# THE FRESHWATER FLATFISHES FROM LAMPUNG, SUMATRA, WITH NOTES ON ACHIROIDES LEUCORHYNCHUS BLKR (HETEROSOMATA: SOLEIDAE)

by

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#### ABSTRACT

An account is given on two species of freshwater flat-fish. Achiroides melanorhynchus (Blkr) and A. leucorhynchus Blkr. The existing description of the latter species is considered inadequate and is hereby corrected based on twelve specimens collected from Lampung, South Sumatra. It is a new locality record for the species as well.

The freshwater flatfish of the genus Achiroides in the Indo-Australian Archipelago are represented by two species, Achiroides melanorhynchus (BLEEKER) and A. leucorhynchus BLEEKER. The two species can be distinguished from each other by the difference in number of dorsal and anal-finrays, the number of lateral-line scales and the coloration (see WEBER & de BEAUFORT 1929).

Seventeen specimens of *Achiroides* consisting of both species have been collected from Lampung, Sumatra, during the faunistic exploration in 1974 and 1975. All specimens were caught by a fine cashnet at Sekampung river, about 100 km upstream from its mouth. The fishes were found at the fine sandy bottom with much debris at a depth of 50 to 75 cm. The water was slightly turbid and the velocity was relatively low.

This report is an account on both species obtained from Lampung. Redescription and remarks are given for A. leucorhynchus which was inadequately described by the first author (s) (BLEEKER 1851, 1866-1872 and WEBER & de BEAUFORT 1929). All forteen specimens were deposited at the Museum Zoologicum Bogoriense, Bogor, and the other three being donated to Museum of Natural History, Leiden.

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## Achiroides melanorhynchus (Bleeker)

Materials examined: MZB 1970, 29-1-1975, Sekampung river (Sukoharjo, Lampung), Soetikno, 5 ex.

Total length of the specimens ranged between 26 and 57 mm. This species was also recorded from Kalimantan (Borneo), Singapore, Malay Peninsula and Khmer (WEBER and de BEAUFORT 1929). This species differs from A. leucorhynchus on the higher number of dorsal and anal-finrays and the presence of distinct black blotch around the blind side of the mouth.

## Achiroides leucorhynchus Bleeker

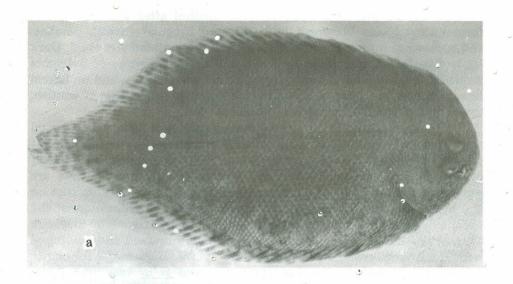
Materials examined: MZB 1852, 10-11-1974, Sekampung river (Kedung durian, Lampung), Soetikno, 1 ex; MZB 1958, 28-1-1975, Sekampung river (Podomoro/Pringsewu, Lampung), Soetikno, 11 ex. (3 ex. presented to Leiden Museum, the Netherland).

Total length of the observed specimens is about 39-65 mm.

Description:

Fin formula: D.49-55, A.35-38, V.4.

Lateral series of scales 52-58. Body height 1.9-2 in standard length, 2.2.2.5 in total length. Head length 3.3-4 in standard length, 4-4.6 in total length. Snout measured from the upper eye 2.9-3.8 in head length. Eyes slightly prominent, 5.3-8.1 in head length; upper eye slightly more anterior than lower one, which is separated by 2-3 scales from the upper. Anterior nostril of the coloured side on a tube, just above upper lip. Posterior nostril with a short cutaneous flap situated close behind anterior one. Anterior nostril of blind side close above upper lip; posterior one, a short tube about 11/2 eye diameter above corner of mouth corner of mouth below front of lower eye or slightly further backward. Scales ctenoid, changing into villous or fringe-like structure on blind side of head, especially around mouth, on cheek and on margin of opercle (fig. 1). Lips on eyed and blind-side with series of villous structure. Some villi on anterior rays of dorsal and anal-fins. Dorsal fin originated on snout, caudal fin confluent with both dorsal and anal fins. Origin of anal fin is reached by ventral fin, which is little shorter than or equal to snout length.



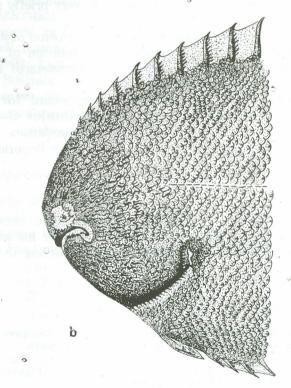


Figure 1: a. Eyed side photograph of A. leucorhynchus. b. Villous structure on blind side.

Colour of preserved specimens in alcohol after few weeks in formalin:eyed side brownish with diffused irregular darkish patches and somewhat interconnected lines forming reticutated structure. Dark spots distributed irregularly on dorsal and anal fins; series of 3-4 spots arranged longitudinally along base of dorsal and anal fins and on lateral line, one spot on base of caudal fin. Colour of blind side is whitish, upper lip of some specimens is black.

This species was first reported from a river near Surakarta, Central Java. The morphological (taxonomical) characters in the earlier description were not completely reported. Some characters were hardly or not mentioned by Bleeker or Weber & de Beaufort. These are especially the precence of a villous structure or fringe-like structure on the head, lip, fin and opercle of the blind side. The coloration of the eyed side was also not completely agree with the figure in Bleeker's atlas (1966-1872). Three specimens have been observed and compared with the holotype in Leiden Museum by Dr. M. Boesemann for clarification. Unfortunately the holotype spesimen is in very bad shape. The presence of villous structure was only very briefly mentioned by Bleeker.

Since other characters agree with the description of Java specimens, other patern of the villous structure and coloration of the Lampung specimens can be regarded as additional characters of the species, a phenomenon of geographical variation.

Sumatra becomes a new distribution record for the species. Dr. Tyson R. Robert of the Smithsonian Institution also reported its existence at Kapuas watershed, West Kalimantan or Borneo (the specimen is also deposited at Museum Zoologicum Bogoriense).

#### ACKNOWLEDGEMENT

Greatful thank is due to Dr. M. Boesemann, curator of fishes, Rijksmusem van Natuurlijke Historie, Leiden, for his kindly help to study the specimens sent to him and for correcting the manuscript. manuscript.

### REFERENCES

- BLEEKER, P., 1851. Over eenige niewe soorten van Pleuronectoiden van den Indischen Archipel. Nat. Tijdschr. Ned. Ind. I: 401-416.
- BLEEKER, P., 1866-1872. Atlas Ichthyplogique des Indes Orientales Neerlandaises VI, pl. 232-278. Fred Muller, Amsterdam.
- WEBER, M. and DE BEAUFORT, 1929. The fishes of the Indo-Australian Archipelago, V. F.J. Brill, Leiden, XIV + 458 pp.