

V. CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the research results, the following conclusions were obtained:

1. Research on aquatic macroinvertebrates in the rice fields of Lubuk Alung, Padang Pariaman, West Sumatra showed temporal changes based on the composition of the classes and genera found. The aquatic macroinvertebrates identified consisted of 4 classes, 13 orders, 18 families, 23 genera, and 7177 individuals. The class Gastropoda had the highest number of individuals, while the class Insecta showed the greatest diversity in genus composition.
2. Environmental factors such as pH, temperature, and water depth fluctuated throughout observation period. pH ranged from slightly acidic to neutral between 6.0 - 7.3. The temperature tended to be warm, ranging from 29.5 - 32.6°C. Water depth on the areas planted with rice plants ranged from 0 - 4.5 cm, while in the *banda keong* ranged from 2.7 - 9.6 cm. Both Environmental factors and agricultural activities influence the condition of the rice field ecosystem and the presence of aquatic macroinvertebrates.

5.2 Suggestion

From the results of the research that has been done, it is recommended to conduct research from all the rice cultivation stage from rice planting to harvesting. There is a need for information about others fauna found in this area and the treatment carried out by farmers on rice fields every day that affect the composition of the component in the communities and the temporal changes that occur.