

Fecundity of freshwater prawn (*Macrobrachium rosenbergii*) in selected rivers of Sarawak, Malaysia

ABSTRACT

Fecundity of freshwater prawn (*Macrobrachium rosenbergii*) in selected rivers of Sarawak, Malaysia. Biodiversitas 17: 498-502. Giant freshwater prawn (*Macrobrachium rosenbergii*) is one of the important species of freshwater aquaculture in Malaysia. However, the sustainability of freshwater prawn farming is currently threatened by low production efficiency. In addition, the degradation of natural habitats and the use of illegal catching methods have caused great threats to freshwater giant prawn populations. Thus, the main objective of this study was to examine the wild population, ecology, and fecundity of giant freshwater prawn in natural water bodies in Sarawak's rivers namely Samarahan, Sadong and Kayan rivers. The mean values of the physicochemical water parameters, such as dissolved oxygen, pH values, conductivity, turbidity and temperature from three rivers surveyed were differenced significantly ($P < 0.05$). However, the characteristics of water quality measured were found to be within the ideal range for freshwater prawn to survive and grow. There were significant differences ($P < 0.05$) of total length, total body weight and eggs weight of prawn population among three rivers. There was no significant difference ($P > 0.05$) of prawn fecundity among the three rivers. The present study showed that berried female particularly from Kayan and Kerang river are suitable as potential brood stock from the wild population for breeding program.

Keyword: Giant freshwater prawn; *Macrobrachium rosenbergii*; Fecundity; Length and weight