

T. VENKATESWARLU

Morphology

ON A RECORD OF THE AMBICOLOURED *ENGYPROSOPON VALDEROSTRATUS*  
(ALCOCK) (*PISCES: BOTHIDAE*) OFF MADRAS, INDIA

OPIS PRZYPADKU DWUSTRONNEGO ZABARWIENIA RYBY  
*ENGYPROSOPON VALDEROSTRATUS* (ALCOCK) (*PISCES: BOTHIDAE*)  
Z-MADRAS, INDIE

Zoological Survey of India

The author describes a rare case of ambicolouration on the do called "blind side" of a bothid fish *Engyprosopon valderostratus* (Alcock) caught off Madras.

INTRODUCTION

While studying the fish collections from Madras coast the author had come across an ambicoloured aothid fish which was later identified as *Engyprosopon valderostratus* (Alcock). This species was originally reported from South-east coast of Sri Lanka at a depth of 32 fathoms by R.I.M.S. "Investigator" (Alcock, 1890) and subsequently north of Umhlang river, Natal, South Africa (1905) from a depth between 22–26 fathoms. This species was reported from India by Chakrapany and Roma Rao (1974), north off Madras harbour from a depth of 25 to 30 meters. Hence the specimen under study is significant and can be reckoned as the second and most recent record of this species from Indian waters. This species is Indo-Pacific in distribution (Smith, 1965).

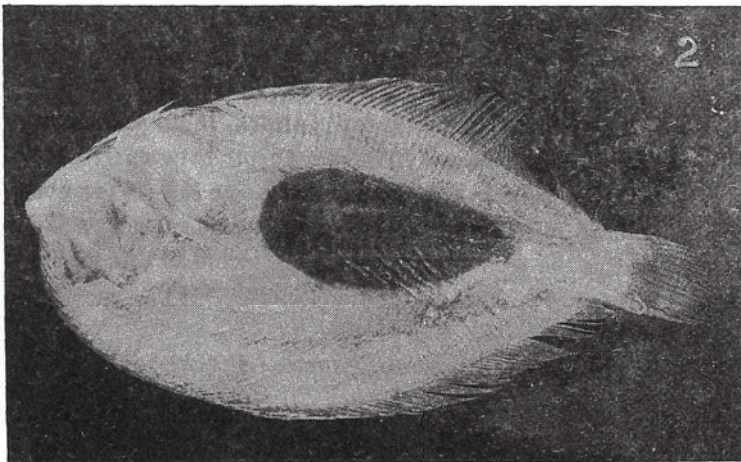
*Engyprosopon valderostratus* (Alcock)

1890. *Rhomboidichthys valderostratus*, Alcock-Ann. Mag. Nat. Hist., 6(6): 435 (type locality: Off Southeast coast of Ceylon)

1905. *Platophrys dimorphus*, Gilchrist.-Mar. Invest. S. Africa, 3:10, pl. 27.  
1920. *Crossorhombus dimorphus*, Regan, - Ann. Durban Mus., 2:212,  
1925. *Crossorhombus dimorphus* (part), Barnard,- Ann. S. Afric. Mus., 21:386.  
1927. *Crossorhombus valderostratus*, Norman,- Rec. Indian. Mus., 29(1):28-29, Fig. 6.  
1965. *Engyprosopon valderostratus*, Smith, The Sea Fishes of South Africa:159,  
fig. 313.  
1974. *Engyprosopon valderostratus*, Chakrapany and Rama Rao,-Ind. J. Zoot., 15, 1:  
45-46.



1. *Engyprosopon valderostratus* (Alcock) showing normal ocular side



2. *Engyprosopon valderostratus* (Alcock) showing blind side with ambicolouration

**Material:** One specimen measuring 110 mm in total length. Ennore, Madras, 23.6.1975, T. Venkateswarlu, Collector.

**Counts:** D.89, A.70, P.10 and L.I.60.

**Description:** The description of the species under report agrees in all respects with that given by Norman (1927) except in the presence of a pigmentation on the blind side which is considered as an instance of "Staining" (Norman, 1934; Jones and Menon, 1950).

#### REMARKS ON AMBICOLOURATION

Usually in fishes the dorsal and lateral sides are coloured and the ventral side as rather pale or light in colour but in flatfishes the ocular side is usually coloured and the blind side is pale or colourless. However, pigmentation on the blind side of flatfishes has been observed and it is usually considered an abnormality which is known as "ambicolouration". Amongst the Indian flatfishes ambicolouration has been first recorded in *Brachirus pan* (Ham.) by Jones and Menon (1950) and later in other flatfishes by R.M. Pradhan and M.J. Pradhan (1962), Sivaprakasam (1966), Seshappa (1962, 1972, 1972a), and Ramaiyan (1973). This abnormality on the blind side is of various kinds such as staining, spotting and true ambicolouration (Norman, 1934:22-27). In the present instance the ambicolouration can be termed "staining". The black staining is confined to the middle of the body (Plate 1.) and is nearly oval in shape, 38 mm and 18 mm being the maximum length and breadth respectively. It may be probably due to the action of light entering horizontally or obliquely and reaching areas of skin which are not in contact with bottom, in course of time causing these areas to become pigmented (Norman, 1934:24).

The specimen under study has been added to the Ichthyological collections of Southern Regional Station, Zoological Survey of India, Madras.

#### ACNOWLEDGEMENTS

My thanks are due to the Director, Zoological Survey of India, Calcutta and Dr.R.S.Pillai, SRS, ZSI, Madras for providing facilities and encouragement; Dr.K.C. Jayaram, ZSI, Calcutta for valuable suggestions and shri S. Vijayaraghavan for photographs.

#### REFERENCES

- Chakrapany, S. and K.V. Rama Rao, 1974: A new record of *Engyprosopon valderostratus* (Alcock) Bothidae: Pisces) from India with ambicolouration.-Indian J. Zoot., 15, 1:45-46.
- Jones, S. and Menon, P.M.G., 1950: An interesting case of ambicolouration in the "Pan" Sole *Brachirus pan* (Hamilton).- Rec. Indian Mus., 48, 1:67-70.

- Norman, J.R., 1927: The flat fishes (Heterosomata) of India, with a list of specimens in the Indian Museum. Pt. 1.- Rec. Indian Mus., 26, 1:7-47.
- — 1934: A Systematic monograph of the flat fishes (Heterosomata). 1:22-27, London.
- Pradhan, R.M. and Pradhan, M.J., 1962: An instance of partial ambicolourations in the Oriental sole, *Brachirus orientalis* (Bloch and Schneider).- J. Bombay nat. Hist. Soc., 59, 3:968-69.
- Ramaiyan, V., 1973: A partial ambicolouration in the Indian halibut, *Psettodes erumei* (Bloch) (Psettodidae:Pleuronectiformes) from Portonovo, S.India.- J. Bombay nat. Hist. Soc., 70, 3:567-568, fig. 1.
- Seshappa, G., 1966: On the lateral line sensory canal system in *Cynoglossus semifasciatus* (Day).- Indian J. Fish., 13, 1 and 2:311-321.
- — — 1972: On a partially ambicoloured specimen of *Cynoglossus dubius* Day.- J. Mar. Biol. Ass. India, 14, 2:875-877.
- — — 1972a: A case of partial ambicolouration combined with the development of an unusual accessory fin in *Cynoglossus macrostomus* Norman.- J. Mar. Biol. Ass. India, 14, 2:877-879.
- Sivaprakasam, T.E., 1966: Ambicolouration in two species of flatfishes from Madras.- J. Bombay Nat. Hist. Soc., 63,3:758-759, 2 pls.
- Smith, J.L.B., 1965: The sea fishes of South Africa, Central News Agency Ltd., S. Africa.

T. Venkateswarlu

OPIS PRZYPADKU DWUSTRONNEGO ZABARWIENIA RYB  
*ENGYPROSOPON VALDEROSTRATUS* (ALCOCK) (*PISCES: BOTHIDAE*)  
Z MADRAS, INDIA

Streszczenie

Autor opisuje przypadek znalezienia ryby *Engyprosopon valderostratus* (Alcock) z rodziny *Bothidae* o ciekawej aberacji barwnej w postaci ciemnego zabarwienia części skóry na tzw. „ślepej stronie” (Fig. 2). Ryba pochodzi z Oceanu Indyjskiego z wód przybrzeżnych Ennore w okolicy Madrasu. Sam gatunek należy uważać za indopacyficzny.

Jest to drugi przypadek w ostatnich latach znalezienia odmiennie zabarwionej ryby z wód indyjskich.

Autor daje krótki przegląd podobnych znalezisk.

T. Venkateswarlu

ОПИСАНИЕ СЛУЧАЯ ДВУХСТОРОННЕЙ ОКРАСКИ РЫБЫ *ENGYPROSOPON VALDEROSTRATUS*  
(ALCOCK) (*PISCES; BOTHIDAE*) ИЗ РАЙОНА МАДРАСА, ИНДИЯ

Резюме

Автор описывает случай находки рыбы *Engyprosopon valderostratus* (Alcock) из семьи *Bothidae* с интересной цветной аберрацией в виде темной окраски

части кожи на так называемой незримой стороне (фиг.2). Рыбы выловили в прибрежных водах Энноре в Индийском океане вблизи Мадраса. Этот вид рыбы следует считать индо-тихоокеанским.

Это второй случай обнаружения в последние годы отличительно окрашенной рыбы в индийских водах.

Автор дает короткий обзор подобных находок.

Перевод: dr Józef Domagała

Address:

Received: 2 III 81

T. Venkateswarlu  
Southern Regional Station,  
Zoological Survey of India  
Madras 600028, India