

# Morphological differentiation of closely resembling ariid species, *Arius venosus* and *A. sumatranus*

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In Indian waters ariids (Siluriformes/ Ariidae) are represented by 9 genera and 25 valid species. The genus *Arius* is the most diverse with eight species reported from Indian waters which can be categorised in two broad groups. One having elongated teeth patches with globular teeth comprising of five species- *A. jella*, *A. maculatus*, *A. gagora*, *A. malabaricus* and *A. arius* is clubbed under maculatus complex. Other group included species like *A. subrostratus*,

*A. sumatranus* and *A. venosus* having smaller teeth patches with villiform teeth (non-maculatus complex) (Dhanze and Jayaram. 1982). The non-maculatus complex does not contribute much to the commercial fishery barring *A. subrostratus* which forms minor fishery along southwest coast of India. *A. subrostratus* can be easily differentiated from rest of the con-generic members by smaller barbels and long snout with small mouth. The other two members



Fig 1. a) *Arius venosus*; b) *Arius sumatranus*

of non-maculatus complex are very similar in appearance and very difficult to separate out from external appearance (Kumar *et al.*, 2015). Both *A. sumatranus* and *A. venosus* (Fig 1) are small to medium sized catfishes with smooth to mildly granulated head shield, narrow median longitudinal groove reaching up to the base of supra-occipital process, dorsal fin with prominent filament, body brownish grey on sides and back and lighter below and fins dusky with yellowish to brown tinge. The most contrasting difference between the two species lies in the shape of teeth patch which in triangular in *A. venosus* and transversely oval in

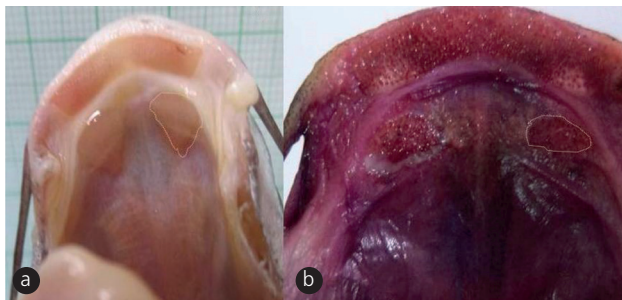


Fig. 2. Teeth patch: a) Triangular in *A. venosus*; b) Oval in *A. sumatranus*

*A. sumatranus* (Fig. 2). A minor difference in having longer maxillary barbels and shorter snout length is evident in *A. venosus*. The extent of granulation is even fainter in case of *A. venosus* (Fig. 3). Both the species are rarely landed especially along northwest coast of India and most often goes unnoticed by the field surveyors and enumerators. In this context, the current pictorial differentiation between the species will help them in easy identification and prompt reporting the species.

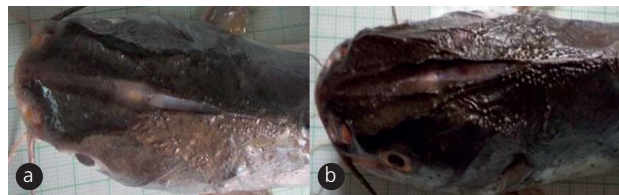


Fig. 3. Head shield: a) *A. venosus*; b) *A. sumatranus*

## References

- Dhanze and Jayaram. 1982, *Proc.: Animal Sciences*, 91:79-98.  
Kumar *et al.*, 2015, *Indian J. Fish.* 62(4):109-115.