**FISH DIVERSITY IN CIMANUK RIVER BEFORE AND AFTER RAINY SEASON IN JATIGEDE RESERVOIR WEST JAVA PROVINCE**

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**Abstract**

Jatigede Reservoir has been built in Cimanuk river, causing the change of the riverine to lacustrin ecosystem in the lentic areas, and with the construction of dam resulted in the breakdown of fish migration. Fish community in Cimanuk River is derived from the indigenous fish of Cimanuk River and introduced fish. Research aims to map the diversity of fish living in the Cimanuk River before and after the Jatigede Reservoir. Research using field observation method, and census sampling technique. Research is done in the rainy season in November 2017 until January 2018, fish taken from 4 stations. Parameters measured by the diversity index (H'), dominance index (C), Equitability index (E), water quality include current velocity, light penetration, temperature, depth, substrate type, dissolved oxygen, pH, ammonia, and nitrite. Data analysis used a comparative descriptive method by mapping the species and comparing the diversity of fish before and after the Jatigede Dam. The results of the research indicate that the identified fishes are 6 families consisting of 14 species, the diversity of Cimanuk River fish before Jatigede Reservoir (station I and II), including moderate diversity 1.735 ≤ H '≤ 1.909, low species dominance 0.185 ≤ C ≤ 0.194, high equitability 0.617 ≤ E ≤ 0.789, stable fish community structure. Diversity of fish after Jatigede Reservoir (station III and IV), including low with 0.759 ≤ H '≤ 0.855, moderate species dominance 0,55 ≤ C ≤ 0.57, low equitability 0.296 ≤ E ≤ 0.317, distressed fish community structure. Water quality in general meets the requirements of water quality standards for fisheries, except for light penetration, nitrite at station I, IV and ammonia at station III that has exceeded environmental quality standards, but can still be tolerated by several types of fish.

*Keywords*: Cimanuk River, Diversity, Fish, Jatigede Reservoir.