

## MORPHOLOGICAL TOOL TO ELUCIDATE TWO CLOSELY RELATED PANGASIUS CATFISH

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### ABSTRACT

Pangasius catfish are commonly cultured in most Asian countries due to fast growth and edible flesh. The commonly cultured catfish is *Pangasius hypophthalmus* while the expensive and endemic species is *P. nasutus*. However, hybridisation and lack of knowledge in species identification caused misidentification and profit loss. The purpose is to find characters that help in differentiating these two species to avoid confusion among fish farmers. Analyses of conventional morphometric, meristic and truss morphometric were performed on two species. Three morphometric approaches (conventional, meristic and truss morphometric) were employed to identify the morphological differences. Conventional morphometric suggested eye diameter, body width, body depth, dorsal fin base length and barbells as characters that showed significant differences ( $P < 0.05$ ) between the species, make them as potential diagnostic markers. Truss morphometric analyses approved that *P. nasutus* have larger dorsal fin base length as suggested by conventional morphometry data. The meristic analysis showed a significant difference ( $P < 0.05$ ) in the number of dorsal fin rays, pelvic fin rays, anal fin rays and caudal fin rays. All three types of morphometric prove to support in elucidating the two species.

**Keywords:** Aquaculture, Catfish, Morphometric, Truss, Meristic

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