



## **Analysis of relative growth patterns and sexual dimorphism of selected morphometric and meristic characters of *Macrobrachium rosenbergii dacqueti* (Sunier 1925)**

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**Abstract.** Freshwater prawn *Macrobrachium rosenbergii dacqueti* is one of the most economically important crustacean species cultured within its' natural distribution and beyond. This study was conducted to estimate the sexual dimorphic characters and their relative growth pattern using two meristic and fourteen morphometric characters excluding periopods. Thirty-two individuals for each sex were selected from four populations. According to the results males showed higher growth rates for all morphometric parameters. Analysis based on the relative growth equation for crustaceans ( $Y = bX^a$ ) revealed that five morphometric characters that are relevant to the abdomen and first and second pleopods are sexually dimorphic ( $P < 0.05$ ). All derived allometric coefficients were positive except the relationship between log carapace length and log exopod length of 1<sup>st</sup> pleuron of females. Meristic characteristics did not show significant difference between two sexes. The importance of identification of sexual dimorphic characters of *M. r. dacqueti* in aquaculture programs and suggestions for further studies are discussed.

**Keywords:** Crustacea, *Macrobrachium rosenbergii dacqueti*, morphometric, relative growth, sexual dimorphism

### **Acknowledgements**

This study was financially supported by International Foundation for Science (IFS). Authors wish to thank people who helped in collecting samples and analyzing data.