

SUMMARY

Fiddler crab belongs to the subphylum Crustacea, Order Decapoda, and the Family Ocypodidae. Its rectangular and trapezoid carapace characterizes the Family Ocypodidae. These crabs consisted of 13 Genera: *Afruca*, *Uca*, *Gelasimus*, *Austruca*, *Cranuca*, *Leptuca*, *Minuca*, *Paraleptuca*, *Petruca*, *Tabuca*, *Xeruca*, and *Ucides*. Fiddler crab are characterized by sexual dimorphism and asymmetry in one male crab claw. Adult male crabs have one big claw, which is called a major cheliped, and one small claw called a minor cheliped. So that this character can be used as the main key in determining the type of species, the crabs can be found in the mangrove ecosystem at Segara Anakan, Cilacap. However, from several previous studies, it is possible that not all types of fiddler crabs in the area have been identified. Therefore, this study aims to evaluate the diversity of fiddler crabs in the Segara Anakan mangrove ecosystem based on morphological characters and number of species.

The research used a survey method with a purposive random sampling technique at four stations in Kutawaru, Tambakreja, Ujunggalang, and Ujunggagak Districts. Additional specimens from the crustacean collection at Museum Zoologicum Bogoriense (MZB) will also be used. Sampling was carried out at 16 stations based on the condition of the mangrove ecosystem in Segara Anakan, Cilacap. The variables are the Meristic, Morphometric and General Morphological. Parameters to be observed were body measurements of Carapace Length (CL), Carapace Width (CW), Propodus Length (PL), number of long dactylus grooves, predistal triangular tooth, long row of tubercles, carapace color patterns, carapace shape, claw shape, front and eye stalks. The data obtained was analyzed descriptively. The collected data were analyzed descriptively using SPSS 26 on the mean and standard deviation results.

The results of this study obtained 9 species of *Tabuca coarctata*, *T. arcuata*, *T. rosea*, *T. dussumieri*, *T. demani*, *T. forcipata*, *T. bellator*, *A. annulipes* and *A. triangularis*. 16 stations indicate the presence of *T. coarctata* species that occupy all stations. The data shows the relationship between fiddler crabs that coexist at each location. Based on the identification of fiddler crabs, it was found to have general morphology, meristic, and morphometric variations. This was related to the taxonomic status of fiddler crabs which has undergone several revisions from previous studies. The results of the variation color pattern are black with bright blue hues, black with white shades, dark blue with light blue circular hues, black with red, and purplish pink. The shape of the carapace is Rectangular and Trapezoid. Observation Meristic character is The highest number of long grooves of dactylus only in the species *T. rosea* and *T. dussumieri*. The most predistal triangular tooth in the dactylus and pollex area is *A. annulipes*. The highest number of tubercles on the orbital floor is *A. triangularis*. and then morphometric Character based on CL, CW, and PL measurements, *T. arcuata* has the highest value, while *A. annulipes* has the lowest value.

Keywords: Diversity, Fiddler crab, Ocypodidae, Segara Anakan, Taxonomy.