ON A PARTIALLY AMBICOLOURED SPECIMEN OF
CYNOGLOSSUS DUBIUS DAY

ABSTRACT

An instance of partial ambicolouration in a 13.4 cm (T.L.) female flatfish Cynoglossus dubius Day obtained from West Hill, Calicut, on 24-11-1967, is recorded and described.

AMBICOLOURATION and albinism are interesting phenomena that are noticed occasionally in various species of flatfishes (Norman, 1934). Reports of such cases have, however, been very rare in the case of the Indian species. Jones and Menon (1950) described a case of ambicolouration in Brachirus pan (Hamilton) and concluded that it may be the result of aberration caused by genetic factors. Pradhan and Pradhan (1962) recently recorded another instance of partial ambicolouration in Brachirus orientalis (Bloch and Schneider). In a separate paper the present author (Seshappa,
1971) has described and discussed certain cases of partial ambicolouration, ‘staining’ and albinism in the Malabar sole *Cynoglossus semifasciatus* Day (= *C. macrostomus* Norman), along with some associated peculiarities in the lateral line canal system in the species. The author has also noticed (MS) an interesting specimen of *C. macrostomus* having partial ambicolouration and also an unusual accessory fin. The present note records an instance of partial ambicolouration in *C. dubius* Day, the specimen being obtained from West Hill, Calicut, on 24th November 1967. The individual is a female measuring 13.4 cm in total length and 12.4 cm in body length. Some of the other measurements in cm are as follows: Head length to opercular angle—3.5; Snout length—1.6; Maximum depth—2.9; Depth at opercular angle—2.8; Diameter of eye—0.2; Interorbital width—0.17; Rostral hook from end of snout—1.7; and angle of mouth from end of snout—1.9. The fin formula is D. 110/A.85/C.12. There are 114 scales in a longitudinal series along the lateral line (mediolateral), and 20 scales at the widest part between the two lateral lines on the eyed side. The specimen is below one year in age as determined from the scales. On the eyed side the fish has the colour and lateral lines as normal in the species with various branches as shown in Fig. 1a, a loop in the branch of the rostral hook and an extra forward branch of the mandibulo-opercular line being slight abnormalities. There are two main longitudinal canals of the lateral line system on the coloured side of the body, namely, the mediolateral and the dorsolateral canals. On the blind side in normal specimens the colour is uniform whitish and there is a single main lateral line—the mediolateral—running along the middle of the body. In the present case, while most of the blind side is whitish, a considerable area in the caudal region of the body has the same colour as the eyed side, though of a slightly lighter shade. Fig. 1b shows the extent of the coloured area and the relation of the same to the lateral line canal which extends through the coloured area also. An interesting peculiarity is that a second lateral line—cor-
responding in position to the dorsolateral line of the eyed side—has developed in
the coloured area, this line being interrupted where the colour is also interrupted.
It seems obvious that this is also a case of genetic aberration.

Central Marine Fisheries Research
Institute, Sub-station,
Calicut.

G. SESHAPPA

REFERENCES


1972. A case of partial ambicolouration combined with the development of an unusual