

SPATIAL DISTRIBUTION PATTERN OF THE POPULATIONS OF *OPLISMENUS UNDULATIFOLIUS* VAR. *UNDULATIFOLIUS* AT MT. AHOP

Man Kyu Huh
Dong-eui University
SOUTH KOREA

ABSTRACT

Oplismenus undulatifolius var. *undulatifolius* is a shallow rooted perennial with stolons. Spatial distribution of this species was studied in an established 16 m x 32 m plot at Mountain Ahop in Korea during 2015. The spatial pattern of *O. undulatifolius* var. *undulatifolius* was analyzed according to several patchiness indexes, population uniformity or aggregation under different sizes of plots by dispersion indices, and spatial autocorrelation. Most natural plots of *O. undulatifolius* var. *undulatifolius* were not uniformly distributed in the forest community. The small and middle plots (2 m x 2 m, to 16 m x 16 m) of *O. undulatifolius* var. *undulatifolius* were uniformly distributed in the forest community and one large plot (16 m x 32 m) was aggregately distributed. Significant aggregation by Moran's *I* of *O. undulatifolius* var. *undulatifolius* was partially observed within IV classes (8 m). Significant dissimilarity among pairs of individuals could found by more than 16.0 m. In conclusion, the geographic distribution of *O. undulatifolius* var. *undulatifolius* is not even with varying degrees of size of plots and human activities give rise to density effects in the plots at Mt. Ahop in Korea.

Keywords: *Oplismenus undulatifolius* var. *undulatifolius*, spatial distribution, patchiness indexes, Moran's *I*.