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Diversity and Remarkable Plants in the Alpine Zone in the Nepal Himalaya

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The high mountains more than 4000 m in elevation have a vegetation zone called alpine zone. The alpine zone of the Nepal Himalaya has a variety of vegetation and rich flora. A total of 317 genera and 1223 species of the flowering plants have been recorded in the alpine zone. Two hundred and forty-three of the 317 genera (67.7%) are represented by one or a few species. Nearly half (595 species, 48.7%) of the total number of the species belong to only 29 of the 317 genera, that is, only 9% of the total number of the genera account for the half of the species diversity. Most of the 29 genera also occur in both arctic and temperate regions of the Northern Hemisphere. The alpine flora contains various curious plants with unusual forms of flowers and habits. One of them is gigantic plants such as greenhouse plants and snowball plants. Rheum nobile and Saussurea ovballata are good representatives of the former, and Saussurea gossypiphora and related species are of the latter. The present situation of the alpine vegetation and flora of the Nepal Himalaya is relatively well reserved, but their continued degeneration would result in a desert. Conservation of the alpine vegetation and flora is essential for keeping of biodiversity and sustainable use of resources.