

Characteristics and spatial distribution pattern of plant community of mountain meadow in Wugong Mountain

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The flora characteristics of vascular plants and distribution types of Wugong Mountain mountain meadow, plant community diversity, the spatial distribution pattern of small communities were analyzed, and the effect of human disturbance, for the rational development and utilization of Wugong Mountain mountain meadow vegetation protection, and to provide scientific reference for the recovery. The results show:

(1) There are many types of Wugong Mountain meadow, investigation of ferns, gymnosperms and angiosperms belonging to 44 families, 90 genera, 108 species.

(2) There are 12 families belonging to the type of distribution in the world, accounting for 27%, and belongs to the temperate tropical nature of the subjects were 13 families, accounting for 30%; 18 genera belong to the type of distribution in the world, accounting for 20%; 24 genera are tropical nature, accounted for 27%; 49 genera are temperate, accounted for 54%.

(3) The *Miscanthus sinensis* is the dominant species of the whole plant community, followed by *Arundinella anomala* Steud. as the subdominant species, accompanying species such as *Hypericum ascyron*

L、*Selaginella* and so on.

(4) *Miscanthus sinensis* as the primary community, its distribution area is larger. There are 23 kinds of small communities in there. the horizontal distribution pattern, in the sunny slope and shady slope respectively have 11, 12 small communities, each community dominant species and edifiers are not the same, and they are alone in the surrounding community. In the vertical distribution pattern, the altitude of 1900 meters only found a small community. With the increase of elevation gradient, changes in diversity index showed a wavy change. Analyze trends of beta diversity the 5 index, with the increase of elevation, 5 index fluctuation is larger, indicating the adjacent elevation between the species replacement rate varies greatly, lead to changes of beta diversity among communities.