

BIODIVERSITY OF KINGDOM ANIMALIA AT THE SHINJEON RIVER IN HAPCHEON-GUN, KOREA

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ABSTRACT

Biodiversity provides people with basic ecosystem goods and services. This study is to investigate the biodiversity of animal kingdoms at four regions on the Shinjeon River in Korea. Animal groups included mammals, birds, herpetology, fish, and invertebrates. A diversity index is a mathematical measure of species diversity in a given community. Mammals accounted for eleven taxa for four seasons within the studied areas. Invertebrates exhibited the greatest species diversity with 20 taxa identified, followed by birds (*Aves*) (16 taxa). There were ten taxa of reptiles/amphibians (*Sauropsida/Amphibia*) at four sites for four seasons. Shannon-Weaver index (H') for mammals at the upper region (A) was higher than those of low region (D). The values of β -diversity for animals were varied from 0.209 for Herpetology to 0.218 for fish. For the community as a whole, the values of β -diversity were the low (from 0.163 for St. D to 0.221 for St. B). Neighboring stations such as St. B and St. C had the similar species composition (94.8%) and the highest remote populations (St. A and St. D) did not share any species (51.1%). It is usually assumed that habitat quality and the biological characters are based on their ability in the heterogeneous environments.

Keywords: Animal kingdoms, biodiversity, Shinjeon River, richness indices, β -diversity.