Endemic and Rare Plants of Mt. Sorak

Tchang Bok Lee
(Emeritus Professor, Coll. of Agric., Seoul Nat’l Univ.)

雪嶽山의 特產 및 稀貴植物

李 昌 福
(서울대학교 農科大學 林学科 名譽教授)

Summary

With an investigation of the flora of the nature reserve area of Mt. Sorak the author presented 114 taxa among more or less 1000 total vascular plants reported so far from this area. He concluded that 65 of 114 taxa were endemic plants, in which 17 taxa were inhabited only in this area. The most of the rest taxa were those plants that were growing at the border area of their distributions, which he listed them under a category of rare plants. Thirteen taxa which include alpine species and endangered species were presented with their ecological status.

摘要

雪嶽山地域에서 지금까지 報告된 약 1000 종의 藻類植物중에서 114종의 稀貴植物이 天然保護區域
內에서 자라고 있음을 밝혔다. 114종중에서 65종은 特產植物이며, 其中 그중에서 17종은 이
區域內에서만 生育한다. 이 밖에 底部의 植物들은 分布界線上에 坐하여 있으므로 이
植物들은 稀
貴植物로 收錄하였다. 高山植物 및 稀有植物에 놓인 稀貴種을 含有的 13종은 그들의 生態의 特性을
보고하였다.

There are more or less 1000 vascular plant taxa growing in the nature reserve area of Mt. Sorak, in which 65 endemic taxa are included. Besides of those endemic plants some rare plants which stand on the border line of their distributions or those which are endangering state caused by an environmental changes are listed here.

One hundred and fourteen taxa of vascular plants which include endemic and rare plants are listed below. In the endemic species of total one taxon stands on the northern border of it’s distribution, 17 taxa are limited to this area and 47 taxa are further extended out side of this area.

On the rare plants 35 taxa are those that occupied front area of their distributions. Thirty three taxa

extended further down to this area from northern part through the Taebaek Mountain Range and 4 taxa came up to this area from the south and were prohibited further migration toward north by a high range of mountains.

Seven taxa of northern alpine plants which have survived at the summit of both Mountains, Sorak and Chombong are treated here as rare plants, and 5 taxa, such as Lespedeza bicolor for. alba, Acer mono
var. ambiguum, Gentiana uchiyamei, Melampyrum setaceum var. nakai, and Schizopepon bryonial
folia are also included here under a category of rare plants because of a few individuals and limited growing places. Among these white flower of Lespedeza is found only at the eastern slope of Mt. Wha-
An endemic species growing on the rock of stream side.

_Carex okamotoi_ Ohwi

An endemic species standing at the front line of its northern boundary of distribution along the edge of Hankeryong.

_Carex lastolepis_ Franchet

Grows along trail side as well as open space in the wood occupying southern border of it's distribution.

_Eriophorum gracile_ Koch

Grows along the stream side of valley and stands at the southern border of it's distribution.

_Liliaceae_

_Aletris fauriei_ Lev. et Vnt.

An endemic species growing along stream side but it goes up to grass land in the Mt. Jiri.

_Allium senescens_ Lin.

Appears at the upper part of the mountain and occupies southern border of it's distribution.

_Allium victorialis var. platyphyllum_ Makino

Grows at the upper part of the mountain confronting southern border of it's distribution though it appears at the upper part of Mt. Jiri.

_Lilium cernuum_ Kom.

This area is closer to the southern border of distribution and grows at the upper part of the mountain.

_Lilium distichum_ Nakai

Grows at the upper part of the mountain occupying southern border of it's distribution.

_Trillium tschonoskii_ Max.

An endangered northern species growing in the woods.

_Iridaceae_

_Iris uniflora var. carinata_ Kitagawa grows at the open space of deep valley, along the upper edge of the whachae-bong and around Bongjong-am, standing at the southern border of it's distribution.

_Salicaceae_

_Salix hallaisanensis_ Lev.

An endemic species growing among shrub wood.

_Salix hallaisensis var. longifolia_ Nakai

An endemic variety, growing with basic species.

_Salix maximowiczii_ Kom.
This area is closer to the southern border of its distribution and grows along the stream side of valley.

*Chosenia bracteosa* Nakai

It grows only from Suryom Hutte to Sang-pok where is the southern border line of it's distribution.

**Betulaceae**

*Alnus fruticosa var. mandshurica* Callier

Grows mostly along the stream side of deep valley and standing at the front line of it's distribution.

**Caryophyllaceae**

*Silene jeniseensis* Willd.

Grows at the summit of the mountain where is the southern border of it's distribution, rare.

*Silene koreana* Kom.

Grows at the mountain foot where is the southern limit of it's distribution or closer to it.

**Ranunculaceae**

*Aconitum koreanum* Reymond

An endangered species growing in the open space of the woods.

*Anemone glabratra* Juzepc.

Grows on the edge of the forest and stands on the front line of southern border of it's distribution.

*Anemone koreaiensis* Nakai

An endemic species distributed to this area limited.

*Clematis fusca var. coreana* Nakai

An endemic variety of the species growing to this area limited.

*Clematis trichotoma* Nakai

An endemic species growing on the edge of the woods.

*Eranthis stellata* Max.

Grows on the upper part of the mountain such as Daeung-ryong and is standing at the front line of the southern border of it's distribution.

*Ipsoypyrum raddeanum* Max.

Grows under woods confronting the southern border of it's distribution.

*Megaleranthus saniculaefolia* Ohwi

An endemic genus to Korea and growing along the stream sides of the Mt. Chombong.

*Thalictrum coreanum* Lev.

An endemic taxon growing along the rocky site of Mt. Whachaebong.

*Thalictrum rochebrunnianum var. grandisepalum* Ohwi

An endemic variety of the species differing from the basic species by sepal size and occurs at the foot of the mountain.

*Paonia japonica* Miyabe et Takeda

An endangered species growing in the open space of the woods.

**Berberidaceae**

*Berberis koreana* Palibin

An endemic taxon growing in the shrubly woods of the mountain foot.

*Leontice microrhyncha* S. Moore

Grows on the summitish area of Mt. Bugamryong along boundary of the nature reserve where *Erythro-nium japonicum*, *Symlocarpus nipponicus* and *Anemo-none raddeana* etc form a population.

**Menispermaceae**

*Menispermum daceuricum var. pilosum* Schneider

Grows at the foot of Mt. Chombong near the village of Osaek confronting the southern border of it's distribution.

**Cruciferae**

*Cardamine amaraeformis* Nakai

An endemic species growing along the stream sides and wet places of the valley.

**Saxifragaceae**

*Saxifraga oblongifolia* Nakai

An endemic species growing on the wet rock surface.

*Saxifraga punctata* Lin.

Grows at the upper part of the mountain confronting at the southern border of it's distribution.

*Deutzia coreana* Lev.

An endemic taxon which grows on crack of the rock through all parts of Korea.

*Deutzia coreana var. triradiata* Hatus.

An endemic variety limited in the southern part of Korea.

**Rosaceae**

*Filipendula glaberrima* Nakai

An endemic species growing near wet places.

*Crataegus komarovii* Sargent

Grows on the summit of Mts Sorak and Chombong but disappeared from the latter place, both places are southern border of it's distribution.
Potentilla matsumurae Wolf.
An alpine plant which appears not often.

Pyrus ussuriensis var. diamentica Ueyki
An endemic taxon limited to this area grows in the woods.

Pyrus ussuriensis var. hakunensis T. Lee
An endemic variety growing in the woods.

Rosa acicularis Lindley
An alpine shrub growing in the shrubly woods, rare.

Rosa koreana Kom.
Grows on the upper part of the mountain where is the southern border of it's distribution.

Rosa marrettii Lev.
Grows on the summitish part of the mountain where is the southern border of it's distribution.

Spiraea pubescens var. lasiocarpa Nakai
An endemic variety restricted to this area.

Waldsteinia ternata Fritsch
Grows under forest standing on the southern border of it's distribution.

Leguminosae
Gleditsia japonica var. koraiensis Nakai
Grows at lower part of the mountain and is an endemic variety.

Lespedeza thunbergii var. intermedia T. Lee
An endemic variety growing at the foot of the mountain.

Lespedeza bicolor for. alba Ohwi
A rare form growing at the foot of Mt. Whachae-bong.

Vicia unijuga var. apoda Max.
Grows on the summit of Mt. Daechong-bong.

Vicia venosa var. cuspidata Max.
An endemic variety growing in the open forest and grass land.

Vicia venosissima Nakai
An endemic taxon growing from the foot to the summit of the mountain.

Geraniaceae
Geranium davuricum DC.
An alpine species of northern element which grows on the summitish part of the mountain.

Geranium eriostemon Fischer
An alpine species of northern element growing on the summitish part of the mountain.

Euphorbiaceae
Sapium japonicum Pax et Hoffm.
Grows in the eastern valley of the mountain where is the northern border of it's distribution.

Aceraceae
Acer mono var. ambiquum Rehder
This variety appears very often from the entrance of Shinhung Buddhist temple to the Gejo-am through valley bottom though it appears rare in the other areas.

Rhamnaceae
Rhamnus koraiensis Schneider
An endemic species growing in the shrubly woods.

Tiliaceae
Tilia megaphylla Nakai
An endemic species restricted to this area.

Violaceae
Viola diamanthica Nakai
An endemic species forms small populations in the woods.

Araliaceae
Acanthopanax chiisanensis Nakai
An endemic species growing in the open woods.

Oplopanax elatus Nakai
An endemic species growing along the upper ridges of the mountain.

Umbelliferae
Angelica gigas Nakai
This endemic species has been dug up by herbal diggers and made it almost endangered.

Bupleurum euphorbioides Nakai
An endemic species restricted to this area grows on the ridge line of the mountain.

Cnidium tachiroei Makino
This species grows on cracks of the rock or sometimes appears often on the rock near stream sides.

Ericaceae
Arctous ruber Nakai
An alpine plant which stands at the southern border of it's distribution.

Rhododendron aureum Georgi
Inhabited at the summit of Mt. Junchong-bong where is the southern border of it's distribution.

Rhododendron fauriei for. rufescens T. Lee
It forms good populations occasionally in the woods of *Thuja koraiensis* etc. This is a rare species growing in the deep valley of the higher mountains.

**Vaccinium koreanum** Nakai
An endemic species growing mostly along the ridges of the mountains through all parts of Korea.

**Vaccinium uliginosum** Lin.
Grows only at the summit of Jungchong-bong where is the southern border of it’s distribution though it appears again at the top of Mt. Halla.

**Primulaceae**

**Androsace cortusaefolia** Nakai
An endemic species growing at the southern border of it’s distribution.

**Styracaceae**

**Styrax japonica** Siebold et Zucc.
The valley of Sorak-dong is the northern border of distribution for this species.

**Oleaceae**

**Forsythia ovata** Nakai
An endemic taxon of this area and grows along the ridge of Mt. Whachae-bong as well as on the cracks of the cliff of outer Sorak area from the river sides to the summit of Mt. Daechong-bong.

**Gentianaceae**

**Gentiana axillarisflora var. coreana** Kudo
An endemic taxon growing in this area restricted.

**Gentiana uchiyamai** Nakai
A rare species growing from valley bottom to the top of the mountain in the area of higher altitude.

**Solanaceae**

**Scopolia japonica** Max.
An endangered species caused by continuous digging of herbal diggers. It distribute several places of Korea but tends to disappear caused by the same reason.

**Labiatae**

**Salvia chanroenica** Nakai
An endemic taxon growing at the margin of forest in the lower elevation.

**Schrophulariaceae**

**Pedicularis mandsurica** Max.
Grows at the upper part or summitish area where is supposed to be the southern border of it’s distribution.

**Melamprum setaceum var. nakaianum** Yamazaki
Grows in the open forest from the middle part towards upper elevation.

**Pedicularis verticillata** L.
Inhabits at the summitish area of the mountain where is supposed to be the southern border of it’s distribution.

**Pseudolysimachion kiusianum var. diamantica** Yamazaki
An endemic species which grows from 970m above sea level and this area is the southern border of it’s distribution or closer.

**Pseudolysimachion rotundum var. subintegrum** Yamazaki
An endemic variety which grows at the upper part of the mountain.

**Pseudolysimachion rotundum var. coreanum** Yamazaki
An endemic taxon which inhabitats at the upper area of the mountain.

**Scrophularia koraiensis** Nakai
An endemic taxon which appears from the middle towards higher elevation of the mountain.

**Cucurbitaceae**

**Schizopepon bryoniaefolia** Max.
A rare species which grows at the margin of forest.

**Rubiaceae**

**Asprena lasiantha** Nakai
An endemic species which grows on the open places of woods.

**Caprifoliaceae**

**Lonicera coreana** Nakai
An endemic shrub growing at the upper part of the mountain.

**Lonicera okamotoana** Ohwi
An endemic taxon which appears in the same habitat of the former taxon.

**Weigela subsessilis** Bailey
An endemic taxon which grows in the valley bottom through all parts of Korea.

**Valerianaceae**

**Patrinia saniculaefolia** Hemsley
An endemic species which grows mostly on the rocky site of mountain ridges.

**Dipsacaceae**

**Scabiosa mansenensis for. pinnata** Nakai
An endemic form which grows at the upper site of the mountain.

*Campanulaceae*

*Adenophora grandiflora* Nakai
An endemic species which grows in the higher area than 1200m above sea level.

*Adenophora grandiflora for. alba* T. Lee
An endemic form which appears with basic species.

*Adenophora lamarckii* Fischer
Grows from 1300m above sea level which is the southern border of it's distribution.

*Adenophora lamarckii for. albifloras* T. Lee
An endemic form from this area grows together with basic species.

*Hanabusaya asiatica* Nakai
An endemic genus of Korea grows in the area higher than 700m above sea level.

*Hanabusaya asiatica for. alba* T. Lee
Grows around the Nymph’s Water Fall of Osak valley.

*Hanabusaya asiatica for. albescen* T. Lee
Grows on the higher elevation than 1200m above sea level along the ridge of the Mt. Whachaebong towards Daechong-bong, from Mt. Junghong-bong downwards Hangeryong and eastern slope of Mt. Chombong.

*Hanabusaya asiatica for. rubescens* T. Lee
Grows on the lower elevation than 1000m above sea level in the eastern slope of Mt. Chombong.

*Hanabusaya asiatica for. rubropurpurea* T. Lee
This endemic form differs from basic species by its corona colour only and appears to be redish than basic species. This form is growing in the eastern slope of the Mt. Chombong.

*Compositae*

*Cirsium chanroenicum* Nakai
An endemic species growing in the open space of the upper part of the mountain.

*Leontopodium coreanum* Nakai
An endemic species which inhabited only to this area. It appears on cracks of the rock through Mt. Hwachae-bong from 700m above sea level as well as Hankeryong ridges etc.

*Saussurea diamantica* Nakai
An endemic species which grows in the open woods appears on the higher elevation than 900m above sea level along the ridges of Mt. Whachaebong.

*Saussurea diamantica var. longifolia* Nakai
An endemic variety which seems to be growing further north than the basic species was not found yet from this area.

*Saussurea nutans* Nakai
An endemic species which appears at the upper part of the mountain.

*Saussurea triangulata* Fr. et Meyer
An alpine species which appears not often.

*Saussurea triangulata subsp. manshurica* Kitagawa
Grows at the southern border of it's distribution.

*Senecio koreanus* Kom.
An endemic taxon which grows from the middle to the summitish area of the mountain.