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Floristic study of Cheondeungsan Mountain in Korea

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ABSTRACT

The distribution of native plants of Cheondeungsan Mountain (807 m, N 37°05'00"–37°05'30", E 128°00'00"–128°02'00") in Chungcheongbuk-do was determined and the major flora were identified. During field investigations carried out from May 2011 to October 2011, 87 families, 254 genera, and 369 taxonomic groups (327 species, 4 subspecies, 33 varieties, and 5 forms) were confirmed, and the distribution of 219 taxonomic groups was discovered for the first time. The distribution of four endemic plants of Korea, including *Ajuga spectabilis* Nakai and *Salvia chamryoenica* Nakai, and that of *Penthorum chinense* Pursh, a Grade V specific plant species, was found. There were 20 taxa of naturalized plants at Cheondeungsan; the growth and development of plants that are harmful to the ecosystem, such as *Ambrosia artemisiifolia* L., *Ambrosia trifida* L., *Eupatorium rugosum* Houtt., and *Aster pilosus* Willd., was observed around the forest paths and lowlands.

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Introduction

Administratively, Cheondeungsan Mountain (807 m, north latitude 37°05'00"–37°05'30" and east longitude 128°00'00"–128°02'30") is located on the border between Sancheok-myeon in Chungju-si and Baegun-myeon in Jecheon-si. Topographically, it is the vein of the Charyeong Mountain Range and is located on the northeast part of the Chungju basin. To its south is located Indeungsan Mountain (665 m) and to the north are Sirangsan Mountain (691 m) and Bakdaljae Pass. Cheondeungsan has deep valleys which give rise to the development of many small streams. The mountain stream that flows along the northeast slope becomes the Jecheongang River and flows into Chungjuho Lake, while the mountain stream on the southwest slope flows into the Namhangan-gang River.

The area of investigation was north of the Sobaek Mountain Range, where the metasedimentary and granite rocks have been greatly affected by folds and faults. It has a very complex geological structure as a result of the rock types present, the distribution of

strata, and the interrelationship of the rocks and strata. The mountainous area of Cheondeungsan is a gneiss residuum and the soil has good drainage. The surface soil layer is composed of soil containing dark brown gravel (Kang and Park, 2002). The annual average temperature at Cheondeungsan is 11.2°C, annual average rainfall is 1212.7 mm, and it displays a typical central continental climate (Korea Meteorological Administration, 2011).

A study on the flora of this region was carried out in the past by Kang and Ko (2002) and, together with the voucher specimens, a total of 311 taxa were reported. The plant list included planted vegetation such as *Eucommia ulmoides* Oliv., *Prunus salicina* Lindl., and *Prunus yedoensis* Matsum., and erroneously identified taxa such as *Artemisia sylvatica* Maxim., *Artemisia montana* (Nakai) Pamp., and *Corydalis turtschaninovii* var. *pectinata* (Maxim.) Nakai, therefore this cannot be viewed as an accurate list of the native plants of Cheondeungsan.

However, in this study, voucher specimens were collected through field investigations at Cheondeungsan. Based on the data on vascular plants drafted using the voucher specimens, the accurate distribution of vascular plants in the region and the spontaneous areas of endemic plants and other major plants were identified, to check the invasion of naturalized plants and collect basic data for the preservation of natural resources in this region in the future. In addition, we conducted this study in order to confirm

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the distributional characteristics of plants of Cheondeungsan and provide complete information on the floristic data.

Materials and methods

This study was carried out based on four field-investigation results from May 29 to October 18, 2011 (Figure 1 and Table 1). During the field investigations, only those plants with reproductive organs such as flowers, fruits, and spores were collected as voucher specimens to maintain accuracy, and the collected specimens were stored at the Chungbuk National University Herbarium. Using the illustrative guides of Lee (1996, 2003, 2006) and Park (2009). The use of scientific names was in accordance with the Korea National Arboretum and the Plant Taxonomic Society of Korea (2007). For the specific plants of the investigated area, the data of Oh et al. (2005), the Korea National Arboretum (2008), the Ministry of Environment (2006, 2009), Park (2009), and Lee et al. (2011) were considered.

Results

Vascular plants of Cheondeungsan according to voucher specimens

The vascular plants of Cheondeungsan found in this investigation included 87 families, 254 genera, 327 species, four subspecies, 33 varieties, and five forms for a total of 369 taxa. There were seven families, 13 genera, 18 species, and one variation (5.1%) for pteridophyta; one family, two genera, and two species (0.5%) for gymnosperm; 67 families, 191 genus, 240 species, four subspecies, 23 variations, and five forms (73.6%) for angiosperm; and 12 families, 48 genera, 68 species, and nine variations (20.8%) for monocotyledons (Table 2 and Appendix 1). In the tree layer of the investigated area, *Quercus mongolica* Fisch. ex Ledeb. and *Quercus variabilis* Blume. were the dominant species; *Carpinus cordata* Blume, *Betula davurica* Pall., and *Quercus acutissima* Carruth were also found. In the subtree layer, *Platycarya strobilacea* Siebold & Zucc., *Morus bombycis* Koidz., and *Robinia pseudoacacia* L. were

Table 1
Dates and routes of investigations.

No.	Date	Investigation routes
1	May 29, 2011	A: Yeongdeok-ri → Forest road → Swaemaegigogae (hill) B: Cheondeungsa (temple) → 491 m hill → Dongsam-yeon
2	Jun 11, 2011	A: Neureupjae (hill) → Southern forest road → Darakjae (hill) → Western forest road → Pavilion → Northern forest road → Seokcheon-ri B: Northern forest road → Anbu → Northern slope → 638Goji → Northeastern slope → Dongbong → Northern valley → Forest road
3	Sep 5, 2011	A: Northern forest road → Seokcheon tri-way intersection → Seokcheon-ri → Songgang-ri (Gwangdong) B: Northern forest road → Northwestern slope → Sobong → Northern slope → Peak → Southern slope
4	Oct 18, 2011	Neureupjae (hill) → Samtan, Songgang-ri (Gwangdong) → Northern forest road → Seokcheon-ri → Aeryeon-ri

relatively commonly found. In the shrub layer, which makes up the lower structure, *Lespedeza bicolor* Turcz., *Lespedeza maximowiczii* C.K. Schneid., and *Rhododendron schlippenbachii* Maxim. grew commonly, while in the herb layer, there were *Impatiens textori* Miq., *Chelidonium majus* var. *asiaticum* (Hara) Ohwi, *Lysimachia clethroides* Duby, and *Convallaria keiskei* Miq. In the fallow grounds of the lowland, there were wetland plants such as *Rotala pusilla* Tul., *Eriocaulon robustius* (Maxim.) Makino, *Sagittaria aginashi* Makino, and *Monochoria vaginalis* var. *plantaginea* (Roxb.) Solms.

Above an altitude of 400 m, the environment of the forest vegetation was relatively good and favored the growth of *Q. mongolica* Fisch. and *Q. variabilis* Blume. However, in lowland areas (below 400 m) there was human interference, with relatively large areas being used as orchards and *Larix kaempferi* (Lamb.) Carrière forests; thus, these areas have relatively simple vegetation. Lowland areas comprise both housing and farming areas, and thus have a high density of naturalized plants.

Compared with previous studies (Kang and Ko, 2002) on the flora of Cheondeungsan, a total of 159 taxa such as *Asarum sieboldii*

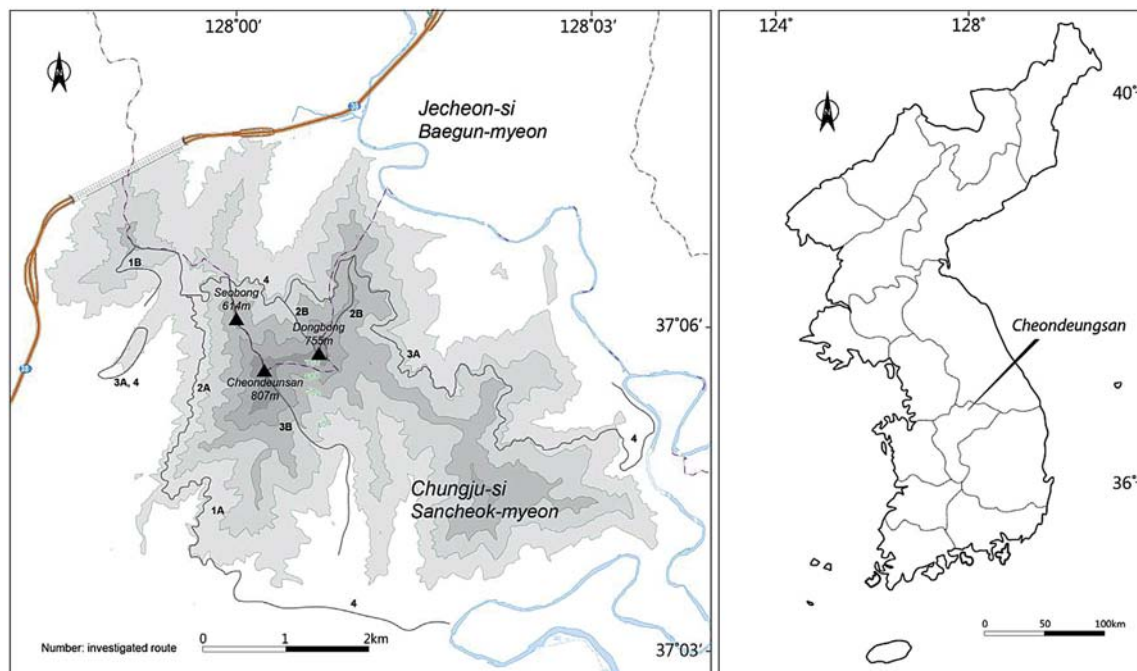


Figure 1. Area investigated (Cheondeungsan) in this study.

Table 2
Summary of the floristics of Cheondeungsan Mountain.

Taxa	Family	Genera	Species	Subspecies	Variety	Form	Total	Ratio
Pteridophyta	7	13	18	–	1	–	19	5.1
Gymnospermae	1	2	2	–	–	–	2	0.5
Angiospermae								
Dicotyledons	67	191	239	4	23	5	272	73.6
Monocotyledons	12	48	68	–	9	–	77	20.8
Total	87	254	327	4	33	5	370	100

Miq., *Lamium amplexicaule* L., and *Taraxacum coreanum* Nakai were not found in this investigation. On the other hand, a total of 219 taxa such as *Eleutherococcus sessiliflorus* (Rupr. & Maxim.) S.Y.Hu, *R. pusilla* Tul., *Salvia chanryoenica* Nakai, and *Scopolia japonica* Maxim were newly found. These are indicated by an asterisk (*) in the plant list (Appendix 1).

Considering the starting period for the investigation and that the study was carried out for a short period of time, while conducting additional studies to include spring plants in the future, it is judged that more plants can be discovered in the future, and thus, long-term investigation plans should be established.

Endemic plants of Korea

Endemic plants of Korea, the distribution of which was confirmed around Cheondeungsan, include four taxa: *Weigela subsessilis* (Nakai) L.H.Bailey, *Ajuga spectabilis* Nakai, *S. chanryoenica* Nakai, and *Philadelphus schrenkii* Rupr., These account for approximately 0.8% of all vascular plants in Cheondeungsan (Table 3). A small amount of *S. chanryoenica* Nakai was found to grow near the summit. Currently, construction work is being carried out near this location. This construction work should be undertaken in such a way that the spontaneous land is not destroyed.

Floristic regional plants

For the floristic-specific plant species designated by the Ministry of Environment, one taxon such as *Penthorum chinense* Pursh was in the fifth degree, and 10 taxa, including *S. japonica* Maxim., *S. chanryoenica* Nakai, *Indigofera pseudotinctoria* Matsum., *B. davurica* Pall., and *Diarrhena fauriei* (Hack.) Ohwi, were in the third degree for a total of 11 taxa (approximately 2.9%) (Table 4). Meanwhile, it was found that the fourth-degree species *Wisteria floribunda* (Willd.) DC. was planted, therefore it was excluded from the list of native plants. *P. chinense* Pursh was found on the riverside between Seokcheon-ri and Aeryeon-ri, and *S. japonica* Maxim. was found in small amounts in the valley from the eastern peak toward the northern slope.

Naturalized plants

The naturalized plants of Cheondeungsan found in this study comprised 20 taxa, including *Ambrosia artemisiifolia* L., *Eupatorium rugosum* Houtt., and *Fallopia dumetorum* (L.) (approximately 5.4%) (Table 5). The naturalized index (number of taxa of naturalized

Table 3
List of the Korean endemic plants of Cheondeungsan Mountain.

No.	Family name	Taxa
1	Caprifoliaceae	<i>Weigela subsessilis</i> (Nakai) L.H.Bailey 병꽃나무
2	Labiatae	<i>Ajuga spectabilis</i> Nakai 자란초
3	Labiatae	<i>Salvia chanryoenica</i> Nakai 참배암차초기
4	Saxifragaceae	<i>Philadelphus schrenkii</i> Rupr. 곶강나무

Table 4
List of fifth- to third-degree taxa floristic regional plants of Cheondeungsan Mountain.

No.	Family name	Taxa	Degree
1	Crassulaceae	<i>Penthorum chinense</i> Pursh 낙지다리	V (1 taxon)
2	Betulaceae	<i>Betula davurica</i> Pall 울박달나무	III (10 taxa)
3	Cruciferae	<i>Arabis pendula</i> L. 느리진장대	
4	Ericaceae	<i>Vaccinium hirtum</i> var. <i>koreanum</i> (Nakai) Kitam. 산앵도나무	
5	Gramineae	<i>Diarrhena fauriei</i> (Hack.) Ohwi 광릉옹수염	
6	Labiatae	<i>Salvia chanryoenica</i> Nakai 참배암차초기	
7	Leguminosae	<i>Indigofera pseudotinctoria</i> Matsum. 남아초	
8	Liliaceae	<i>Veratrum maackii</i> Regel 긴잎여로	
9	Ranunculaceae	<i>Aconitum longecassidatum</i> Nakai 흰진법	
10	Saxifragaceae	<i>Mukdenia rossii</i> (Oliv.) Koidz. 돌단풍	
11	Solanaceae	<i>Scopolia japonica</i> Maxim. 미치광이풀	

Table 5
List of the naturalized plants of Cheondeungsan Mountain.

No.	Family name	Taxa
1	Amaranthaceae	<i>Amaranthus blitum</i> L. 개비름
2	Amaranthaceae	<i>Amaranthus patulus</i> Bertol. 가는털비름
3	Caryophyllaceae	<i>Cerastium glomeratum</i> Thuill. 유럽점나도나물
4	Chenopodiaceae	<i>Chenopodium album</i> L. 흰명아주
5	Compositae	<i>Ambrosia artemisiifolia</i> L. 돼지풀
6	Compositae	<i>Ambrosia trifida</i> L. 단풍잎돼지풀
7	Compositae	<i>Aster pilosus</i> Willd. 미국속부쟁이
8	Compositae	<i>Bidens frondosa</i> L. 미국가막사리
9	Compositae	<i>Carduus crispus</i> L. 지느러미영경귀
10	Compositae	<i>Coreopsis lanceolata</i> L. 큰금계국
11	Compositae	<i>Erechtites hieracifolia</i> Raf. 붉은서나물
12	Compositae	<i>Erigeron annuus</i> (L.) Pers. 개망초
13	Compositae	<i>Eupatorium rugosum</i> Houtt. 서양등골나물
14	Convolvulaceae	<i>Ipomoea purpurea</i> Roth 둥근일나팔꽃
15	Gramineae	<i>Eragrostis curvula</i> Nees 능수참새그렁
16	Leguminosae	<i>Robinia pseudoacacia</i> L. 아까시나무
17	Leguminosae	<i>Trifolium repens</i> L. 토끼풀
18	Onagraceae	<i>Oenothera biennis</i> L. 달맞이꽃
19	Polygonaceae	<i>Fallopia dumetorum</i> (L.) Holub 닭의당굴
20	Simaroubaceae	<i>Ailanthus altissima</i> (Mill.) Swingle 가축나무

plants/number of taxa of distributed plants × 100) of the investigation area was 5.42% and the urbanization index (number of taxa of naturalized plants/number of taxa of naturalized plants of South Korea × 100) was 6.45%. The naturalized plants in this region increased about two-fold compared to the 10 taxa reported in previous studies (Kang and Ko, 2002). However, the reason for this may be the inclusion of lowlands such as street sides and places around housing and farming areas in the investigation area.

Meanwhile, *A. artemisiifolia* L., *Ambrosia trifida* L., and *E. rugosum* Houtt., which are categorized as plants that harm the ecosystem, were found in high numbers near Samtan Station and Chungjuho, while *Aster pilosus* Willd. was found to be distributed all around the forest paths and lowlands of Cheondeungsan. Because their seeds and roots can be dispersed easily by soil or wind over long distances, it is most effective to remove them in their early growth stage, and it is necessary to manage them by restricting the movement of soil containing their seeds or parts of their plants.

Discussion

Cheondeungsan is classified as the Central Province of the floristic regions in the Korean peninsula (Lee and Yim, 2002). This region is occupied by the endemic plants of the central area such as *S. chanryoenica* Nakai, and the central southern or the central northern floristic elements such as *A. spectabilis* Nakai and *Arabis pendula* L.; together forming the distributional characteristics of the

Central Province. The forest vegetation distributed throughout this mountain (above 400 m) shows the vegetation type of *Lindero-Quercion mongolicae*, which is characterized as the central mountain type and the forest vegetation type (Kim, 2006).

Meanwhile, the forest roads in the investigation region are well developed, so that naturalized plants may actively invade this region. As found in this research, *A. pilosus* Willd., *Eragrostis curvula* Nees, and *Oenothera biennis* L. are widely distributed across the areas near the forest roads, threatening the growth of native plants. In particular, *A. pilosus* Willd., *A. artemisiifolia* L., *A. trifida* L., and *E. rugosum* Houtt., the species that disturb the ecology, are widely spread throughout the areas near the forest roads and the lowlands. Appropriate steps are needed to prevent the spread of these species.

Acknowledgments

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Appendix 1. List of vascular plants of Cheondeungsan including voucher specimens.

Dennstaedtiaceae (잔고사리과)

1. *Dennstaedtia hirsuta* (Sw.) Mett. ex Miq. 잔고사리; *cheondeung-110905-212*, *cheondeung-111018-049*
2. *Dennstaedtia wilfordii* (Moore) Christ 황고사리*; *cheondeung-110711-004*, *cheondeung-111018-046*
3. *Pteridium aquilinum* var. *latiusculum* (Desv.) Und. ex Heller. 고사리; *cheondeung-110711-246*

Davalliaceae (넉줄고사리과)

4. *Davallia mariesii* Moore ex Bak. 넉줄고사리; *cheondeung-110905-080*

Parkeriaceae (공작고사리과)

5. *Coniogramme intermedia* Hieron 고비고사리*; *cheondeung-110905-064*

Aspleniaceae (꼬리고사리과)

6. *Asplenium incisum* Thunb. 꼬리고사리; *cheondeung-110905-187*

Dryopteridaceae (면마과)

7. *Dryopteris chinensis* (Bak.) Koidz. 가는잎족제비고사리; *cheondeung-110711-093*, *cheondeung-111018-052*
8. *Dryopteris crassirhizoma* Nakai 관중; *cheondeung-110711-099*, *cheondeung-110905-086*
9. *Dryopteris lacera* (Thunb.) Kuntze 비늘고사리*; *cheondeung-110905-181*, *cheondeung-111018-054*
10. *Dryopteris monticola* (Makino) C.Chr. 왕지네고사리*; *cheondeung-110905-182*
11. *Dryopteris sacrosancta* Koidz. 애기족제비고사리*; *cheondeung-111018-051*
12. *Polystichum ovatopaleaceum* var. *coraiense* (Christ) Kurata 참나도히초미*; *cheondeung-111018-008*

Woodsiaceae (우드풀과)

13. *Athyrium yokoscense* (Franch. & Sav.) Christ 백고사리; *cheondeung-110905-055*, *cheondeung-111018-053*
14. *Cornopteris crenulatoserrulata* (Makino) Nakai 응달고사리*; *cheondeung-110905-126*
15. *Deparia coreana* (Christ) M.Kato 곱새고사리*; *cheondeung-110711-223*, *cheondeung-110905-205*
16. *Deparia pycnosora* (Christ) M.Kato 털고사리*; *cheondeung-110711-096*
17. *Onoclea orientalis* (Hk.) Hk. 개면마*; *cheondeung-110905-091*
18. *Woodsia polystichoides* D.C.Eaton 우드풀*; *cheondeung-110905-067*

Polypodiaceae (고란초과)

19. *Lepisorus ussuriensis* (Regel & Maack) Ching 산일엽초*; *cheondeung-110711-184*

Pinaceae (소나무과)

20. *Larix kaempferi* (Lamb.) Carrière 일본잎갈나무; *cheondeung-110529-003*
21. *Pinus densiflora* Siebold & Zucc. 소나무*; *cheondeung-110529-045*, *cheondeung-110711-267*

Juglandaceae (가래나무과)

22. *Platycarya strobilacea* Siebold & Zucc. 굴피나무*; *cheondeung-110711-262*

Betulaceae (자작나무과)

23. *Alnus sibirica* Fisch. ex Turcz. 물오리나무; *cheondeung-110711-234*
24. *Betula davurica* Pall. 물박달나무; *cheondeung-110711-051*
25. *Carpinus cordata* Blume 까치박달; *cheondeung-110711-002*
26. *Corylus heterophylla* Fisch. ex Trautv. 개암나무; *cheondeung-110529-093*, *cheondeung-110711-247*

Fagaceae (참나무과)

27. *Castanea crenata* Siebold & Zucc. 밤나무; *cheondeung-110711-067*
28. *Quercus acutissima* Carruth. 상수리나무; *cheondeung-110711-259*
29. *Quercus dentata* Thunb. 떡갈나무; *cheondeung-110529-094*
30. *Quercus mongolica* Fisch. ex Ledeb. 신갈나무; *cheondeung-110711-248*

Ulmaceae (느릅나무과)

31. *Hemiptelea davidii* (Hance) Planch. 시무나무; *cheondeung-111018-030*

Moraceae (뽕나무과)

32. *Morus bombycis* Koidz. 산뽕나무; *cheondeung-110529-055*, *cheondeung-110711-135*

Cannabaceae (삼과)

33. *Humulus japonicus* Siebold & Zucc. 환삼덩굴; *cheondeung-110905-159*

Urticaceae (뽕기풀과)

34. *Boehmeria longispica* Steud. 왜모시풀*; *cheondeung-110711-037*
 35. *Pilea japonica* (Maxim.) Hand.-Mazz. 산물통이*; *cheondeung-110905-084*
 36. *Pilea mongolica* Wedd. 모시물통이*; *cheondeung-110905-082*, *cheondeung-111018-094*

Loranthaceae (꼬리겨우살이과)

37. *Viscum album* var. *coloratum* (Kom.) Ohwi 겨우살이*; *cheondeung-110905-031*

Polygonaceae (마디풀과)

38. *Fagopyrum esculentum* Moench 메밀*; *cheondeung-110905-146*
 39. *Fallopia dumetorum* (L.) Holub 닭의덩굴*; *cheondeung-111018-027*
 40. *Persicaria dissitiflora* (Hemsl.) H.Gross ex Mori 가시여뀌*; *cheondeung-110711-057*, *cheondeung-110905-001*
 41. *Persicaria filiformis* (Thunb.) Nakai ex Mori 이삭여뀌*; *cheondeung-110905-003*
 42. *Persicaria hydropiper* (L.) Spach 여뀌*; *cheondeung-111018-073*
 43. *Persicaria lapathifolia* (L.) Gray 흰여뀌*; *cheondeung-110905-158*, *cheondeung-111018-095*
 44. *Persicaria longiseta* (Brujin) Kitag. 개여뀌*; *cheondeung-110905-007*, *cheondeung-111018-037*
 45. *Persicaria nepalensis* (Meisn.) H.Gross 산여뀌*; *cheondeung-110905-207*, *cheondeung-111018-026*
 46. *Persicaria posumbu* var. *laxiflora* (Meisn.) H.Hara 장대여뀌*; *cheondeung-110905-020*
 47. *Persicaria sagittata* (L.) H.Gross ex Nakai 미꾸리늪시*; *cheondeung-110905-100*, *cheondeung-111018-039*
 48. *Persicaria senticosa* (Meisn.) H.Gross ex Nakai 며느리밀씻개*; *cheondeung-110905-017*
 49. *Persicaria thunbergii* (Siebold & Zucc.) H.Gross ex Nakai 고마리*; *cheondeung-110905-081*, *cheondeung-111018-042*
 50. *Rumex acetosa* L. 수영; *cheondeung-110529-130*, *cheondeung-110711-112*

Caryophyllaceae (석죽과)

51. *Arenaria serpyllifolia* L. 벼룩이자리; *cheondeung-110529-196*
 52. *Cerastium glomeratum* Thuill. 유럽접나도나물*; *cheondeung-110529-205*
 53. *Cerastium holosteoides* var. *hallaisanense* (Nakai) Mizush. 접나도나물*; *cheondeung-110529-036*
 54. *Dianthus chinensis* L. 패랭이꽃; *cheondeung-110711-167*
 55. *Lychnis cognata* Maxim. 동자꽃*; *cheondeung-110711-111*
 56. *Pseudostellaria heterophylla* (Miq.) Pax ex Pax & Hoffm. 개별꽃; *cheondeung-110529-034*
 57. *Silene firma* Siebold & Zucc. 장구채*; *cheondeung-110905-058*, *cheondeung-111018-011*

58. *Silene seoulensis* Nakai 가는장구채*; *cheondeung-110905-008*
 59. *Stellaria alsine* var. *undulata* (Thunb.) Ohwi 벼룩나물; *cheondeung-110905-149*
 60. *Stellaria aquatica* (L.) Scop. 쇠별꽃; *cheondeung-110529-195*, *cheondeung-110711-085*, *cheondeung-111018-019*

Chenopodiaceae (명아주과)

61. *Chenopodium album* L. 흰명아주*; *cheondeung-111018-059*

Amaranthaceae (비름과)

62. *Achyranthes japonica* (Miq.) Nakai 쇠무릎*; *cheondeung-110905-094*, *cheondeung-111018-035*
 63. *Amaranthus blitum* L. 개비름*; *cheondeung-110905-198*
 64. *Amaranthus patulus* Bertol. 가는털비름*; *cheondeung-110905-141*

Lauraceae (녹나무과)

65. *Lindera obtusiloba* Blume 생강나무; *cheondeung-110529-098*, *cheondeung-110711-202*

Ranunculaceae (미나리아재비과)

66. *Aconitum longecassidatum* Nakai 흰진범*; *cheondeung-110905-122*
 67. *Cimicifuga dahurica* (Turcz. ex Fisch. & C.A.Mey.) Maxim. 눈빛송마*; *cheondeung-110905-124*
 68. *Clematis heracleifolia* DC. 병조희풀; *cheondeung-110905-071*
 69. *Clematis terniflora* DC. 참으아리*; *cheondeung-110711-045*
 70. *Hepatica asiatica* Nakai 노루귀*; *cheondeung-110905-057*
 71. *Pulsatilla koreana* (Yabe ex Nakai) Nakai ex Mori 할미꽃; *cheondeung-110529-097*
 72. *Ranunculus japonicus* Thunb. 미나리아재비*; *cheondeung-110529-107*
 73. *Ranunculus tachiroei* Franch. & Sav. 개구리미나리*; *cheondeung-110711-076*

Berberidaceae (매자나무과)

74. *Caulophyllum robustum* Maxim. 쩡의다리아재비*; *cheondeung-110711-162*

Lardizabalaceae (으름덩굴과)

75. *Akebia quinata* (Thunb.) Decne. 으름덩굴; *cheondeung-110711-197*

Menispermaceae (새모래덩굴과)

76. *Cocculus trilobus* (Thunb.) DC. 땡땡이덩굴*; *cheondeung-110711-069*
 77. *Menispermum dauricum* DC. 새모래덩굴; *cheondeung-110529-164*

Chloranthaceae (홀아비꽃대과)

78. *Chloranthus japonicus* Siebold 홀아비꽃대; *cheondeung-110529-051*, *cheondeung-110905-066*

Aristolochiaceae (취방울덩굴과)

79. *Aristolochia contorta* Bunge 취방울덩굴*; *cheondeung-110711-178*

Actinidiaceae (다래나무과)

80. *Actinidia polygama* (Siebold & Zucc.) Planch. ex Maxim. 개다래; *cheondeung-110711-008*

Guttiferae (물레나물과)

81. *Hypericum ascyron* L. 물레나물; *cheondeung-110711-053*

Papaveraceae (양귀비과)

82. *Chelidonium majus* var. *asiaticum* (Hara) Ohwi 애기똥풀; *cheondeung-110529-076*, *cheondeung-110711-255*
 83. *Hylomecon vernalis* Maxim. 피나물*; *cheondeung-110905-189*

Fumariaceae (현호색과)

84. *Corydalis pauciovulata* Ohwi 선괴불주머니*; *cheondeung-110905-002*, *cheondeung-111018-024*
 85. *Corydalis speciosa* Maxim. 산괴불주머니; *cheondeung-110529-029*
 86. *Dicentra spectabilis* (L.) Lem. 금낭화; *cheondeung-110529-008*

Cruciferae (십자화과)

87. *Arabis glabra* Bernh. 장대나물; *cheondeung-110529-077*
 88. *Arabis pendula* L. 느러진장대*; *cheondeung-110905-016*
 89. *Barbarea orthoceras* Ledeb. 나도냉이*; *cheondeung-110529-139*
 90. *Capsella bursa-pastoris* (L.) L.W.Medicus 냉이; *cheondeung-110529-019*
 91. *Cardamine flexuosa* With. 황새냉이; *cheondeung-110529-006*, *cheondeung-110711-081*, *cheondeung-111018-077*
 92. *Cardamine impatiens* L. 싸리냉이*; *cheondeung-110529-024*
 93. *Cardamine leucantha* (Tausch) O.E.Schulz 미나리냉이; *cheondeung-110529-065*, *cheondeung-110711-256*
 94. *Dontostemon dentatus* (Bunge) Ledeb. 가는장대*; *cheondeung-110711-119*
 95. *Draba nemorosa* L. 꽃다지*; *cheondeung-110529-117*
 96. *Rorippa cantoniensis* (Lour.) Ohwi 좁개갯냉이*; *cheondeung-111018-064*
 97. *Rorippa indica* (L.) Hiern 개갯냉이*; *cheondeung-111018-062*
 98. *Rorippa palustris* (Leyss.) Besser 속속이풀*; *cheondeung-110711-080*, *cheondeung-111018-061*

Crassulaceae (돌나물과)

99. *Penthorum chinense* Pursh 낙지다리*; *cheondeung-111018-002*
 100. *Sedum aizoon* L. 가는기린초*; *cheondeung-110711-050*
 101. *Sedum kamtschaticum* Fisch. & Mey. 기린초; *cheondeung-110711-154*, *cheondeung-110905-076*
 102. *Sedum polytrichoides* Hemsl. 바위채송화*; *cheondeung-110905-188*

Saxifragaceae (범의귀과)

103. *Astilbe rubra* Hook.f. & Thomas ex Hook.f. 노루오줌*; *cheondeung-110711-035*
 104. *Deutzia uniflora* Shirai 매화말발도리; *cheondeung-110711-015*, *cheondeung-110905-079*
 105. *Hydrangea serrata* f. *acuminata* (Siebold & Zucc.) Wilson 산수국; *cheondeung-110711-038*
 106. *Mukdenia rossii* (Oliv.) Koidz. 돌단풍*; *cheondeung-111018-006*
 107. *Philadelphus schrenkii* Rupr. 고광나무; *cheondeung-110711-203*

Rosaceae (장미과)

108. *Agrimonia coreana* Nakai 산짚신나물*; *cheondeung-110905-070*
 109. *Agrimonia pilosa* Ledeb. 짚신나물; *cheondeung-110711-075*, *cheondeung-110905-069*
 110. *Agrimonia pilosa* var. *nipponica* (Koidz.) Kitam. 좁짚신나물*; *cheondeung-111018-044*
 111. *Crataegus pinnatifida* Bunge 산사나무*; *cheondeung-110711-079*
 112. *Geum aleppicum* Jacq. 큰뺨무*; *cheondeung-110711-058*, *cheondeung-110905-006*
 113. *Potentilla chinensis* Ser. 딱지꽃*; *cheondeung-110711-022*
 114. *Potentilla cryptotaeniae* Maxim. 물양지꽃*; *cheondeung-110711-020*, *cheondeung-111018-007*
 115. *Potentilla freyniana* Bornm. 세잎양지꽃; *cheondeung-110529-135*
 116. *Rosa multiflora* Thunb. 찔레나무; *cheondeung-110529-100*
 117. *Rubus coreanus* Miq. 복분자딸기; *cheondeung-110711-173*
 118. *Rubus crataegifolius* Bunge 산딸기; *cheondeung-110529-054*, *cheondeung-110711-245*
 119. *Rubus parvifolius* L. 멍석딸기*; *cheondeung-110711-071*
 120. *Rubus phoenicolasius* Maxim. 곰딸기*; *cheondeung-110711-054*
 121. *Sanguisorba officinalis* L. 오이풀; *cheondeung-110905-042*
 122. *Stephanandra incisa* (Thunb.) Zabel 국수나무; *cheondeung-110529-025*, *cheondeung-110711-127*

Leguminosae (콩과)

123. *Aeschynomene indica* L. 자귀풀*; *cheondeung-110905-137*
 124. *Albizia julibrissin* Durazz. 자귀나무*; *cheondeung-110711-042*
 125. *Amphicarpaea bracteata* subsp. *edgeworthii* (Benth.) H.Ohashi 새콩*; *cheondeung-110905-015*
 126. *Chamaecrista nomame* (Siebold) H.Ohashi 차풀*; *cheondeung-110905-156*
 127. *Desmodium podocarpum* DC. 개도독놈의갈고리*; *cheondeung-110905-078*

128. *Desmodium oldhami* Oliv. 큰도독놈의갈고리*; *cheondeung-110905-009*
129. *Indigofera kirilowii* Maxim. ex Palib. 땅비싸리; *cheondeung-110711-264*
130. *Indigofera pseudotinctoria* Matsum. 냥아초*; *cheondeung-110711-049*
131. *Lathyrus davidii* Hance 활랑나물*; *cheondeung-110711-125*
132. *Lespedeza bicolor* Turcz. 싸리; *cheondeung-110711-060*, *cheondeung-110905-040*
133. *Lespedeza cuneata* G.Don 비수리; *cheondeung-111018-083*
134. *Lespedeza maximowiczii* C.K.Schneid. 조록싸리; *cheondeung-110711-148*
135. *Robinia pseudoacacia* L. 아까시나무; *cheondeung-110711-236*
136. *Sophora flavescens* Solander ex Aiton 고삼; *cheondeung-110711-237*
137. *Trifolium repens* L. 토끼풀; *cheondeung-110711-074*
138. *Vicia unijuga* A.Braun 나비나물; *cheondeung-110905-056*
139. *Wisteria floribunda* (Willd.) DC. 등*; *cheondeung-110711-242*
- Oxalidaceae (괘이밥과)
140. *Oxalis corniculata* L. 괘이밥*; *cheondeung-111018-001*
141. *Oxalis stricta* L. 선괘이밥*; *cheondeung-110529-023*
- Geraniaceae (쥐손이풀과)
142. *Geranium thunbergii* Siebold & Zucc. 이질풀*; *cheondeung-110905-005*
- Euphorbiaceae (대극과)
143. *Acalypha australis* L. 깨풀*; *cheondeung-110905-201*
144. *Euphorbia sieboldiana* Morren & Decne. 개감수*; *cheondeung-110529-079*
145. *Phyllanthus ussuriensis* Rupr. & Maxim. 여우주머니*; *cheondeung-110905-151*
146. *Securinega suffruticosa* (Pall.) Rehder 광대싸리; *cheondeung-110711-010*
- Rutaceae (윤향과)
147. *Evodia daniellii* Hemsl. 쉬나무*; *cheondeung-110711-270*
148. *Zanthoxylum piperitum* (L.) DC. 초피나무; *cheondeung-110711-244*
149. *Zanthoxylum schinifolium* Siebold & Zucc. 산초나무; *cheondeung-110711-105*, *cheondeung-110905-019*
- Simaroubaceae (소태나무과)
150. *Ailanthus altissima* (Mill.) Swingle 가죽나무; *cheondeung-110711-062*
151. *Picrasma quassioides* (D.Don) Bennett 소태나무; *cheondeung-110711-179*
- Anacardiaceae (옻나무과)
152. *Rhus javanica* L. 붉나무; *cheondeung-110711-260*
153. *Rhus tricarpa* Miq. 개옻나무*; *cheondeung-110529-063*, *cheondeung-110711-153*, *cheondeung-110905-043*
- Aceraceae (단풍나무과)
154. *Acer pictum* subsp. *mono* (Maxim.) Ohashi 고로쇠나무; *cheondeung-110711-040*
155. *Acer pseudosieboldianum* (Pax) Kom. 당단풍나무; *cheondeung-110529-001*, *cheondeung-110711-011*
156. *Acer tataricum* subsp. *ginnala* (Maxim.) Wesm. 신나무; *cheondeung-110529-102*, *cheondeung-110711-249*
- Balsaminaceae (봉선화과)
157. *Impatiens noli-tangere* L. 노랑물봉선*; *cheondeung-110905-014*
158. *Impatiens textori* Miq. 물봉선*; *cheondeung-110905-077*
159. *Impatiens textori* var. *koreana* Nakai 흰물봉선*; *cheondeung-110905-102*
- Celastraceae (노박덩굴과)
160. *Celastrus orbiculatus* Thunb. 노박덩굴; *cheondeung-110711-030*, *cheondeung-111018-028*
161. *Euonymus alatus* f. *ciliatodentatus* (Franch. & Sav.) Hiyama 회잎나무*; *cheondeung-110529-203*
162. *Tripterygium regelii* Sprague & Takeda 미역줄나무*; *cheondeung-110711-032*
- Staphyleaceae (고추나무과)
163. *Staphylea bumalda* DC. 고추나무; *cheondeung-110529-061*, *cheondeung-110711-039*
- Vitaceae (포도과)
164. *Ampelopsis brevipedunculata* f. *ciliata* (Nakai) T.B.Lee 털개머루*; *cheondeung-110711-078*
165. *Parthenocissus tricuspidata* (Siebold & Zucc.) Planch. 담쟁이덩굴; *cheondeung-110711-265*
- Tiliaceae (피나무과)
166. *Corchoropsis tomentosa* (Thunb.) Makino 수까치개*; *cheondeung-110905-108*
- Elaeagnaceae (보리수나무과)
167. *Elaeagnus umbellata* Thunb. 보리수나무; *cheondeung-110711-048*
- Violaceae (제비꽃과)
168. *Viola acuminata* Ledeb. 줄방제비꽃; *cheondeung-110529-081*, *cheondeung-110905-047*
169. *Viola albida* var. *chaerophylloides* (Regel) F.Maek. 남산제비꽃; *cheondeung-110529-026*
170. *Viola rossii* Hemsl. 고깔제비꽃; *cheondeung-110905-177*
171. *Viola variegata* Fisch. ex Link. 알록제비꽃; *cheondeung-110529-007*, *cheondeung-110905-004*

Lythraceae (부처꽃과)

172. *Rotala indica* (Willd.) Koehne 마디꽃*; *cheondeung-110905-135*, *cheondeung-111018-074*
 173. *Rotala pusilla* Tul. 가는마디꽃*; *cheondeung-110905-131*

Onagraceae (바늘꽃과)

174. *Ludwigia prostrata* Roxb. 여뀌바늘*; *cheondeung-110905-154*
 175. *Oenothera biennis* L. 달맞이꽃; *cheondeung-110711-018*, *cheondeung-110905-148*

Alangiaceae (박쥐나무과)

176. *Alangium platanifolium* var. *trilobum* (Miq.) Ohwi 박쥐나무; *cheondeung-110529-058*, *cheondeung-110711-028*

Cornaceae (층층나무과)

177. *Cornus controversa* Hemsl. ex Prain 층층나무; *cheondeung-110529-151*, *cheondeung-110711-024*

Araliaceae (두릅나무과)

178. *Eleutherococcus sessiliflorus* (Rupr. & Maxim.) S.Y.Hu 오갈피나무*; *cheondeung-110711-026*

Umbelliferae (산형과)

179. *Angelica dahurica* (Fisch. ex Hoffm) Benth. & Hook.f. ex Franch. & Sav. 구릿대*; *cheondeung-110905-095*
 180. *Angelica decursiva* (Miq.) Franch. & Sav. 바디나물; *cheondeung-111018-043*
 181. *Heracleum moellendorffii* Hance 어수리; *cheondeung-110711-095*
 182. *Osmorhiza aristata* (Thunb.) Makino & Yabe 긴사상자*; *cheondeung-110711-041*
 183. *Ostericum grosseserratum* (Maxim.) Kitag. 신감채*; *cheondeung-110905-193*
 184. *Ostericum sieboldii* (Miq.) Nakai 윗미나리*; *cheondeung-111018-014*
 185. *Peucedanum terebinthaceum* (Fisch.) Fisch. ex DC. 기름나물; *cheondeung-110905-178*, *cheondeung-111018-082*
 186. *Pimpinella brachycarpa* (Kom.) Nakai 참나물*; *cheondeung-110905-065*
 187. *Sanicula chinensis* Bunge 참반디*; *cheondeung-110711-047*

Pyrolaceae (노루발과)

188. *Pyrola japonica* Klenze ex Alef. 노루발; *cheondeung-110529-152*, *cheondeung-110711-065*

Ericaceae (진달래과)

189. *Rhododendron schlippenbachii* Maxim. 철쭉; *cheondeung-110711-101*
 190. *Rhododendron yedoense* f. *poukhanense* (H.Lév.) Sugim. 산철쭉; *cheondeung-111018-004*

191. *Vaccinium hirtum* var. *koreanum* (Nakai) Kitam. 산앵도나무; *cheondeung-110711-227*

Primulaceae (앵초과)

192. *Lysimachia clethroides* Duby 큰까치수염; *cheondeung-110711-089*
 193. *Lysimachia vulgaris* var. *davurica* (Ledeb.) R.Kunth 좁쌀풀*; *cheondeung-110711-073*
 194. *Primula jesoana* Miq. 큰앵초*; *cheondeung-110711-094*
 195. *Primula sieboldii* E.Morren 앵초*; *cheondeung-110529-071*

Styracaceae (때죽나무과)

196. *Styrax obassia* Siebold & Zucc. 쪽동백나무; *cheondeung-110529-039*, *cheondeung-110711-263*

Symplocaceae (노린재나무과)

197. *Symplocos chinensis* f. *pilosa* (Nakai) Ohwi 노린재나무; *cheondeung-110529-128*, *cheondeung-110711-025*

Oleaceae (물푸레나무과)

198. *Fraxinus rhynchophylla* Hance 물푸레나무; *cheondeung-110711-013*
 199. *Ligustrum obtusifolium* Siebold & Zucc. 쥐똥나무; *cheondeung-110529-167*, *cheondeung-110905-011*

Rubiaceae (꼭두서니과)

200. *Asperula maximowiczii* Kom. 개갈퀴; *cheondeung-110711-158*, *cheondeung-110905-180*
 201. *Galium dahuricum* Turcz. 큰잎갈퀴*; *cheondeung-110711-131*
 202. *Galium spurium* var. *echinospermum* (Wallr.) Hayek 갈퀴덩굴; *cheondeung-110529-099*
 203. *Galium trifidum* L. 가는네잎갈퀴*; *cheondeung-110905-073*
 204. *Galium verum* var. *asiaticum* Nakai 솔나물*; *cheondeung-110711-241*

Convolvulaceae (메꽃과)

205. *Calystegia hederacea* Wall. 애기메꽃*; *cheondeung-110711-121*
 206. *Calystegia sepium* var. *japonicum* (Choisy) Makino 메꽃*; *cheondeung-110711-019*
 207. *Ipomoea purpurea* Roth 둥근잎나팔꽃*; *cheondeung-111018-072*

Boraginaceae (지치과)

208. *Trigonotis peduncularis* (Trevir.) Benth. ex Hemsl. 꽃마리; *cheondeung-110529-119*
 209. *Trigonotis radicans* var. *sericea* (Maxim.) H.Hara 참꽃마리; *cheondeung-110529-086*

Verbenaceae (마편초과)

210. *Callicarpa japonica* Thunb. 작살나무; *cheondeung-110711-231*
 211. *Caryopteris divaricata* (Siebold & Zucc.) Maxim. 누린내풀*; *cheondeung-111018-022*
 212. *Clerodendrum trichotomum* Thunb. 누리장나무; *cheondeung-110711-044*

Labiatae (꿀풀과)

213. *Agastache rugosa* (Fisch. & Mey.) Kuntze 배초향*; *cheondeung-110905-075*
 214. *Ajuga spectabilis* Nakai 자란초; *cheondeung-110711-164*, *cheondeung-110905-030*
 215. *Clinopodium micranthum* (Regel) Hara 두메층층이*; *cheondeung-110905-022*
 216. *Elsholtzia ciliata* (Thunb.) Hyl. 향유; *cheondeung-111018-021*
 217. *Elsholtzia splendens* Nakai 꽃향유*; *cheondeung-111018-020*
 218. *Isodon inflexus* (Thunb.) Kudô 산박하*; *cheondeung-110905-048*
 219. *Isodon japonicus* (Burm.) Hara 방아풀; *cheondeung-110905-013*
 220. *Lamium album* var. *barbatum* (Siebold & Zucc.) Franch. & Sav. 광대수염*; *cheondeung-110529-092*
 221. *Leonurus macranthus* Maxim. 송장풀*; *cheondeung-110905-027*
 222. *Meehania urticifolia* (Miq.) Makino 벌깨덩굴; *cheondeung-110529-080*, *cheondeung-110711-117*
 223. *Mosla punctulata* (J.F.Gmel.) Nakai 들깨풀*; *cheondeung-110905-093*
 224. *Phlomis umbrosa* Turcz. 속단*; *cheondeung-110711-134*, *cheondeung-110905-039*
 225. *Prunella vulgaris* var. *lilacina* Nakai 꿀풀*; *cheondeung-110711-005*
 226. *Salvia chanryoenica* Nakai 참배암차즈기*; *cheondeung-110905-025*, *cheondeung-111018-009*
 227. *Scutellaria pekinensis* var. *maxima* S.Kim & S.Lee 왕골무꽃*; *cheondeung-110711-142*
 228. *Scutellaria pekinensis* var. *transitra* (Makino) Hara 산골무꽃*; *cheondeung-110711-185*
 229. *Stachys japonica* Miq. 석잠풀; *cheondeung-110711-082*

Solanaceae (가지과)

230. *Scopolia japonica* Maxim. 미치광이풀*; *cheondeung-110711-097*

Scrophulariaceae (현삼과)

231. *Deinostema violacea* (Maxim.) T.Yamaz. 진땅고추풀*; *cheondeung-110905-166*
 232. *Lindernia procumbens* (Krock.) Borbás 발톱외풀*; *cheondeung-110905-153*
 233. *Mazus miquelii* Makino 누운주름잎*; *cheondeung-111018-065*
 234. *Melampyrum roseum* Maxim. 꽃머느리밭풀; *cheondeung-110905-046*
 235. *Scrophularia kakudensis* Franch. 큰개현삼*; *cheondeung-110905-179*, *cheondeung-111018-015*
 236. *Veronica linariifolia* Pall. ex Link 꼬리풀*; *cheondeung-111018-084*

Phrymaceae (파리풀과)

237. *Phryma leptostachya* var. *asiatica* H.Hara 파리풀*; *cheondeung-110711-110*

Plantaginaceae (질경이과)

238. *Plantago asiatica* L. 질경이; *cheondeung-110529-048*, *cheondeung-110711-077*, *cheondeung-110905-063*

Caprifoliaceae (인동과)

239. *Lonicera praeflorens* Batalin 올괴불나무; *cheondeung-110529-185*
 240. *Sambucus sieboldiana* var. *miquelii* (Nakai) Hara 지렁쿠나무*; *cheondeung-110711-195*
 241. *Weigela florida* (Bunge) A.DC. 붉은병꽃나무; *cheondeung-110711-007*
 242. *Weigela subsessilis* (Nakai) L.H.Bailey 병꽃나무*; *cheondeung-110711-161*

Valerianaceae (마타리과)

243. *Patrinia scabiosaefolia* Fisch. ex Trevir. 마타리; *cheondeung-110711-033*, *cheondeung-110905-203*
 244. *Patrinia villosa* (Thunb.) Juss. 똑갈; *cheondeung-110905-041*
 245. *Valeriana fauriei* Briq. 쥐오줌풀; *cheondeung-110529-154*, *cheondeung-110711-088*

Campanulaceae (초롱꽃과)

246. *Adenophora remotiflora* (Siebold & Zucc.) Miq. 모시대*; *cheondeung-110905-112*
 247. *Adenophora verticillata* Fisch. 층층잔대*; *cheondeung-110905-121*
 248. *Asyneuma japonicum* (Miq.) Briq. 영아자*; *cheondeung-110905-083*
 249. *Lobelia chinensis* Lour. 수염가래꽃*; *cheondeung-110905-133*

Compositae (국화과)

250. *Adenocaulon himalaicum* Edgew. 멸가치*; *cheondeung-110905-123*
 251. *Ainsliaea acerifolia* Sch.Bip. 단풍취; *cheondeung-110711-092*
 252. *Ambrosia artemisiifolia* L. 돼지풀*; *cheondeung-110905-117*
 253. *Ambrosia trifida* L. 단풍잎돼지풀*; *cheondeung-111018-036*
 254. *Artemisia feddei* H.Lév. & Vaniot 뽕썩*; *cheondeung-110905-114*
 255. *Artemisia gmelini* Weber ex Stechm. 더위지기; *cheondeung-110905-111*, *cheondeung-111018-032*
 256. *Artemisia keiskeana* Miq. 맑은대썩; *cheondeung-110905-054*
 257. *Artemisia princeps* Pamp. 썩; *cheondeung-110905-092*
 258. *Artemisia stolonifera* (Maxim.) Kom. 넓은잎외썩; *cheondeung-110711-129*, *cheondeung-110905-044*
 259. *Aster ageratoides* Turcz. 까실썩부쟁이*; *cheondeung-110905-062*
 260. *Aster hispidus* Thunb. 갯썩부쟁이*; *cheondeung-111018-033*
 261. *Aster pilosus* Willd. 미국썩부쟁이*; *cheondeung-111018-018*
 262. *Aster scaber* Thunb. 참취; *cheondeung-110905-059*
 263. *Aster tataricus* L.f. 개미취; *cheondeung-110905-162*
 264. *Atractylodes ovata* (Thunb.) DC. 샅주; *cheondeung-110905-045*

265. *Bidens biternata* (Lour.) Merr. & Sherff ex Sherff 털도깨비바늘*; *cheondeung-111018-055*
266. *Bidens frondosa* L. 미국가막사리*; *cheondeung-111018-040*
267. *Bidens radiata* var. *pinnatifida* (Turcz ex DC.) Kitam. 구와가막사리*; *cheondeung-111018-079*
268. *Carduus crispus* L. 지느러미영경귀; *cheondeung-110529-066*
269. *Carpesium cernuum* L. 좁담배풀*; *cheondeung-110905-185*
270. *Carpesium macrocephalum* Franch. & Sav. 여우오줌*; *cheondeung-110905-021*
271. *Centipeda minima* (L.) A.Br. & Asch. 종대가리풀*; *cheondeung-110905-128*
272. *Cirsium japonicum* var. *maackii* (Maxim.) Matsum. 영경귀*; *cheondeung-110529-127, cheondeung-110711-068*
273. *Cirsium pendulum* Fisch. ex DC. 큰영경귀*; *cheondeung-110905-157, cheondeung-111018-038*
274. *Coreopsis lanceolata* L. 큰금계국*; *cheondeung-110711-213*
275. *Crepidiastrum denticulatum* (Houtt.) J.H.Pak & Kawano 이고들빼기; *cheondeung-110905-010, cheondeung-111018-089*
276. *Crepidiastrum sonchifolium* (Bunge) Pak & Kawano 고들빼기; *cheondeung-110529-133, cheondeung-110711-235*
277. *Dendranthema boreale* (Makino) Ling ex Kitam. 산국; *cheondeung-111018-023*
278. *Eclipta prostrata* (L.) L. 한련초*; *cheondeung-110905-130*
279. *Erechtites hieracifolia* Raf. 붉은서나물*; *cheondeung-111018-025*
280. *Erigeron annuus* (L.) Pers. 개망초; *cheondeung-110711-086*
281. *Eupatorium japonicum* Thunb. 등골나물; *cheondeung-110711-029, cheondeung-111018-017*
282. *Eupatorium rugosum* Houtt. 서양등골나물*; *cheondeung-111018-041*
283. *Hemistepta lyrata* Bunge 지칭개; *cheondeung-110529-124*
284. *Hieracium umbellatum* L. 조밥나물*; *cheondeung-110905-200*
285. *Ixeris polycephala* Cass. 벌썸바귀; *cheondeung-111018-063*
286. *Lactuca indica* L. 왕고들빼기*; *cheondeung-110905-160*
287. *Lactuca raddeana* Maxim. 산썸바귀*; *cheondeung-110905-144*
288. *Sigesbeckia glabrescens* Makino 진득찰*; *cheondeung-111018-060*
289. *Sigesbeckia pubescens* Makino 털진득찰*; *cheondeung-110905-145*
290. *Solidago virgaurea* subsp. *asiatica* Kitam. ex Hara 미역취*; *cheondeung-110905-029, cheondeung-111018-048*
291. *Syneilesis palmata* (Thunb.) Maxim. 우산나물; *cheondeung-110711-137, cheondeung-110905-052*
292. *Tephrosia kirilowii* (Turcz. ex DC.) Holub 솜방망이*; *cheondeung-110529-104*
293. *Youngia japonica* (L.) DC. 뿌리뱅이*; *cheondeung-110529-021*
- Alismataceae (택사과)
294. *Sagittaria aginashi* Makino 보풀*; *cheondeung-110905-143*
- Liliaceae (백합과)
295. *Allium macrostemon* Bunge 산달래*; *cheondeung-110529-013*
296. *Convallaria keiskei* Miq. 은방울꽃; *cheondeung-110529-143, cheondeung-110711-141*
297. *Disporum smilacinum* A.Gray 애기나리; *cheondeung-110711-016*
298. *Disporum uniflorum* Baker 윤판나물; *cheondeung-110529-011*
299. *Disporum viridescens* (Maxim.) Nakai 큰애기나리; *cheondeung-110711-126, cheondeung-110905-024*
300. *Hemerocallis hakuunensis* Nakai 백운원추리*; *cheondeung-110711-271*
301. *Hosta capitata* (Koidz.) Nakai 일월비비추; *cheondeung-110711-034*
302. *Lilium amabile* Palib. 털중나리; *cheondeung-110905-035*
303. *Lilium tsingtauense* Gilg 하늘말나리; *cheondeung-110711-084, cheondeung-110905-034*
304. *Polygonatum inflatum* Kom. 통통굴레; *cheondeung-110711-143*
305. *Polygonatum involucreatum* (Franch. & Sav.) Maxim. 옹통굴레*; *cheondeung-110711-200*
306. *Polygonatum lasianthum* Maxim. 죽대; *cheondeung-110711-133, cheondeung-110905-023*
307. *Polygonatum odoratum* var. *pluriflorum* (Miq.) Ohwi 등굴레; *cheondeung-110529-012, cheondeung-110711-064, cheondeung-110905-018*
308. *Smilacina japonica* A.Gray 풀솜대; *cheondeung-110711-027*
309. *Smilax sieboldii* Miq. 청가시덩굴; *cheondeung-110529-067, cheondeung-110711-055*
310. *Veratrum maackii* Regel 긴잎여로*; *cheondeung-110711-214*
- Dioscoreaceae (마과)
311. *Dioscorea batatas* Decne. 마*; *cheondeung-110905-012*
312. *Dioscorea nipponica* Makino 부채마*; *cheondeung-110711-221*
313. *Dioscorea tokoro* Makino 도꼬로마; *cheondeung-110529-129*
- Pontederiaceae (물옥잠과)
314. *Monochoria vaginalis* var. *plantaginea* (Roxb.) Solms 물달개비*; *cheondeung-110905-136*
- Iridaceae (붓꽃과)
315. *Iris sanguinea* Donn ex Horn 붓꽃*; *cheondeung-110529-009*
- Juncaceae (골풀과)
316. *Juncus effusus* var. *decepiens* Buchenau 골풀*; *cheondeung-110711-059*
317. *Luzula capitata* (Miq.) Miq. 쟁의밥*; *cheondeung-110529-095*
- Commelinaceae (닭의장풀과)
318. *Aneilema keisak* Hassk. 사마귀풀*; *cheondeung-110905-152*
319. *Commelina communis* L. 닭의장풀*; *cheondeung-110905-068*
320. *Streptolirion volubile* Edgew. 덩굴닭의장풀*; *cheondeung-110905-103*
- Eriocaulaceae (곡정초과)
321. *Eriocaulon robustius* (Maxim.) Makino 넓은잎개수염*; *cheondeung-110905-167, cheondeung-111018-075*
- Gramineae (벼과)
322. *Agrostis clavata* var. *nukabo* Ohwi 겨이삭*; *cheondeung-110529-198, cheondeung-110711-220*

323. *Alopecurus aequalis* var. *amurensis* (Kom.) Ohwi 떡새풀; *cheondeung-110529-141*
324. *Arundinella hirta* var. *ciliata* Koidz. 털새*; *cheondeung-110905-173*
325. *Calamagrostis arundinacea* (L.) Roth 실새풀*; *cheondeung-110905-176*, *cheondeung-111018-091*
326. *Calamagrostis epigeios* (L.) Roth 산조풀*; *cheondeung-110711-273*
327. *Diarrhena fauriei* (Hack.) Ohwi 광릉웅수염*; *cheondeung-110711-206*, *cheondeung-110905-183*
328. *Digitaria ciliaris* (Retz.) Koel. 바랭이; *cheondeung-110905-119*, *cheondeung-111018-067*
329. *Echinochloa crusgalli* (L.) P.Beauv. 들피*; *cheondeung-110905-194*, *cheondeung-111018-029*
330. *Eragrostis curvula* Nees 능수참새그령*; *cheondeung-110711-274*
331. *Eragrostis ferruginea* (Thunb.) P.Beauv. 그령*; *cheondeung-110905-192*
332. *Festuca parvigluma* Steud. 김의털아재비*; *cheondeung-110529-179*
333. *Imperata cylindrica* var. *koenigii* (Retz.) Pilg. 띪*; *cheondeung-111018-078*
334. *Koeleria cristata* Pers. 도랭이피*; *cheondeung-110529-199*
335. *Oplismenus undulatifolius* (Ard.) P.Beauv. 주름조개풀; *cheondeung-110905-061*
336. *Oplismenus undulatifolius* var. *japonicus* (Steud.) Koidz. 민주름조개풀*; *cheondeung-111018-050*
337. *Panicum bisulcatum* Thunb. 개기장*; *cheondeung-110905-210*, *cheondeung-111018-092*
338. *Phragmites japonica* Steud. 달뿌리풀*; *cheondeung-111018-013*
339. *Poa hisauchii* Honda 구내풀*; *cheondeung-110529-178*
340. *Poa sphondylodes* Trin. 포아풀*; *cheondeung-110529-180*
341. *Poa trivialis* L. 큰새포아풀*; *cheondeung-110529-192*
342. *Setaria faberii* Herrm. 가을강아지풀*; *cheondeung-110905-118*, *cheondeung-111018-068*
343. *Setaria glauca* (L.) P.Beauv. 금강아지풀; *cheondeung-111018-058*
344. *Setaria italica* (L.) P.Beauv. 조*; *cheondeung-110905-140*
345. *Setaria pallidifusca* (Schumach.) Stapf & C.E.Hubb. 가는금강아지풀*; *cheondeung-110905-139*
346. *Setaria viridis* (L.) P.Beauv. 강아지풀; *cheondeung-110711-243*
347. *Spodiopogon sibiricus* Trin. 큰기름새; *cheondeung-110905-174*
348. *Stipa sibirica* (L.) Lam. 나래새*; *cheondeung-110905-186*
349. *Zizania latifolia* (Griseb.) Turcz. ex Stapf 줄*; *cheondeung-111018-088*
350. *Arisaema amurense* Maxim. 등근잎천남성; *cheondeung-110529-010*, *cheondeung-110711-205*
351. *Arisaema peninsulae* Nakai 점박이천남성; *cheondeung-110529-017*, *cheondeung-110711-172*, *cheondeung-110905-036*
352. *Carex breviculmis* R.Br. 청사초*; *cheondeung-110529-191*
353. *Carex forficula* Franch. & Sav. 산뚝사초*; *cheondeung-110529-175*
354. *Carex japonica* Thunb. 개저버리사초*; *cheondeung-110529-181*, *cheondeung-110711-219*
355. *Carex lanceolata* Boott 그늘사초*; *cheondeung-110529-194*
356. *Carex leiorhyncha* C.A.Mey. 산괭이사초; *cheondeung-110529-174*
357. *Carex sabynensis* Less. ex Kunth 실청사초*; *cheondeung-110529-176*
358. *Carex shimidzensis* Franch. 산꼬리사초*; *cheondeung-110711-208*
359. *Carex siderosticta* Hance 대사초; *cheondeung-110529-064*, *cheondeung-110905-060*
360. *Cyperus difformis* L. 알방동사니*; *cheondeung-110905-169*
361. *Cyperus hakonensis* Franch. & Sav. 병아리방동사니*; *cheondeung-110905-196*
362. *Cyperus microiria* Steud. 금방동사니; *cheondeung-110905-165*
363. *Cyperus polystachyos* Rottb. 갯방동사니*; *cheondeung-111018-071*
364. *Eleocharis ovata* (Roth) Roem. & Schult. 둥근검바늘골*; *cheondeung-110905-171*
365. *Fimbristylis autumnalis* (L.) Roem. & Schult. 애기하늘지기*; *cheondeung-110905-164*
366. *Scirpus juncoides* var. *hotarui* (Ohwi) Ohwi 올챙이고랭이*; *cheondeung-110905-168*
- Orchidaceae (난초과)
367. *Cephalanthera longibracteata* Blume 은대난초; *cheondeung-110529-070*, *cheondeung-110711-139*
368. *Liparis kumokiri* F.Maek. 옥잠난초*; *cheondeung-110711-001*
369. *Spiranthes sinensis* (Pers.) Ames 타래난초*; *cheondeung-110711-240*
- * Newly found in this study.

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