

Muhammad Firdaus. 2012. The Diversity of Aquatic Macroinvertebrates in Riparian Vegetation of The River of Order 1 and Order 2 in Maron River System of Seloliman Village, Mojokerto. This thesis is under the guidance of Dr. Bambang Irawan and Drs. Noer Moehammadi, M.Kes. Department of Biology, Faculty of Science and Technology, Airlangga University, Surabaya.

ABSTRACT

This research is intended to find the diversity index and to find if there is a difference among the diversity index of aquatic macroinvertebrates in riparian vegetation of river of order 1 (Sempur creek), that of order 2 (the segment of Maron river before merging into Sempur creek) and that of order 2 (the segment of Maron river after merging into Sempur creek), in Maron river system, Seloliman village, Mojokerto. The research was conducted by taking samples of aquatic macroinvertebrates at 9 stations in Maron river system on February-March 2012. The samples were taken from riparian vegetation which interacted with the water body in the two river banks, by three-times-replication using kick-net in different days. The aquatic macroinvertebrates samples were then identified and analyzed to find the data of the family identity, the values of the diversity index and to find if there is a difference among the index value of each order in Maron river system. The diversity index of aquatic macroinvertebrates of riparian vegetation of river of order 1 (Sempur creek consists of station I, II, and III), that of order 2 (the segment of Maron river before merging into Sempur creek consists of station IV, V, and VI), and that of order 2 (the segment of Maron river after merging into Sempur creek consists of station VII, VIII, and IX) in Maron river system, Seloliman village, Mojokerto, by the three-times-replication were respectively of the average 1,921; 2,393; and 2,562. In the analysis result of Kruskal-Wallis Test, the value $H(7,200) > \chi^2(5,99)$, then H_0 is rejected, so that there is a difference among the diversity index of aquatic macroinvertebrates of riparian vegetation of river of order 1 (Sempur creek), that of order 2 (the segment of Maron river before merging into Sempur creek) and that of order 2 (the segment of Maron river after merging into Sempur creek), in Maron river system, Seloliman village, Mojokerto.

Key words: *diversity index, aquatic macroinvertebrates, riparian vegetation, order of river, Maron river system.*