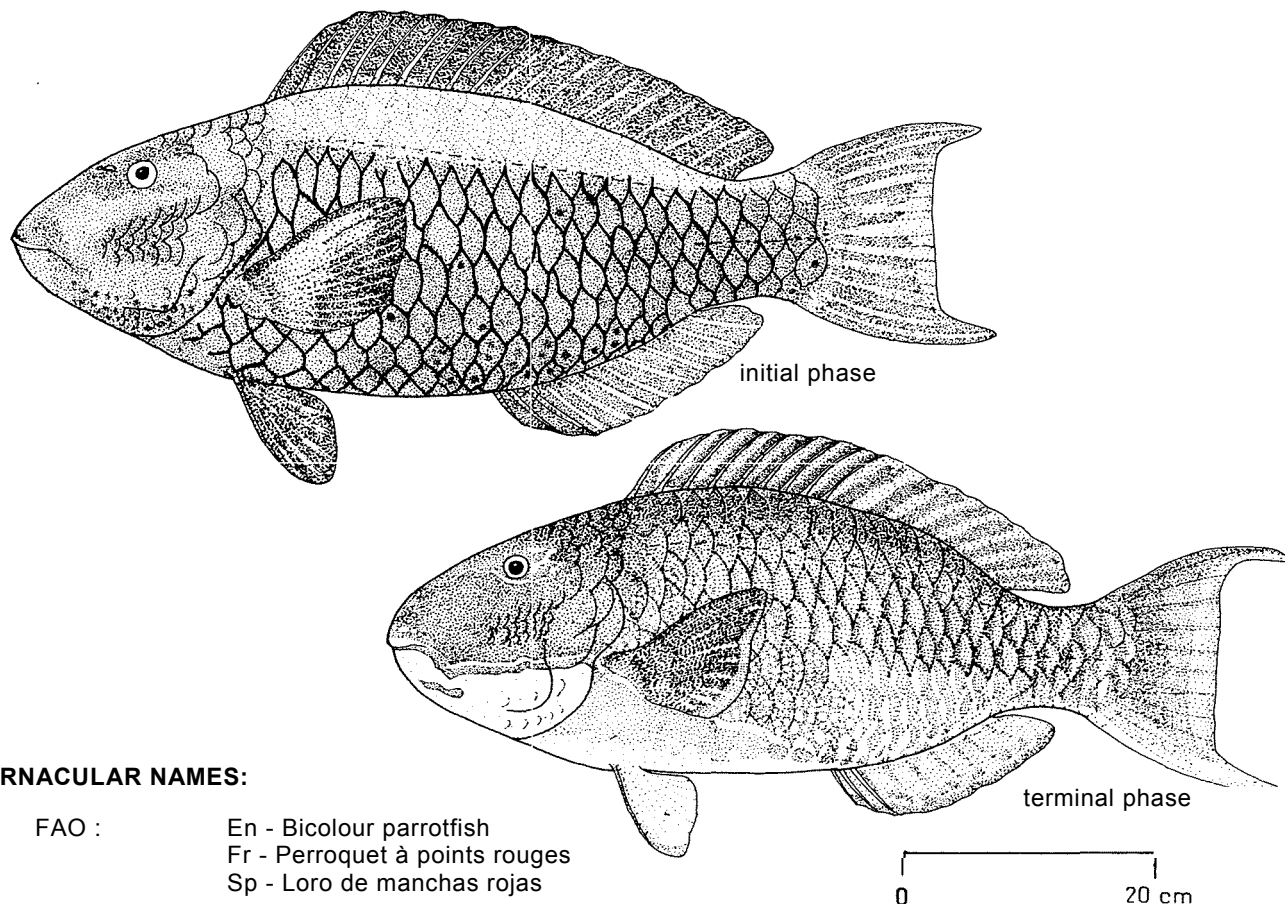


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCARIDAE

FISHING AREA 51
(W. Indian Ocean)Cetoscarus bicolor (Rüppell, 1828)OTHER SCIENTIFIC NAMES STILL IN USE : Bolbometopon bicolor by Schultz, 1969

VERNACULAR NAMES:

FAO : En - Bicolour parrotfish
 Fr - Perroquet à points rouges
 Sp - Loro de manchas rojas

NATIONAL:

DISTINCTIVE CHARACTERS:

Body depth at pelvic fin base contained about 2.8 times in standard length. Teeth fused in upper and lower jaws to form dental plates; plates rough to touch, the individual teeth clearly visible over entire surfaces of plates; lips covering 3/4 to all of dental plates; no canine teeth on dental plates; 6 (occasionally 5 to 7) median predorsal scales; 3 rows of cheek scales with 5 to 8 scales in dorsal row, 5 to 9 scales in middle row and 1 to 8 scales in ventral row (the small anterior predorsal and cheek scales partially imbedded in large individuals); posterior nostril large and oval. Pectoral fins with 12 (occasionally 13) branched fin rays; caudal fin slightly rounded to truncate in young, emarginate to deeply emarginate in adults.

Colour: 2 adult colour phases; initial phase - body above level of eye yellow, below bluish grey, the scales edges with black, the centres with small black spots and short irregular lines; head purplish to reddish brown with some small black spots posteriorly and ventrally; fins reddish to purplish brown, the caudal fin with a pale yellow crescent midposteriorly; front of dorsal fin, and rays on underside of pectoral fins may be yellow; dental plates white in both phases; terminal phase - green, the edges of the scales orange; scales anteriorly on body with numerous small orange spots; an orange to pink line from edge of upper lip to pectoral fin base, the head above this line green with orange to pink spots as on anterior body except for irregular green band through upper part of

eye; a broad green band (narrow on Red Sea specimens with a second shorter band below) across lower cheek adjacent to orange line, continuing broadly on thorax and narrowing as it passes posteriorly on abdomen to origin of anal fin; ventral part of head, thorax and abdomen orange; dorsal fin blue with an orange streak paralleling the rays on each interradiation membrane; anal fin orange with a blue border and some scattered blue spots near outer part of fin; caudal fin orange with a pale orangish or yellowish crescentic region midposteriorly, preceded by a band of blue-green or a series of blue-green spots; upper and lower edges of caudal fin blue; pectoral fins with dark purplish rays and clear membranes, the axil yellow; pelvic fins orange with purplish rays and clear membranes, the axil yellow; pelvic fins orange with blue leading edge. Juveniles distinctly coloured; white with a broad dark-edged orange bar on head enclosing eye and most of postorbital head; a large yellow to orange-edged black spot anteriorly in dorsal fin; caudal fin broader edged with orange-yellow.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Bolbometopon muricatum: a pronounced hump on forehead; 14 branched pectoral fin rays (12 in C. bicolor); large specimens very deep-bodied; body uniform blue-green.

Other genera of Scaridae: teeth either not fused (Calotomus), or teeth fused into dental plates with smooth external surfaces (Hipposcarus, Scarus), or lower dental plates enclosing the upper plates (Leptoscarus); all differ in coloration.

SIZE:

Maximum: about 90 cm total length, 75 cm standard length, about 8 kg (estimated).

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Occurs from the Red Sea and coast of East Africa (to at least 15°S), Madagascar, the Seychelles, La Réunion, Chagos Archipelago and the Maldives. Also found in the Eastern Indian Ocean/Western Central Pacific.

Found close to regions of deep water on coral reefs.

A benthic grazer of algae. Usually solitary or in groups of terminal phase with a few initial phases.

PRESENT FISHING GROUNDS:

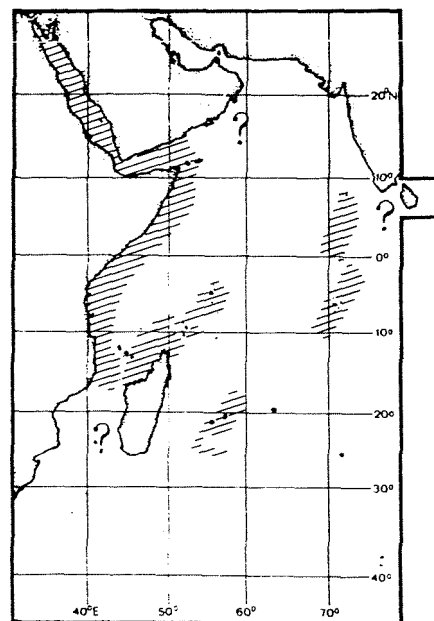
Probably occasionally caught throughout most of its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

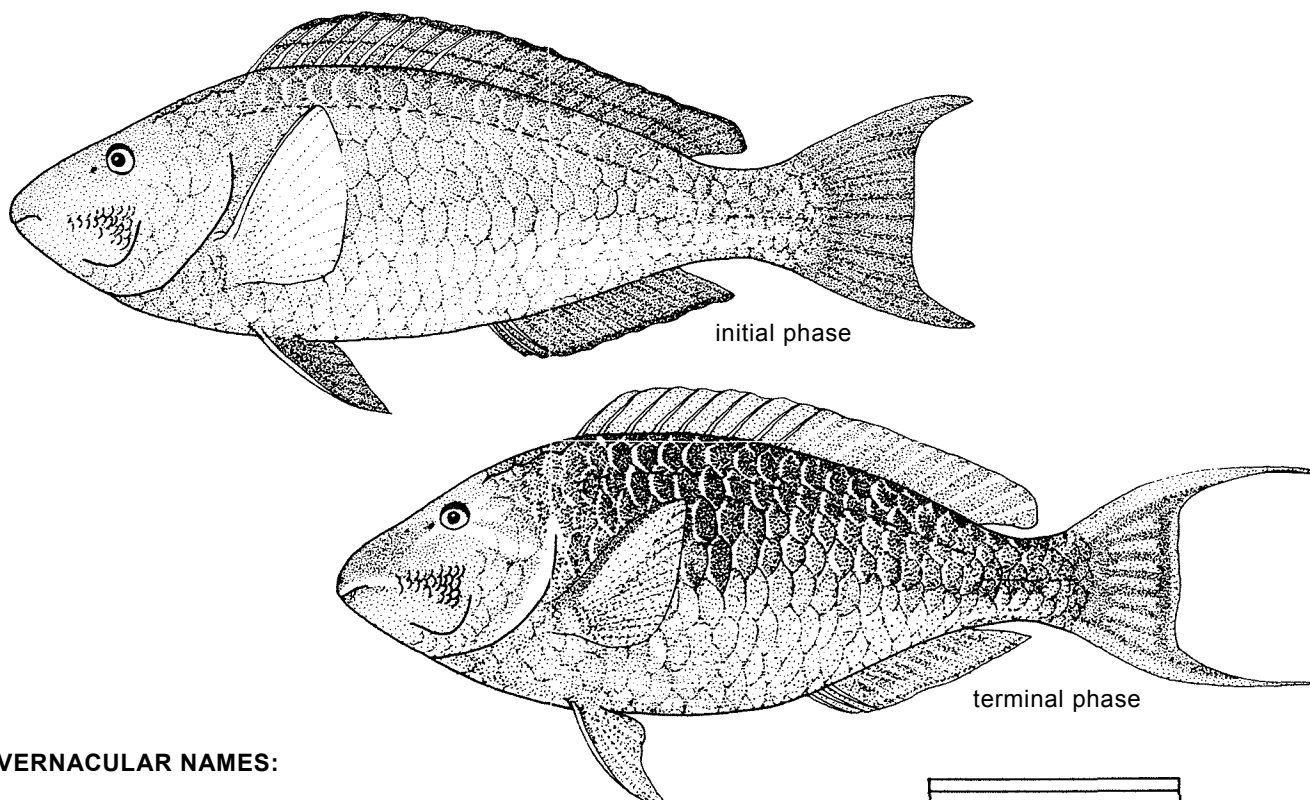
Caught mainly with traps, nets and other kinds of artisanal gear.

Marketed mostly fresh.



FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCARIDAE

FISHING AREA 51
(W. Indian Ocean)Hipposcarus harid (Forsskål, 1775)OTHER SCIENTIFIC NAMES STILL IN USE : Hipposcarus harid vexillus Smith, 1959
Scarus harid by Schultz, 1969

VERNACULAR NAMES:

FAO : En - Candelamoa parrotfish
Fr - Perroquet candelamoa
Sp - Loro candelamoa

NATIONAL:

DISTINCTIVE CHARACTERS:

Body depth at pelvic fin base contained 2.7 to 2.9 times in standard length. Upper and lower head profiles slope gradually, producing a characteristic long snout. Teeth fused to form dental plates in upper and lower jaws; upper jaw encloses lower with mouth closed; dental plates smooth, the individual teeth only visible at margins; dental plates narrow, 1.5 to 2.0 times in orbit diameter, lips covering nearly all of dental plates; upper dental plate with 1 or 2 canines posteriorly; 4 (occasionally 3) median predorsal scales; 3 rows of cheek scales (4 in Western Indian Ocean specimens), the dorsal row with 7 to 10 scales, the 2nd row with 6 to 10 scales, 3rd row with 2 to 8 scales, 4th row (if present) with 2 to 9 scales; cheek scales small, in a subtriangular patch. Pectoral fins with 13 (occasionally 12 or 14) branched rays; caudal fin emarginate in small specimens, becoming markedly so in large specimens, the lobes often greatly produced in the terminal phase.

Colour: 2 adult colour phases; initial phase - light tan, the edges of the scales paler, shading to whitish ventrally; dorsal edge of eye blue; dorsal and anal fins pale yellowish with light blue or blue-green borders (some specimens with a blue longitudinal band in middle of fins); caudal fin pale yellowish, the rays prominently streaked with light blue; pectoral fins pale with yellowish rays, the second ray pale orange, edged basally with light blue; pelvic fins light orangish with a pale blue leading edge; dental plates white in both phases; terminal phase - body

green, the scales edged in pale orange except on sides of abdomen and thorax which are solid green; a row of blue spots on abdomen on scale row below pectoral fin base, with a few blue spots below this in region of anal fin origin; thorax and abdomen pale orange midventrally; dorsal part of head green with 2 irregular pale orange-yellow bands extending anteriorly from eye and 3 posteriorly; cheek, side of snout and ventral part of head pale orange; lips edged in orange, submarginally blue (in Indian Ocean but not Red Sea individuals, the orange of lips continues from the corner of the mouth to opercular margin, dividing the head into a dorsal green part and a ventral pale green region); dorsal and anal fins light orange-yellow with blue borders and 1 or 2 longitudinal rows of blue spots in middle of fins; caudal fin blue with a broad band of orange in each lobe and a short longitudinal streak of orange on central part of median 7 rays; pectoral fins with upper margin blue, followed by a zone of deep yellow, rest of fin pale orangish; pelvic fins light orange with a blue lateral edge.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

No other scarid combines such narrow dental plates (their height 1.5 to 2.0 times in orbit diameter) with small cheek scales in a subtriangular patch, and a relatively pointed snout. Furthermore all other species differ in coloration.

SIZE:

Maximum: 58 cm total length, 42 cm standard length, 2.3 kg; terminal phase usually larger than 30 cm standard length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

Recorded from the Red Sea and the east African coast (south at least to Mozambique Channel) eastward to Madagascar, the Seychelles, Chagos Archipelago, Maldives and Sri Lanka

In coastal regions associated with coral reefs and reef flats. Colour variation has been recorded between Red Sea and Indian Ocean populations. Closely related to the Western Pacific species *H. longiceps*.

Feeds on benthic algae.

PRESENT FISHING GROUNDS:

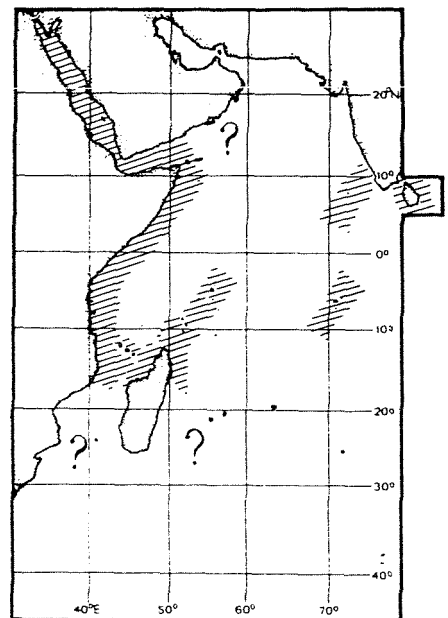
Probably caught throughout most of its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with traps, nets and other kinds of artisanal gear.

Marketed mostly fresh.

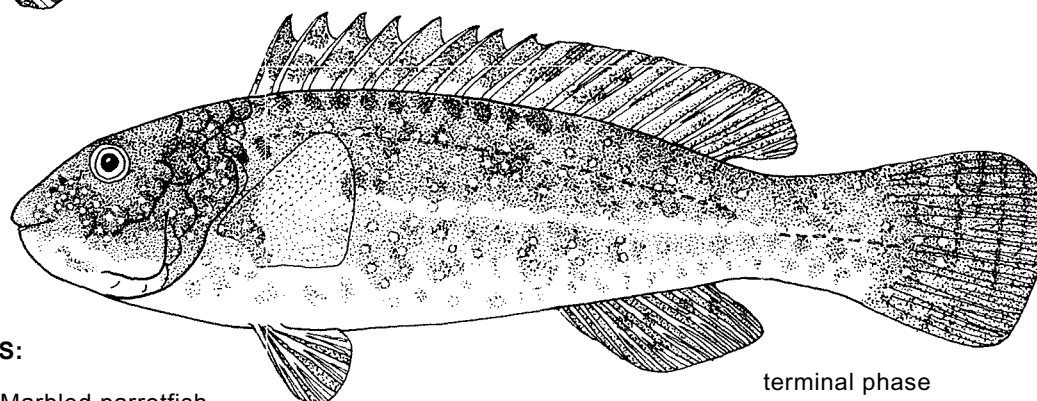
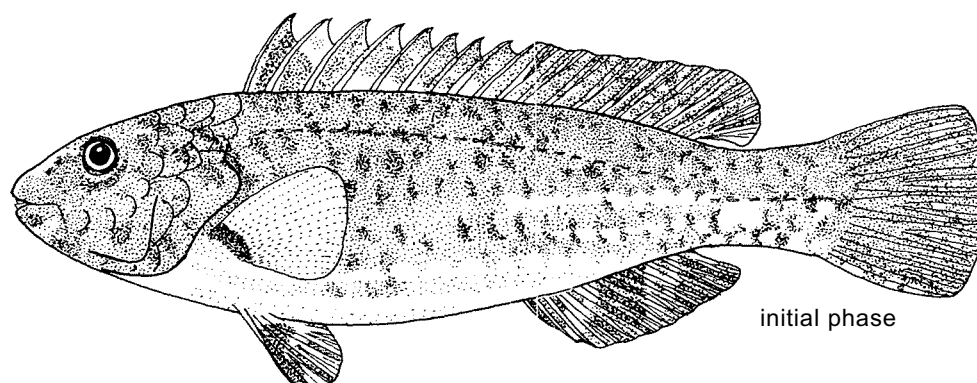


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCARIDAE

FISHING AREA 51
(W. Indian Ocean)Leptoscarus vaigiensis (Quoy & Gaimard, 1824)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Marbled parrotfish
Fr - Perroquet marbré
Sp - Loro jaspeado

NATIONAL:

DISTINCTIVE CHARACTERS:

Body somewhat elongate, the depth contained about 2.8 to 3.8 times in standard length. Teeth fused into a beak; upper dental plates enclosed by the lower plates when mouth closed; mature males with 1 to 4 canines projecting laterally from upper dental plates; 1 row of cheek scales below eye, with 3 to 6 (usually 5) scales in this row; 3 to 5 (usually 4) median predorsal scales. Pectoral fin with 11 (occasionally 12) branched rays; caudal fin slightly rounded at all sizes.

Colour: 2 adult colour phases; **initial case** - green-brown, darker above, whitish below; head and body covered with white blotches; lower flanks, anal and pelvic fins spotted with brown; pectoral fin bases dark; **terminal phase** - green-brown, darker above, yellowish below, head body and caudal fin spotted with blue with a broad white stripe along midbody from just posterior to opercle to just anterior to caudal peduncle (may be indistinct).

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Calotomus species: teeth not fused; upper jaw opposing lower jaw with mouth closed.

All other species of Scaridae: upper jaw encloses lower jaw when the mouth is closed. Furthermore, coloration different.

SIZE:

Maximum: about 27 cm standard length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR :

Within area, from the Red Sea and east coast of Africa (south to Natal) eastward to Madagascar, the Seychelles, Mauritius, Chagos Archipelago, Laccadives and Sri Lanka. Elsewhere in the Eastern Indian Ocean/Western Central Pacific, eastward to the Mariana Islands and Easter Island.

Usually found in seagrass beds, often in relatively shallow water; apparently this species does not change sex.

Feeds on seagrasses and algae.

PRESENT FISHING GROUNDS:

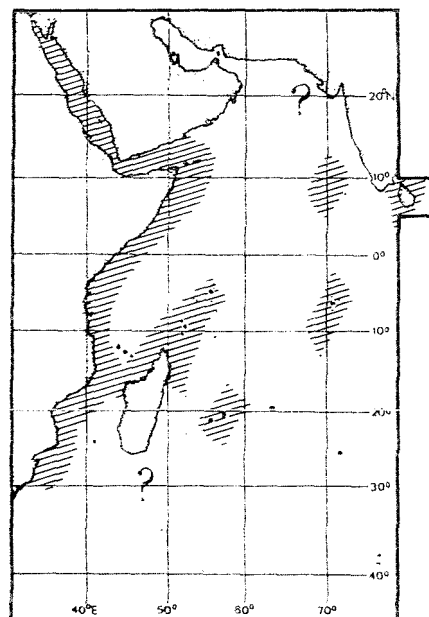
Probably caught throughout most of its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with traps.

Marketed mostly fresh.

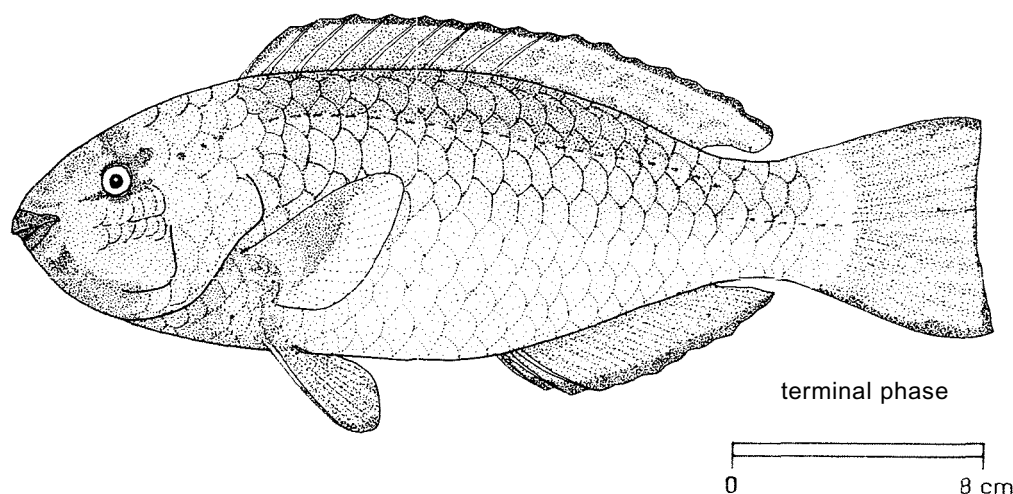


FAO SPECIES IDENTIFICATION SHEETS

FAMILY: SCARIDAE

FISHING AREA 51
(W. Indian Ocean)*Scarus arabicus* (Steindachner, 1902)

OTHER SCIENTIFIC NAMES STILL IN USE: None



VERNACULAR NAMES:

FAO : En - Arabian parrotfish
Fr - Perroquet arabe
Sp - Loro de Arabia

NATIONAL:

DISTINCTIVE CHARACTERS:

Body depth contained 2.7 times in standard length. Teeth fused in upper and lower jaws to form dental plates; plates smooth, the individual teeth only visible at margins; upper jaw enclosing lower jaw; 4 or 5 small, blunt teeth may be present posteriorly on upper plates; lips covering slightly less than 1/2 of dental plates; 4 median predorsal scales; 2 rows of scales on cheek, with 6 in upper row and 5 in lower row. Pectoral fins with 13 branched rays; caudal fin slightly emarginate.

Colour: probably 2 adult colour phases; initial phase yet to be described; terminal phase - tan, edges of scales narrowly brown, shading to whitish ventrally except on thorax and ventral part of head where they are suffused with pale blue; a broad, irregular, faint blue band crossing interorbital space and 2 short posterior projections of blue from upper half of orbit; 3 small, faint, bluish spots in a row between orbit and upper end of gill opening; upper lip with salmon margin and bluish band above; lower lip and chin a mixture of dusky pale salmon and blue; lower cheek pale bluish; dorsal fin dull orange with blue margin; anal fin with blue border and a faint blue-green band at base; caudal fin dusky orange, the upper and lower margins blue, the posterior edge with a narrow bluish margin and a blue submarginal line; pectoral fins with pale membranes and purplish to yellow brown rays; pelvic fins pale salmon pink with a light blue leading edge; dental plates bright blue-green.

DISTINGUISHING CHARACTERS OF SIMILAR SPECIES OCCURRING IN THE AREA:

Other Scarus species also having 2 rows of cheek scales, 4 median predorsal scales and 13 branched pectoral fin rays, include S. atrilunula, S. enneacanthus, S. genazantus, S. japonensis and S. sordidus; all differ in coloration from S. arabicus.

Remaining Scarus species: 12 branched pectoral fin rays, lips broadly covering dental plates, and/or 3 rows of cheek scales; all differ in coloration.

Other genera of Scaridae: narrow dental plates; cheek scales in a distinctly triangular patch (Hipposcarus); dental plates rough to touch (Bolbometopon, Cetoscarus); one row of cheek scales (Calotomus, Leptoscarus) .

SIZE:

Maximum: about 35 cm standard length.

GEOGRAPHICAL DISTRIBUTION AND BEHAVIOUR:

At present records are restricted to the Gulf of Aden and the Gulf of Oman.

PRESENT FISHING GROUNDS:

Appears to be rare. Probably caught occasionally throughout its range.

CATCHES, FISHING GEAR AND FORMS OF UTILIZATION:

Separate statistics are not reported for this species.

Caught mainly with traps, nets and other kinds of artisanal gear.

Marketed mostly fresh.

