

Vascular Plants Resources of Jeju Island, Korea

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Jeju Island is classified as belonging to the East Asiatic floristic region of the Holarctic floristic kingdom. Furthermore, given its unique geographical and geological location, it is also classified as the East Siberian floristic region, in addition to serving as a boundary that begins to exhibit features of the Indo-Malaysian subkingdom.

Consequently, the flora on Jeju Island derives from greatly divergent regions. First, there are those that traveled southward from the main continent; others have survived on a long and narrow journey from China, Jeju Island and Japan; some have originated from tropical and subtropical zones; finally, there are those that evolved from the flora of Jeju Island, Taiwan and Japan. As such, distributed on a relatively small area, the flora of Jeju Island exhibits astoundingly diverse traits and characteristics. Hallasan is located in the center of Jeju Island; the geographical coordinates at its summit are 33°21'29"N, 126°31'53"E, standing at 1,950 meters above sea level. As such, the top of the Hallasan marks the highest land point of South Korea. From its summit, the stretch lying 14.4 km from east to west, and the area of land stretching 9.8 km north to south are the regions being proposed for inscription as the Hallasan Natural Reserve.

Vascular plants of Jeju Island composed of 28 families 63 genera, 192 species, 8 varieties with 200 taxa in Pteridophyta, 3 families 5 genera, 8 species, 1 forma with 9 taxa in gymnosperm and 160 families 717 genera, 1,654 species, 3 subspecies, 98 varieties and 6 forma with 1,761 taxa in Endospermae. The total number of taxa was 1,970 consisting 193 families, 785 genera, 1,854 species, 3 subspecies, 106 varieties and 7 forma with naturalized plants which are 47 families 161 genera, 248 species, 6 varieties with 254 taxa were included. Endemic plants in Jeju Island which were 42 families 69 genera, 87 species, 3 varieties and 3 forma with 93 taxa were found. One forma of *Abies koreana*, endemic to Jeju Island, belongs to gymnosperm. More endemic plants were found in Endospermae. Five families, 9 genera and 9 species in Monocotyledonae were endemic to Jeju Island. Twenty three families, 32 genera, 43 species, 2 varieties and 1 forma, total 47 taxa, in Chloipetalae and 9 families, 24 genera, 29 species, 1 variety and 2 forma, total 32 taxa in Sympetalae were endemic to Jeju Island. Total 93 taxa with 42 families, 69 genera, 87 species, 3 varieties and 3 forma including 4 families, 4 genera, and 5 species of Pteridophyta were evaluated as endemic plants in Jeju Island.

Of these, in Hallasan Natural Reserve Region, 53 taxa in 27 families and 49 genera of Korean and Jeju endemic plants are distributed. Fourteen species in 11 families and 14 genera are growing in the region. Thirty nine species in 22 families and 35 genera are identified as endemic plants to Jeju. Thirty two species in 20 families and 31 genera out of 32 species are found only in Hallasan Natural Reserve Region and others are distributed in beyond the region as well.

In this region, total of 116 species in 92 genera and 43 families are listed in rare plants excluding endemics. It consists of 15 species in 6 families and 12 genera of pteridophyte, 2 species in 2 families and 2 genera of coniferae and 99 species in 35 families and 78 genera of endosperm. The rare plant species found in the region are arctic-alpine plants which are relics of the Glacial Age.