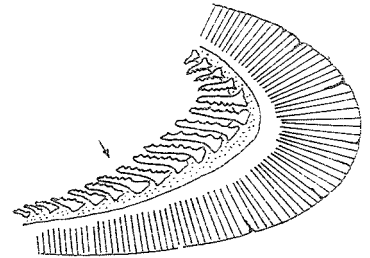
J. aneus: teeth slightly differentiated in both jaws, upper jaw without strong anterior teeth; mouth slightly inferior.

J. macrorhynchus: teeth in lower jaw weakly differentiated; lower gillrakers stumpy, 5 to 8; mouth inferior.

Johnius species: lower jaw teeth uniformly villiform.



J. vogleri



J. sina

first gill arch

SIZE:

Maximum: 30 cm; common to 13 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

From Natal eastward to India. Also in the Eastern Indian ocean and Western Central Pacific to the north coast of Australia.

Found in inshore waters, down to 40 m depth.

Feeds on small crustaceans.

PRESENT FISHING GROUNDS:

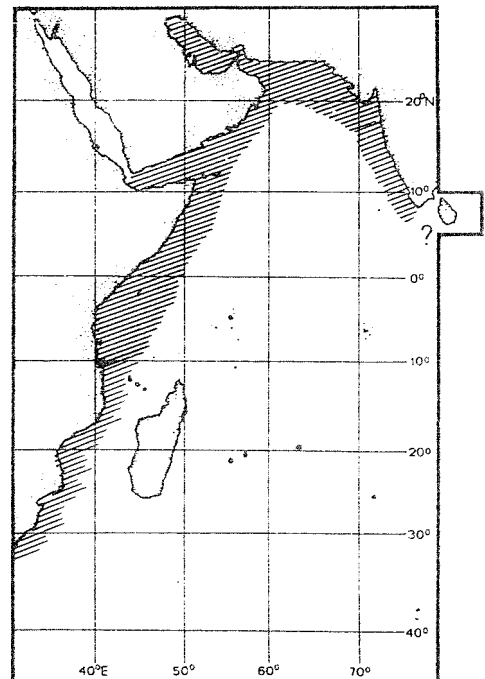
Coastal waters throughout its range; forms a fishery along the northwest coast of India.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not recorded for this species within the area.

Caught with bottom trawls, bottom-set gillnets and bag-nets.

Marketed fresh dried salted.

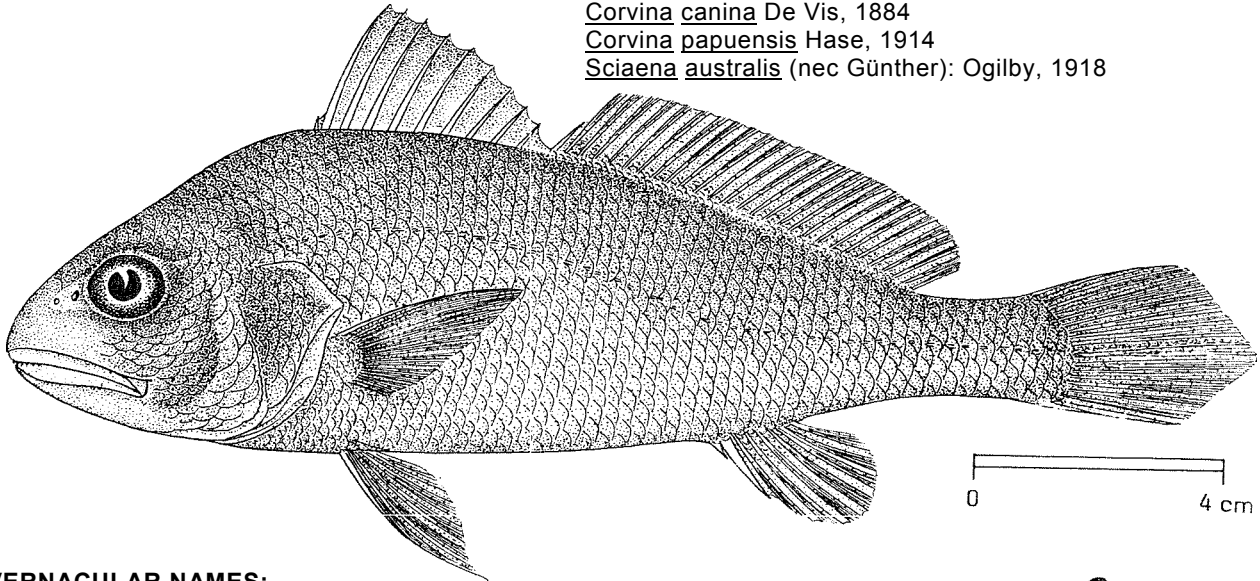


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCIAENIDAE

FISHING AREA 51
(W. Indian Ocean)*Johnnieops vogleri* (Bleeker, 1853)

OTHER SCIENTIFIC NAMES STILL IN USE:

Sciaena sina: Day, 1876 (in part)*Sciaena siamensis* Hora, 1924*Corvina canina* De Vis, 1884*Corvina papuensis* Hase, 1914*Sciaena australis* (nec Günther): Ogilby, 1918

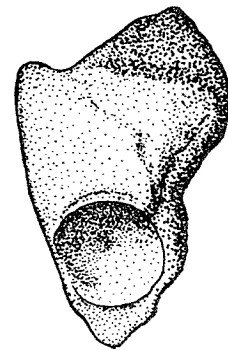
VERNACULAR NAMES:

FAO : En - Sharptooth hammer croaker
Fr - Courbine dentue
Sp - Corvina dientusa

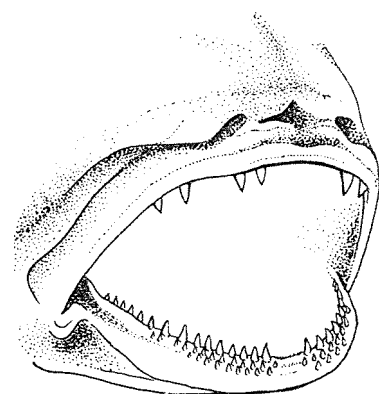
NATIONAL:

DISTINCTIVE CHARACTERS:

A fairly small species. Snout rounded but, not projecting, not greatly swollen; eye large; mouth large, a little inferior, the upper jaw long, extending to below hind margin of pupil and almost $\frac{1}{2}$ of head length, lower jaw about $\frac{1}{2}$ of head length; rostral pores minute, 3; marginal pores 5; mental pores in 3 pairs, the anterior close together, joined by a groove; teeth in narrow bands, well differentiated into large and small in both jaws, the large ones forming the outer series in upper jaw, the inner series in the lower; enlarged teeth in upper jaw widely spaced; no canines; sagitta (large earstone) with a tadpole-shaped impression, of which the "head" is obliquely truncate and the "tail" is deepened as a hollow cone; gillrakers short, curved and coarsely toothed in adult, 9 to 12 on lower limb of first arch. Dorsal fin with 10 spines, followed by a deep notch, second part of fin with 1 spine and 26 to 31 soft rays; pectoral fin moderately long, about $\frac{3}{4}$ of head length; anal fin with 2 spines and 7 soft rays, the second spine short; caudal fin rhomboid. Scales cycloid smooth on head, elsewhere ctenoid (rough to touch); scales covering lower parts of both dorsal and anal fins; lateral line scales reaching to tip of caudal fin. Swimbladder hammer-shaped, with 14 to 16 pairs of arborescent appendages, the first entering the head and sending a palmate branch to front of pectoral arch.



sagitta (inner surface)

teeth of *Johnnieops* sp.

Colour: no distinctive coloration.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

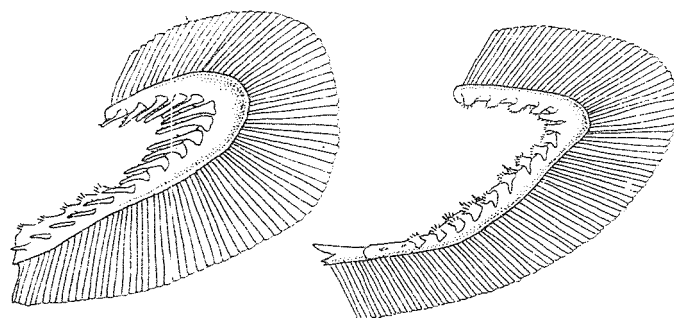
Johnieops sina: teeth in both jaws well differentiated, upper jaw without strong anterior teeth on each side; lower gillrakers slender, 13 to 15 (9 to 12 in J. vogleri); mouth subterminal.

J. dussumieri: teeth in both jaws not well differentiated, upper without strong teeth; lower gillrakers slender, 12 to 16 (9 to 12 in J. vogleri); mouth subterminal, snout swollen.

J. aneus: teeth slightly differentiated in both jaws, upper jaw without strong teeth on each side; mouth slightly inferior.

J. macrorhynchus: teeth in jaws weakly differentiated; lower gillrakers stumpy, 5 to 8; mouth inferior.

Johnius species: lower jaw teeth uniformly villiform.



Johnieops dussumieri

J. vogleri

first gill arch

SIZE:

Maximum: 30 cm; common to 20 cm.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Within the area, known from the Gulf of Oman, and western coast of India. Also in the Eastern Indian Ocean and the Western, Central Pacific to the northern coast of Australia.

Inhabits shallow coastal waters.

Feeds on small fishes and crustaceans.

PRESENT FISHING GROUNDS :

Coastal waters throughout its range; forms a fishery on the northwest coast of India.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species within the area.

Caught with bottom trawls and gillnets.

Marketed fresh; also dried salted.

