INIMICUS SINENSE (VALENCIENNES) (SYNANCEIIDAE : PISCES) A NEW RECORD FROM INDIA AND CEYLON

ABSTRACT

The stonefish, *Inimicus sinense* (Valenciennes) is recorded for the first time off the coast of Rameswaram Island (India) and Mannar Island (Ceylon) in the Gulf of Mannar area. A description of the species is given here with illustrations.

WHILE carrying out a coastal survey of the Tamil Nadu coast with special reference, to venomous and poisonous fishes, a venomous fish, *Inimicus sinense* (Valenciennes) hitherto unknown from the Indian seas was collected by the authors off Pamban (Gulf of Mannar). One of us (K.V.R.R.) while studying the scorpionfishes collected during the International Indian Ocean Expedition at California Academy of Sciences, San Francisco, had occasion to examine a specimen of *I. sinense* collected off Mannar Island, in the Gulf of Mannar area of Ceylon, which is new to Ceylon waters. Two specimens to this species were also collected by Mr. T. E. Sivaprakasam, from Tondi (Palk Bay) as early as 1965. These records of *I. sinense* from India and Ceylon indicates its wider occurrence in the Gulf of Mannar and Palk Bay.

Inimicus sinense (Valenciennes) (Fig. 1a, b)

Pelor sinense Valenciennes, 1833, pp. 468–469 (Original description, locality: Canton). Inimicus cirrhosus McKay, 1964, pp. 8–12 (Original description, type locality: Shark Bay, Western Australia).

Material examined

U. S. Nat. Hist. Museum, (uncatalogued), one specimen, 122.0 mm S.L, South Bar, off Mannar Island, Ceylon, Gulf of Mannar, Gill Net catch, 4-6 meters, Frank Schwartz Coll., 16-17, March, 1969; Zoological Survey of India (Southern Reg. Centre). (uncatalogued), 2 specimens, 139.0, 149.0 mm S.L, Tondi, Palk Bay, T. E. Sivaprakasam Coll., 13 January, 1965; ZSI (Marine Biological Stn.) (uncatalogued), three specimens 72.0-128.0 mm S.L, Rameswaram Island, Off Pamban, Gulf of Mannar, K. V. Rama Rao and M. Badrudeen Coll., 9 February, 1973.

Diagnosis

Inner pectoral colouration species specific (Fig. 1 b); all specimens with white (yellow in life) spots on grey or brown background, number and size of spots is variable.

Description

Dorsal fin count III, XIII-XIV, 8–10; soft dorsal rays branched (usually III, XIV, 8). Anal fin count II, 12, all rays branched, caudal fin rounded with 13 rays, intermediate ones branched; pectoral rounded with 10 + 2 rays, lower two pectoral rays free, intermediate ones branched; pelvic rays 1+5, soft rays, branched; gill rakers 1–3 (normally 2 or 3) in upper arch and 5–7 (normally 6 or 7) in lower arch; lateral line with 12–14 pores, 4 more lateral line pores along dorsal side, lateral line pores not visible in specimens upto 100 mm S.L, all pores with cirri.

Head 32.1-34.7, snout 13.2-15.4, orbit 3.5-5.1, jaw 14.0-15.9, longest dorsal spine 19.0-24.7, pectoral fin 32.6-36.5; interorbital width 9.4-12.1, postorbital distance 14.8-15.8, predorsal distance 23.6-28.8, interorbital width in snout length 1.3-1.5 and snout length in postorbital distance 0.9-1.2 percent in standard length.

General body shape and colouration of preserved specimens as in Fig. 1 b. Body elongate, less compressed, tapering posteriorly, without scales; skinny appendages all over body, especially on chin, mandibles, preopercle and opercular margin; head grotesquely shaped and depressed; snout and eyes elevated; preorbital pit shallow, interorbital space broad and concave with a ridge inbetween orbits; occiput with a broad depression; mouth protractile, moderate, oblique, lower jaw projecting, ending in a symphyseal knob; maxilla not reaching eye, its depth equal to orbit; villiform bands of teeth in jaws and vomer, but none on palatines; tongue free and triangular; branchiostegals seven; gill rakers tubercle-like, gill opening wide and gill membranes united with isthmus; nostrils tubular, anterior ones situated on either side of snout elevation, posterior ones situated behind elevation.

Spines on head not well developed; nasal spines absent; preorbital with two blunt spines; suborbital with three spines; ocular spines with blunt knobs; postorbital spine absent; preopercle with four spines; supplemental preopercular spine present; opercle with two divergent spines; frontal, anterior parietal and sphenotic spines absent; post parietal, pterotic, upper and lower post temporals and supracleithral present; coronal ridges well developed; subopercular spine absent; cleithral poorly developed.

Three anterior dorsal spines are isolated with interspinous membrane extending to tips and connected with remaining by a membrane; interspinous membrane of latter deeply incised; dorsal spines strong and pointed, covered with skin to their tips; intermediate ones with uniform height; anal spines embedded in thick skin; pectoral extending beyond origin of anal, upper pectoral rays filamentous in juveniles (McKay, 1964) and are lost in adults; pelvic fin elongated and adnate to belly reaching beyond anus.

Colouration

Colour in life: Body blackish with orange blotches; ocelli on the inner surface of pectoral fin and spots on caudal fin with yellowish tinge in middle and reddish orange around; pelvic fin blackish. In alcohol: Body as a whole pinkish with white spots on inner side of pectroal. In formalin: Body brownish, mottled with variable whitish bloches, first one at beginning of dorsal, second below 4th, 5th and 6th dorsal spines, third at middle of body below 10th to 15th dorsal spines, last below soft dorsal fin; throat and chest brownish mixed with minute white spots; belly with variable marblings and dark spots; dorsal fin membrane brownish except between 10th-15th, the area



Fig. 1 a. Infinitus sinense (Valenciennes), measuring 164.0 mm T.L., collected from Rameswaram Island; and b. Inner pectoral colouration of 1. sinense.

being pinkish: soft dorsal pinkish; base of anal whitish, distal part being grey; caudal with two white cross bars, distal part blackish with three rows of white spots ventral fin light grey; pectoral base with white blotches followed by light brownish area, a pale area in middle of fin and outer half blackish; inner surface of pectoral fin dark brown to blackish, with distinct ocelli and few indistinct white spots at distal part in 2 or 3 rows; inner pectoral colour is seen vaguely through fin; free pectoral rays barred.

Ecology

This species occurs on sandy and muddy bottoms. It has a wider distribution in the Gulf of Mannar and Palk Bay, and is commonly taken on prawn and Leiognathid fish trawling grounds at depths upto 27 metres. A partly digested fish, was found in the stomach of one specimen.

Distribution

It ranges from east coast of India, Ceylon (Gulf of Mannar) to Hong Kong, through Java and Philippines to Western Australia.

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