FLORISTIC CHARACTERIZATION AND BIODIVERSITY OF RIPARIAN ZONES AT THE GWANGYANG RIVER, KOREA

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ABSTRACT

This study of the vegetation of the Gwangyang River in Korea is examined river naturality and vegetative composition of river riparian zones to identify their most important sources of variation. The river was divided into 3 compartments for convenience. Sampling with quadrats (plots of a standard size) can be used for most plant communities. The upper region was 40 families, 99 genera, 108 species, 6 varieties, and one form have been identified. The value of cover-abundance was total 10.54. A Shannon-Weaver indices (H´) of diversity were varied from 2.305 (trees) to 3.715 (forbs). Naturalized Index(NI) and Urbanization Index(UI) were 9.7% and 3.4%, respectively. The middle region was 25 families, 78 genera, 93 species, 6 varieties, and 3 forms. The total transformed Braun-Blanquet value and r-NCD at upper area were 320 and 3,555.6, respectively. The low region was 18 families, 48 genera, 61 species, 6 varieties, and 3 forms. The total transformed Braun-Blanquet value and relative net contribution degree (r-NCD) at upper area were 260 and 2,888.9, respectively. When Jaccard's Index of Similarity (ISj) were applied to Gwangyang River, the most similar sites were middle and low areas (ISj = 42.6%). Upper and low were the most dissimilar (ISj = 25.5%). Sorensen's Index of Similarity (ISs) was also used because it gives greater weight than Jaccard's to the species that recur in the two test areas than to those that are unique to either area. Upper and low were the most dissimilar (ISs = 28.9%).

Keywords: Braun-Blanquet, Gwangyang River, relative net contribution degree (r-NCD), Shannon-Weaver indices.