



Journal of Asia-Pacific Biodiversity

journal homepage: <http://www.elsevier.com/journals/journal-of-asia-pacific-biodiversity/2287-884x>



Original article

Distribution characteristics of plants in the Ungseokbong Mountain, Gyeongsangnam-do, Korea



Hee-Suk Hwang, Su-Young Jung, Jeong-Won Jang, Jun-Gi Byeon, Kae-Sun Chang,
Seung-Hwan Oh, Jong-Cheol Yang*

Division of Forest Biodiversity and Herbarium, Korea National Arboretum, Pocheon, Gyeonggi-do, Republic of Korea

ARTICLE INFO

Article history:

Received 24 January 2014

Received in revised form

11 March 2014

Accepted 27 March 2014

Available online 24 April 2014

Keywords:

Rare plants

Endemic plants

Specific plants designated by the Ministry of Environment

Naturalized plants

ABSTRACT

This study was conducted 13 surveys from 2007 through 2012. The surveys on the entire plants distribution in the Ungseokbong Mountain found 491 taxa in total: 99 families, 290 genera, 419 species, 3 subspecies, 61 varieties, and 8 forms. 1,211 specimens were secured as evidence. In particular, 11 taxa of the rare plants which were designated by the Korea Forest Service were confirmed, and 12 taxa of the endemic plants were confirmed in this study. Those plants above Class III of the specific plants designated by the Ministry of Environment were confirmed 19 taxa. Among them, in particular, it was confirmed that *Kirengeshoma koreana* Nakai has a new habitat in the Unseokbong. Naturalized plants included 34 taxa accounting for 6.9% were representatively confirmed.

Copyright © 2014, National Science Museum of Korea (NSMK) and Korea National Arboretum (KNA).

Production and hosting by ELSEVIER. All rights reserved.

Introduction

The Ungseokbong Mountain is located on the administrative boundary with: Na-ri, Sancheong-eup; Honggye-ri, Samjang-myeon; and Cheonggye-ri, Danseong-myeon, Sancheong-gun, Gyeongsangnam-do, which is 1,099 m high. It is situated at 35 degrees 21 minutes north latitude and 127 degrees 52 minutes east longitude, and designated as a county park in 1983. A branch from Cheongwangbong (peak; 1,915 m) of Jirisan Mountain, it has rough and irregular sides, and is sometimes used for a rain calling ceremony in the year of drought. The name of 'Ungseok' derives from the shape of peak looking like a bear ('Ung' means a bear in Chinese character). The Jirisan Mountain (1,915 m) is located in the west of survey site; and Hwangmaesan Mountain (1,104 m) is located in its northeast side. The Ungseokbong Mountain stands tall in the southern part of the Sobaek Mountains suffering from continuous uplifts and erosions and phasing in forming intermount basins, highlands, and plains accompanied by deep valleys mainly with granite and granite gneiss (Kim and Kil, 2000). Floristically, the mountain belongs to the southern sub-district among 8 sub-districts in the Korean District (Lee and Yim, 2002). Sancheong-gun indicates its 6-year average temperature of

13.2 °C from 2007 through 2012 with the average highest temperature of 19.2 °C and the average lowest temperature of 8.1 °C, and with the annual average precipitation of 1,641.2 mm; among which average temperature and average highest temperature are indicated to gradually decrease (Table 1, Korea Meteorological Administration Seoul, 2007, 2008, 2009, 2010, 2011 and 2012).

There are previous studies by Kim (2010), An and Choo (2010) conducted on the Ungseokbong Mountain in terms of structural analysis on flora and forest community; though, which are limited to the reference of approximate plant distribution. In fact, there is no study on the whole plant distribution in the Unseokbong Mountain. In this regard, this study was conducted to provide basic materials to secure plant distribution information by obtaining evidence specimens and further efficiently manage and conserve rare and endemic plants through the surveys on plant distribution in the Unseokbong Mountain, Gyeongsangnam-do.

Materials and methods

This area was prior surveyed from April through October 2007; in 2012 an additional complementary survey was conducted (Figure 1, Table 2). In addition, the accuracy of results required collecting only the individuals with generative organs such as flower, fruit, and spore, etc.; if not mature or without a generative organ, those that could be exactly identified were recorded (Appendix 1). Those collected plants were made in a dry specimen and maintained in the

* Corresponding author. Tel.: +82 31 540 1075.

E-mail address: yangun@forest.go.kr (J.-C. Yang).

Peer review under responsibility of National Science Museum of Korea (NSMK) and Korea National Arboretum (KNA).

Table 1

The annual mean temperature and precipitation in the Unseokbong Mountain, Gyeongsangnam-do, Korea for the recent 6 years (2007–2012).

Division	Temperature (°C)			Precipitation (mm)
	Mean	Mean maximum	Mean minimum	
2007	13.8	19.9	8.8	1775.9
2008	13.2	19.7	7.9	785.5
2009	13.4	19.8	8.0	1169.0
2010	13.0	19.0	8.1	2189.5
2011	13.1	18.7	8.2	2013.1
2012	12.8	18.5	8.1	1914.2
Average	13.2	19.2	8.1	1,641.2

Korea National Herbarium (KH) of the Korea National Arboretum. Identifying the taxa was conducted using the illustrated plant book written by Lee (1980, 2003a, 2003b) and Lee (1996a, 1996b); major specific plants that deserve special mention were identified referring to the Ministry of Environment-National Institute of Environmental Research (2006), endemic plants were identified referring to Oh et al. (2005a), rare plants were identified referring to the Korea National Arboretum (2008), and naturalized plants were identified referring to Park (1995, 2001, 2009), Lee et al. (2011). Classification system and scientific names were subject to the Korea National Arboretum, 2014 of the Korea National Arboretum.

Result

Flora survey

The results of surveying the flora in the Ungseokbong Mountain revealed a total of 99 families, 290 genera, 419 species, 3 subspecies,

61 varieties, 8 forms, and 491 taxa. Taxonomically, pteridophyta was surveyed as many as 7 families, 13 genera, and 27 taxa; gymnosperm was surveyed as many as 3 families, 3 genera, and 3 taxa; and dicotyledonous plant out of angiosperm was surveyed as many as 77 families, 212 genera, and 343 taxa and non-dicotyledonous plant out of angiosperm was surveyed as many as 12 families, 62 genera, and 118 taxa (Table 3). As for the diversity by family structuring species, chrysanthemum family recorded 54 taxa (10.9%), the highest, which was followed by gramineae (45 taxa, 9.1%), liliaceae (28 taxa, 5.7%), and cyperaceae (25 taxa, 5.0%).

Shrub layer was dominantly distributed largely by *Corylopsis gotoana* var. *coreana* (Uyeki) T.Yamaz. ranging from the peak of the Ungseokbong Mountain through the ridge to the helicopter landing site and ranging from the peak to the all direction to Naeri reservoir while *Rhododendron mucronulatum* Turcz. and *R. schlippenbachii* Maxim., etc. are significantly distributed at the foot of the mountain. According to the survey on some of the species conducted by Kim (2010), *Sorbus commixta* Hedl. and *Hosta longipes* (Franch. & Sav.) Matsum., etc. were distributed ranging from the peak of the Ungseokbong Mountain to the helicopter landing site; which had yet to be confirmed in this study, and judging from the fact that rather this study found *Sorbaria sorbifolia* var. *stellipila* Maxim. and *Hosta capitata* (Koidz.) Nakai, such Kim's data appears to be a wrong identification.

Endemic plants

Aconitum austro-koreense Koidz., an endemic plant confirmed in the survey, is sporadically distributed along with trail paths around the valleys while *Thalictrum uchiyamai* Nakai is located in the direction of Naeri reservoir from the peak and around forest roads, posing a concern to be stamped or collected by climbers. Besides, a

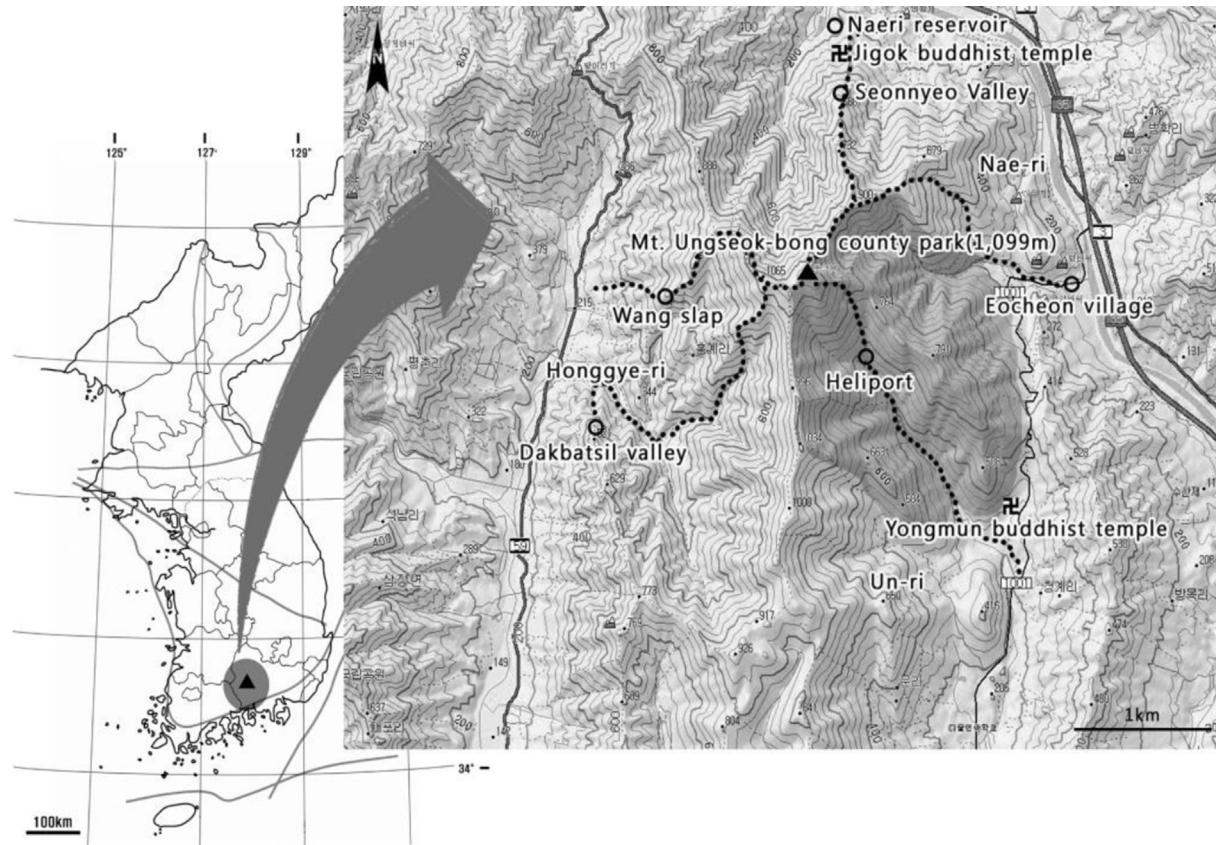


Figure 1. Map of the investigated area in this study.

Table 2

Investigation dates and routes.

Date	Survey Routes at the Ungseokbong Mountain, Gyeongsangnam-do Korea
26 Apr. 2007	A: Buddhist temple-Jigok—Valley-Seonnyeo—Valley north B: Eocheon-village—Forest road—Heliport—Valley east— Eocheon-village C: Heliport—Forest road—Eastern slope-Buddhist temple Yongmun
31 May 2007	Buddhist temple-Jigok—Valley-Seonnyeo—Valley north
20 Jun. 2007	Buddhist temple-Jigok—Valley-Seonnyeo—Forest road— Slap-wang
21 Jun. 2007	A: Eocheon-village—Forest road—Heliport—Ridge—Summit of the Ungseokbong Mountain B: Eocheon-village—Forest road—Heliport—Valley east— Buddhist temple Yongmun
28 Jun. 2007	Buddhist temple-Jigok—Valley-Seonnyeo—Forest road— Slap-wang
29 Jun. 2007	A: Eocheon-village—Forest road—Heliport—Ridge—Summit of the Ungseokbong Mountain B: Heliport—Forest road—Eastern slope-Buddhist temple Yongmun
7 Aug. 2007	Eocheon-village—Forest road—Heliport—Ridge—Summit of the Ungseokbong Mountain
13 Sep. 2007	Buddhist temple-Jigok—Valley-Seonnyeo—Forest road— Slap-wang
14 Sep. 2007	A: Eocheon-village—Forest road—Heliport—Ridge—Summit of the Ungseokbong Mountain B: Heliport—Forest road—Eastern slope-Buddhist temple Yongmun
18 Oct. 2007	Buddhist temple-Jigok—Valley-Seonnyeo—Forest road— Slap-wang
25 Jun. 2012	Honggye-ri Dakbatsil-valley—Summit of the Ungseokbong Mountain —Reservoir-Naeri
26 Jun. 2012	Reservoir-Naeri-Summit of the Ungseokbong Mountain— Slap-wang
27 Jun. 2012	Buddhist temple-Jigok—Valley-Seonnyeo—Forest road— Slap-wang

total of 11 taxa were confirmed including *Weigela subsessilis* (Nakai) L. H. Bailey (Figure 2, Table 4). As for the near Jirisan Mountain, there were confirmed of 76 taxa of endemic plants, which were relatively higher compared to the flora in other areas (Jang et al.,

Table 3

Summary on the floristics of the Ungseokbong Mountain, Gyeongsangnam-do, Korea.

Taxa	Fam.	Gen.	Sp.	Subsp.	Var.	For.	Total
Pteridophyta	7	13	24	—	3	—	27
Gymnospermae	3	3	3	—	—	—	3
Angiospermae							
Dicotyledons	77	212	295	3	40	5	343
Monocotyledons	12	62	97	—	18	3	118
Total	99	290	419	3	61	8	491

*Fam.: Family, Gen.: Genus, Sp.: Species, Subsp.: Subspecies, Var.: Variety, For.: Forma.

Table 4

The list of the Korean endemic plants.

Family name	Scientific name	Korean name	Jirisan Mountain
Polygonaceae	<i>Fallopia koreana</i> B.U.Oh & J.G.Kim	삼도하수오	
Ranunculaceae	<i>Aconitum austro-koreense</i> Koidz.	세뿔투구꽃	○
Ranunculaceae	<i>Thalictrum uchiyamai</i> Nakai	자주정의다리	○
Aristolochiaceae	<i>Asarum patens</i> (K.Yamaki) B.U.Oh	금오족도리풀	
Papaveraceae	<i>Coreanomecon hylomeconoides</i> Nakai	매미꽃	○
Saxifragaceae	<i>Kirengeshoma koreana</i> Nakai	나도승마	
Rubiaceae	<i>Asperula lasiantha</i> Nakai	갈퀴아재비	○
Caprifoliaceae	<i>Weigela subsessilis</i> (Nakai) L.H.Bailey	병꽃나루	○
Compositae	<i>Cirsium setidens</i> (Dunn) Nakai	고려엉겅퀴	○
Compositae	<i>Saussurea seoulensis</i> Nakai	분취	
Cyperaceae	<i>Carex okamotoi</i> Ohwi	지리대사초	
	11 taxa		6 taxa

2007). The common taxa found in the Ungseokbong Mountain and Jirisan Mountain were 6 including *Aconitum austro-koreense* Koidz., *Thalictrum uchiyamai* Nakai, and *Coreanomecon hylomeconoides* Nakai, but it was not distinct in distribution between major species.

Rare plants

Critically endangered species (CR) among the rare plants designated by the Korea Forest Service was surveyed 1 taxon such as *Kirengeshoma koreana* Nakai. *K. koreana* Nakai is distributed in the valley part around Naeri reservoir, in and around the valley of Dakbatsilgol, and along the forest ridge from the peak of the Ungseokbong Mountain to the helicopter landing site. Its distribution areas are the cutting areas of forest road and around the valleys with a few populations, suggesting an urgent protection and management in terms of rarity and endangerment. Recently, Kang et al. (2007) conducted a plant-sociological survey in the colony of *K. koreana* Nakai distributing in the Baekunsan Mountain; however, it is needed to further come up with basic materials on how to conserve rare plants distributing on a limited basis. Vulnerable (VU) species was surveyed 1 taxon such as *Aconitum austro-koreense* Koidz. except for *Koelreuteria paniculata* Laxmann that was planted while least concerned (LC) species were surveyed 9 taxa including *Coreanomecon hylomeconoides* Nakai and *Mono-tropa uniflora* L. (Figure 3, Table 5).

Specific plants

Among the floristic specific plants, those in Degree V include 3 taxa such as *Corylopsis gotoana* var. *coreana* (Uyeki) and T.Yamaz.



Figure 2. A. *Aconitum austro-koreense* Koidz., B. *Asarum patens* (K.Yamaki) B.U.Oh, C. *Thalictrum uchiyamai* Nakai.



Figure 3. A. *Corylopsis gotoana* var. *coreana* (Uyeki) T.Yamaz., B. *Viola albida* Palib., C. *Monotropa uniflora* L.

Table 5

List of the rare and endangered plants which were designated by Korea Forest Arboretum.

Family name	Scientific name	Korean name	Degree
Saxifragaceae	<i>Kirengeshoma koreana</i> Nakai	나도승마	CR
Ranunculaceae	<i>Aconitum austro-koreense</i> Koidz.	세뿔투구꽃	VU
Aristolochiaceae	<i>Aristolochia contorta</i> Bunge	쥐방울덩굴	LC
Papaveraceae	<i>Coreanomecon hylomeconoides</i> Nakai	매미꽃	
Hamamelidaceae	<i>Corylopsis gotoana</i> var. <i>coreana</i> (Uyeki) T.Yamaz.	히어리	
Violaceae	<i>Viola albida</i> Palib.	태백제비꽃	
Pyrolaceae	<i>Monotropa uniflora</i> L.	수정난풀	
Gentianaceae	<i>Gentiana triflora</i> var. <i>japonica</i> (Kusn.) Hara	과남풀	
Valerianaceae	<i>Patrinia saniculaefolia</i> Hemsl.	금마타리	
Liliaceae	<i>Lilium distichum</i> Nakai ex Kamibay Nakai	말나리	
Iridaceae	<i>Iris ensata</i> var. <i>spontanea</i> (Makino)	꽃창포	
	11 taxa		

which are dominantly distributed along the ridge of Unseokbong Mountain; those in Degree IV include 2 taxa such as *Coreanomecon hylomeconoides* Nakai; those in Degree III include 14 taxa such as *Cirsium setidens* (Dunn) Nakai, *Salvia japonica* Thunb., and *Diarrena fauriei* (Hack.) Ohwi; and the others in Degrees I and II were confirmed: a total of 50 taxa (Figure 4, Table 6).

Naturalized plants

The naturalized plants confirmed within the survey area include a total of 12 families, 28 genera, 32 species, 2 varieties, and 34 taxa such as: *Amaranthus retroflexus* L., *Bidens pilosa* L., *Galinsoga ciliata* (Raf.) S. F. Blake, *Ipomoea hederacea* var. *integriuscula* A. Gray. These naturalized plants take up 6.9% of the entire taxa surveyed in this study. Among them, chrysanthemum family was 13 taxa showing the highest appearance taking up 38.2% followed by gramineae, polygonaceae, and convolvulaceae (Figure 5, Table 7).

The Ungseokbong Mountain was confirmed to have *Bidens pilosa* L., *Festuca arundinacea* Schreb., and *Eragrostis curvula* Nees along

Table 6

The list of 5th to 3rd degree taxa of specially designated plants by the Ministry of Environment National Institute of Environmental Research.

Degree	Scientific name/Korean name	Total
V	<i>Kirengeshoma koreana</i> Nakai 나도승마, <i>Corylopsis gotoana</i> var. <i>coreana</i> (Uyeki) T.Yamaz. 히어리, <i>Aconitum austro-koreense</i> Koidz. 세뿔투구꽃	3
IV	<i>Thelypteris beddomei</i> (Bak.) Ching 가는잎처녀고사리, <i>Coreanomecon hylomeconoides</i> Nakai 매미꽃	2
III	<i>Betula chinensis</i> Maxim. 개박달나무, <i>B. costata</i> Trautv. 거제수나무, <i>Stewartia pseudocamellia</i> Maxim. 노각나무, <i>Sorbaria sorbifolia</i> var. <i>stellipila</i> Maxim. 쇠땅나무, <i>Poncirus trifoliata</i> Raf. 행자나무 (planted), <i>Koelreuteria paniculata</i> Laxmann 모감주나무(planted), <i>Angelica gigas</i> Nakai 창당귀, <i>Vaccinium hirtum</i> var. <i>koreanum</i> (Nakai) Kitam. 산앵도나무, <i>Asperula lasiantha</i> Nakai 갈퀴아재비, <i>Hedysotis diffusa</i> Willd. 백운풀, <i>Salvia japonica</i> Thunb. 통근배암차즈기, <i>Scrophularia koraiensis</i> Nakai 토현삼, <i>Cirsium setidens</i> (Dunn) Nakai 고려엉겅퀴, <i>Diarrhena fauriei</i> (Hack.) Ohwi 광통용수염	14

with the near forest road through the foot of the ridge. These naturalized plants are also distributed along with the trail pathway surrounding Jirisan Mountain, posing a concern of the possibility to proliferate these naturalized plants along with such trails.

Classification by purpose

As results of analyzing vascular plants by purpose based on the data by Lee (1976), it was found that except for 146 taxa (29.7%) – not known of their purpose – out of 491 taxa, 345 taxa (70.2%) were useful as a resource plant. Those 345 taxa were divided by purpose into: 168 edible (E) (34.4%), 6 fiber (F) (1.2%), 133 medical (M) (27.0%), 57 ornamental (O) (11.6%), 178 pasturing (P) (36.2%), 6 industrial (I) (1.2%), 11 dyeing (S) (2.2%), 13 timber (T) (2.6%) plants (Table 8, Appendix 1). The taxa with more than two purposes are 213. Regarding this, it is necessary to have an appropriate plan in terms of management and future use of the major resource plants.



Figure 4. A. *Coreanomecon hylomeconoides* Nakai (IV), B. *Stewartia pseudocamellia* Maxim. (III), C. *Cirsium setidens* (Dunn) Nakai (III).



Figure 5. A. *Aster pilosus* Willd, B. *Bidens pilosa* L., C. *Ipomoea hederacea* var. *integriuscula* A.Gray.

Table 7

The list of naturalized plants.

Famaly name	Scientific name/Korean name	Total
Polygonaceae	<i>Fallopia dentata</i> (F.Schmidt) Holub 큰닭의덩굴, <i>F. dumetorum</i> (L.) Holub 닭의덩굴, <i>Rumex acetosella</i> L. 애기수영, <i>R. crispus</i> L. 소리챙이, <i>R. obtusifolius</i> L. 둘소리챙이	5
Phytolaccaceae	<i>Phytolacca americana</i> L. 미국자리공	1
Amaranthaceae	<i>Amaranthus retroflexus</i> L. 털비름	1
Cruciferae	<i>Lepidium virginicum</i> L. 품다닥냉이	1
Leguminosae	<i>Trifolium repens</i> L. 토끼풀	1
Simaroubaceae	<i>Ailanthus altissima</i> (Mill.) Swingle 가죽나무	1
Onagraceae	<i>Oenothera biennis</i> L. 달맞이꽃	1
Rubiaceae	<i>Diodia teres</i> Walter 백령풀	1
Convolvulaceae	<i>Cuscuta pentagona</i> Engelm. 미국실새삼, <i>Ipomoea hederacea</i> var. <i>integriuscula</i> A.Gray 등근잎미국나팔꽃	2
Scrophulariaceae	<i>Veronica arvensis</i> L. 선개불알풀	1
Compositae	<i>Ambrosia artemisiifolia</i> L. 돼지풀, <i>Aster pilosus</i> Willd. 미국쑥부쟁이, <i>A. subulatus</i> var. <i>sandwicensis</i> A.G.Jones 큰비짜루국화, <i>Bidens frondosa</i> L. 미국가막사리, <i>B. pilosa</i> L. 올산도깨비바늘, <i>Conyza canadensis</i> (L.) Cronquist 망초, <i>Crassocephalum crepidioides</i> (Benth.) S.Moore 주홍서나물, <i>Erechtites hieracifolia</i> Raf. 블은서나물, <i>Erigeron annuus</i> (L.) Pers. 개망초, <i>E. strigosus</i> Muhl. 주걱개망초, <i>Galinsoga ciliata</i> (Raf.) S.F.Blake 털별꽃아재비, <i>Hypochoeris radicata</i> L. 서양금흔초, <i>Xanthium canadense</i> Mill. 큰도꼬마리	13
Gramineae	<i>Coix lacryma-jobi</i> L. 엽주, <i>Dactylis glomerata</i> L. 오리사, <i>Eragrostis curvula</i> Nees 능수참새그령, <i>Festuca arundinacea</i> Schreb. 큰김의털, <i>Lolium perenne</i> L. 호밀풀, <i>Panicum dichotomiflorum</i> Michx. 미국개기장 34 taxa	6

Endemic species

Kirengeshoma koreana Nakai

This species, designated as rare and endangered species by the Korea Forest Service, is distributed in Gwangyang, Jeollanam-do with less than 10 habitats and was reported to have far less populations (Korea National Arboretum, 2008). It is an endemic species of Korea only inhabiting in Gwangyang and the Baekunsan Mountain in Hamyang (Oh et al., 2004, Oh et al., 2005a, Oh, 2010a) and designated as the protection wild animals and plants notified by the Ministry of Environment (Ministry of Environment, 1998, Kang et al., 2007). This study confirmed its new habitat around the Ungseokbong Mountain in Sancheong-gun beside the Baekunsan Mountain, which forms little bushes or is sporadically distributed in and around the valley near the Naeri reservoir in the Ungseokbong Mountain area, the valley near the Yongmunsa Temple, the ridge from the peak through the helicopter landing site, and the valley of Dakbatsilgol (Figure 6A). It is necessarily to come up with the measures to conserve the habitat through the basic surveys of population number and the analysis on surrounding environments considering the species' rarity and endangerment.

Coreanomecon hylomeconoides Nakai

Coreanomecon hylomeconoides is distributed usually in southern part of the Korean peninsula such as Jeollanam-do and Gyeongsangnam-do; particularly, Jirisan Mountain and Baekunsan Mountain in Gwangyang and their surroundings were confirmed to be a habitat of this species and also little population of this kind was confirmed in some areas in Namhae, Gyeongsangnam-do and in the Palyeongsan Mountain in Goheung, Jeollanam-do (Son et al., 2012). Besides, the species is reportedly found in Suncheon, Gwangyang, Namwon, Sancheong, and Hamyang and was found to have a habitat in Yeosu, Goseong, Gurye, and Biseulsan Mountain in Daegu (Oh et al., 2004, Oh et al., 2005b, Oh et al., 2007, Oh et al., 2008, Oh, 2010a, Oh, 2010b). This study observed this species in and around the valley of the Jigoksa Temple of the Ungseokbong Mountain in Sancheong, along with the valley from the Naeri Reservoir through the peak, and Seonnyeo Valley, a north valley of the Ungseokbong Mountain (Figure 6B). However, it has not that many populations but is sporadically distributed near the trails so that it is likely to be impaired due to stamping or artificial collection by climbers.

Corylopsis gotoana var. *coreana* (Uyeki) T.Yamaz

Corylopsis gotoana var. *coreana* was recorded in literature to be collected in Namhae, Gangjin, Suncheon, Gwangyang, Boseong, Goheung, Namwon, Hamyang, Seoul, Suwon, Pocheon, and Cheolwon; and also reported to have a habitat in Namhae, Gokseong, and Gurye (Oh et al., 2004, Oh et al., 2005b, Oh et al., 2008, Oh et al., 2009, Oh, 2010a, Oh, 2011). In this study, the species widely

Table 8

Usage types of vascular plants in the Ungseokbong Mountain, Gyeongsangnam-do, Korea.

	E	F	M	O	P	I	S	T	U
Number of taxa	169	6	133	57	178	6	11	13	146
Ratio (%)	34.4	1.2	27.0	11.6	36.2	1.2	2.2	2.6	29.7

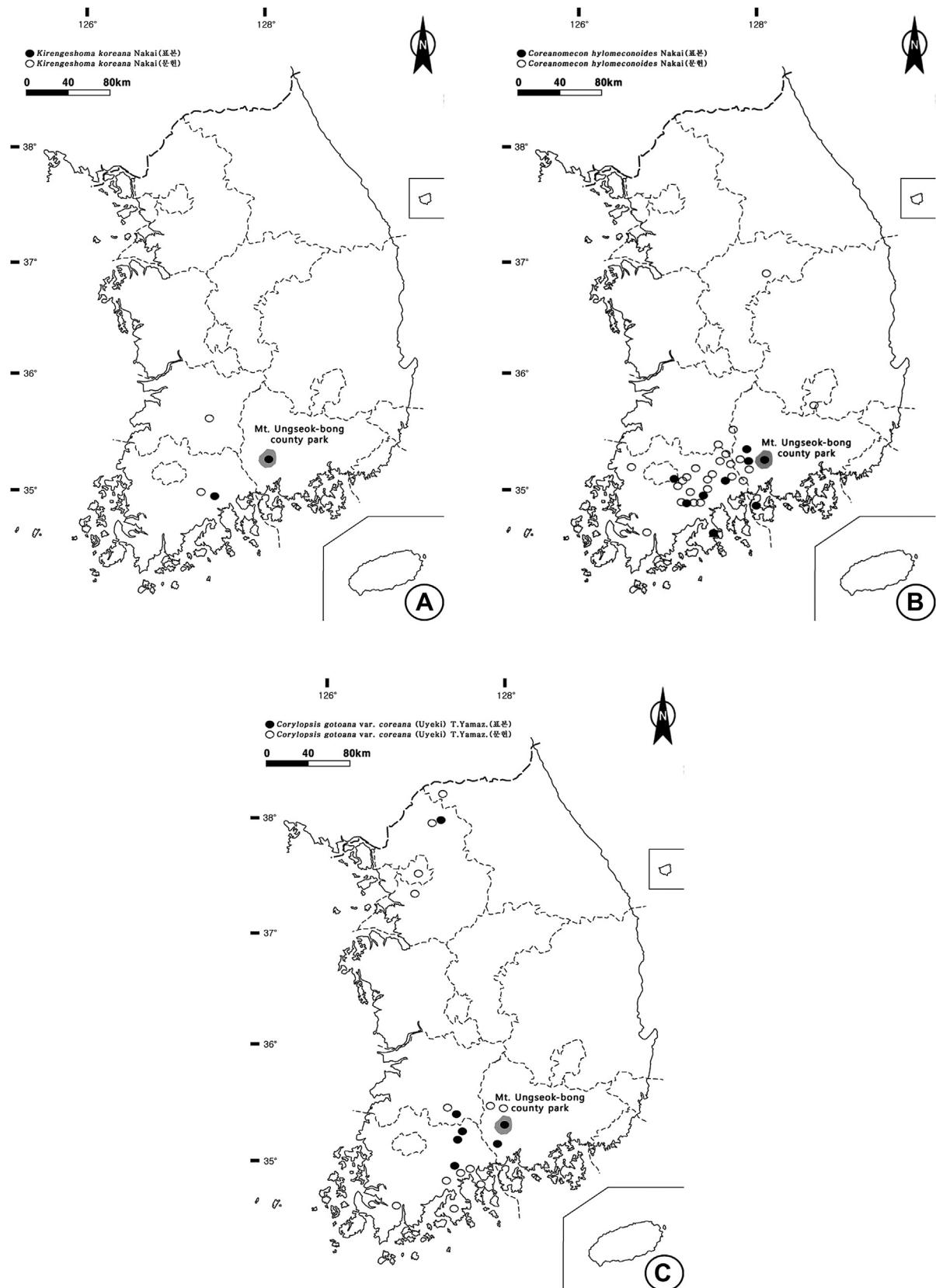


Figure 6. Distribution map of three domestic plants in South Korea [A: *Kirengeshoma koreana* Nakai; B, *Coreanomecon hylomeconoides* Nakai; C, *Corylopsis gotoana* var. *coreana* (Uyeki) T.Yamaz.]

grows ranging from the slope from Naeri reservoir to the peak of the Ungseokbong Mountain in Sancheong to the valley of the Jigoksa Temple and from the peak to the ridge of helicopter landing site, which is regarded as an important area to form a massive population in Korea (Figure 6C).

Acknowledgments

This study was supported by the Korea National Arboretum as a part of the assignment titled “Enhancement of Infrastructure of Biological Specimen from Forests on the Korean Peninsula” (Assignment No.: KNA1-1-5, 11-2).

Appendix 1. List of vascular plants in the Ungseokbong Mountain.

Scientific name	Korean name	Specimen number	U.P	A	B
Selaginellaceae 부처손과 <i>Selaginella rossii</i> (Bak.) Warburg	구실사리	ESJeon80352	U	●	●
Equisetaceae 속새과 <i>Equisetum arvense</i> L.	쇠뜨기	JJ120213	E,P	●	●
Dennstaedtiaceae 고사리과 <i>Dennstaedtia hirsuta</i> (Sw.) Mett. ex Miq.	잔고사리	WR-080608-008	U	●	●
<i>Dennstaedtia wilfordii</i> (Moore) Christ	황고사리	JJ120182	U	●	●
<i>Pteridium aquilinum</i> var. <i>latiusculum</i> (Desv.) Und. ex Heller.	고사리	ParkSH74196	E,M	●	
Davalliaceae 네줄고사리과 <i>Davallia solida</i> Moore ex Bak.	네줄고사리	ChoiHJ 70409	O	●	
Aspleniaceae 꼬리고사리과 <i>Asplenium incisum</i> Thunb.	꼬리고사리	WR-080608-001	U	●	●
Dryopteridaceae 면마과 <i>Dryopteris bissetiana</i> (Bak.) C.Chr.	산족제비고사리	JJ120222	U	●	●
<i>Dryopteris chinensis</i> (Bak.) Koidz.	가는잎족제비고사리	WR-080608-006, JJ120199	U	●	●
<i>Dryopteris crassirhizoma</i> Nakai	관종	WR-080608-052	M,E	●	
<i>Dryopteris lacera</i> (Thunb.) Kuntze	비늘고사리	WR-080608-019	U		
<i>Dryopteris sacrosancta</i> Koidz.	애기족제비고사리	WR-080608-031	U	●	
<i>Dryopteris uniformis</i> (Makino) Makino	곰비늘고사리	JJ120348	U	●	●
<i>Polystichum tripteron</i> (Kunze) C.Presl	십자고사리	WR-080608-017	U	●	●
<i>Thelypteris beddomei</i> (Bak.) Ching	가는잎처녀고사리	ParkSH73786	U	●	
<i>Thelypteris decursive-pinnata</i> (v.Hall) Ching	설설고사리		U	●	
<i>Thelypteris japonica</i> (Bak.) Ching	지네고사리	JJ120152	U	●	●
<i>Thelypteris japonica</i> var. <i>glabrata</i> Ching	민지네고사리	ParkSH73819	U	●	
<i>Thelypteris torresiana</i> var. <i>calvata</i> (Bak.) K.Iwats	각시고사리	YangJC 70280	U	●	
<i>Athyrium niponicum</i> (Mett.) Hance	개고사리	JJ120262	E	●	●
<i>Athyrium yokoscense</i> (Franch. & Sav.) Christ	뱀고사리	JSY1177	E	●	●
<i>Deparia coniliifera</i> (Franch. & Sav.) M.Kato	좁진고사리	YangJC 70003	U	●	
<i>Deparia lasiopteris</i> (Kunze) Nakaike	큰진고사리	JJ120295	U	●	
<i>Deparia pycnora</i> (Christ) M.Kato	털고사리	YangJC 70014	U	●	
<i>Woodsia manchuriensis</i> Hk.	만주우드풀	ParkSH73651	U	●	
<i>Woodsia polystichoides</i> D.C.Eaton	우드풀	WR-080608-038	U	●	
Polypodiaceae 고란초과 <i>Lepisorus ussuriensis</i> (Regel & Maack) Ching	산일엽초	JJ120338	U	●	●
Pinaceae 소나무과 <i>Pinus densiflora</i> Siebold & Zucc.	소나무	JJ120162	E,M,O,T	●	●
Cupressaceae 측백나무과 <i>Juniperus rigida</i> Siebold & Zucc.	노간주나무	JJ120240	M,S	●	●
Cephalotaxaceae 개비자나무과 <i>Cephalotaxus koreana</i> Nakai	개비자나무	JJ120264	E,O	●	●
Juglandaceae 가래나무과 <i>Platycarya strobilacea</i> Siebold & Zucc.	굴피나무	JJ120154	S	●	●
Salicaceae 버드나무과 <i>Salix caprea</i> L.	호랑버들	JJ120292	P	●	●
<i>Salix gracilistyla</i> Miq.	갓버들	ParkSH73165	P	●	
Betulaceae 자작나무과 <i>Alnus firma</i> Siebold & Zucc.	사방오리(식재)	JJ120193	S	●	●
<i>Alnus sibirica</i> Fisch. ex Turcz.	물오리나무	JJ120171	S	●	●
<i>Betula chinensis</i> Maxim.	개박달나무		T		
<i>Betula costata</i> Trautv.	거제수나무	JSY1152	M	●	
<i>Betula schmidtii</i> Regel	박달나무	ParkSH73824	T	●	●
<i>Carpinus cordata</i> Blume	까치박달	JSY1144	T,P	●	●
<i>Carpinus tshonoskii</i> Maxim.	개서어나무	ChoiHJ 70226	O,S	●	
<i>Corylus sieboldiana</i> Blume	참개암나무	YangJC 70009	E,M	●	
<i>Corylus sieboldiana</i> var. <i>mandshurica</i> (Maxim. & Rupr.) C.K.Schneid.	물개암나무	JSY1184	E,M	●	●
Fagaceae 참나무과 <i>Castanea crenata</i> Siebold & Zucc.	밤나무	WR-080608-030	E,M,T,S	●	●
<i>Quercus aliena</i> Blume	갈참나무	JJ120176	E,T,P	●	●
<i>Quercus mongolica</i> Fisch. ex Ledeb.	신갈나무	JSY1178	E,T,P	●	●
<i>Quercus serrata</i> Thunb.	줄참나무	JJ120164	E,T,P,M	●	●
<i>Quercus variabilis</i> Blume	굴참나무	JJ120217	E,T,I,M	●	●
Ulmaceae 느릅나무과 <i>Celtis sinensis</i> Pers.	팽나무		E,M,P	●	
<i>Zelkova serrata</i> (Thunb.) Makino	느티나무	JJ120244	E,T	●	●

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
Moraceae 뽕나무과					
<i>Broussonetia kazinoki</i> Siebold	닥나무	ChoiHJ 70139	E,F,M	●	
<i>Morus bombycina</i> Koidz.	산뽕나무	WR-080608-003	E,M,P,S	●	
Cannabaceae 삵과					
<i>Humulus japonicus</i> Siebold & Zucc.	환삼덩굴		E,P,M	●	
Urticaceae 쌩기풀과					
<i>Boehmeria longispica</i> Steud.	왜모시풀		F	●	
<i>Boehmeria spicata</i> (Thunb.) Thunb.	좁깨잎나무	JSY1174	F	●	●
<i>Boehmeria tricuspidis</i> (Hance) Makino	거북꼬리		E,F	●	
Polygonaceae 마디풀과					
<i>Fallopia dentata</i> (F.Schmidt) Holub	큰닭의덩굴	JJ120312	U	●	●
<i>Fallopia dumetorum</i> (L.) Holub	닭의덩굴	ParkSH74269	U	●	
<i>Fallopia koreana</i> B.U.Oh & J.G.Kim	삼도하수오	ChoiHJ 70431	U	●	
<i>Persicaria japonica</i> (Meisn.) H.Gross ex Nakai	흰꽃여뀌	ParkSH74198	U	●	
<i>Persicaria lapathifolia</i> (L.) Gray	흰여뀌	ParkSH74223	U	●	
<i>Persicaria longistata</i> (Bruijn) Kitag.	개여뀌	JJ120188	M	●	●
<i>Persicaria nepalensis</i> (Meisn.) H.Gross	산여뀌	ParkSH74246	P	●	
<i>Persicaria sagittata</i> (L.) H.Gross ex Nakai	미꾸리낚시	ParkSH74218	P	●	
<i>Persicaria senticosa</i> (Meisn.) H.Gross ex Nakai	머느리밀쓰개		E,P	●	
<i>Persicaria thunbergii</i> (Siebold & Zucc.) H.Gross ex Nakai	고마리		P	●	
<i>Polygonum aviculare</i> L.	마디풀	JSY1159	E,M	●	●
<i>Rumex acetosella</i> L.	애기수영		E	●	
<i>Rumex crispus</i> L.	소리챙이	ChoiHJ 70140	E,M,P	●	
<i>Rumex obtusifolius</i> L.	돌소리챙이	ParkSH73672	U	●	
Phytolaccaceae 자리공과					
<i>Phytolacca americana</i> L.	미국자리공		U	●	
Caryophyllaceae 석죽과					
<i>Cerastium holosteoides</i> var. <i>hallaisanense</i> (Nakai) Mizush.	점나도나물		E	●	
<i>Cucubalus baccifer</i> var. <i>japonicus</i> Miq.	덩굴벌꽃	ParkSH74452	U	●	
<i>Pseudostellaria heterophylla</i> (Miq.) Pax ex Pax & Hoffm.	개별꽃	ParkSH73183	E,M	●	
<i>Silene firma</i> Siebold & Zucc.	장구채		M,E,P	●	
<i>Silene seoulensis</i> Nakai	가는장구채	JSY1154, ParkSH73849	P	●	●
<i>Stellaria alsine</i> var. <i>undulata</i> (Thunb.) Ohwi	벼룩나물		E	●	
Chenopodiaceae 명아주과					
<i>Chenopodium album</i> var. <i>centrorubrum</i> Makino	명아주	ParkSH74424	E,P	●	
Amaranthaceae 비름과					
<i>Achyranthes japonica</i> (Miq.) Nakai	쇠무릎	ParkSH74244	E,M,P	●	
<i>Amaranthus retroflexus</i> L.	털비름		E,P	●	
Magnoliaceae 목련과					
<i>Magnolia obovata</i> Thunb.	일본목련	JJ120237	O	●	●
<i>Magnolia sieboldii</i> K.Koch	함박꽃나무	JJ120149	O,P	●	●
Lauraceae 녹나무과					
<i>Lindera erythrocarpa</i> Makino	비록나무	JSY1170	O	●	●
<i>Lindera glauca</i> (Siebold & Zucc.) Blume	감태나무	JJ120216	U	●	●
<i>Lindera obtusiloba</i> Blume	생강나무	WR-080608-015	E,M,O	●	
Ranunculaceae 미나리아재비과					
<i>Aconitum austro-koreense</i> Koidz.	세뿔투구꽃	118	U	●	●
<i>Aconitum jalicense</i> Kom.	투구꽃	ChoiHJ 70448	M	●	
<i>Actaea asiatica</i> H.Hara	노루삼	ChoiHJ 70205	U	●	
<i>Cimicifuga dahurica</i> (Turcz. ex Fisch. & C.A.Mey.) Maxim.	눈빛승마	ChoiHJ 70453	M,E	●	
<i>Clematis apifolia</i> DC.	사위질빵	JJ120195	U	●	●
<i>Clematis heracleifolia</i> DC.	병조희풀	JSY1175	M	●	●
<i>Clematis patens</i> C.Morren & Decne.	큰꽃으아리	JJ120209	O	●	●
<i>Ranunculus chinensis</i> Bunge	젓가락나물		U	●	
<i>Thalictrum actaeifolium</i> var. <i>brevistylum</i> Nakai	은평의다리	JJ120180	E	●	●
<i>Thalictrum aquilegifolium</i> var. <i>sibiricum</i> Regel & Tiling	평의다리	ParkSH73804	E,M,P	●	
<i>Thalictrum uchiyamai</i> Nakai	자주평의다리	YangJC 70008	U	●	
Lardizabalaceae 으름덩굴과					
<i>Akebia quinata</i> (Thunb.) Decne.	으름덩굴	JJ120233	M,P,O	●	●
Menispermaceae 새모래덩굴과					
<i>Cocculus trilobus</i> (Thunb.) DC.	댕댕이덩굴	JJ120230	E,M,P	●	●
Chloranthaceae 흰아비꽃대과					
<i>Chloranthus japonicus</i> Siebold	출아비꽃대		U	●	
Aristolochiaceae 쥐방울덩굴과					
<i>Aristolochia contorta</i> Bunge	쥐방울덩굴	JJ120282	M	●	●
<i>Asarum patens</i> (K.Yamaki) B.U.Oh,	금오족도리풀	ESJeon80346	U	●	
<i>Asarum sieboldii</i> Miq.	족도리풀	JSY1150	M	●	●
Actinidiaceae 다래나무과					
<i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex Miq.	다래	ChoiHJ 70147	U	●	
<i>Actinidia polygama</i> (Siebold & Zucc.) Planch. ex Maxim.	개다래	JJ120161	E,M	●	●
Theaceae 차나무과					
<i>Stewartia pseudocamellia</i> Maxim.	노각나무	JJ120356	T,O	●	●
Guttiferae 물레나물과					
<i>Hypericum ascyron</i> L.	물레나물	JJ120225	E,O	●	●

(continued on next page)

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
Papaveraceae 양귀비과					
<i>Chelidonium majus</i> var. <i>asiaticum</i> (Hara) Ohwi	애기똥풀	JJ120189	M	●	●
<i>Coreanomecon hylomeconoides</i> Nakai	매미꽃	WR-080608-002	O	●	●
Fumariaceae 현호색과					
<i>Corydalis heterocarpa</i> Siebold & Zucc.	염주괴불주머니		U	●	
<i>Corydalis speciosa</i> Maxim.	산괴불주머니	WR-080608-021	U	●	
<i>Dicentra spectabilis</i> (L.) Lem.	금낭화	JJ120207	E,O	●	●
Cruciferae 십자화과					
<i>Berteroella maximowiczii</i> (Palib.) O.E.Schulz	장대냉이		E	●	
<i>Cardamine flexuosa</i> With.	황새냉이		E	●	
<i>Lepidium virginicum</i> L.	콩다닥냉이		U	●	
<i>Rorippa cantoniensis</i> (Lour.) Ohwi	좁개갓냉이	ParkSH73680	U	●	
<i>Rorippa indica</i> (L.) Hiern	개갓냉이	ChoiHJ 70168	E	●	
<i>Rorippa palustris</i> (Leyss.) Besser	속속이풀	ParkSH73682	E	●	
Hamamelidaceae 조록나무과					
<i>Corylopsis gotoana</i> var. <i>coreana</i> (Uyeki) T.Yamaz.	히어리	WR-080608-014	O	●	●
Crassulaceae 돌나물과					
<i>Hylotelephium erythrostictum</i> (Miq.) H.Ohba	꿩의비름	ParkSH73847	E,M,P	●	
<i>Hylotelephium verticillatum</i> (L.) H.Ohba	세잎꿩의비름	JSY1131	U	●	●
<i>Sedum bulbiferum</i> Makino	말똥비름		U	●	
<i>Sedum kamtschaticum</i> Fisch. & Mey.	기린초	WR-080608-005	U	●	●
<i>Sedum polytrichoides</i> Hemsl.	바위채송화	JJ120166	U	●	●
Saxifragaceae 범의귀과					
<i>Astilbe rubra</i> Hook.f. & Thomas ex Hook.f.	노루오줌	JSY1145	M,P	●	●
<i>Chrysosplenium flagelliferum</i> F.Schmidt	애기괭이눈		U		
<i>Deutzia glabrata</i> Kom.	룰참대	JJ120220	O	●	
<i>Deutzia grandiflora</i> var. <i>baroniana</i> Diels	바위맡발도리	ParkSH73162	O	●	
<i>Deutzia parviflora</i> Bunge	맡발도리		O	●	
<i>Deutzia uniflora</i> Shirai	매화맡발도리	JSY1180	O	●	●
<i>Hydrangea serrata</i> f. <i>acuminata</i> (Siebold & Zucc.) Wilson	산수국	JSY1142	O	●	●
<i>Kirengeshoma koreana</i> Nakai	나도승마	114	O	●	
<i>Philadelphus tenuifolius</i> Rupr. & Maxim.	얇은잎고광나무	JJ120211	O,P	●	●
<i>Saxifraga fortunei</i> var. <i>incisolobata</i> (Engl. & Irmsch.) Nakai	바위떡풀	JJ120342	E	●	●
Rosaceae 장미과					
<i>Agrimonia pilosa</i> Ledeb.	짚신나물	JJ120250	E,M,P	●	●
<i>Potentilla anemonefolia</i> Lehm.	가락지나물	ChoiHJ 70137	U	●	
<i>Potentilla dickinsii</i> Franch. & Sav.	돌양지꽃	JJ120324	U	●	
<i>Potentilla fragarioides</i> var. <i>major</i> Maxim.	양지꽃	ParkSH73144	E,M	●	
<i>Pourthiaeavillosa</i> (Thunb.) Decne.	윤노리나무	WR-080608-004	U	●	
<i>Prunus persica</i> (L.) Batsch	복사나무	JJ120172	E,P	●	●
<i>Prunus sargentii</i> Rehder	산벚나무		O,P	●	
<i>Prunus serrulata</i> var. <i>pubescens</i> (Makino) Nakai	잔털벚나무	JSY1186	O,E	●	
<i>Prunus serrulata</i> var. <i>tomentella</i> Nakai	털벗나무	ParkSH73147	O,E	●	
<i>Pyrus pyrifolia</i> (Burm.f.) Nakai	돌배나무	JJ120254	E	●	●
<i>Rubus coreanus</i> Miq.	복분자딸기	JJ120229	E,M	●	●
<i>Rubus crataegifolius</i> Bunge	산딸기	ChoiHJ 70183	E,M,P	●	
<i>Rubus parvifolius</i> L.	멍석딸기		E	●	
<i>Rubus phoenicolasius</i> Maxim.	곰딸기	JJ120173	E	●	
<i>Sanguisorba officinalis</i> L.	오이풀	ParkSH73831	M,P	●	
<i>Sorbaria sorbifolia</i> var. <i>stellipila</i> Maxim.	쉬팡나무	JJ120337	E,P	●	●
<i>Stephanandra incisa</i> (Thunb.) Zabel	국수나무	JJ120270	S	●	●
Leguminosae 콩과					
<i>Albizia julibrissin</i> Durazz.	자귀나무	JJ120201	M,P,O	●	●
<i>Amphicarpha bracteata</i> subsp. <i>edgeworthii</i> (Benth.) H.Ohashi	새콩	ParkSH74457	E,P	●	
<i>Chamaecrista nomame</i> (Siebold) H.Ohashi	차풀		E,M,P	●	
<i>Desmodium podocarpum</i> var. <i>oxyphyllum</i> (DC.) H.Ohashi	도독놈의갑고리	ParkSH73816	U	●	
<i>Glycine soja</i> Siebold & Zucc.	돌콩		E,P	●	
<i>Indigofera kirilowii</i> Maxim. ex Palib.	땅비싸리	WR-080608-022	O	●	
<i>Kummerowia stipulacea</i> (Maxim.) Makino	동근매듭풀	ParkSH74235	P	●	
<i>Lespedeza bicolor</i> Turcz.	싸리	JJ120153	O,P	●	●
<i>Lespedeza cuneata</i> G.Don	비수리	ParkSH74432	P	●	
<i>Lespedeza cyrtobotrya</i> Miq.	참싸리	JJ120305	O,F	●	
<i>Lespedeza maximowiczii</i> C.K.Schneid.	조록싸리	WR-080608-016	O,P	●	●
<i>Lespedeza pilosa</i> (Thunb.) Siebold & Zucc.	괭이싸리		P		
<i>Lespedeza tormentosa</i> (Thunb.) Siebold ex Maxim.	개싸리		P	●	
<i>Maackia amurensis</i> Rupr. & Maxim.	다릅나무	JSY1140	T	●	
<i>Pueraria lobata</i> (Willd.) Ohwi	칡	ParkSH73813	E,M,S,P	●	
<i>Rhynchosia volubilis</i> Lour.	여우콩	JJ120214	U	●	
<i>Sophora flavescens</i> Solander ex Aiton	고삼		M	●	
<i>Trifolium repens</i> L.	토끼풀		P	●	
<i>Vicia anguste-pinnata</i> Nakai	가는갈퀴나물		U	●	
<i>Vicia unijuga</i> A.Braun	나비나물		E,P	●	
<i>Vicia venosa</i> (Willd.) Maxim.	연리갈퀴	JSY1160	P	●	
<i>Vigna angularis</i> (Willd.) Ohwi & H.Ohashi	팔	JJ120268	E	●	●

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
<i>Vigna angularis</i> var. <i>nipponensis</i> (Ohwi) Ohwi & H.Ohashi	새풀	ParkSH74448	E	●	
Euphorbiaceae 대극과					
<i>Phyllanthus ussuriensis</i> Rupr. & Maxim.	여우주머니		U	●	
<i>Sapium japonicum</i> (Siebold & Zucc.) Pax & Hoffm.	사람주나무	WR-080608-012	S	●	●
<i>Securinega suffruticosa</i> (Pall.) Rehder	광대싸리	JJ120259	M	●	●
Rutaceae 운향과					
<i>Poncirus trifoliata</i> Raf.	탱자나무(식재)		M,O	●	
<i>Zanthoxylum piperitum</i> (L.) DC.	초피나무	ParkSH73154	E,M	●	
<i>Zanthoxylum schinifolium</i> Siebold & Zucc.	산조나무	JJ120168	E	●	●
Simaroubaceae 소태나무과					
<i>Ailanthus altissima</i> (Mill.) Swingle	가죽나무	JJ120191	M,S	●	●
<i>Picrasma quassoides</i> (D.Don) Bennett	소태나무	JJ120257	M,F	●	●
Anacardiaceae 옻나무과					
<i>Rhus javanica</i> L.	붉나무	JJ120165	E,M,R	●	●
<i>Rhus tricocarpa</i> Miq.	개옻나무	ChoiHJ 70188	M	●	
Aceraceae 단풍나무과					
<i>Acer pictum</i> var. <i>truncatum</i> (Bunge) C.S.Chang	만주고로쇠	ParkSH73812	O	●	
<i>Acer pictum</i> subsp. <i>mono</i> (Maxim.) Ohashi	고로쇠나무	WR-080608-029	O,M,P	●	●
<i>Acer pseudoboldianum</i> (Pax) Kom.	당단풍나무	JSY1146	O,P	●	●
Sapindaceae 무환자나무과					
<i>Koelreuteria paniculata</i> Laxmann	모감주나무(식재)	YangJC 70281	O,P	●	
Sabiaceae 나도밤나무과					
<i>Meliosma myriantha</i> Siebold & Zucc.	나도밤나무	ChoiHJ 70221	U	●	
<i>Meliosma oldhamii</i> Maxim.	합다리나무	JJ120190	E	●	●
Balsaminaceae 봉선화과					
<i>Impatiens textori</i> Miq.	물봉선	ParkSH74453	M	●	
Aquifoliaceae 감탕나무과					
<i>Ilex macropoda</i> Miq.	대팻집나무	ParkSH73155	E	●	
Celastraceae 노박덩굴과					
<i>Celastrus orbiculatus</i> Thunb.	노박덩굴	YangJC 70015	E,O,R	●	
<i>Euonymus alatus</i> (Thunb.) Siebold	화살나무	ParkSH73166	E,M,P	●	
<i>Euonymus alatus</i> f. <i>ciliatodentatus</i> (Franch. & Sav.) Hiyama	회잎나무	JJ120284	E,P	●	
<i>Euonymus hamiltonianus</i> Wall.	참빗살나무	ParkSH73151	M,P	●	
<i>Euonymus japonicus</i> Thunb.	사철나무(식재)		O	●	
<i>Euonymus oxyphyllus</i> Miq.	참회나무	JJ120336	P	●	●
<i>Tripterygium regelii</i> Sprague & Takeda	미역줄나무	JSY1151	U	●	●
Staphyleaceae 고추나무과					
<i>Staphylea bumalda</i> DC.	고추나무	WR-080608-010	E	●	●
Rhamnaceae 갈매나무과					
<i>Rhamnus yoshinoi</i> Makino	꺽자래나무	ChoiHJ 70141	U	●	
Vitaceae 포도과					
<i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv.	개머루	JSY1166	U	●	●
<i>Ampelopsis brevipedunculata</i> f. <i>ciliata</i> (Nakai) T.B.Lee	틸개머루		U	●	
<i>Parthenocissus tricuspidata</i> (Siebold & Zucc.) Planch.	담쟁이덩굴	JJ120178	O,P	●	●
<i>Vitis amurensis</i> Rupr.	왕머루	ChoiHJ 70148	E,M,P	●	
<i>Vitis ficifolia</i> var. <i>singuata</i> (Regel) H.Hara	까마귀머루	JJ120232	E,P	●	●
<i>Vitis flexuosa</i> Thunb.	새머루	WR-080608-011	E,P	●	●
Tiliaceae 피나무과					
<i>Corchoropsis tomentosa</i> (Thunb.) Makino	수까치깨	JJ120289	U	●	●
Elaeagnaceae 보리수나무과					
<i>Elaeagnus umbellata</i> Thunb.	보리수나무		E,P	●	
Violaceae 제비꽃과					
<i>Viola acuminata</i> Ledeb.	출방제비꽃		E	●	
<i>Viola albida</i> Palib.	태백제비꽃	JSY1181	E	●	●
<i>Viola albida</i> var. <i>chaerophylloides</i> (Regel) F.Maek.	남산제비꽃	JJ120258	U	●	●
<i>Viola japonica</i> Langsdorff ex Ging.	왜제비꽃		U	●	
<i>Viola mandshurica</i> W.Becker	제비꽃	ParkSH73145	M,E,P	●	
<i>Viola orientalis</i> (Maxim.) W.Becker	노랑제비꽃	JSY1120	U	●	●
<i>Viola patrinii</i> DC. ex Ging.	흰제비꽃	ParkSH73173	U	●	
<i>Viola rossii</i> Hemsl.	고깔제비꽃		M	●	
Lythraceae 부처꽃과					
<i>Rotala indica</i> (Willd.) Koehne	마디꽃		U	●	
<i>Rotala leptopetala</i> var. <i>littorea</i> (Miq.) Koehne	물마디꽃	ParkSH74441	U	●	
Onagraceae 바늘꽃과					
<i>Oenothera biennis</i> L.	달맞이꽃	ParkSH73799	O,P	●	
Alangiaceae 박쥐나무과					
<i>Alangium platanifolium</i> var. <i>trilobum</i> (Miq.) Ohwi	박쥐나무	ESJeon80343	E,P	●	●
Cornaceae 총총나무과					
<i>Cornus controversa</i> Hemsl. ex Brain	총총나무	ParkSH73673	U	●	
<i>Cornus kousa</i> F.Buerger ex Miq.	산딸나무		U	●	
<i>Cornus macrophylla</i> Wall.	곰의말채나무	YangJC 70279	U	●	
<i>Cornus walteri</i> F.T.Wangerin	말채나무	JJ120335	U	●	●
Araliaceae 두릅나무과					
<i>Kalopanax septemlobus</i> (Thunb.) Koidz.	음나무	JJ120163	E,P	●	●

(continued on next page)

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
Umbelliferae 산형과					
<i>Angelica decursiva</i> (Miq.) Franch. & Sav.	바디나물		E,M	●	
<i>Angelica gigas</i> Nakai	참당귀		M,E	●	
<i>Angelica polymorpha</i> Maxim.	궁궁이	ChoiHJ 70452	E,M	●	
<i>Cymopterus melanotilingia</i> (H.Bossieu) C.Y.Yoon	큰참나물	ChoiHJ 70450	E	●	
<i>Hydrocotyle maritima</i> Honda	선피막이	ParkSH73801	M	●	
<i>Peucedanum terebinthaceum</i> (Fisch.) Fisch. ex DC.	기름나물	ParkSH74429	E	●	
<i>Pimpinella brachycarpa</i> (Kom.) Nakai	참나물	JJ120316	E,P	●	●
<i>Sanicula chinensis</i> Bunge	참반디	ChoiHJ 70445	E,M	●	
<i>Torilis japonica</i> (Houtt.) DC.	사상자	JJ120293	M	●	●
Pyrolaceae 노루발과					
<i>Monotropa uniflora</i> L.	수정난풀		U	●	
<i>Pyrola japonica</i> Klenze ex Alef.	노루발	WR-080608-032	M	●	●
Ericaceae 진달래과					
<i>Rhododendron mucronulatum</i> Turcz.	진달래	WR-080608-037	O,E	●	●
<i>Rhododendron schlippenbachii</i> Maxim.	철쭉	JSY1164	O	●	●
<i>Rhododendron yedoense</i> f. <i>poukhanense</i> (H.Lév.) Sugim.	산철쭉	JJ120303	O	●	●
<i>Vaccinium hirtum</i> var. <i>koreanum</i> (Nakai) Kitam.	산앵도나무	JJ120317	E	●	●
<i>Vaccinium oldhamii</i> Miq.	정검나무	JJ120330	E	●	●
Primulaceae 앵초과					
<i>Lysimachia clethroides</i> Duby	큰까치수염	JSY1162	E,P	●	●
Ebenaceae 감나무과					
<i>Diospyros lotus</i> L.	고을나무	JJ120280	E,M	●	●
Styracaceae 때죽나무과					
<i>Styrax japonicus</i> Siebold & Zucc.	때죽나무	JJ120198	O,P	●	●
<i>Styrax obassia</i> Siebold & Zucc.	쪽동백나무	JSY1165	O,P	●	●
Symplocaceae 노린재나무과					
<i>Symplocos chinensis</i> f. <i>pilosa</i> (Nakai) Ohwi	노린재나무	WR-080608-023	P	●	
Oleaceae 물푸레나무과					
<i>Fraxinus rhynchophylla</i> Hance	물푸레나무		M,P	●	
<i>Fraxinus sieboldiana</i> Blume	쇠물푸레나무	JJ120308	M	●	●
<i>Ligustrum obtusifolium</i> Siebold & Zucc.	쥐똥나무	JJ120251	M	●	●
Gentianaceae 용담과					
<i>Gentiana triflora</i> var. <i>japonica</i> (Kusn.) H.Hara	과남풀	JSY1122	M	●	●
<i>Gentiana zollingeri</i> Faw.	큰구슬봉이	ParkSH73146	U	●	
Asclepiadaceae 박주가리과					
<i>Cynanchum ascyrifolium</i> (Franch & Sav.) Matsum.	민백미꽃	WR-080608-025	M	●	●
<i>Metaplexis japonica</i> (Thunb.) Makino	박주가리		E,M,P	●	
Rubiaceae 꼈두서니과					
<i>Asperula lasiantha</i> Nakai	갈퀴아재비		U	●	
<i>Asperula maximowiczii</i> Kom.	개갈퀴	JSY1167	U	●	●
<i>Diodia teres</i> Walter	백령풀		U		
<i>Galium dahuricum</i> Turcz.	큰잎갈퀴	ParkSH73660	U	●	
<i>Galium gracilens</i> (A.Gary) Makino	좁네잎갈퀴	WR-080608-007	U	●	●
<i>Galium pogonanthum</i> Franch. & Sav.	산갈퀴	ChoiHJ 70151	U	●	
<i>Galium trachyspermum</i> A.Gray	네잎갈퀴	JSY1173	U	●	●
<i>Galium verum</i> var. <i>asiaticum</i> Nakai	술나물		P	●	
<i>Hedysotis diffusa</i> Willd.	백운풀		U	●	
<i>Paederia scandens</i> (Lour.) Merr.	계요등	JJ120210	M	●	●
<i>Rubia akane</i> Nakai	꼭두서니	JSY1169	U	●	●
<i>Rubia chinensis</i> Regel & Maack	큰꼭두서니	ParkSH73640	M,P	●	
Convolvulaceae 메꽃과					
<i>Cuscuta pentagona</i> Engelm.	미국실새삼	ParkSH74431	U	●	
<i>Ipomoea hederaea</i> var. <i>integriuscula</i> A.Gray	동근잎미국나팔꽃	ParkSH74438	U	●	
Boraginaceae 지치과					
<i>Bothriospermum tenellum</i> (Hornem.) Fisch. & C.A.Mey.	꽃밤이	YangJC 70282	U	●	
Verbenaceae 마편초과					
<i>Callicarpa japonica</i> Thunb.	작살나무	JJ120236	O	●	●
<i>Caryopteris divaricata</i> (Siebold & Zucc.) Maxim.	누린내풀	ParkSH74416	M	●	
<i>Clerodendrum trichotomum</i> Thunb.	누리장나무	JJ120159	E,M,P	●	●
Labiatae 꿀풀과					
<i>Agastache rugosa</i> (Fisch. & Mey.) Kuntze	배초향	ChoiHJ 70414	E	●	
<i>Clinopodium chinense</i> var. <i>parviflorum</i> (Kudô) Hara	총총이꽃	ParkSH74414	E	●	
<i>Elsholtzia splendens</i> Nakai	꽃향유	ChoiHJ 70439	M	●	
<i>Isodon inflexus</i> (Thunb.) Kudô	산박하	JJ120309	E	●	
<i>Isodon japonicus</i> (Burm.) Hara	방아풀	ParkSH73842	E	●	
<i>Leonurus japonicus</i> Houtt.	익모초	ParkSH74456	M	●	
<i>Lycopus lucidus</i> Turcz.	쉽싸리	JSY1156	M	●	●
<i>Mosla punctulata</i> (J.F.Gmel.) Nakai	들깨풀	ParkSH74206	M	●	
<i>Phlomis umbrosa</i> Turcz.	속단	JSY1172	M,E	●	
<i>Prunella vulgaris</i> var. <i>lilacina</i> Nakai	꿀풀	ParkSH73650	E,M	●	
<i>Salvia japonica</i> Thunb.	둥근배암차즈기		M	●	
<i>Scutellaria indica</i> L.	꼴무꽃	JJ120212	M	●	
<i>Scutellaria pekinensis</i> var. <i>transitra</i> (Makino) Hara	산꼴무꽃	WR-080608-033	U	●	●

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
<i>Stachys japonica</i> Miq.	석잠풀	YangJC 70285	P	●	
<i>Teucrium viscidum</i> var. <i>miquelianum</i> (Maxim.) Hara	덩굴狎향	ChoiHJ 70451	U	●	
Solanaceae 가지과					
<i>Solanum lyratum</i> Thunb.	배봉등	JJ120155	U	●	●
<i>Solanum nigrum</i> L.	까마종	ParkSH74459	E,M,P	●	
Scrophulariaceae 현삼과					
<i>Lindernia micrantha</i> D.Don	논뚝외풀		U	●	
<i>Mazus pumilus</i> (Burm.f.) Steenis	주름잎	ChoiHJ 70166	E	●	
<i>Melampyrum roseum</i> Maxim.	꽃머느리밥풀	JJ120187	U	●	●
<i>Melampyrum roseum</i> var. <i>ovalifolium</i> Nakai ex Beauverd	알머느리밥풀	ParkSH73815	U	●	
<i>Paulownia tomentosa</i> (Thunb.) Steud.	참오동나무	ChoiHJ 70136	T	●	
<i>Phtheirospermum japonicum</i> (Thunb.) Kanitz	나도송이풀	ChoiHJ 70440	U	●	
<i>Scrophularia kakudensis</i> Franch.	큰개현삼	JJ120329	U	●	●
<i>Scrophularia koraiensis</i> Nakai	토현삼	ParkSH74266	U	●	
<i>Siphonostegia chinensis</i> Benth.	절국대	ParkSH73806	U	●	
<i>Veronica arvensis</i> L.	선개불알풀	ChoiHJ 70167	U	●	
<i>Veronica kiusiana</i> var. <i>glabrifolia</i> (Kitag.) Kitag.	큰산꼬리풀	ParkSH73852	U	●	
<i>Veronica rotunda</i> var. <i>subintegra</i> (Nakai) T.Yamaz.	산꼬리풀	JSY1137	U	●	●
Bignoniaceae 능소화과					
<i>Catalpa ovata</i> G.Don	개오동		M	●	
Acanthaceae 쥐꼬리망초과					
<i>Justicia procumbens</i> L.	쥐꼬리망초	JJ120194	M,P	●	●
Phrymaceae 파리풀과					
<i>Phryma leptostachya</i> var. <i>asiatica</i> H.Hara	파리풀	JJ120185	M	●	●
Plantaginaceae 질경이과					
<i>Plantago asiatica</i> L.	질경이	JSY1155	E,M,P	●	●
Caprifoliaceae 인동과					
<i>Sambucus sieboldiana</i> var. <i>miquelii</i> (Nakai) Hara	지렁쿠나무	JJ120347	E,M,P	●	●
<i>Viburnum dilatatum</i> Thunb.	가막살나무	ChoiHJ 70192	E	●	
<i>Viburnum erosum</i> Thunb.	덜꿩나무	JJ120261	P	●	●
<i>Viburnum wrightii</i> Miq.	산가막살나무	ParkSH73163	O	●	
<i>Weigela praecox</i> (Lemoine) L.H.Bailey	소영도리나무	JJ120304	O	●	●
<i>Weigela subsessilis</i> (Nakai) L.H.Bailey	병꽃나무	JSY1183	O,P	●	●
Valerianaceae 마타리과					
<i>Patrinia saniculaefolia</i> Hemsl.	금마타리	JJ120297	U	●	●
<i>Patrinia scabiosaeifolia</i> Fisch. ex Trevir.	마타리	JJ120227	E,M,P	●	●
<i>Patrinia villosa</i> (Thunb.) Juss.	똑갈	JJ120226	E	●	●
Campanulaceae 초롱꽃과					
<i>Adenophora divaricata</i> Franch. & Sav.	넓은잔대	JJ120318	E	●	●
<i>Adenophora remotiflora</i> (Siebold & Zucc.) Miq.	모시대	JJ120343	E,M	●	●
<i>Adenophora triphylla</i> var. <i>japonica</i> (Regel) H.Hara	잔대	JJ120300	U	●	●
<i>Codonopsis lanceolata</i> (Siebold & Zucc.) Trautv.	더덕	JSY1179	E,M,P	●	●
<i>Lobelia chinensis</i> Lour.	수염가래꽃	ParkSH74442	M	●	
<i>Platycodon grandiflorum</i> (Jacq.) A.DC.	도라지	JJ120239	M,O	●	●
Compositae 국화과					
<i>Ainsliaea acerifolia</i> Sch.Bip.	단풍취	JSY1153	E	●	●
<i>Ambrosia artemisiifolia</i> L.	돼지풀	ParkSH74222	U	●	
<i>Artemisia capillaris</i> Thunb.	사철쑥	ParkSH74437	E,P	●	
<i>Artemisia japonica</i> Thunb.	제비쑥	JSY1147	E,P	●	●
<i>Artemisia keiskeana</i> Miq.	맑은대쑥	JSY1125	E,M,P	●	●
<i>Artemisia princeps</i> Pamp.	쑥	ParkSH74215	U	●	
<i>Aster ageratoides</i> Turcz.	까실쑥부쟁이	ParkSH74259	U	●	
<i>Aster hispidus</i> Thunb.	갓쑥부쟁이	WR-080608-028	E,M	●	
<i>Aster meyendorffii</i> (Regel & Maack) Voss	개쑥부쟁이	ParkSH73189	U	●	
<i>Aster pilosus</i> Willd.	미국쑥부쟁이		U	●	
<i>Aster scaber</i> Thunb.	참취	JSY1163	E,P	●	●
<i>Aster subulatus</i> var. <i>sandwicensis</i> A.G.Jones	큰비짜루국화	ParkSH74413	U	●	
<i>Atractylodes ovata</i> (Thunb.) DC.	삽주	JSY1129	E,M,P	●	●
<i>Bidens bipinnata</i> L.	도깨비바늘		E,M,P	●	
<i>Bidens biternata</i> (Lour.) Merr. & Sherff ex Sherff	털도깨비바늘	ParkSH74208	P	●	
<i>Bidens frondosa</i> L.	미국가약사리	ParkSH74229	P	●	
<i>Bidens pilosa</i> L.	울산도깨비바늘	JSY1126	U	●	●
<i>Bidens tripartita</i> L.	가막사리	ChoiHJ 70434	E,M	●	
<i>Carpesium divaricatum</i> Siebold & Zucc.	긴담배풀	ParkSH73793	E,M	●	
<i>Centipeda minima</i> (L.) A.Br. & Asch.	증대가리풀		P	●	
<i>Cirsium japonicum</i> var. <i>maackii</i> (Maxim.) Matsum.	엉겅퀴	ParkSH73645	E,M,P	●	
<i>Cirsium setidens</i> (Dunn) Nakai	고려엉겅퀴	ParkSH73848	E	●	
<i>Conyza canadensis</i> (L.) Cronquist	망초	ParkSH74243	E	●	
<i>Crassocephalum crepidioides</i> (Benth.) S.Moore	주총서나물	ParkSH74212	U	●	
<i>Crepidiastrum chelidonifolium</i> (Makino) J.H.Pak & Kawano	까치고들빼기	JJ120200	E	●	
<i>Crepidiastrum denticulatum</i> (Houtt.) J.H.Pak & Kawano	이고들빼기		E,P	●	
<i>Crepidiastrum sonchifolium</i> (Bunge) Pak & Kawano	고들빼기	ChoiHJ 70174	E,P	●	
<i>Dendranthema zawadskii</i> var. <i>latilobum</i> (Maxim.) Kitag.	구질초	ParkSH74241	M,P	●	
<i>Echinops setifer</i> Iljin	절굿대	JJ120151	M	●	●
<i>Eclipta prostrata</i> (L.) L.	한련초	ParkSH74451	M	●	

(continued on next page)

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
<i>Erechtites hieracifolia</i> Raf.	붉은서나물	ParkSH74200	E	●	
<i>Erigeron annuus</i> (L.) Pers.	개방초	ParkSH73675	E	●	
<i>Erigeron strigosus</i> Muhl.	주걱개방초		U	●	
<i>Eupatorium japonicum</i> Thunb.	등골나물	JJ120170	E,P	●	●
<i>Eupatorium lindleyanum</i> DC.	골등골나물	ParkSH73810	E,P	●	
<i>Galinsoga ciliata</i> (Raf.) S.F.Blake	털별꽃아재비	YangJC 70288	U	●	
<i>Gnaphalium affine</i> D.Don	떡쑥		E,M	●	
<i>Hemistepta lyrata</i> Bunge	지칭개	ChoiHJ 70161	E,P	●	
<i>Hypochoeris radicata</i> L.	서양금흔조	YangJC 70198	U	●	
<i>Ixeridium dentatum</i> (Thunb. ex Mori) Tzvelev	씀바귀	JSY1119	E,M,P	●	●
<i>Ixeris polyccephala</i> Cass.	벌씀바귀	ParkSH73681	E,P	●	
<i>Lactuca indica</i> L.	왕고들빼기	ParkSH73839	E,M,P	●	
<i>Lactuca raddeana</i> Maxim.	산씀바귀	JSY1171	E,P	●	●
<i>Lactuca triangulata</i> Maxim.	두메고들빼기		P		
<i>Saussurea gracilis</i> Maxim.	은분취	JJ120325	P	●	●
<i>Saussurea maximowiczii</i> Herd	버들분취		P	●	
<i>Saussurea pulchella</i> (Fisch.) Fisch.	각시취	ParkSH73851	E	●	
<i>Saussurea seoulensis</i> Nakai	분취	ESJeon80353	E,P	●	
<i>Serratula coronata</i> var. <i>insularis</i> (Iljin) Kitam.	산비장이	JSY1121	E	●	
<i>Sigesbeckia glabrescens</i> Makino	진득찰	ParkSH74412	M,P	●	
<i>Solidago virgaurea</i> subsp. <i>asiatica</i> Kitam. ex Hara	미역취		E,M	●	
<i>Synurus deltoides</i> (Aiton) Nakai	수리취	JSY1135	E,P	●	●
<i>Xanthium canadense</i> Mill.	큰도꼬마리	ChoiHJ 70442	U	●	
<i>Youngia japonica</i> (L.) DC.	뾰리뱅이	ParkSH73168	E	●	
Liliaceae 백합과					
<i>Allium sacculiferum</i> Maxim.	참산부추		E	●	
<i>Asparagus schoberioides</i> Kunth	비짜루	JJ120204	E	●	●
<i>Convallaria keiskei</i> Miq.	은방울꽃	JJ120315	M	●	●
<i>Disporum smilacinum</i> A.Gray	애기나리	JSY1148	E,P	●	●
<i>Disporum uniflorum</i> Baker	윤판나물	JJ120294	E,P	●	●
<i>Disporum viridescens</i> (Maxim.) Nakai	큰애기나리	ESJeon80344	E,P		
<i>Erythronium japonicum</i> (Baker) Decne.	얼레지		M,E	●	
<i>Hemerocallis fulva</i> (L.) L.	원추리	JSY1139	M,O,E,P	●	●
<i>Hemerocallis minor</i> Mill.	애기원추리	ParkSH73853	O,E	●	
<i>Hosta capitata</i> (Koidz.) Nakai	일월비비추	ESJeon80342	E,P	●	●
<i>Lilium amabile</i> Palib.	털종나리	JJ120184	M,E	●	
<i>Lilium distichum</i> Nakai ex Kamibay	말나리	JJ120205	E	●	●
<i>Lilium tsingtauense</i> Gilg	하늘말나리	JSY1141	E,M,P,O	●	●
<i>Liriopoe platyphylla</i> F.T.Wang & T.Tang	맥문동	JJ120221	M,P	●	●
<i>Liriopoe spicata</i> (Thunb.) Lour.	개맥문동	ChoiHJ 70429	M,P	●	
<i>Polygonatum inflatum</i> Kom.	통등굴레	ChoiHJ 70222	U	●	
<i>Polygonatum involucratum</i> (Franch. & Sav.) Maxim.	용등굴레	ParkSH73182	E,P		
<i>Polygonatum lasianthum</i> Maxim.	죽대	WR-080608-026	M	●	●
<i>Polygonatum odoratum</i> var. <i>pluriflorum</i> (Miq.) Ohwi	동굴레	JSY1127	E,P	●	●
<i>Scilla scilloides</i> (Lindl.) Druce	무릇	ParkSH73833	E	●	
<i>Smilacina japonica</i> A.Gray	풀솜대	JJ120311	U	●	
<i>Smilax china</i> L.	청미래덩굴	ParkSH73158	M,E,P	●	●
<i>Smilax nipponica</i> Miq.	선밀나물	JSY1123	E,P		
<i>Smilax riparia</i> var. <i>ussuriensis</i> (Regel) Hara & T.Koyama	밀나물	JJ120351	E,P	●	●
<i>Smilax sieboldii</i> Miq.	청가시덩굴	JJ120260	E,P	●	●
<i>Smilax sieboldii</i> f. <i>intermis</i> (Nakai) Hara	민청가시덩굴	JJ120256	E,P	●	●
<i>Veratrum maackii</i> var. <i>japonicum</i> (Baker) T.Shimizu	여로	JJ120186	M	●	●
<i>Veratrum versicolor</i> Nakai	흰여로	JSY1158	U	●	●
Dioscoreaceae 마파					
<i>Dioscorea batatas</i> Decne.	마	JJ120224	M,E,P	●	●
<i>Dioscorea nipponica</i> Makino	부채마	JJ120223	O,P	●	●
<i>Dioscorea tenuipes</i> Franch. & Sav.	각시마	ESJeon80351	M	●	
Pontederiaceae 물옥잠과					
<i>Monochoria vaginalis</i> var. <i>plantaginea</i> (Roxb.) Solms	물달개비	ParkSH74443	U	●	
Iridaceae 뿔꽃과					
<i>Iris ensata</i> var. <i>spontanea</i> (Makino) Nakai	꽃창포	JJ120355	O,P	●	●
<i>Iris rossii</i> Baker	각시뿔꽃		O,P	●	
<i>Iris sanguinea</i> Donn ex Horn	붓꽃	ChoiHJ 70207	M,O,P	●	
Juncaceae 골풀과					
<i>Juncus diastrophanthus</i> Buchenau	별날개골풀		U	●	
<i>Juncus effusus</i> var. <i>decipiens</i> Buchenau	골풀	JSY1157	M,P	●	●
<i>Juncus krameri</i> Franch. & Sav.	비녀골풀	JSY1132	U	●	●
<i>Juncus papillosum</i> Franch. & Sav.	청비녀골풀	ParkSH73826	U	●	
Commelinaceae 닭의장풀과					
<i>Commelinia communis</i> L.	닭의장풀		M,E,P	●	
<i>Commelinia communis</i> var. <i>angustifolia</i> Nakai	좁닭의장풀	ParkSH74450	M,E,P	●	
Eriocaulaceae 곡정초과					
<i>Eriocaulon robustius</i> (Maxim.) Makino	넓은잎개수염	ParkSH74458	U	●	

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
Gramineae 벼과					
<i>Agropyron tsukushense</i> var. <i>transiens</i> (Hack.) Ohwi	개밀	WR-080608-034	P	●	
<i>Agrostis clavata</i> var. <i>nukabo</i> Ohwi	겨이삭	ParkSH73642	P	●	
<i>Andropogon brevifolius</i> Sw.	쇠풀	ParkSH74214	P	●	
<i>Arundinella hirta</i> (Thunb.) Koidz.	새	ParkSH73802	P	●	
<i>Arundinella hirta</i> var. <i>hondana</i> Koidz.	이삭털새	JSY1133	U	●	
<i>Arundinella hirta</i> var. <i>ciliata</i> Koidz.	털새	JSY1124	U	●	●
<i>Bromus japonicus</i> Thunb.	참새귀리	ChoiHJ 70218	P	●	
<i>Calamagrostis arundinacea</i> (L.) Roth	실새풀	ParkSH73820	P	●	
<i>Calamagrostis epigeios</i> (L.) Roth	산조풀		P	●	
<i>Coix lacryma-jobi</i> L.	엄주		O,E	●	
<i>Cymbopogon tortilis</i> var. <i>goeringii</i> (Steud.) Hand.-Mazz.	개술새		P	●	
<i>Dactylis glomerata</i> L.	오리새	WR-080608-027	P	●	
<i>Diarrhena fauriei</i> (Hack.) Ohwi	광발용수염	JJ120333	P	●	
<i>Diarrhena mandshurica</i> Maxim.	껍질용수염	ParkSH73838	P	●	
<i>Digitaria ciliaris</i> (Retz.) Koel.	바랭이	ParkSH74217	U	●	
<i>Digitaria violascens</i> Link	민바랭이		P	●	
<i>Echinochloa crusgalli</i> (L.) P.Beaup.	돌피	ParkSH74240	E,S	●	
<i>Eragrostis curvula</i> Nees	능수참새그령	WR-080608-050	U	●	
<i>Eragrostis ferruginea</i> (Thunb.) P.Beaup.	그령	ParkSH73800	P	●	
<i>Eragrostis pilosa</i> (L.) P.Beaup.	큰비노리	ChoiHJ 70202	P	●	
<i>Festuca arundinacea</i> Schreb.	큰김의털	WR-080608-047	U	●	
<i>Hemarthria sibirica</i> (Gand.) Ohwi	쇠치기풀	ParkSH74449	P	●	
<i>Leersia japonica</i> Makino	나도거풀		P	●	
<i>Lolium perenne</i> L.	호밀풀	ParkSH73669	U	●	
<i>Microstegium vimineum</i> var. <i>imberbe</i> (Nees ex Steud.) Honda	큰들성이삭새		U	●	
<i>Misanthus sacchariflorus</i> (Maxim.) Benth.	물억새	ParkSH74455	P	●	
<i>Misanthus sinensis</i> Anderss.	참억새	ParkSH74236	S,M	●	
<i>Misanthus sinensis</i> var. <i>purpurascens</i> (Andersson) Rendle	억새		P	●	
<i>Molinia japonica</i> Hack.	진퍼리새		P	●	
<i>Oplismenus undulatifolius</i> (Ard.) P.Beaup.	주름조개풀	JJ120202	P	●	
<i>Oplismenus undulatifolius</i> var. <i>japonicus</i> (Steud.) Koidz.	민주름조개풀	JJ120263	P	●	●
<i>Panicum dichotomiflorum</i> Michx.	미국개기장	ParkSH74249	P	●	
<i>Paspalum thunbergii</i> Kunth ex Steud.	참새피	JJ120241	P,M	●	●
<i>Pennisetum alopecuroides</i> (L.) Spreng.	수크령		P	●	
<i>Phragmites japonica</i> Steud.	달뿌리풀		P,M	●	
<i>Sasa borealis</i> (Hack.) Makino	조릿대	JJ120242	E,P,M	●	
<i>Setaria faberii</i> Herrm.	가을강아지풀	JSY1134, ParkSH73829	P	●	
<i>Setaria glauca</i> (L.) P.Beaup.	금강아지풀	ParkSH74205	P	●	
<i>Setaria viridis</i> (L.) P.Beaup.	강아지풀	JJ120196	P	●	
<i>Spodiopogon cotulifer</i> (Thunb.) Hack.	기름새	JJ120301	P	●	●
<i>Spodiopogon sibiricus</i> Trin.	큰기름새	ParkSH73830	P	●	
<i>Sporobolus fertilis</i> (Steud.) Clayton	쥐꼬리새풀		P	●	
<i>Sporobolus japonicus</i> (Steud.) Maxim. ex Rendle	나도잔디	ParkSH74207	P	●	
<i>Stipa sibirica</i> (L.) Lam.	나래새	ParkSH74415	P	●	
<i>Themeda triandra</i> var. <i>japonica</i> (Willd.) Makino	솔새		P	●	
Araceae 천남성과					
<i>Arisaema amurense</i> Maxim.	동근잎천남성	ChoiHJ 70214	M,P	●	
<i>Arisaema amurense</i> f. <i>serratum</i> (Nakai) Kitagausa	천남성	JJ120278	M,P	●	
<i>Arisaema peninsulare</i> Nakai	점박이천남성	ChoiHJ 70169	M,P	●	
Lemnaceae 개구리밥과					
<i>Lemna perpusilla</i> Torr.	좁개구리밥	ParkSH74439	M	●	
Cyperaceae 사초과					
<i>Carex breviculmis</i> R.Br.	청사초	ChoiHJ 70228	U	●	
<i>Carex humilis</i> var. <i>nana</i> (H.Lév. & Vaniot) Ohwi	가는잎그늘사초		P	●	
<i>Carex lanceolata</i> Boott	그늘사초	WR-080608-043	P	●	
<i>Carex leiorhyncha</i> C.A.Mey.	산괭이사초	JSY1138	P	●	●
<i>Carex neurocarpa</i> Maxim.	괭이사초		P	●	
<i>Carex okamotoi</i> Ohwi	지리대사초	JJ120353	P	●	
<i>Carex siderosticta</i> Hance	대사초	JSY1149	P	●	
<i>Cyperus amuricus</i> Maxim.	방동사니		M	●	
<i>Cyperus difformis</i> L.	알방동사니		U	●	
<i>Cyperus globosus</i> All.	드렁방동사니		U	●	
<i>Cyperus hakonensis</i> Franch. & Sav.	병아리방동사니		U	●	
<i>Cyperus haspan</i> L.	모기방동사니		U	●	
<i>Cyperus iria</i> L.	참방동사니		U	●	
<i>Cyperus microiria</i> Steud.	금방동사니	ParkSH74247	U	●	
<i>Cyperus sanguinolentus</i> Vahl	방동사니대가리		U	●	
<i>Cyperus serotinus</i> Rottb.	너도방동사니		U	●	
<i>Eleocharis attenuata</i> f. <i>laeviseta</i> (Nakai) Hara	참배늘골		U	●	
<i>Eleocharis congesta</i> D.Don	바늘골		U	●	
<i>Fimbristylis autumnalis</i> (L.) Roem. & Schult.	애기하늘지기		U	●	
<i>Fimbristylis dichotoma</i> (L.) Vahl	하늘지기		U	●	
<i>Fimbristylis miliacea</i> (L.) Vahl	바람하늘지기	ParkSH74445	U	●	
<i>Kyllinga brevifolia</i> Rottb.	파대가리	ParkSH74454	U	●	

(continued on next page)

(continued)

Scientific name	Korean name	Specimen number	U.P	A	B
<i>Lipocarpha microcephala</i> (R.Br.) Kunth	세대가리		U	●	
<i>Scirpus juncooides</i> var. <i>hotarui</i> (Ohwi) Ohwi	율챙이고랭이	ParkSH74444	U	●	
<i>Scirpus karuizawensis</i> Makino	술방울고랭이	ParkSH73808	U	●	
Orchidaceae 난초과					
<i>Amitostigma gracile</i> (Blume) Schltr.	병아리난초		U	●	
<i>Cephalanthera longibracteata</i> Blume	온대난초	ParkSH73646	U	●	
Total				501	209

U.P: Useful plant, A: Research in 2007, B: Research in 2012.

References

- An HC, Choo GC. 2010. Vegetation structure of the Woongseokbong in the Jirisan (Mt.). *Korean Journal of Environment and Ecology* 24 (5):547–555.
- Jang CG, Kim YY, Ji SJ, Ko EM, Yang JC, Jang CS, Eom JA, Yoon CY, Chang CS, Lee CH, Kim KS, Oh BU. 2007. The floristic study of chirisan national park in Korea. *Korean Journal of Plant Taxonomy* 73 (2):155–196.
- Kang SH, Kim GR, Kim JK, Park SH, Lee WK, Lee JK. 2007. The ecology of *Kirengeshoma koreana* Nakai (Saxifragaceae), a rare species in Korea. *Korean Journal of Plant Resources* 20 (1):1–6.
- Kim HS. 2010. *A study on the relationship between vascular plants and forest structure in Woongseokbong, Jirisan (Mt.)*. Gyeongnam national university of science and technology Graduate School of Industry. 57 p.
- Kim JE, Kil BS. 2000. *Quercus mongolica forest in Korea: environment, vegetation and life*. Wonkwang University Press. 512 p.
- Korea Meteorological Administration Seoul. 2007. *Annual climatological report*. p. 252.
- Korea Meteorological Administration Seoul. 2008. *Annual climatological report*. p. 252.
- Korea Meteorological Administration Seoul. 2009. *Annual climatological report*. p. 253.
- Korea Meteorological Administration Seoul. 2010. *Annual climatological report*. p. 256.
- Korea Meteorological Administration Seoul. 2011. *Annual climatological report*. p. 258.
- Korea Meteorological Administration Seoul. 2012. *Annual climatological report*. p. 257.
- Korea National Arboretum. 2008. *Rare plants data book in Korea*. Korea National Arboretum. 332 p.
- Korea National Arboretum. 2014. http://www.nature.go.kr/newkfsweb/kfs/idx/SubIndex.do?orgId=kpn&mn=KFS_29 [Date Accessed: 24 January 2014].
- Lee TB. 1976. Vascular plants and their uses in Korea. *Bulletin of the arboretum Seoul National University* 1:1–131.
- Lee TB. 1980. *Illustrated flora of Korea*. Seoul: Hyangmunsa. 990 p.
- Lee TB. 2003a. *Coloured flora of Korea (I)*. Seoul: Hyangmunsa. 914 p.
- Lee TB. 2003b. *Coloured flora of Korea (II)*. Seoul: Hyangmunsa. 910 p.
- Lee WC. 1996a. *Lineamenta florae Coreae*. Academy publishing Co. Ltd. 1,688 p.
- Lee WC. 1996b. *Standard illustrations of Korean plants*. Academy publishing Co. Ltd. 624 p.
- Lee WC, Yim YJ. 2002. *Plant geography*. Chuncheon: Kangwon National University Press. 412 p.
- Lee YM, Park SH, Jung SY, Oh SH, Yang JC. 2011. Study on the current status of naturalized plants in South Korea. *Korean Journal of Plant Taxonomy* 41 (1): 87–101.
- Ministry of Environment. 1998. *White paper of environment*. 622 p.
- Ministry of Environment, National Institute of Environmental Research. 2006. *The 3rd National natural environment research guidelines*. Ministry of Environment. 298 p.
- Oh BU, Jo DG, Sun BY, Choi BH, Park JH, Im HT, Chang CS, Paik WK, Chung GY, Park KR, Kim JH. 2004. *Distribution maps of vascular plants in the South Coast of Korean Peninsula*. Korea National Arboretum. p. 692.
- Oh BU, Jo DG, Kim KS, Jang CG. 2005a. *Endemic vascular plants in the Korean Peninsula*. Seoul: Korea National Arboretum. 205 p.
- Oh BU, Jo DG, Park JH, Im HT, Chang CS, Paik WK, Chung GY, Kim JH, Yoon CY, Kim YD, Yoo KO, Jang CG. 2005b. *Distribution maps of vascular plants of Korean Peninsula II*. South Province (Jeolla-do & Jirisan): Korea National Arboretum. p. 633.
- Oh BU, Ko SC, Im HT, Paik WK, Chung GY, Yoon CY, Yoo KO, Jang CG. 2007. *Distribution maps of vascular plants of Korean Peninsula IV*. Central & South Province (Gyeongsangbuk-do): Korea National Arboretum. p. 707.
- Oh BU, Kim KS, Ko SC, Choi BH, Im HT, Paik WK, Chung GY, Yoon CY, Jang CG, Kang SH, Lee CH. 2008. *Distribution maps of vascular plants of Korean Peninsula V*. Central Province (Gyeonggi-do): Korea National Arboretum. p. 760.
- Oh BU, Jo DG, Ko SC, Im HT, Paik WK, Chung GY, Yoon CY, Yoo KO, Jang CG, Kang SH. 2009. *Distribution maps of vascular plants of Korean Peninsula VI*. Central Province (Gangwon-do): Korea Forest Service, Korea National Arboretum. p. 793.
- Oh BU. 2010a. *Distribution maps of vascular plants of Korean Peninsula VII*. South Province (Gyeongsangnam-do) and Ulleung-do Province: Korea Forest Service, Korea National Arboretum. p. 776.
- Oh BU. 2010b. *Distribution maps of vascular plants of Korean Peninsula VIII*. Jeju-do Province: Korea Forest Service, Korea National Arboretum. p. 681.
- Oh BU. 2011. *Distribution maps of vascular plants of Korean Peninsula IX*. Western & southern coastal area: Korea Forest Service, Korea National Arboretum. p. 737.
- Park SH. 1995. *Colored Illustrations of Naturalized Plants of Korea*. Seoul: Ilchokak. 372 p.
- Park SH. 2001. *Colored illustrations of naturalized plants of Korea (appendix)*. Seoul: Ilchokak. 178 p.
- Park SH. 2009. *New illustrations and photographs of naturalized plants of Korea*. Seoul: Ilchokak. 602 p.
- Son SW, Chung JM, Shin JK, Lee BC, Park KW, Park SJ. 2012. Distribution, vegetation characteristics and assessment of the conservation status of a rare and endemic plant, *Coreanomecon hylomeconoides* Nakai. *Korean Journal of Plant Taxonomy* 42 (2):116–125.