



## The flora of vascular plants in Gibaeksan Mt. County Park and mountains neighboring the park

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**ABSTRACT:** The flora of vascular plants in the Gibaeksan Mt. County Park and its neighboring mountains, located at the boundary between Geochang-gun and Hamyang-gun in Gyeongsangnam-do province in Korea, were surveyed for a total 46 times from April to September of 2011, in July of 2012, and from April of 2015 to August of 2018. The result of this survey revealed 659 taxa composed of 107 families, 346 genera, 583 species, 14 subspecies, 46 varieties and 6 forms. Among them, 25 taxa were endemic plants to Korea, and 18 taxa were rare and endangered plants of Korea. The floristic regional indicator plants including cultivated plants were 5 taxa of grade V, 5 taxa of grade IV, 29 taxa of grade III, 30 taxa of grade II and 38 taxa of grade I. Forty-three taxa of alien plants were found in this area. In addition, 500 taxa out of a total of 649 taxa were categorized by usage into eight groups, including among others an edible group containing 257 taxa, a medicinal group containing 206, a pasturing group containing 220, and an ornamental group containing 84, with some taxa belonging to more than one group. The flora of this surveyed area belongs to the southern province among the floral provinces of the Korean Peninsula.

**Keywords:** Flora, Gibaeksan Mt. county park, Geumwonsan Mt., Gibaeksan Mt., Hwangseoksan Mt., Geomangsan Mt.

기백산군립공원은 지리적으로 소백산맥에 속하는 남덕유산(1,507.4 m)에서 남동쪽으로 뻗어나간 지맥의 8.5 km 지점에 위치한다. 본 조사 범위에는 기백산 군립 공원과 인근지역의 산지로서 금원산(1,352.5 m), 기백산(1,350.8 m), 황석산(1,190 m)과 거망산(1,184 m)이 포함되었다. 행정구역상으로 금원산(1,352.5 m)은 경상남도 거창군 북상면과 위천면 및 함양군 안의면의 경계에, 기백산(1,350.8 m)은 위천면과 안의면의 경계에, 황석산(1,190 m)과 거망산(1,184 m)은 경상남도 함양군 안의면, 서상면과 서하면의 경계에 각각 위치하고 있다. 전체적으로 본 조사지는 동쪽으로는 금원산, 기백산으로, 서쪽으로는 은신치, 거망산, 황석산으로 이어지는 능선이 각각 있으며, 이들 능선은 금원산과 거망산의 사이에 있는 수망령에 의해 이어져 있다.

본 산지의 수계는 서쪽으로는 남강, 북동쪽으로는 월성계곡, 북쪽으로는 창선천, 동쪽으로는 한수동계곡과 유안청계곡, 거망산과 금원산 사이의 수망령에서 시작하는 용추계곡이 흐르고 있다. 용추계곡은 함양군 안의면에서 지우천으로 유입되어 남강으로 합류되며, 월성계곡, 창

선천, 유안청계곡과 한수동계곡은 위천천으로 유입되어 황강의 상류를 이루고, 합천호로 흘러든다.

토양은 여름과 겨울에 기온과 강우량의 교차가 큰 낙엽 활엽수림대에서 형성되는 갈색산림토로서 표층이 두텁고 용탈이 적어서, 전반적으로 표층은 갈색을 띠고, 하위 층은 황갈색산림토이다. 암석은 주로 화강편마암과 화강암으로 구성되어 있으며, 화강편마암은 차별침식으로 산릉을 이루고 있다(Kang, 1971).

본 조사지가 속한 거창군과 함양군의 기후는 연교차와 일교차가 크고, 여름철에는 덥고 강우의 60–70%가 편중되며, 겨울철에는 추운 전형적인 내륙성 기후를 보이기는 하나, 해발 1,000 m 이상의 높은 산들이 곳곳에 위치하고 있어 겨울철의 북서풍과 여름철의 계절풍인 남동풍을 막아주어 바람으로 인한 영향은 없는 편이다. 한편 최근 5년 간 기상자료에 의하면 거창군의 연평균기온은 12.3°C, 연평균 강수량은 1,074.4 mm이며, 함양군의 연평균기온은 13.0°C, 연평균 강수량은 1,087.5 mm이다(Geochang-gun, 2018; Hamyang-gun, 2018). 최한월은 1월이며, 최난월은 8월이고, 연교차는 거창군이 26.7°C, 함양군이 26.4°C이다.

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본 조사지역은 한반도 식물의 지리적 분포를 바탕으로 구분된 8개의 식물구계 중 남부아구에 해당되며(Lee and Yim, 1978, 2002), 한반도 기후를 바탕으로 한 5개 산림대 중 온대남부대에 속한다(Yim and Kira, 1975).

본 산지의 식물상에 관한 선행연구로는 금원산에 대하여 Kwon et al. (1997)은 금원산 자연휴양림의 목본식물상을 조사하여 49과 87속 147분류군을, Seok et al. (2003)은 108과 357속 534종 80변종 6품종 620분류군을, Park et al. (2007)은 금원산 자연휴양림 산림식생의 종조성을 조사하면서 교목 27종 아교목 44종 관목 71종 초본 69종의 총 152분류군을, Oh et al. (2008)은 금원산 생태수목원 조성 부지의 관속식물상 연구에서 84과 217속 319종 43변종 7품종 369분류군을 각각 보고하였다. 그리고 Lee and Oh (1986)가 함양 백운산 일대 종합보고에서 황석산과 기백산을 포함하여 96과 297속 499분류군을, Lee (1986)는 78과 194속 335분류군을, Kim (2011)은 기백산에서 108과 383속 587종 114변종 21품종 722분류군을 각각 조사·보고한 바 있으며, National Institute of Environmental Research (2012)와 Oh et al. (2015)에 의해 97과 295속 394종 4아종 80변종 17품종 495분류군이, Shin (2015)에 의해 61과 132속 167종 2아종 22변종 4품종 195분류군이, 거망

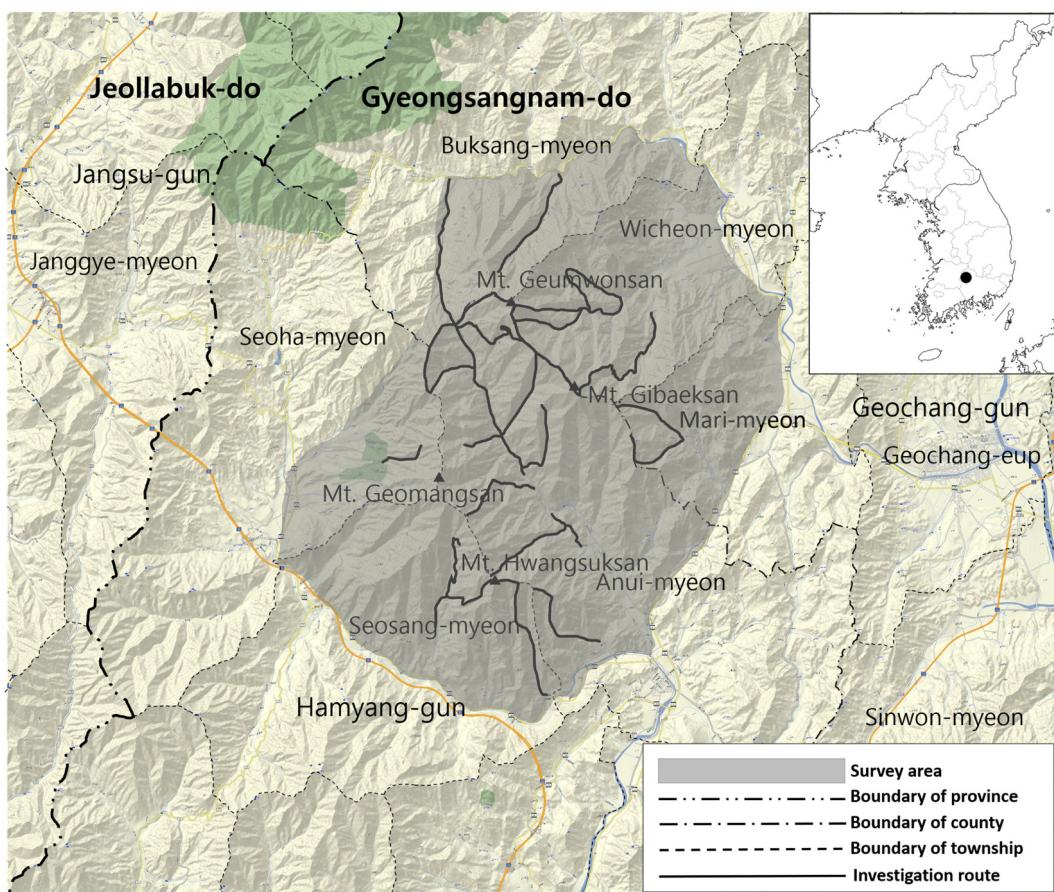
산은 Jeong (2017)에 의해 76과 188속 4아종 31변종 6품종의 총 287분류군이 각각 보고된 바 있다. 그러나 상기 연구들의 소산식물목록 중 큰천남성, 히어리, 도깨비부채, 자주종덩굴, 검종덩굴 등 본 조사지역에 분포가 의심되는 식물들이 다수 포함되어 있고, 이들에 대한 증거표본의 언급이 없기 때문에 현재 식물상과의 비교 연구를 수행하는데 어려움이 있다.

본 연구는 기백산군립공원 일대의 금원산, 기백산, 거망산, 황석산에 대한 현지조사를 통해 수집한 증거표본을 바탕으로 관속식물상을 조사하여 선행연구들과 그 결과를 비교 검토하고, 본 지역의 식물지리학적 특징과 주요식물을 파악하여, 기백산군립공원의 주요 산림식물자원에 대한 분포와 이들의 보존 및 관리정책을 수립하기 위한 기초자료를 제공하고자 수행되었다.

## 재료 및 방법

### 조사경로 및 일정

조사 범위와 경로는 기백산군립공원을 중심으로 북쪽으로는 금원산 북사면, 동쪽으로는 기백산 동사면, 남쪽으로는 황석산 남사면, 서쪽으로는 거망산 서사면 일대를



**Fig. 1.** Map of investigated area and routes in Geochang-gun and Hamyang-gun.

경계로 하여 식물상이 비교적 다양하다고 생각되는 지역을 선정하였고, 현지조사는 계곡, 등산로, 임도를 따라 사면별, 고도별로 이루어졌다(Fig. 1).

조사 기간은 2011년 4월에서 9월까지, 2012년 7월, 2015년 4월부터 2018년 8월까지 총 46회에 걸쳐 행해졌으며, 자세한 일정별 경로는 Table 1과 같다.

**Table 1.** Dates and routes of the investigation.

| Date        | Route of investigation   |
|-------------|--|
| 20 Apr 2011 | Ticket office - Jawoonpokpo (falls) - Yuancheongpokpo (falls) - gazebo - summit of Geumwonsan Mt.  |
| 14 May 2011 | Pogojang (village) - Sumangnyeong (uphill) - summit of Geumwonsan Mt. - heliport - forest road - Yuancheongpokpo (falls) - Jawoonpokpo (falls) - ticket office                                 |
| 15 May 2011 | Ticket office - Jawoonpokpo (falls) - Yuancheongpokpo (falls) - forest road  |
| 18 May 2011 | A : ticket office - Munbawi (stone) - Jijaemigol (valley) - forest road<br>B : ticket office - Jawoonpokpo (falls) - Yuancheongpokpo (falls) - forest road                                     |
| 19 May 2011 | A : Jawoonpokpo (falls) - Yuancheongpokpo (falls) - forest road - heliport - summit of Geumwonsan Mt.<br>B : Changseon-ri (village) - Changseoncheon (river)                                   |
| 4 Jun 2011  | Ticket office - Munbawi (stone) - Jijaemigol (valley) - forest road - Yuancheongpokpo (falls) - Jawoonpokpo (falls) - ticket office  |
| 16 Jul 2011 | Sapyeong (village) - Siheung-gol (valley) - milestone (three-way) - gazebo - summit of Geumwonsan Mt. - heliport - forest road - Yuancheongpokpo (falls) - Jawoonpokpo (falls) - ticket office |
| 30 Aug 2011 | Ticket office - Munbawi (stone) - Jijaemi (valley) - forest road - summit of Geumwonsan Mt. - heliport - forest road - yuancheongpokpo(falls) - Jawoonpokpo (falls) - ticket office            |
| 18 Sep 2011 | Pogojang (village) - Sumangnyeong (uphill) - summit of Geumwonsan Mt. - heliport - forest road - Yuancheongpokpo (falls) - Jawoonpokpo (falls) - ticket office                                 |
| 21 Jul 2012 | Sapyeong (village) - Siheung-gol (valley) - milestone (three-way) - Siheunggol (valley) - Sapyeong (village)   |
| 24 Apr 2015 | Yongchusa iljumun(gate) - starting point of Deulmeori - Dosugol (valley) - Dosuk (valley)  |
| 5 Jun 2015  | Yongchusa iljumun(gate) - Sapyeong - Yongchu natural recreation forest - Sumangnyeong (uphill)   |
| 9 Jul 2015  | Sangchonmaeul (village) - Neulbatgogae (hill)  |
| 12 Aug 2015 | Sangchonmaeul (village) - Jeolteosgol (valley) - Anbong (Mt.)  |
| 17 Sep 2015 | Sumangnyeong (uphill) - forest road - heliport - summit of Gibaeksan Mt. - heliport - forest road - Sumangnyeong (uphill)  |
| 18 Sep 2015 | Sapyeong (village) - Siheunggol (valley) - ridge of Gibaeksan Mt.  |
| 15 Oct 2015 | Sangcheonjeosuji (reservoir) - Hansudong valley - summit of Gibaeksan Mt.  |
| 16 Oct 2015 | Yongchu natural recreation forest - Sumangnyeong (uphill) - forest road - heliport   |
| 23 Apr 2015 | Deokhyeonmaeul (village) - Sannaegol (valley) - Pibawi(stone) - Geobukbawi (stone)   |
| 24 Apr 2015 | Yongchusa iljumun(gate) - starting point of Deulmeori - Dosugol (valley) - Dosuk (valley)  |
| 19 May 2015 | Ujeonmaeul (Village) - Sigumokgol (valley)   |
| 4 Jun 2015  | Hwangamsa (temple) – 710 m highland  |
| 5 Jun 2015  | Yongchusa iljumun(gate) - Sapyeong (village) - Yongchu natural recreation forest - Sumangnyeong (uphill)   |
| 9 Jul 2015  | Sangchonmaeul (village) - Neulbatgogae (hill)  |
| 10 Jul 2015 | Ujeonmaeul (Village) - Pibawi (stone) - Hwangseoksanseong (Fortress) - Hwangseoksanseong nammun (fortress) - summit of Hwangseoksan Mt.  |
| 12 Aug 2015 | Sangchonmaeul (village) - Jeolteosgol (valley) - Anbong (Mt.)  |
| 13 Aug 2015 | Deokhyeonmaeul (village) - Sannaegol (valley) - Deokhyeonmaeul (village) - Yudongmaeul (village) - Yeonchonmaeul (village)   |
| 17 Sep 2015 | Sumangnyeong (uphill) - forest road - heliport - summit of Gibaeksan Mt. - heliport - forest road - Sumangnyeong (uphill)  |
| 18 Sep 2015 | Yongchu natural recreation forest - Sapyeong (village) - Siheunggol (valley) - milestone (three-way)   |
| 15 Oct 2015 | Sangcheonjeosuji (reservoir) - Hansudonggyegok (valley) - forest road - milestone (three-way) - summit of Gibaeksan Mt.  |
| 16 Oct 2015 | Yongchu natural recreation forest - Sumangnyeong (uphill) - forest road - heliport   |

**Table 1.** Continued.

| Date        | Route of investigation  |
|-------------|---|
| 22 Oct 2015 | Ujeonmaeul (village) - Pibawi (stone) - Hwangseoksanseong (fortress) - Hwangseoksanseong nammun (fortress) - summit of Hwangseoksan Mt.   |
| 23 Oct 2015 | Hwangamsa (temple) - summit of Hwangseoksan Mt.   |
| 15 Apr 2016 | ticket office - Jawoonpokpo (falls) - Yuancheongpokpo (falls) - gazebo - summit of Geumwonsan Mt. - heliport - forest road - Geumwonsan Mt. Recreational Forest - ticket office |
| 21 Sep 2016 | Ujeonmaeul (village) - Pibawi (stone) - Hwangseoksanseong (fortress) - Hwangseoksanseong nammun (fortress) - summit of Hwangseoksan Mt.   |
| 22 Sep 2016 | Sapyeong (village) - Taejanggol (valley)  |
| 25 May 2017 | Cheongnyangsa (temple) - Buldanggol (valley) - milestone (three-way)  |
| 26 May 2017 | A: Yongchusa iljumun(gate) - Yongchugyegok (valley) - Sapyeong (village)<br>B: Deokhyeonmaeul (village) - Sannaegol (valley) - Pibawi (stone)                                   |
| 13 Jul 2017 | Cheongnyangsa (temple) - Buldanggol (valley) - milestone (three-way) - milestone (three-way)  |
| 14 Jul 2017 | Ujeonmaeul (Village) - Pibawi (stone) - Hwangseoksanseong (Fortress) - Hwangseoksanseong nammun (gate) - summit of Hwangseoksan Mt.   |
| 18 Apr 2018 | Sapyeong (village) - Taejanggol (valley) - Sapyeong (village) - forest road - milestone (three-way) - Jijanggol (valley)  |
| 19 Apr 2018 | Sumangnyeong (uphill) - Keunmokjae (uphill) - Eunsinamgol (valley) - Eunsinchi (pass) - forest road   |
| 19 Jun 2018 | Ujeonmaeul (Village) - Pibawi (stone) - Hwangseoksanseong (Fortress) - Hwangseoksanseong nammun (gate) - summit of Hwangseoksan Mt.   |
| 20 Jun 2018 | forest road - Eunsinamgol (valley) - Eunsinchi (pass) - forest road   |
| 31 Jul 2018 | Sorosoryuji (tractional pond) - heliport  |
| 1 Aug 2018  | Hwangseoksa (temple) - forest road - heliport   |

## 표본수집 및 동정

조사지의 관속식물에 대한 분포증거를 확보하기 위하여 조사지역 내에 관찰되는 식물 중 꽃, 열매 또는 포자 등의 생식기관이 있는 개체만을 대상으로 채집을 수행하였으며, 채집된 모든 식물은 채집번호를 각각 부여하였고, 일차종발생정보의 확보를 위한 GPS정보를 기록하였다. 채집품은 암착·건조 후 표본으로 제작하여 한남대학교 자연사박물관(HNHM), 국립수목원(KH), 국립생물자원관(KB), 한국한의학연구원(KIOM)에 각각 보관하였다.

식물의 동정은 Lee (1980, 2003), Lee (1996, 2006) 등의 도감류와 Park (2007)의 식물지 등을 이용하였으며, 확증표본을 바탕으로 확인된 분류군만을 목록에 포함시켰다.

## 식물목록작성

관속식물의 목록 작성은 Engler의 분류체계(Melchior, 1964)에 따라 작성되었고, 과 내에서는 알파벳순으로 속명과 종소명을 정리하였다. 학명의 사용은 A Synonymic List of Vascular Plants in Korea (Korea National Arboretum and The Plant Taxonomic Society of Korea, 2007)와 Checklist of Vascular Plants in Korea (Korea National Arboretum, 2017)에 따랐다. 작성된 식물목록(Appendix 1)을 기초로 한국특산식물은 Chung et al. (2017)에 의하였고, 식물구계학적 특

정식물종은 Floristic Target Species (FT species) in Korea (National Institute of Ecology, 2018)에 따라 파악하였다. 희귀식물은 Rare Plants Data Book in Korea (Korea National Arboretum, 2008)를, 외래식물은 Checklist of Alien Plants in Korea (Korea National Arboretum, 2019)를 참고하여 작성하였으며, 재배 또는 식재종은 목록에 따로 표기하였다. 또한 식물의 유용도 분석은 Lee (1976)에 준하였고, 식물목록(Appendix 1)에 표기하였다.

## 결과 및 고찰

### 관속식물상

본 조사지역에서 밝혀진 관속식물상은 금원산 81과 197속 294종 109아종 18변종 3품종의 325분류군, 기백산 93과 226속 301종 120아종 28변종 4품종의 345분류군, 황석산 95과 273속 387종 11아종 30변종 6품종의 434분류군, 거망산 74과 148속 187종 3아종 15변종 3품종의 208분류군이며, 전체적으로는 도합 107과 346속 583종 14아종 46변종 6품종으로 총 649분류군이다(Table 2, Appendix 1). 이는 양치식물 12과 17속 29종 1변종의 30분류군(4.6%), 나자식물 3과 8속 8종의 8분류군(1.2%), 피자식물의 쌍자엽식물 81과 259속 440종 140아종 37변종 4품종의 495분류군(76.3%), 단

**Table 2.** Comparison of floras in this investigation with those in previous ones.

| Flora           | Family | Genus | Species | Subspecies | Variety | Forma | *Total |
|-----------------|--------|-------|---------|------------|---------|-------|--------|
| Geumwonsan Mt.  | 81     | 197   | 294     | 10         | 18      | 3     | 325    |
| Gibaeksan Mt.   | 93     | 226   | 301     | 12         | 28      | 4     | 345    |
| Hwangsuksan Mt. | 95     | 273   | 387     | 11         | 30      | 6     | 434    |
| Geomangsan Mt.  | 74     | 148   | 187     | 3          | 15      | 3     | 208    |
| Total           | 107    | 346   | 583     | 14         | 46      | 6     | 649    |

\*Species and infraspecific taxa only

**Table 3.** Summary of the floristics of Gibaeksan Mt. county park and its neighboring mountains.

| Taxa           | Family | Genus | Species | Subspecies | Variety | Forma | *Total | Ratio (%) |
|----------------|--------|-------|---------|------------|---------|-------|--------|-----------|
| Pteridophyta   | 12     | 17    | 29      | 0          | 1       | 0     | 30     | 4.6       |
| Gymnospermae   | 3      | 8     | 8       | 0          | 0       | 0     | 8      | 1.2       |
| Angiospermae   | 92     | 321   | 546     | 14         | 45      | 6     | 611    | 94.2      |
| Dicotyledons   | 81     | 259   | 440     | 14         | 37      | 4     | 495    | 76.3      |
| Monocotyledons | 11     | 62    | 106     | 0          | 8       | 2     | 116    | 17.9      |
| Total          | 107    | 346   | 583     | 14         | 46      | 6     | 649    | 100       |

\*Species and infraspecific taxa only

**Table 4.** List of the major families in Gibaeksan Mt. county park and its neighboring mountains.

| Family     | Total (No.) | Ratio (%) | Family        | Total (No.) | Ratio (%) |
|------------|-------------|-----------|---------------|-------------|-----------|
| Compositae | 66          | 10.17     | Lamiaceae     | 24          | 3.70      |
| Rosaceae   | 38          | 5.86      | Ranunculaceae | 22          | 3.39      |
| Poaceae    | 36          | 5.55      | Cyperaceae    | 22          | 3.39      |
| Liliaceae  | 33          | 5.08      | Polygonaceae  | 18          | 2.77      |
| Fabaceae   | 30          | 4.62      | Apiaceae      | 18          | 2.77      |

자연식물 11과 62속 106종 8변종 2품종의 116분류군(17.9%)으로 구성되며(Table 3), 한반도 전체 관속식물 4,881분류군(Korea National Arboretum and The Plant Taxonomic Society of Korea, 2007)의 13.3%, 경상남도 전체 관속식물 953분류군(Oh et al., 2010)의 68.1%에 해당된다.

식물상 종조성의 주요 10개과는 국화과가 66분류군(10.2%)으로 가장 많았고, 장미과 38분류군(5.9%), 벼과 36분류군(5.6%), 백합과 33분류군(5.1%), 콩과 30분류군(4.6%), 꿀풀과 24분류군(3.7%), 미나리아재비과 22분류군(3.4%), 사초과 22분류군(3.4%) 순이었으며, 마디풀과와 산형과가 18분류군(2.8%)으로 가장 적었다. 전체 종조성에 대한 이들 상위 10개과가 차지하는 비율은 47.3%로서 약 1/2에 해당된다(Table 4).

본 조사지역의 전체적인 식생은 온대림의 대표수종인 출참나무, 굴참나무, 신갈나무 등이 우세하나, 개비자나무, 노각나무, 사람주나무, 대팻집나무 등이 자주 출현하는 온대 남부의 식생을 보인다.

식물상 우수지역으로서 금원산은 희귀식물인 덩굴꽃

마리와 빼꾹나리, 식물구계학적 특정식물 IV등급에 해당되는 가는잎개고사리와 가지괭이눈, III등급종인 너도바람꽃, 노각나무 등이 생육하고 있는 유안청계곡 인근의 동사면 지역, 기백산은 특산식물인 물들메나무와 금마타리, 식물구계학적 특정식물 III등급인 긴병꽃풀, 인가목조팝나무, 시탁나무 등이 확인된 수망령에서 용추계곡까지의 지역, 거망산은 너도바람꽃, 나도개감채, 꿩의다리아재비 등이 자생하며, 해발 800 m 이상부터 개비자나무 군락이 출현하는 은신골 지역, 황석산은 돌양지꽃, 천마 등이 분포하며, 깊은 계곡이 있어 식물상이 비교적 다양하게 나타나는 황석산성 일원이 본 조사지역의 산지들에서 식물상이 우수한 지역에 해당된다.

#### 선행연구와 비교

선행연구와 비교함에 있어 기백산은 Lee (1986)와 Kim (2011), 금원산은 Kwon et al. (1997), Seok et al. (2003), Park et al. (2007), Oh et al. (2008)의 조사연구가 있다. 또한 Lee and Oh (1986)는 기백산과 아울러 백운산과 황석산을 조

사한 바 있으나 식물목록은 산지 구별 없이 관찰된 전체 목록만을 제시하고 있어 단순 비교가 어려운 실정이다. 또한 상기 언급한 선행연구들은 모두 증거표본에 대한 언급이 없을 뿐만 아니라, 특정 또는 특산식물 등 주요 종으로 언급된 분류군 중 식물지리학적으로 본 지역의 분포가 의심되는 분류군이 목록에 다수 제시되어 있어 신뢰하기 어렵다. 예로서 특산식물인 히어리에 대하여 Kwon et al. (1997)과 Seok et al. (2003)은 금원산에 분포한다고 언급하였다. 그러나 Oh et al. (2016)에 따르면 경남지역에서 히어리는 남해, 하동, 산청지역에서만 그 생육이 확인된 바 있다. 산림청 지정 회귀식물이자 특산식물인 도깨비부채, 환경부 지정 멸종위기식물이자 특산식물인 자주솜대가 Park et al. (2007)에 의해 금원산 분포가 언급되었지만 도깨비부채는 경기도와 강원도(Kim, 2007b)에, 자주솜대는 설악산, 소백산, 덕유산, 지리산 등의 백두대간 고봉(Oh,

2007)에 생육하는 식물로 알려져 있다. 또한 큰천남성은 Seok et al. (2003)과 Oh et al. (2008)에 의해 금원산 분포가 보고된 바 있으나, 본 종은 한반도 남부에 분포하는 난대성 식물로서 오동정 가능성이 높다. 다만 Seok et al. (2003)에 의해 보고된 금원산 620분류군, Kim (2011)에 의한 기백산 722분류군과 본 조사에서 금원산과 기백산에서 확인된 이들 식물 493분류군과는 많은 차이를 보인다. 그러나 상기 보고들은 앞서 언급한 바와 같이 증거표본에 대한 정보가 제시되어 있지 않아 그 실체를 확인할 수 없기 때문에 분류군 수에 대한 비교는 무의미 하다. 다만 본 조사가 생식기관이 있는 개체만을 대상으로 채집된 확증표본을 바탕으로 목록이 작성되었고, 조사지역에 생육하고 있을지라도 조사당시 생식기관이 없는 개체는 채집대상에서 제외되었기 때문이기도 하다. 추후 조사경로와 시기를 달리하여 보완 조사를 수행한다면 본 산지의 산세로

**Table 5.** List of the endemic plants in Gibaeksan Mt. county park and its neighboring mountains.

| Family name      | Taxa   | 1 | 2 | 3 | 4 |
|------------------|--|---|---|---|---|
| Pinaceae         | <i>Abies koreana</i> E. H. Wilson 구상나무 (식)                                 | ○ | - | - | - |
| Ulmaceae         | <i>Celtis edulis</i> Nakai 노랑팽나무   | - | - | ○ | - |
| Moraceae         | <i>Broussonetia × hanjiana</i> M. Kim 닥나무 (식)                              | - | ○ | ○ | - |
| Ranunculaceae    | <i>Aconitum austrokoreense</i> Koidz. 세뿔투구꽃                                | - | - | ○ | - |
| Ranunculaceae    | <i>Aconitum pseudolaeve</i> Nakai 진벌                                       | - | ○ | - | - |
| Ranunculaceae    | <i>Clematis brachyura</i> Maxim. 외대으아리                                     | - | ○ | - | - |
| Ranunculaceae    | <i>Clematis trichotoma</i> Nakai 할미밀망                                      | ○ | ○ | ○ | - |
| Ranunculaceae    | <i>Thalictrum actaeifolium</i> Siebold & Zucc. 은평의다리                       | ○ | ○ | ○ | ○ |
| Aristolochiaceae | <i>Asarum patens</i> (Yamaki) M. Kim & S. So 금오족도리풀                        | ○ | - | ○ | - |
| Theaceae         | <i>Stewartia koreana</i> Nakai ex Rehder 노각나무                              | ○ | - | ○ | ○ |
| Rosaceae         | <i>Rubus coreanus</i> Miq. var. <i>concolor</i> Nakai ex J. Y. Yang 청복분자딸기 | - | ○ | - | - |
| Fabaceae         | <i>Vicia hirticalycina</i> Nakai 나래완두                                      | ○ | - | - | - |
| Apiaceae         | <i>Angelica reflexa</i> B. Y. Lee 강황                                       | ○ | ○ | ○ | - |
| Oleaceae         | <i>Abeliophyllum distichum</i> Nakai 미선나무 (식)                              | ○ | - | - | - |
| Oleaceae         | <i>Fraxinus chiisanensis</i> Nakai 물들메나무                                   | - | ○ | - | ○ |
| Lamiaceae        | <i>Ajuga spectabilis</i> Nakai 자란초   | - | - | - | ○ |
| Scrophulariaceae | <i>Paulownia coreana</i> Uyeki 오동나무  | ○ | - | ○ | - |
| Caprifoliaceae   | <i>Weigela subsessilis</i> (Nakai) L. H. Bailey 병꽃나무                       | ○ | ○ | ○ | ○ |
| Valerianaceae    | <i>Patrinia saniculifolia</i> Hemsl. 금마타리                                  | - | ○ | - | - |
| Asteraceae       | <i>Aster koraiensis</i> Nakai 별개미취   | ○ | - | - | - |
| Asteraceae       | <i>Cirsium setidens</i> (Dunn) Nakai 고려엉겅퀴                                 | ○ | ○ | ○ | - |
| Asteraceae       | <i>Crepidiastrum koidzumianum</i> (Kitam.) J. H. Pak & Kawano 지리고들빼기       | - | ○ | - | - |
| Liliaceae        | <i>Heloniopsis koreana</i> Fuse, N. S. Lee & M. N. Tamura 처녀치마             | ○ | - | - | - |
| Liliaceae        | <i>Hemerocallis hakuunensis</i> Nakai 백운산원추리                               | ○ | ○ | - | - |
| Iridaceae        | <i>Iris koreana</i> Nakai 노랑붓꽃 (식)   | - | - | ○ | - |

1, Geumwonsan Mt.; 2, Gibaeksan Mt.; 3, Hwangseoksan Mt.; 4, Geomangsan Mt.

보아 분류군 수는 다소 증가할 수 있을 것으로 판단된다.

한편, 기존연구와 비교시 본 연구를 통해 새롭게 확인된 분류군은 긴꽃고사리삼, 노랑팽나무, 세뿔투구꽃, 애기고추나물, 금오죽도리풀 등 111분류군이며, 이들은 소산식물목록의 일련번호 앞에 ★로 표시하였다(Appendix 1).

### 한국특산식물

본 조사지에서 생육이 확인된 한국특산식물은 진범, 외대으아리, 할미밀망 등 25분류군이며, 이들 중 구상나무, 미선나무, 닥나무, 노랑붓꽃의 4분류군은 금원산자연휴양림에 식재된 것이다(Table 5). 상기 식재된 4분류군을 제외하면 본 지역에 자생하는 특산식물은 전체 한국특산식물의 약 3.23%에 해당된다.

한편 확인된 특산식물 중 노랑팽나무는 중부지방의 길가, 숲, 계곡과 사면에 생육하는 수종으로 알려져 있으며 (Kim, 2007a), 본 조사에서는 황석산성 주변에서 개박달나무, 신갈나무, 산오리나무, 팔배나무, 대팻집나무와 혼생하고 있었고, 물들메나무는 수망령과 금원산 용추계곡 주변을 비롯하여 거망산의 동사면 계곡부에서도 생육을 확인하였다. 또한 자란초는 거망산의 은진치에서 신갈나무, 산뽕나무, 당단풍나무, 멸가치, 조릿대 등과 함께 우점하고 있었으며, 노각나무는 금원산, 황석산, 거망산의 산지 계곡주변 또는 그늘진 습한 곳에서 비교적 흔히 관찰되었고, 진범은 기백산의 정상부 능선과 동북사면의 등산로에서 다수의 개체가 확인되었다. 조사지역 내 확인된 특산식물 자생지는 대체적으로 양호하나, 등산로 또는 임도 주변에서 확인된 특산식물은 담압, 불법채취 등에 의한 피해가 우려되며, 금원산 동사면 지역은 위락시설 등이 추가 조성되고 있으므로 자생지의 주변 식생에 대한 관리방안을 고려할 필요가 있다.

### 희귀 및 멸종위기식물

조사지역의 산림청 지정 희귀식물은 총 18분류군이 확인되었으며(Table 6), 보존 등급이 높은 critically endangered species (CR)에서 vulnerable (VU)까지의 등급에 해당되는 종은 총 6분류군이다. 이들 중 멸종위기종(CR)은 목련, 미선나무, 노랑붓꽃의 3분류군이 있으나 모두 식재된 것이

며, 취약종(VU)은 세뿔투구꽃, 왜박주가리, 천마의 3분류군이며, 위기종(EN)은 발견되지 않았다(Table 6). 이들 중 세뿔투구꽃은 경상도와 지리산, 전남 백운산 등의 주로 우리나라 남부지역에 자생하는 특산식물(Korea Forest Service and Korea National Arboretum, 2016; Lim et al., 2017)로 본 조사지에서는 황석산 남사면 해발 600 m 이상의 등산로 주변에서 큰꽃으아리, 다래, 개옻나무, 짹자래나무 등과 함께 생육하고 있었다. 그러나 자생지 주변에서 확인된 개체 수는 많지 않고, 인근 사찰 및 수련원의 방문객 또는 등산객의 왕래가 빈번하여 이들에 의한 훼손이 예상되며, 세뿔투구꽃의 개체군 보전을 위한 주기적인 모니터링이 필요할 것으로 판단된다. 왜박주가리는 기백산 동사면의 고학리에서 늘밭고개로 가는 등산로에서 확인되었으나 개체 수가 적고, 등산로 주변에 생육하고 있어 제초 및 탐방객 유입 등에 의한 자생지 훼손이 우려되기 때문에 적절한 조치가 요구된다. 또한 천마는 황석산 서사면의 피바위 주변에서 소수 개체가 발견되었으며, 주위에는 함박꽃나무, 대팻집나무, 얇은잎고광나무, 노루오줌 등이 생육하고 있었으나 등산로 주변에 생육하고 있어 담압 및 불법채취 등과 같은 인위적 간섭에 의한 피해가 우려되므로 이에 대한 보전 및 관리방안이 필요할 것으로 판단된다. 한편 환경부 지정 멸종위기 야생 식물은 미선나무, 노랑붓꽃, 세뿔투구꽃의 3분류군이며, 모두 2등급에 해당된다.

### 식물구계학적 특정식물종

식물구계학적 특정식물종은 자연환경 평가를 위한 식물군으로 국내 주요종의 보존 우선순위를 결정하는 데 이용할 수 있으며, 이들을 등급화하여 특정한 지역공간 내 분포현황을 통해 자연환경의 우수성 정도 및 상대적 우열을 파악하는 데 이용하고자 선정한 목록이다(Kim, 2000; National Institute of Ecology, 2018). 조사지역의 식물구계학적 특정식물종은 총 107분류군이며, 이들을 등급별로 구분해 보면 V등급에는 노랑팽나무와 세뿔투구꽃을 비롯한 5분류군이 있으나, 이들 중 목련, 미선나무, 노랑붓꽃의 3분류군은 식재된 것이며, IV등급에는 가는잎개고사리, 가지괭이눈, 꽃싸리, 파란여로, 왕김의털의 5분류군, III등급에는 식재된 구상나무, 낭아초, 행자나무, 단풍나

**Table 6.** List of the rare and endangered plants in Gibaeksan Mt. county park and its neighboring mountains.

| Family name   | Taxa  | Criteria |
|---------------|---|----------|
| Magnoliaceae  | <i>Magnolia kobus</i> DC. 목련 (식)              | CR       |
| Oleaceae      | <i>Abeliophyllum distichum</i> Nakai 미선나무 (식) | CR       |
| Iridaceae     | <i>Iris koreana</i> Nakai 노랑붓꽃 (식)            | CR       |
| Ranunculaceae | <i>Aconitum austrokoreense</i> Koidz. 세뿔투구꽃   | VU       |
| Apocynaceae   | <i>Tylophora floribunda</i> Miq. 왜박주가리        | VU       |
| Orchidaceae   | <i>Gastrodia elata</i> Blume 천마               | VU       |

CR, critically endangered species; VU, vulnerable.

**Table 7.** The list of floristic regional indicator plants (designated by the National Institute Ecology) in Gibaeksan Mt. county park and its neighboring mountains.

| Family name     | Taxa  | Grade |
|-----------------|---|-------|
| Ulmaceae        | <i>Celtis edulis</i> Nakai 노랑팽나무  | V     |
| Magnoliaceae    | <i>Magnolia kobus</i> DC. 목련 (식)  | V     |
| Ranunculaceae   | <i>Aconitum austrokoreense</i> Koidz. 세뿔투구꽃   | V     |
| Oleaceae        | <i>Abeliophyllum distichum</i> Nakai 미선나무 (식)                                       | V     |
| Iridaceae       | <i>Iris koreana</i> Nakai 노랑붓꽃 (식)  | V     |
| Athyriaceae     | <i>Athyrium iseanum</i> Rosenst. 가는잎개고사리  | IV    |
| Saxifragaceae   | <i>Chrysosplenium ramosum</i> Maxim. 가지괭이눈  | IV    |
| Fabaceae        | <i>Campylotropis macrocarpa</i> (Bunge) Rehder 꽂싸리                                  | IV    |
| Liliaceae       | <i>Veratrum maackii</i> Regel var. <i>parviflorum</i> (Maxim. ex Miq.) H. Hara 파란여로 | IV    |
| Poaceae         | <i>Festuca rubra</i> L. 왕김의털  | IV    |
| Pinaceae        | <i>Abies koreana</i> E. H. Wilson 구상나무 (식)  | III   |
| Betulaceae      | <i>Betula chinensis</i> Maxim. 개박달나무  | III   |
| Betulaceae      | <i>Betula davurica</i> Pall. 물박달나무  | III   |
| Betulaceae      | <i>Betula schmidtii</i> Regel 박달나무  | III   |
| Ranunculaceae   | <i>Actaea asiatica</i> H. Hara 노루삼  | III   |
| Ranunculaceae   | <i>Clematis brachyura</i> Maxim. 외대으아리  | III   |
| Ranunculaceae   | <i>Eranthis stellata</i> Maxim. 너도바람꽃   | III   |
| Actinidiaceae   | <i>Actinidia kolomikta</i> (Maxim. & Rupr.) Maxim. 쥐다래                              | III   |
| Theaceae        | <i>Stewartia koreana</i> Nakai ex Rehder 노각나무                                       | III   |
| Papaveraceae    | <i>Dicentra spectabilis</i> (L.) Lem. 금낭화   | III   |
| Hydrangeaceae   | <i>Philadelphus pekinensis</i> Rupr. 애기고광나무   | III   |
| Grossulariaceae | <i>Ribes mandshuricum</i> (Maxim.) Kom. 까치밥나무                                       | III   |
| Grossulariaceae | <i>Ribes maximowiczianum</i> Kom. 명자순   | III   |
| Rosaceae        | <i>Aruncus dioicus</i> (Walter) Fernald 눈개승마  | III   |
| Rosaceae        | <i>Prunus sargentii</i> Rehder 산벗나무   | III   |
| Rosaceae        | <i>Sorbaria sorbifolia</i> (L.) A. Braun 쉬땅나무                                       | III   |
| Rosaceae        | <i>Spiraea chamaedryfolia</i> L. 인가목조팝나무  | III   |
| Rosaceae        | <i>Spiraea fritschiana</i> C. K. Schneid. 참조팝나무                                     | III   |
| Fabaceae        | <i>Indigofera pseudotinctoria</i> Matsum. 낭아초 (식)                                   | III   |
| Rutaceae        | <i>Poncirus trifoliata</i> Raf. 행자나무(식)   | III   |
| Aceraceae       | <i>Acer komarovii</i> Pojark. 시탁나무  | III   |
| Aceraceae       | <i>Acer palmatum</i> Thunb. 단풍나무 (식)  | III   |
| Ericaceae       | <i>Vaccinium hirtum</i> Thunb. var. <i>koreanum</i> (Nakai) Kitam. 산앵도나무            | III   |
| Primulaceae     | <i>Lysimachia vulgaris</i> L. var. <i>davurica</i> (Ledeb.) R. Knuth 줄쌀풀            | III   |
| Oleaceae        | <i>Chionanthus retusus</i> Lindl. & Paxton 이팝나무 (식)                                 | III   |
| Oleaceae        | <i>Fraxinus chiisanensis</i> Nakai 물들메나무  | III   |
| Valerianaceae   | <i>Patrinia saniculifolia</i> Hemsl. 금마타리   | III   |
| Liliaceae       | <i>Veratrum maackii</i> Regel var. <i>japonicum</i> (Baker) Shimizu 여로              | III   |
| Cyperaceae      | <i>Carex papulosa</i> Boott 쇠낚시사초   | III   |

무, 이팝나무를 포함하여 29분류군, II등급에는 긴꽃고사리삼을 비롯한 30분류군, I등급에는 개비자나무를 비롯한 38분류군이 각각 확인되었다(Table 7). 이는 조사지 전체 관속식물 대비 약 16.5%에 해당되며, 이들 중 상대적으로 중시되고 있는 III등급 이상의 식물은 총 39분류군이나 식

재종 8분류군을 제외하면 31분류군으로서 전체 관속식물 대비 약 4.77%에 해당된다.

이들 중 가지괭이눈은 주로 강원도에 분포하는 식물로 잎은 대생하고, 꽃받침은 퍼지며, 녹색이고, 심과는 컵형인 특징을 가지는데 본 조사에서 금원산 북사면의 창선리

계곡과 동사면의 유안정 계곡에서 많은 군락이 확인되었 다. 꽃싸리는 중국, 한국에 자생하는 식물로 국내에서는 경상도 지역에서만 분포가 확인되고 있는 분포 특이식물 이다(Oh et al., 2016). 본 조사에서 꽃싸리는 황석산의 피바 위 주변 등산로에서 확인되었으며, 소나무, 쇠풀푸레나무, 조릿대와 함께 생육하고 있었다. 식물구계학적특정식 물 4등급 이상의 분류군 중 자생하는 종들은 다소 제한된 분포를 보이며, 자생지는 소수의 개체로 구성되므로 추후 자생지 보존과 관리가 필요할 것으로 판단된다. 또한 인 가목조팝나무는 경기, 강원, 충북, 경북, 전북에 분포하며, 줄기는 각이지고, 화서는 산형상 산방화서이며, 묵은 가지에 달리고, 수술은 30개 이상이며, 길이는 꽂잎의 2배 이상인 특징이 있는 식물로 본 조사지역에서는 기백산의 정 상부 능선에서 3개체가 발견되었다. 지금까지 알려진 인 가목조팝나무의 분포역(Oh et al., 2016)을 미루어볼 때 본 자생지는 식물지리학적으로 남방한계분포지로 판단된다.

### 외래식물

조사지역에서 확인된 외래식물은 19과 43분류군이다 (Table 8). 이는 조사지의 전체 관속식물 대비 약 6.6%로서 우리나라의 평균 귀화율인 10.3% (Koh et al., 1995)보다는 낮은 편이다. 조사지역의 외래식물을 분류군 수가 많은 과별로 정리해 보면 국화과가 돼지풀, 망초, 코스모스 등의 10분류군, 벼과가 큰이삭풀, 오리새, 큰김의털 등의 5분류군, 마디풀과가 애기수영, 묵밭소리쟁이, 소리쟁이 등 4분류군 순이다. 국내 정착 및 확산여부에 따른 외래식물 분류기준으로 구분해보면 침입외래식물(invasive alien plant)은 29분류군, 잠재침입외래식물(potentially invasive plant)은 9분류군, 사전귀화식물(Arc., archaeophyte)은 5분류군으로 나타났다. 한편 조사지역 내 생태계교란종은 애기수영, 돼지풀이 2종으로 확인되었다. 애기수영과 돼지풀은 황석산 서사면의 사방댐과 임도 주변부에서 발견되었다. 확인된 위치와 생태계교란종의 개체군 크기로 보아

**Table 8.** List of the alien plants in Gibaeksan Mt. county park and its neighboring mountains.

| Family          | Species  | Classification | Ecosystem disturbing species |
|-----------------|--|----------------|------------------------------|
| Pinaceae        | <i>Larix kaempferi</i> (Lamb.) Carrière 일본잎갈나무 (식)           | PIP            | -                            |
| Cupressaceae    | <i>Chamaecyparis obtusa</i> (Siebold & Zucc.) Endl. 편백 (식)   | PIP            | -                            |
| Cupressaceae    | <i>Cryptomeria japonica</i> (Thunb. ex L.f.) D.Don 삼나무 (식)   | PIP            | -                            |
| Betulaceae      | <i>Alnus firma</i> Siebold & Zucc. 사방오리 (식)                  | PIP            | -                            |
| Polygonaceae    | <i>Rumex acetosella</i> L. 애기수영                              | IAP            | ○                            |
| Polygonaceae    | <i>Rumex conglomeratus</i> Murray 묵밭소리쟁이                     | IAP            | -                            |
| Polygonaceae    | <i>Rumex crispus</i> L. 소리쟁이                                 | IAP            | -                            |
| Polygonaceae    | <i>Rumex obtusifolius</i> L. 돌소리쟁이                           | IAP            | -                            |
| Phytolaccaceae  | <i>Phytolacca americana</i> L. 미국자리공                         | IAP            | -                            |
| Caryophyllaceae | <i>Cerastium glomeratum</i> Thuill. 유럽점나도나물                  | IAP            | -                            |
| Caryophyllaceae | <i>Silene armeria</i> L. 끈끈이대나물                              | IAP            | -                            |
| Caryophyllaceae | <i>Stellaria media</i> (L.) Vill. 별꽃                         | IAP            | -                            |
| Magnoliaceae    | <i>Liriodendron tulipifera</i> L. 백합나무 (식)                   | PIP            | -                            |
| Saururaceae     | <i>Houttuynia cordata</i> Thunb. 약모밀(식)                      | Arc.           | -                            |
| Brassicaceae    | <i>Lepidium apetalum</i> Willd. 닥닥냉이 (식)                     | PIP            | -                            |
| Brassicaceae    | <i>Lepidium virginicum</i> L. 콩다닥냉이                          | IAP            | -                            |
| Rosaceae        | <i>Kerria japonica</i> (L.) DC. 황매화 (식)                      | PIP            | -                            |
| Rosaceae        | <i>Prunus persica</i> (L.) Stokes 복사나무 (식)                   | Arc.           | -                            |
| Fabaceae        | <i>Amorpha fruticosa</i> L. 족제비싸리                            | IAP            | -                            |
| Fabaceae        | <i>Styphnolobium japonicum</i> (L.) Schott 회화나무 (식)          | PIP            | -                            |
| Fabaceae        | <i>Trifolium repens</i> L. 토끼풀                               | IAP            | -                            |
| Oxalidaceae     | <i>Oxalis corniculata</i> L. 팽이밥                             | Arc.           | -                            |
| Anacardiaceae   | <i>Toxicodendron vernicifluum</i> (Stokes) F. A. Barkley 옻나무 | Arc.           | -                            |
| Aceraceae       | <i>Acer buergerianum</i> Miq. 중국단풍 (식)                       | PIP            | -                            |

**Table 8.** Continued.

| Family           | Species  | Classification | Ecosystem disturbing species |
|------------------|--|----------------|------------------------------|
| Aquifoliaceae    | <i>Ilex serrata</i> Thunb. 낙상홍(식)                      | IAP            | -                            |
| Onagraceae       | <i>Oenothera biennis</i> L. 달맞이꽃                       | IAP            | -                            |
| Solanaceae       | <i>Solanum nigrum</i> L. 까마중                           | Arc.           | -                            |
| Scrophulariaceae | <i>Veronica polita</i> Fr. 개불알풀                        | IAP            | -                            |
| Asteraceae       | <i>Ambrosia artemisiifolia</i> L. 돼지풀                  | IAP            | ○                            |
| Asteraceae       | <i>Conyza canadensis</i> (L.) Cronquist 망초             | IAP            | -                            |
| Asteraceae       | <i>Cosmos bipinnatus</i> Cav. 코스모스                     | IAP            | -                            |
| Asteraceae       | <i>Erechtites hieracifolius</i> (L.) Raf. ex DC. 붉은서나물 | IAP            | -                            |
| Asteraceae       | <i>Erigeron annuus</i> (L.) Pers. 개망초                  | IAP            | -                            |
| Asteraceae       | <i>Galinsoga ciliata</i> (Raf.) S. F. Blake 털별꽃아재비     | IAP            | -                            |
| Asteraceae       | <i>Galinsoga parviflora</i> Cav. 별꽃아재비                 | IAP            | -                            |
| Asteraceae       | <i>Rudbeckia bicolor</i> Nutt. 원추천인국                   | IAP            | -                            |
| Asteraceae       | <i>Rudbeckia laciniata</i> L. 삼잎국화                     | IAP            | -                            |
| Asteraceae       | <i>Taraxacum officinale</i> F. H. Wigg. 서양민들레          | IAP            | -                            |
| Poaceae          | <i>Bromus catharticus</i> Vahl 큰이삭풀                    | IAP            | -                            |
| Poaceae          | <i>Dactylis glomerata</i> L. 오리새                       | IAP            | -                            |
| Poaceae          | <i>Festuca arundinacea</i> Schreb. 큰김의털                | IAP            | -                            |
| Poaceae          | <i>Lolium perenne</i> L. 호밀풀                           | IAP            | -                            |
| Poaceae          | <i>Poa pratensis</i> L. 왕포아풀                           | IAP            | -                            |

IAP, invasive alien plant; PIP, potentially invasive plant; Arc., archaeophyte.

**Table 9.** Usage types of vascular plants in Gibaeksan Mt. county park and its neighboring mountains.

|                | E    | F   | M    | O    | P    | R   | S   | T   | U    |
|----------------|------|-----|------|------|------|-----|-----|-----|------|
| Number of taxa | 257  | 8   | 206  | 84   | 220  | 4   | 13  | 23  | 152  |
| Ratio (%)      | 39.6 | 1.2 | 31.7 | 12.9 | 33.9 | 0.6 | 2.0 | 3.5 | 23.1 |

E, edible; F, fiber; M, medicinal; O, ornamental; P, pasture; R, industrial raw material; S, plant dyestuff; T, timber source; U, unknown.

등산객 및 임도 공사에서 종자가 유입되어 밭아한 후 정착하여 군락을 형성한 것으로 판단되며, 이들이 산림 내에 침입하여 추가적으로 확산되지 않도록 제거 및 관리가 필요할 것으로 판단된다.

### 용도별 구분

조사지에서 확인된 관속식물 중 Lee (1976)에 근거한 유용식물은 500분류군으로서 전체 관속식물 649분류군의 77%에 해당된다. 이들을 용도별로 구분해보면 식용식물 257분류군(39.6%), 섬유용식물 8분류군(1.2%), 약용식물 206분류군(31.7%), 관상용식물 84분류군(12.9%), 목초용식물 220분류군(33.9%), 공업용식물 4분류군(0.6%), 염료용식물 13분류군(2.0%), 목재용식물 23분류군(3.5%)이었

다(Table 9). 또한 전체 649분류군 중 238분류군이 2가지 이상의 용도를 가지는 것으로 나타났다(Table 9, Appendix 1).

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## Conflict of Interest

The authors declare that there are no conflicts of interest.

## Literature Cited

- Chung, G. Y., K. S. Chang, J.-M. Chung, H. J. Choi, W.-K. Paik and J.-O. Hyun. 2017. A checklist of endemic plants on the Korean Peninsula. *Korean Journal of Plant Taxonomy* 47: 264–288.
- Geochang-gun. 2018. Geochang Statistical Yearbook. Geochang, 465 pp. (in Korean)
- Hamyang-gun. 2018. Hamyang Statistical Yearbook. Hamyang, 520 pp. (in Korean)
- Jeong, Y. J. 2017. The vegetation structure and flora of Mt. Geomgangsan in Hamyang. MS thesis, Graduate School Gyeongnam National University of Science and Technology, Jinju, Korea, 42 pp. (in Korean)
- Kang, S. O. 1971. New Korea Geography. Saegeulsa, Seoul, 606 pp. (in Korean)
- Kim, C. H. 2000. Assessment of natural environment: I. Selection of plant taxa. *Korean Journal of Environmental Biology*, 18: 163–198.
- Kim, J. W. 2011. A study on the relationship between vascular plants and forest structure in Gibaeksan(Mt.). MS thesis, Graduate School Gyeongnam National University of Science and Technology, Jinju, 66 pp. (in Korean)
- Kim, M. 2007a. *Celtis edulis* Nakai. In *The Genera of Vascular Plants of Korea*. Park, C.-W. (ed.), Academy Publ. Co., Seoul. P. 242.
- Kim, Y. D. 2007b. *Rodgersia podophylla* A. Gray. In *The Genera of Vascular Plants of Korea*. Park, C.-W. (ed.), Academy Publ. Co., Seoul. P. 522.
- Koh, K. S., I. G. Kang, M. H. Suh, J. H. Kim, K. D. Kim, J. H. Kil, H. I. Rhu, D. S. Kong, E. B. Lee and E. S. Chun. 1995. Survey for Ecological Impact by Naturalized Organisms (I): Naturalized Plants. National Institute of Environmental Research, Incheon, 215 pp. (in Korean)
- Korea Forest Service and Korea National Arboretum. 2016. Distribution Maps of Vascular Plants in Korea. Korea Forest Service and Korea National Arboretum, Pocheon, 809 pp. (in Korean)
- Korea National Arboretum. 2008. Rare Plants Data Book in Korea. Geobook Publishing Co., Seoul, 332 pp. (in Korean)
- Korea National Arboretum. 2017. Checklist of Vascular Plants in Korea. Korea National Arboretum, Pocheon, 1,000 pp. (in Korean)
- Korea National Arboretum. 2019. Checklist of Alien Plants in Korea. Dooroo Happy Co., Ltd., Seoul, 225 pp. (in Korean)
- Korea National Arboretum and The Plant Taxonomic Society of Korea. 2007. A Synonymic List of Vascular Plants in Korea. Korea National Arboretum, Pocheon, 534 pp. (in Korean)
- Kwon, Y. C., H. C. An, H. S. Cho and G. C. Choo. 1997. Studies on the woody plants of Keum Won San Recreation Forest. *Journal of Agricultural Technology Research Institute (Chinju National University)* 10: 31–41.
- Lee, T. B. 1976. Vascular plants and their uses in Korea. *Bulletin of the Arboretum*, Seoul National University 1: 1–137.
- Lee, T. B. 1980. Illustrated Flora of Korea. Hyangmunsa, Seoul, 990 pp. (in Korean)
- Lee, T. B. 1986. Vegetation of Mt. Paegun of Hamyang. The Report of the Korean Association for Conservation of Nature 24: 61–71. (in Korean)
- Lee, T. B. 2003. Coloured Flora of Korea. Vol. I, II. Hyangmunsa, Seoul, Vol. I, 914 pp, Vol. II, 910 pp. (in Korean)
- Lee, W.-T. and Y. J. Yim. 1978. Studies on the distribution of vascular plants in the Korean Peninsula. *Korean Journal of Plant Taxonomy* 8 (Appendix): 1–33. (in Korean)
- Lee, W. T. and Y. J. Yim. 2002. Plant Geography with Special Reference to Korea. Kangwon National University Press, Chuncheon, 412 pp. (in Korean)
- Lee, Y. N. 1996. Flora of Korea, Gyohaksa, Seoul, 1247 pp. (in Korean)
- Lee, Y. N. 2006. New Flora of Korea. Vol. I, II. Gyohaksa, Seoul, Vol. I, 974 pp, Vol. II. 885 pp. (in Korean)
- Lee, Y. N. and Y. J. Oh. 1986. An investigation for flora on Mt. Paegun, Mt. Kipaeg and Hwangsök mountain. The Report of the Korean Association for Conservation of Nature, 24: 41–60. (in Korean)
- Lim, C. E., T. K. Noh and C.-W. Park. 2017. *Aconitum austroKoreense* Koidz. In *Flora of Korea*. Vol. 2a. Magnoliidae. Flora of Korea Editorial Committee (ed.), National Institute of Biological Resources, Incheon. Pp. 49–50.
- Melchior, H. 1964. An Engler's Syllabus der pflanzenfamilien. Band II. Gebrüder Borntraeger, Berlin, 666 pp.
- National Institute of Ecology. 2018. Floristic Target Species (FT species) in Korea. National Institute of Ecology, Seocheon, 728 pp. (in Korean)
- National Institute of Environmental Research. 2012. 2012 The Investigation to Find the Good Area of Ecological Landscape. National Institute of Environmental Research, Incheon. Pp. 541–674. (in Korean)
- Oh, B. U. 2007. *Smilacina bicolor* Nakai. In *The Genera of Vascular Plants of Korea*. Park, C.-W. (ed.), Academy Publ. Co., Seoul. P. 1313.
- Oh, B. U., D. G. Jo, S. C. Ko, H. T. Im, G. Y. Chung, C. G. Jang

- and S. H. Kang. 2010. Distribution Maps of Vascular Plants of Korean Peninsula. VII. South Province (Gyeongsangnam-do) and Ulleung-do Province. Korean Forest Service, Daejeon and Korean National Arboretum, Pocheon, 776 pp. (in Korean)
- Oh, B. U., S. C. Ko, S. H. Kang, W. K. Paik, K. O. Yoo, H. T. Im, C. G. Jang, G. Y. Chung, B. H. Choi, H. J. Choi, Y. M. Lee, C. H. Shin, K. Choi, J. S. Han, S. H. Park, H. J. Kim, K. S. Chang, J. C. Yang, S. Y. Jung, C. H. Lee, S. H. Oh and D. G. Jo. 2016. Distribution Maps of Vascular Plants in Korea. Korea National Arboretum, Pocheon, 809 pp.
- Oh, H.-K., H.-T. Shin and M.-S. Beon. 2008. Investigation of vascular plants in the Eco-Arboretum Site, Mt. Gumwon. Korean Journal of Plant Resources 21: 117–127.
- Oh, H.-K., S.-C. Kim and J.-H. You. 2015. Study on flora distributed around Mt. Hwangseok, Gyeongsangnam-do for selecting the ecological and landscape conservation area. Journal of Environmental Impact Assessment 24: 51–65.
- Park, C. W. 2007. The Genera of Vascular Plants of Korea. Academy Publishing Co., Seoul, 1482 pp.
- Park, J. H., J. T. Im, G. H. Gu, M. K. Cho, H. R. Jung, J. H. Lee and H. S. Moon. 2007. Species composition of forest vegetation in the Mt. Geumwon recreational forest. Korean Journal of Environmental Agriculture 26(2): 149–158.
- Seok, J. C., O. R. Kim and G. C. Choo. 2003. Vascular plants of Keumwonsan area. Journal of Agricultural Technology Research Institute (Chinju National University) 16: 91–113.
- Shin, H. C. 2015. Vegetation structure and dynamics of northwest slope in Hwangseoksan (Mt.). MS thesis, Graduate School Gyeongnam National University of Science and Technology, Jinju, 42 pp.
- Yim, Y. J. and T. Kira. 1975. Distribution of forest vegetation and climate in the Korean Peninsula: I. Distribution of some indices of thermal climate. Japanese Journal of Ecology 25: 77–88.

## 기백산군립공원과 인접산지의 관속식물상

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**적 요:** 경상남도 거창군과 함양군의 경계에 위치하고 있는 기백산군립공원과 인접산지의 관속식물상을 2011년 4월부터 9월까지, 2012년 7월, 2015년 4월부터 2018년 8월까지 총 46회에 걸쳐 조사하였다. 그 결과, 본 조사 지역의 관속식물은 107과 346속 583종 14아종 46변종 6품종의 총 649분류군으로 조사되었으며, 25분류군의 한국특산식물과 18분류군의 희귀식물이 확인되었다. 식물구계학적 특정식물종은 식재종을 포함하여 V등급에 5분류군, IV등급에 5분류군, III등급에 29분류군, II등급에 30분류군, I등급에 38분류군이 각각 발견되었으며, 외래식물은 43분류군이 확인되었다. 조사된 전체 식물 중 500분류군이 자원식물이었으며, 이를 용도별로 구분하면 식용식물 257분류군, 약용식물 206분류군, 목초용식물 220분류군, 관상용식물 84분류군 등이었다. 조사지의 식물상은 한반도 식물구계의 남부아구에 속한다.

**주요어:** 식물상, 기백산군립공원, 금원산, 기백산, 황석산, 거망산

**Appendix 1. List of the vascular plants of Gibaeksan Mt. county park and its neighboring mountains.**

**Equisetaceae 속새과**

1. *Equisetum arvense* L. 쇠뜨기 E, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-092 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-001 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-059 [HNHM]

**Ophioglossaceae 고사리삼과**

- ★2. *Botrychium strictum* Underw. 긴꽃고사리삼 U[4]  
*Geomangsan Mt.*, 180619-187 [KB]
3. *Sceptridium ternatum* (Thunb.) Sw. 고사리삼 M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-067 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-012 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-090 [HNHM]

**Osmundaceae 고비과**

4. *Osmunda cinnamomea* L. 꿩고비 U [1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-103 [HNHM]

5. *Osmunda japonica* Thunb. 고비 E, M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-005 [KB]

**Dennstaedtiaceae 잔고사리과**

6. *Dennstaedtia hirsuta* (Sw.) Mett. ex Miq. 잔고사리 U[4]  
*Geomangsan Mt.*, 180619-183 [KB]
7. *Dennstaedtia wilfordii* (T. Moore) Christ 황고사리 U[3, 4]  
Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-039 [HNHM]; *Geomangsan Mt.*, 180731-168 [KB]
8. *Pteridium aquilinum* (L.) Kuhn var. *latiusculum* (Desv.) Underw. ex Hell. 고사리 E, M[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-195 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-074 [HNHM]

**Aspleniaceae 꼬리고사리과**

9. *Asplenium incisum* Thunb. 꼬리고사리 U[3]  
Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-006 [HNHM]

**Thelypteridaceae 처녀고사리과**

10. *Thelypteris japonica* (Baker) Ching 지네고사리 U[1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-050 [HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-059 [KB]; Hwangseoksan, 170525-058 [KB]

**Woodsiaceae 우드풀과**

11. *Woodsia polystichoides* D. C. Eaton 우드풀 U[2, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-001 [KB]; *Geomangsan Mt.*, 180731-092 [KB]

**Onocleaceae 야산고비과**

12. *Matteuccia struthiopteris* (L.) Tod. 청나래고사리 E[3]  
*Hwangseoksan Mt.*, 170525-054 [KB]

**Athyriaceae 개고사리과**

13. *Athyrium brevifrons* Nakai ex Kitag. 참새발고사리 E, M[2, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-115 [KB]; *Geomangsan Mt.*, 180619-066 [KB]

- ★14. *Athyrium iseanum* Rosenst. 가는잎개고사리 U[1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-007 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-021 [KB]; *Geomangsan Mt.*, 180619-153 [KB]

15. *Athyrium niponicum* (Mett.) Hance 개고사리 E[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-063 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-007 [HNHM]; *Geomangsan Mt.*, 180619-147 [KB]

16. *Asplenium yokoscense* (Franch. & Sav.) Christ 뱀고사리 E[1, 3]

- Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-055 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-069 [HNHM]

- ★17. *Cornopteris crenulatoserrulata* (Makino) Nakai 응달고사리 U[1]

- Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-032 [HNHM]  
18. *Deparia coniliifera* (Franch. & Sav.) M. Kato 좀진고사리 U[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-124 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-044 [HNHM]; *Geomangsan*, 180619-071 [KB]

19. *Deparia japonica* (Thunb.) M. Kato 진고사리 U[4]  
*Geomangsan Mt.*, 180731-187 [KB]

- ★20. *Deparia pycnosora* (Christ) M. Kato 털고사리 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-115 [KB]

**Dryopteridaceae 관중과**

21. *Dryopteris chinensis* (Baker) Koidz. 가는잎족제비고사리 U[1, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-107 [HNHM]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-025 [HNHM]; *Geomangsan Mt.*, 180619-180 [KB]

22. *Dryopteris crassirhizoma* Nakai 관중 E, M [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-114 [HNHM]

23. *Dryopteris lacera* (Thunb.) Kuntze 늘고사리 U[2, 3, 4]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-082 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-205 [HNHM]; *Geomangsan Mt.*, 180619-063 [KB]

24. *Dryopteris setosa* (Thunb.) Akasawa 산족제비고사리 U[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-107 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-032 [HNHM]; *Geomangsan Mt.*, 180418-076 [KB]

25. *Dryopteris uniformis* (Makino) Makino 곱비늘고사리 U[4]  
*Geomangsan Mt.*, 180619-079 [KB]

26. *Dryopteris varia* (L.) Kuntze 족제비고사리 U[3]  
*Hwangseoksan Mt.*, 180619-192 [KB]

27. *Polystichum tripterion* (Kunze) C. Presl 십자고사리 U[1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-126 [HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-081 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-120 [HNHM]; *Geomangsan Mt.*, 180619-150 [KB]

**Davalliaceae 넉줄고사리과**

28. *Davallia mariesii* T. Moore ex Baker 넉줄고사리 O[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-010 [KB]

**Polypodiaceae 고란초과**

29. *Lepisorus ussuriensis* (Regel & Maack) Ching 산일엽초 U[2, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-106 [HNHM]; *Geomangsan Mt.*, 180419-033 [KB]

30. *Selliguea hastata* (Thunb.) Fraser-Jenk. 고란초 M[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-141 [HNHM]

**Pinaceae 소나무과**

31. *Abies koreana* E. H. Wilson 구상나무(식) O, T[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-001 [HNHM]

32. *Larix kaempferi* (Lamb.) Carrière 일본잎갈나무(식) T[3]  
Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-043 [HNHM]

33. *Pinus densiflora* Siebold & Zucc. 소나무 E, M, O, T[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-008 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-048 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-094 [HNHM]

**Appendix 1. Continued.****Cupressaceae 측백나무과**

- ★34. *Chamaecyparis obtusa* (Siebold & Zucc.) Endl. 편백 (식) O, T [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-028[HNHM]
35. *Cryptomeria japonica* (Thunb. ex L.f.) D. Don 삼나무 (식) T[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-127[HNHM]
36. *Juniperus rigida* Siebold & Zucc. 노간주나무 M, S[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-109[HNHM]
- ★37. *Metasequoia glyptostroboides* Hu & W. C. Cheng 메타세쿼이아 (식) O[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-050[HNHM]

**Cephalotaxaceae 개비자나무과**

38. *Cephalotaxus harringtonii* (Knight ex J. Forbes) K. Koch 개비자나무 E, O[1, 2, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-097[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-012 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-047[HNHM]; Geomangsan Mt., 180619-144 [KB]

**Juglandaceae 가래나무과**

39. *Juglans regia* L. 호두나무 (식) E [3]  
Hwangseoksan Mt., 170526-083 [KB]
40. *Platycarya strobilacea* Siebold & Zucc. 굴피나무 S[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-020[HNHM]

**Salicaceae 베드나무과**

41. *Salix caprea* L. 호랑버들 P [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-036[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-067 [HNHM]; Geomangsan Mt., 180419-068[KB]
42. *Salix gracilistyla* Miq. 깃벼들 P [1, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-057[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-051 [HNHM]; Geomangsan Mt., 180418-096[KB]
43. *Salix pierotii* Miq. 베드나무 P [1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-059[HNHM]

**Betulaceae 자작나무과**

44. *Alnus firma* Siebold & Zucc. 사방오리 S[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-187[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-008 [HNHM]
45. *Alnus incana* (L.) Moench subsp. *hirsuta* (Turcz. ex Spach)  
Á.Löve & D.Löve 물오리나무 S [1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-039[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-040 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-040[HNHM]
46. *Betula chinensis* Maxim. 개박달나무 T [3]  
Hwangseoksan Mt., 170526-001 [KB]
47. *Betula davurica* Pall. 물박달나무 M, T [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-032[HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-041 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-019[HNHM]
48. *Betula schmidtii* Regel 박달나무 T [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-

126[HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-038 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-058[HNHM]; Geomangsan Mt., 180418-051 [KB]

49. *Carpinus cordata* Blume 까치박달 P, T [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-063[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-055 [KB]; Hwangseoksan Mt., 170713-023[KB]; Geomangsan Mt., 180619-010 [KB]

50. *Carpinus laxiflora* (Siebold & Zucc.) Blume 서어나무 O, S[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-045[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-086 [HNHM]; Geomangsan Mt., 180731-143[KB]

51. *Carpinus tschonoskii* (Siebold & Zucc.) Maxim. 개서어나무 O, S[1, 2]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-138 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-176 [HNHM]

52. *Corylus heterophylla* Fisch. ex Trautv. 난티잎개암나무 E, M, P[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-162[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-109 [KB]

53. *Corylus sieboldiana* Blume 참개암나무 E, M[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-134[HNHM]; Hwangseoksan Mt., 170713-066 [KB]

54. *Corylus sieboldiana* Blume var. *mandshurica* (Maxim. & Rupr.) C. K. Schneid. 물개암나무 E, M [1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-127[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-139 [KB]; Geomangsan Mt., 180619-073[KB]

**Fagaceae 참나무과**

55. *Castanea crenata* Siebold & Zucc. 밤나무 (식) E, M, S, T[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-039[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-141 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-104[HNHM]

56. *Quercus acutissima* Carruth. 상수리나무(식) E, M, P, T[3, 4]  
Hwangseoksan Mt., 180801-100 [KB]; Geomangsan Mt., 180731-130[KB]

57. *Quercus aliena* Blume 갈참나무 E, P, T [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-096[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-002 [HNHM]

58. *Quercus mongolica* Fisch. ex Ledeb. 신갈나무 E, P, T[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-046[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-137 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-005[HNHM]

59. *Quercus serrata* Murray 줄참나무 E, M, P, T [1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-028[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-155 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-123[HNHM]

60. *Quercus variabilis* Blume 굽참나무 E, M, R, T[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-059[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-053 [HNHM]

**Ulmaceae 느릅나무과**

- ★61. *Celtis edulis* Nakai 노랑팡나무 E [3]  
Hwangseoksan Mt.-160921-048 [KB]

**Appendix 1. Continued.**

62. *Celtis sinensis* Pers. 팹나무 E, M, P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-001 [HNHM]; Hwangseoksan Mt., 170525-001 [KB]
63. *Ulmus davidiana* Planch. 당느릅나무 E, F, M, T [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-182 [HNHM]
64. *Ulmus davidiana* Planch. var. *japonica*(Rehder) Nakai 느릅나무 E, F, M, T[1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-110 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-060 [HNHM]
65. *Zelkova serrata* (Thunb.) Makino 느티나무 E, T[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-025 [KB]; Hwangseoksan Mt., 180619-100 [KB]; Geomangsan Mt., 180731-164 [KB]
- Moraceae 뽕나무과**
- ★66. *Broussonetia × hanjiana* M. Kim 닥나무 (식) E, F, M [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-229 [KB]; Hwangseoksan Mt., 170525-168 [KB]
67. *Morus australis* Poir. 산뽕나무 E, M, P, S [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-041 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-140 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-056 [HNHM]; Geomangsan Mt., 180619-058 [KB]
- Cannabaceae 삼과**
68. *Humulus scandens* (Lour.) Merr. 환삼덩굴 E, M, P[1, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-089 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-136 [HNHM]
- Urticaceae 쇠기풀과**
69. *Boehmeria japonica* (L.f.) Miq. 왜모시풀 F[1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-051 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-125 [KB]; Geomang Mt., 180731-055 [KB]
70. *Boehmeria platianfolia* (Franch. & Sav.) C. H. Wright 개모시풀 F[1, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-126 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-027 [HNHM]
71. *Boehmeria spicata* (Thunb.) Thunb. 좀깨잎나무 F[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-046 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-084 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-007 [HNHM]; Geomangsan Mt., 180731-067 [KB]
- ★72. *Boehmeria tricuspid* (Hance) Makino var. *unicuspis* Makino ex Ohwi 풀거북꼬리 E, F[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-003 [HNHM]
73. *Pilea peploides* (Gaudich.) Hook. & Arn. 물통이 U[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-010 [KB]
- ★74. *Pilea pumila* (L.) A. Gray 모시물통이 P[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-107 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-128 [HNHM]
75. *Pilea pumila* (L.) A. Gray var. *hamaoi*(Makino) C. J. Chen 큰물통이 U[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-016 [KB]; Hwangseoksan Mt., 160921-028 [KB]
- Santalaceae 단향과**
76. *Thesium chinense* Turcz. 쟈비풀 M [1, 3]
- Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-118 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-043 [HNHM]
- Viscaceae 겨우살이과**
77. *Viscum album* L. var. *coloratum* (Kom.) Ohwi 겨우살이 M [4]  
Geomangsan Mt., 180419-054 [KB]
- Polygonaceae 마디풀과**
78. *Fallopia cilinervis* (Nakai) K. Hammer 낫도하수오 U[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-033 [KB]
- ★79. *Fallopia dentata* (F. Schmidt) Holub 큰닭의덩굴 U[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-062 [HNHM]
80. *Fallopia dumetorum* (L.) Holub 닭의덩굴 U[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-130 [KB]
81. *Persicaria dissitiflora* (Hemsl.) H. Gross ex T. Mori 가시여뀌 U[1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-129 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-006 [KB]; Hwangseoksan Mt., 160922-076 [KB]
82. *Persicaria filiformis* (Thunb.) Nakai ex T. Mori 이삭여뀌 M[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-012 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-058 [HNHM]; Geomangsan Mt., 180731-167 [KB]
83. *Persicaria lapathifolia* (L.) Delarbre 흰여뀌 U[1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-091 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-068 [KB]
84. *Persicaria longiseta* (Bruijn) Kitag. 개여뀌 M[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-153 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-097 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-139 [HNHM]; Geomangsan Mt., 180731-046 [KB]
85. *Persicaria nepalensis* (Meisn.) H. Gross 산여뀌 P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-071 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-005 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-107 [HNHM]
86. *Persicaria perfoliata* (L.) H. Gross 며느리배꼽 E[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 10830-193 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-026 [KB]
87. *Persicaria posumbu* (Buch.-Ham. ex D. Don) H. Gross 장대여뀌 U[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-014 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-014 [HNHM]
88. *Persicaria sagittata* (L.) H. Gross 마꾸리낚시 P[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-107 [KB]; Hwangseoksan Mt., 160922-017 [KB]
89. *Persicaria senticosa* (Meisn.) H. Gross ex Nakai 며느리밀씻개 E, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-280 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-123 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-106 [HNHM]; Geomangsan Mt., 180731-161 [KB]
90. *Persicaria thunbergii* (Siebold & Zucc.) H. Gross 고마리 P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-088 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-046 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-026 [KB]

**Appendix 1. Continued.**

91. *Rumex acetosa* L. 수영 M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-072 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-046 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-036 [HNHM]
92. *Rumex acetosella* L. 애기수영 E [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-085 [HNHM]
93. *Rumex conglomeratus* Murray 묵밭소리쟁이 M, P[4]  
Geomangsan Mt., 180619-032 [KB]
94. *Rumex crispus* L. 소리쟁이 E, M, P [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-120 [KB]; Hwangseoksan Mt., 170525-173 [KB]
95. *Rumex obtusifolius* L. 둘소리쟁이 U [1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-091 [HNHM]
- Phytolaccaceae 자리공과**
96. *Phytolacca americana* L. 미국자리공 U [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-036 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-037 [HNHM]; Geomangsan Mt., 180731-204 [KB]
- Molluginaceae 석류풀과**
97. *Mollugo pentaphylla* L. 석류풀 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-040 [HNHM]
- Caryophyllaceae 석죽과**
98. *Arenaria serpyllifolia* L. 벼룩이자리 E [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-002 [HNHM]
- ★99. *Cerastium glomeratum* Thuill. 유럽점나도나물 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-048 [HNHM]
100. *Cerastium holosteoides* Fr. var. *hallaisanense* (Nakai) Mizush. 점나도나물 E [1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-035 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-030 [KB]
101. *Dianthus chinensis* L. 페랭이꽃 M [3]  
Hwangseoksan Mt., 180801-093 [KB]
102. *Pseudostellaria heterophylla* (Miq.) Pax 개별꽃 E, M [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-028 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-027 [HNHM]; Geomangsan Mt., 180419-047 [KB]
103. *Pseudostellaria palibiniana* (Takeda) Ohwi 큰개별꽃 E [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-089 [KB]; Hwangseoksan Mt., 170525-123 [KB]; Geomangsan Mt., 180418-021 [KB]
- ★104. *Silene armeria* L. 끈끈이대나물 U [3, 4]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-035 [HNHM]; Geomangsan Mt., 180731-047 [KB]
105. *Silene firma* Siebold & Zucc. 장구채 E, M, P [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-282 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-111 [HNHM]; Geomangsan Mt., 180731-334 [KB]
106. *Silene seoulensis* Nakai 가는장구채 P [3, 4]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-015 [HNHM]; Geomangsan Mt., 180731-201 [KB]
107. *Stellaria aquatica* (L.) Scop. 쇠별꽃 E, M [1, 2, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-098 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-157 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-011 [HNHM]
108. *Stellaria media* (L.) Vill. 별꽃 E [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-032 [KB]
109. *Stellaria uliginosa* Murray 벼룩나물 E [1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-038 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-053 [KB]
- Chenopodiaceae 명아주과**
110. *Chenopodium album* L. var. *centrorubrum* Makino 명아주 E, P [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-187 [KB]
- Amaranthaceae 비름과**
111. *Achyranthes bidentata* Blume var. *japonica* Miq. 쇠무릎 E, M, P [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-013 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-114 [HNHM]
- Magnoliaceae 목련과**
- ★112. *Liriodendron tulipifera* L. 백합나무(식) U [3]  
Hwangseoksan Mt., 170526-034 [KB]
113. *Magnolia kobus* DC. 목련 M, O [3]  
Hwangseoksan Mt., 170525-129 [KIOM]
114. *Magnolia sieboldii* K. Koch 합박꽃나무 O, P [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 10518-083 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-026 [KB]; Hwangseoksan Mt., 160921-017 [KB]; Geomangsan Mt., 180619-134 [KB]
- Schisandraceae 오미자과**
115. *Schisandra chinensis* (Turcz.) Baill. 오미자 (식) E, M [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-047 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-080 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-123 [HNHM]
- Lauraceae 녹나무과**
116. *Lindera erythrocarpa* Makino 비목나무 O [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-107 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-080 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-005 [HNHM]; Geomangsan Mt., 180418-043 [KB]
117. *Lindera glauca* (Siebold & Zucc.) Blume 감태나무 S [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-046 [HNHM]
118. *Lindera obtusiloba* Blume 생강나무 E, M, O [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-003 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-176 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-010 [HNHM]; Geomangsan Mt., 180619-028 [KB].
- ★119. *Aconitum austrokoreense* Koidz. 세뿔투구꽃 U [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-195 [HNHM]
120. *Aconitum jaluense* Kom. 투구꽃 M [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-020 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-006 [HNHM]
121. *Aconitum pseudolaeve* Nakai 진벌 M [2]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-025 [KB]
122. *Actaea asiatica* H. Hara 노루삼 U [1, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-062 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-025 [HNHM]; Geomangsan Mt., 180731-307 [KB]

**Appendix 1.** Continued.

123. *Actaea dahurica* (Turcz. ex Fisch. & C. A. Mey.) Franch. 눈꽃  
승마E, M[3]  
Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150604-007 [HNHM]
124. *Adonis amurensis* Regel & Radde 복수초 M, O[4]  
Geomangsan Mt., 180419-003 [KB]
125. *Anemone raddeana* Regel 꽁의바람꽃 O [4]  
Geomangsan Mt., 180419-039 [KB]
126. *Caltha palustris* L. 동의나물 P [4]  
Geomangsan Mt., 180418-064 [KB]
127. *Clematis apiifolia* DC. 사위질빵 U [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-194 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-039 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-055 [HNHM]; Geomangsan Mt., 180731-127 [KB]
128. *Clematis brachyura* Maxim. 외대으아리 M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-028 [KB]
129. *Clematis patens* C. Morren & Decne. 큰꽃으아리 O[3]  
Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150604-181 [HNHM]
130. *Clematis terniflora* DC. var. *mandshurica* (Rupr.) Ohwi 으아리 M[3]  
Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150604-090 [HNHM]
131. *Clematis trichotoma* Nakai 할미밀망 U [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-011 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-005 [KB]; Hwangseoksan Mt., 170525-190 [KB]
132. *Eranthis stellata* Maxim. 네도바람꽃 U [1, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-019 [HNHM]; Geomangsan Mt., 180419-025 [HNHM]
133. *Pulsatilla koreana* (Y. Yabe ex Nakai) Nakai ex T. Mori 할미꽃 M [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-041 [HNHM]; Hwangseoksan Mt., 170525-192 [KB]
134. *Ranunculus chinensis* Bunge 젓가락나물 U [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-044 [KB]
135. *Ranunculus japonicus* Thunb. 미나리아재비 M, P [1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-010 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-088 [KB]
136. *Ranunculus quelpaertensis* (H. Lév.) Nakai 왜젓가락나물 U [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-198 [HNHM]
- ★137. *Ranunculus tachiroei* Franch. & Sav. 가구리미나리 M [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-066 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-065 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-031 [HNHM]
138. *Thalictrum actaeifolium* Siebold & Zucc. 은꽝의다리 E [1, 2, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-095 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-015 [KB]; Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150604-032 [HNHM]; Geomangsan Mt., 180731-212 [KB]
139. *Thalictrum aquilegifolium* L.. var. *sibiricum* Regel & Tiling ♂  
시아꽝의다리 E, M, P [1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-016 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-165 [KB]; Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 151023-080 [HNHM]
140. *Thalictrum tuberiferum* Maxim. 산꿩의다리 M [1, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-124 [HNHM]; Geomangsan Mt., 180619-145 [KB]
- Berberidaceae 매자나무과**
141. *Caulophyllum robustum* Maxim. 꿩의다리아재비 E, M [4]  
Geomangsan Mt., 180619-231 [KB]
- Lardizabalaceae 으름덩굴과**
142. *Akebia quinata* (Houtt.) Decne. 으름덩굴 M, O, P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-001 [KB]; Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150423-018 [HNHM]
- Menispermaceae 방기과**
143. *Cocculus orbiculatus* (L.) DC. 탱탱이덩굴 E, M, P [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-169 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-096 [HNHM]; Geomangsan Mt., 180731-008 [KB]
144. *Menispermum dauricum* DC. 새모래덩굴 U [1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-040 [HNHM]; Hwangseoksan Mt., 170526-050 [KB]
- Saururaceae 삼백초과**
- ★145. *Houttuynia cordata* Thunb. 약모밀 (식) M [3]  
Hwangseoksan Mt., 180619-211 [KB]
- Chloranthaceae 흘아비꽃대과**
146. *Chloranthus japonicus* Siebold 흘아비꽃대 U [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-121 [KB]; Hamyang-gun (Hwangsang-ri, Hwangseoksan Mt.), 150604-051 [HNHM]; Geomangsan Mt., 180731-313 [KB]
- Aristolochiaceae 쥐방울덩굴과**
- ★147. *Asarum patens* (Yamaki) M. Kim & S. So 금오족도리풀 U [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-010 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-014 [HNHM]
148. *Asarum sieboldii* Miq. 족도리풀 M [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-018 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-022 [KB]; Hwangseoksan Mt., 170525-010 [KB]; Geomangsan Mt., 180419-066 [KB]
- Actinidiaceae 다래나무과**
149. *Actinidia arguta* (Siebold & Zucc.) Planch. ex Miq. 다래 E, M [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-144 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-021 [HNHM]; Geomangsan Mt., 180619-110 [KB]
150. *Actinidia kolomikta* (Maxim. & Rupr.) Maxim. 쥐다래 E [4]  
Geomangsan Mt., 180731-192 [KB]
- Ranunculaceae 미나리아재비과**
151. *Actinidia polygama* (Siebold & Zucc.) Planch. ex Maxim. 가다래 E, M [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-049 [KB]
- Theaceae 차나무과**
152. *Stewartia koreana* Nakai ex Rehder 노각나무 O, T [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-127 [HNHM]; Hwangseoksan Mt., 160922-022 [KB]; Geomangsan Mt., 180731-179 [KB]
- Clusiaceae 물레나물과**
153. *Hypericum ascyron* L. 물레나물 E, O [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-011 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-112 [HNHM]; Geomangsan Mt., 180731-123 [KB]

**Appendix 1. Continued.**

154. *Hypericum erectum* Thunb. 고추나물 M, P[2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-106[KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-063  
[HNHM]; Geomangsan Mt., 180731-002[KB]
- ★155. *Hypericum japonicum* Thunb. 애기고추나물 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-166[KB]
156. *Hypericum laxum* (Blume) Koidz. 좀고추나물 U[4]  
Geomangsan Mt., 180731-266 [KB]
- Papaveraceae 양귀비과**
157. *Chelidonium majus* L. var. *asiaticum*(Hara) Ohwi 애기똥풀  
M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
006[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-051 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-075[HNHM]
- Fumariaceae 현호색과**
- ★158. *Corydalis pauciovulata* Ohwi 선괴불주머니 U[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-  
100[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150917-144 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan  
Mt.), 151022-087[HNHM]
159. *Corydalis remota* Fisch. ex Maxim. 현호색 M[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-  
007[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-023 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-012[HNHM]; Geomangsan Mt., 180419-002[KB]
160. *Corydalis speciosa* Maxim. 산괴불주머니 U[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-  
004[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-062 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-005[HNHM]; Geomangsan Mt., 180418-028 [KB]
161. *Corydalis ternata* (Nakai) Nakai 들현호색 M[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
037[HNHM]
162. *Dicentra spectabilis* (L.) Lem. 금낭화 E, O[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-  
008[HNHM]
- Cruciferae 십자화과**
- ★163. *Berteroella maximowiczii* (Palib.) O. E. Schulz 장대냉이  
E[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-073[KB];  
Hwangseoksan Mt., 170526-015 [KB]
164. *Capsella bursa-pastoris* (L.) Medicus 냉이 E, M [1, 2, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-  
068[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-042 [KB]; Geomangsan Mt., 180418-069[KB]
165. *Cardamine fallax* (O. E. Schulz) Nakai 좀쌀냉이 E[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
074[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.),  
150423-055 [HNHM]
166. *Cardamine flexuosa* With. 황새냉이 E[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-  
026[HNHM]; Hwangseoksan Mt., 170525-018 [KB];  
Geomangsan Mt., 180619-178[KB]
167. *Cardamine impatiens* L. 쌈냉이 E [1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-  
031[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-060 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan  
Mt.), 150604-114[HNHM]; Geomangsan Mt., 180418-037 [KB]
168. *Cardamine leucantha* (Tausch) O. E. Schulz 미나리냉이 E[1, 2, 3, 4]
169. *Draba nemorosa* L. 꽃다지 E, M [1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 10519-  
056[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-036 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-003[HNHM]; Geomangsan Mt., 180418-104 [KB]
170. *Lepidium apetalum* Willd. 닥닥냉이(식) E, M[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-051[KB];  
Hwangseoksan Mt., 170525-227 [KB]
171. *Lepidium virginicum* L. 콩다닥냉이 U [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-  
142[HNHM]
172. *Rorippa indica* (L.) Hiern 개갓냉이 E[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-023[KB]
173. *Rorippa palustris* (L.) Besser 속속이풀 E[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-095[KB]
174. *Arabis glabra* L. 장대나물 E [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
002[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.),  
150519-033 [HNHM]
- Crassulaceae 돌나물과**
175. *Hylotelephium erythrostictum*(Miq.) H. Ohba 꿩의비름 E, M,  
P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-001[KB]
176. *Hylotelephium verticillatum*(L.) H. Ohba 세잎꿩의비름 U[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-193[KB]
- ★177. *Hylotelephium viviparum* (Maxim.) H. Ohba 새끼꿩의비름  
O[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-068[KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-063  
[HNHM]
178. *Phedimus aizoon* (L.) 't Hart 가는기린초 E[1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-  
090[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150917-154 [KB]; Geomangsan Mt., 180731-222 [KB]
179. *Phedimus kamtschaticus* (Fisch. & C. A. Mey.) 't Hart 기린초 E[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-  
091[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150605-155 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan  
Mt.), 151022-072[HNHM]
180. *Sedum bulbiferum* Makino 말뚱비름 U [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-161[KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-013  
[HNHM]
181. *Sedum polytrichoides* Hemsl. 바위채송화 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-209[KB]
182. *Sedum sarmentosum* Bunge 돌나물 E, M [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-196[KB];  
Hwangseoksan Mt., 170526-064 [KB]
- Saxifragaceae 범의귀과**
183. *Astilbe chinensis* (Maxim.) Franch. & Sav. 노루오줌 M, P[1, 2,  
3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-  
011[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.),  
150812-091 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan  
Mt.), 150710-054[HNHM]; Geomangsan Mt., 180731-207 [KB]
184. *Astilbe koreana* (Kom.) Nakai 속은노루오줌 U[1, 3]

**Appendix 1.** Continued.

- Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-085 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-002 [HNHM]
185. *Chrysosplenium flagelliferum* F. Schmidt 애기꽝이눈U[1, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-010 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-009 [KB]
186. *Chrysosplenium grayanum* Maxim. 꽝이눈 U[4] Geomansan Mt., 180418-081 [KB]
187. *Chrysosplenium japonicum* (Maxim.) Makino 산꽝이눈U[1, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-033 [HNHM]; Hwangseoksan Mt., 170525-124 [KB]; Geomansan Mt., 180419-031 [KB]
- ★188. *Chrysosplenium ramosum* Maxim. 가지꽝이눈U[1] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-015 [HNHM]
189. *Saxifraga fortunei* Hook. 백위떡풀E[1, 2] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-016 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-028 [KB]
- Hydrangeaceae 수국과**
190. *Deutzia glabrata* Kom. 물참대 O[1, 3, 4] Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-076 [HNHM]; Hwangseoksan Mt., 170525-019 [KB]; Geomansan Mt., 180619-190 [KB]
191. *Deutzia parviflora* Bunge 말발도리O[1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-009 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-001 [KB]; Hwangseoksan Mt., 160921-088 [KB]
192. *Deutzia uniflora* Shirai 매화말발도리 O[1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-002 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-072 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-021 [HNHM]; Geomansan Mt., 180418-044 [KB]
193. *Hydrangea macrophylla* (Thunb.) Ser. subsp. *serrata* (Thunb.) Makino 산수국 O[1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-010 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-042 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-032 [HNHM]; Geomansan Mt., 180731-186 [KB]
- ★194. *Philadelphus pekinensis* Rupr. 애기고광나무O[3] Hwangseoksan Mt., 170526-046 [KB]
195. *Philadelphus tenuifolius* Rupr. & Maxim. 얇은잎고광나무O[1, 2, 3, 4] Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-166 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-068 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-019 [HNHM]; Geomansan Mt., 180731-265 [KB]
- Grossulariaceae 까치밥나무과**
196. *Ribes fasciculatum* Siebold & Zucc. var. *chinense* Maxim. 까마귀밥나무U[2, 4] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-071 [KB]; Geomansan Mt., 180418-022 [KB]
197. *Ribes mandshuricum* (Maxim.) Kom. 까치밥나무E, O[1, 3] Geumwonsan Mt., 160415-004 [KIOM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-019 [HNHM]
- ★198. *Ribes maximowiczianum* Kom. 명자순 O[3] Hwangseoksan Mt., 170525-199 [KB]
- Rosaceae 장미과**
- ★199. *Agrimonia coreana* Nakai 산짚신나물 E, M [1, 3] Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-041 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-029 [HNHM]
200. *Agrimonia pilosa* Ledeb. 짚신나물 E, M, P [1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-118 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-202 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-017 [HNHM]; Geomansan Mt., 180731-076 [KB]
201. *Aruncus dioicus* (Walter) Fernald 눈개승마U[2, 3] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-095 [KB]; Hwangseoksan Mt., 160921-077 [KB]
202. *Duchesnea indica* (Andr.) Focke 뱀딸기 E, M, P [1, 3, 4] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-024 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-031 [HNHM]; Geomansan Mt., 180619-031 [KB]
203. *Geum aleppicum* Jacq. 큰뱀무 E, P [1] Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-025 [HNHM]
204. *Geum japonicum* Thunb. 벼루무 E, M, P [1, 2, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-092 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-049 [KB]; Geomansan Mt., 180731-005 [KB]
- ★205. *Kerria japonica* (L.) DC. 황매화 (식)O[3] Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-011 [HNHM]
206. *Malus baccata* Borkh. 아 ağ나무 E, O [2, 3] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-101 [KB]; Hwangseoksan Mt., 170525-162 [KB]
- ★207. *Malus mandshurica* (Maxim.) Kom. ex Skvortsov 텔야꽝나무E, O[1] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-052 [HNHM]
208. *Malus toringo* (Siebold) de Vriese 아 그배나무E, O [1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-143 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-193 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-004 [HNHM]; Geomansan Mt., 180619-121 [KB]
209. *Potentilla ancistrifolia* Bunge var. *dickinsii* (Franch. & Sav.) Koidz. 돌양지꽃 U [2, 3] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-015 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-043 [HNHM]
- ★210. *Potentilla chinensis* Ser. 딱지꽃 E, M, P [4] Geomansan Mt., 180731-279 [KB]
211. *Potentilla fragarioides* L. 양지꽃 E, M [1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-027 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-015 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-026 [HNHM]; Geomansan Mt., 180418-004 [KB]
212. *Potentilla freyniana* Bornm. 세잎양지꽃 E, P [1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-005 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-036 [HNHM]; Geomansan Mt., 180418-111 [KB]
213. *Potentilla kleiniana* Wight & Arn. 가락지나물 E, P [1, 2, 3, 4] Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-077 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-024 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-099 [HNHM]; Geomansan Mt., 180731-247 [KB]
214. *Potentilla rosulifera* H. Lév. 민눈양지꽃 U [1] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-030 [HNHM]
- ★215. *Prunus armeniaca* L. 살구나무 E, M, O [3] Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-022 [HNHM]

**Appendix 1.** Continued.

216. *Prunus padus* L. 귀릉나무 E, M [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-152[KB]
217. *Prunus persica* (L.) Batsch 복사나무 E, P[1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-075[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-149 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-068[HNHM]; Geomangsan Mt., 180418-088 [KB]
218. *Prunus sargentii* Rehder 산벚나무 O, P [1]  
Geumwonsan Mt., 160415-001 [KIOM]
- ★219. *Prunus serrulata* Lindl. var. *pubescens*(Makino) Nakai 잔털 벚나무 E, O[3, 4]  
Hwangseoksan Mt., 170525-259 [KB]; Geomangsan Mt., 180418-094[KB]
220. *Prunus serrulata* Lindl. f. *spontanea*(E. H. Wilson) Chin S. Chang 벚나무 E, O [3]  
Hwangseoksan Mt., 180619-032 [KB]
221. *Rosa multiflora* Thunb. 꼈려꽃 E, M, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-028[HNHM], Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-064 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-017[HNHM]
222. *Rubus coreanus* Miq. 복분자딸기 E, M [1, 2, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-075[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-012 [KB]; Geomangsan Mt., 180619-101[KB]
- ★223. *Rubus coreanus* Miq. var. *concolor*Nakai ex J. Y. Yang 청복 분자딸기 E[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-234[KB]
224. *Rubus crataegifolius* Bunge 산딸기 E, M, P[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-051[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-018 [HNHM]
225. *Rubus parvifolius* L. 명석딸기 E, M [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-138[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-023 [HNHM]; Geomangsan Mt., 180619-124[KB]
226. *Rubus phoenicolasius* Maxim. 곱딸기 E[2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-038[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-106 [HNHM]; Geomangsan Mt., 180731-060[KB]
227. *Rubus pungens* Cambess. 줄딸기 E [1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-012[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-069 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-032[HNHM]; Geomangsan Mt., 180418-099 [KB]
228. *Sanguisorba officinalis* L. 오이풀 M, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-172[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-003 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-064[HNHM]
- ★229. *Sorbaria sorbifolia* (L.) A. Braun 수땅나무 E, P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-111[HNHM]
230. *Sorbus alnifolia* (Siebold & Zucc.) K. Koch 팔배나무 E, P[1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-094[HNHM]
- ★231. *Spiraea chamaedryfolia* L. 인가목조팝나무 O[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-178[KB]
232. *Spiraea fritschiana* Schneid 참조팝나무 O[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-075[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-053 [KB]
- ★233. *Spiraea miyabei* Koidz. 덤불조팝나무 O [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-065[KB]
234. *Spiraea prunifolia* Siebold & Zucc. f. *simpliciflora*Nakai 조팝나무 E, M, O[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-015[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-033 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-061[HNHM]; Geomangsan Mt., 180418-039 [KB]
- ★235. *Spiraea salicifolia* L. 꼬리조팝나무 E, M, O [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-051[KB]
236. *Stephanandra incisa* (Thunb.) Zabel 국수나무 S[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-011[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-121 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-005[HNHM]; Geomangsan Mt., 180731-346 [KB]
- Leguminosae 콩과**
237. *Albizia julibrissin* Durazz. 자귀나무 M, O, P[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-004[HNHM]
238. *Amorpha fruticosa* L. 족제비싸리 P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-068[HNHM]; Hwangseoksan Mt., 170714-026 [KB]
239. *Amphicarpea bracteata* (L.) Fernald subsp.  
*edgeworthii*(Benth.) H. Ohashi 새콩 E, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-001[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-139 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-009[HNHM]
- ★240. *Campylotropis macrocarpa* (Bunge) Rehder 꽃싸리 O, P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-092[HNHM]
241. *Chamaecrista nomame* (Siebold) H. Ohashi 차풀 E, M, P [2, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-062[KB]; Geomangsan Mt., 180731-034 [KB]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-077[HNHM]; Geomangsan Mt., 180619-198 [KB]
- ★242. *Crotalaria sessiliflora* L. 활나물 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-093[KB]
243. *Glycine max* (L.) Merr. subsp. *soja*(Siebold & Zucc.) H. Ohashi 돌콩 E, P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-140[KB]
244. *Hylodesmum oldhamii* (Oliv.) H. Ohashi & R. R. Mill 큰도둑놈의갈고리 P[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-166[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-116 [HNHM]
- ★245. *Hylodesmum podocarpum* (DC.) H. Ohashi & R. R. Mill 개도둑놈의갈고리 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-205[KB]
246. *Hylodesmum podocarpum* (DC.) H. Ohashi & R. R. Mill subsp.  
*oxyphyllum*(DC.) H. Ohashi & R. R. Mill도둑놈의갈고리 U [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-001[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-004 [HNHM]
- ★247. *Hylodesmum podocarpum* (DC.) H. Ohashi & R. R. Mill  
var. *mandshuricum*(Maxim.) H. Ohashi & R. R. Mill에기도둑놈의갈고리 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-115[HNHM]

**Appendix 1. Continued.**

248. *Indigofera kirilowii* Maxim. ex Palib. 땅비싸리 O[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-093 [HNHM]
249. *Indigofera pseudotinctoria* Matsum. 낭아초 (식) M, O[2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-069 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-129 [HNHM]
250. *Lathyrus davidii* Hance 활량나물 E, M [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-136 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-037 [HNHM]
251. *Lespedeza bicolor* Turcz. 쌈싸리 O, P [1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-087 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-070 [KB]; Hwangseoksan Mt., 170713-103 [KB]
252. *Lespedeza cuneata* (Dum.Cours.) G. Don 비수리 P[2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-072 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-133 [HNHM]
253. *Lespedeza cyrtobotrya* Miq. 참싸리 F, O[1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-050 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-281 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-054 [HNHM]; Geomangsan Mt., 180731-037 [HNHM]
254. *Lespedeza maximowiczii* C. K. Schneid. 조록싸리 O, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-101 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-022 [KB]; Hwangseoksan Mt., 160922-007 [KB]; Geomangsan Mt., 180619-046 [KB]
- ★255. *Lespedeza thunbergii* Nakai subsp. *formosa* (Vogel) H. Ohashi 풀싸리 O, P[3]  
Hwangseoksan Mt., 160922-014 [KB]
256. *Maackia amurensis* Rupr. 태릅나무 T [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-015 [KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-035 [HNHM]
257. *Pueraria lobata* (Willd.) Ohwi 짹 E, M, P, S [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-178 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-133 [HNHM]; Geomangsan Mt., 180731-041 [KB]
258. *Rhynchosia acuminatifolia* Makino 큰여우콩 P[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-058 [KB]
259. *Sophora flavescens* Solander ex Aiton 고삼 M [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-078 [KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-001 [HNHM]
- ★260. *Styphnolobium japonicum* (L.) Schott 회화나무(식) M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-187 [KB]
261. *Trifolium repens* L. 토끼풀 P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-054 [HNHM]
262. *Vicia amoena* Fisch. ex Ser. 갈퀴나물 E, P[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-043 [KB]
- ★263. *Vicia hirticalycina* Nakai 나래완두 P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-001 [HNHM]
264. *Vicia unijuga* A. Braun 나비나물 E, P [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-081 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-015 [HNHM]
265. *Vicia venosa* (Willd.) Maxim. 연리갈퀴 P[4]  
Geomangsan Mt., 180731-361 [KB]
- ★266. *Vigna angularis* (Willd.) Ohwi & H. Ohashi var. *nipponensis* (Ohwi) Ohwi & H. Ohashi 새팥 E[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-029 [HNHM]
- Oxalidaceae 패이밥과**
267. *Oxalis corniculata* L. 패이밥 E, M [4]  
Geomangsan Mt., 180619-235 [KB]
268. *Oxalis obtriangulata* Maxim. 큰팻이밥 E[3, 4]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-016 [HNHM]; Geomangsan Mt., 180419-011 [KB]
- ★269. *Oxalis stricta* L. 선팻이밥 E [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-178 [HNHM]
- Geraniaceae 쥐손이풀과**
270. *Geranium krameri* Franch. & Sav. 선이질풀 M[3]  
Hwangseoksan Mt., 160921-134 [KB]
271. *Geranium sibiricum* L. 쥐손이풀 M, P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-032 [KB];  
Hwangseoksan Mt., 160921-005 [HNHM]
272. *Geranium thunbergii* Siebold ex Lindl. & Paxton 이질풀 M, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-212 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-076 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-064 [HNHM]; Geomangsan Mt., 180731-095 [KB]
273. *Geranium wilfordii* Maxim. 세잎쥐손이 M[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-270 [HNHM]
- Euphorbiaceae 대극과**
274. *Acalypha australis* L. 깨풀 E[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-043 [HNHM]
275. *Euphorbia sieboldiana* Morren & Decne. 개감수 M[3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-070 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-108 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-006 [HNHM]; Geomangsan Mt., 180619-114 [KB]
276. *Neoshirakia japonica* (Siebold & Zucc.) Esser 사람주나무 S[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-134 [KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-129 [HNHM]; Geomangsan Mt., 180619-035 [KB]
- ★277. *Phyllanthus urinaria* L. 여우구슬 U [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-035 [KB];  
Hwangseoksan Mt., 180801-081 [KB]
278. *Securinega suffruticosa* (Pall.) Rehder 광대싸리 M[1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-119 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-004 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-065 [HNHM]
- Rutaceae 운향과**
279. *Phellodendron amurense* Rupr. 황벽나무 M, P[3]  
Hwangseoksan Mt., 180619-046 [KB]
280. *Poncirus trifoliata* Raf. 팽자나무(식) M, O[1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-042 [HNHM]

**Appendix 1. Continued.**

- ★281. *Tetradium daniellii* (Benn.) T. G. Hartley 쇠나무(식)M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-134[KB]
282. *Zanthoxylum piperitum* (L.) DC. 초피나무E, M[1, 2, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-031[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-005 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-053[HNHM]
283. *Zanthoxylum schinifolium* Siebold & Zucc. 산초나무E[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-262[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-089 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-117[HNHM]; Geomangsang Mt., 180731-158 [KB]
- Polygalaceae 원지과**
284. *Polygala japonica* Houtt. 애기풀 E, M[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-007[HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-023 [KB]
- Anacardiaceae 옻나무과**
285. *Rhus chinensis* Mill. 불나무 E, M, R [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-219[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-122 [HNHM]
286. *Toxicodendron trichocarpum*(Miq.) Kuntze 개옻나무M[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-007[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-162 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-191[HNHM]; Geomangsang Mt., 180619-082 [KB]
- ★287. *Toxicodendron vernicifluum*(Stokes) F. A. Barkley 옻나무(식)M, R[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-013[HNHM]
- Aceraceae 단풍나무과**
288. *Acer buergerianum* Miq. 중국단풍 O [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-109[HNHM]
289. *Acer komarovii* Pojark. 시 닥나무 O [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-045[KB]
290. *Acer palmatum* Thunb. 단풍나무 O, P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-166[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-115 [KB]
- ★291. *Acer pictum* Thunb. 텔고로쇠나무 M, O, P [1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-033[HNHM]
292. *Acer pictum* Thunb. subsp. *mono*(Maxim.) Ohashi 고로쇠나무 M, O, P[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-064[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-007 [HNHM]; Geomangsang Mt., 180418-025[KB]
293. *Acer pseudosieboldianum* (Pax) Kom. 당단풍나무(식)O[1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-025[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-070 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-008[HNHM]; Geomangsang Mt., 180619-232 [KB]
294. *Acer tataricum* L. subsp. *ginnala*(Maxim.) Wesm. 신나무 P[1, 2]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-025[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-149 [KB]
- Balsaminaceae 봉선화과**
295. *Impatiens noli-tangere* L. 노랑물봉선 P[1]
- Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-074[HNHM]
296. *Impatiens textori* Miq. 물봉선 M [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-169[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-146 [KB]; Hwangseoksan Mt., 160921-115[KB]
- Aquifoliaceae 감탕나무과**
297. *Ilex macropoda* Miq. 대팻집나무 E [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-044[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-214 [KB]; Hwangseoksan Mt., 170525-187[KB]
- ★298. *Ilex serrata* Thunb. 낙상홍(식) O [1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-074[HNHM]
- Celastraceae 노박덩굴과**
299. *Celastrus orbiculatus* Thunb. 노박덩굴 E, O, R[1, 2]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-150[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-003 [KB]
300. *Euonymus alatus* (Thunb.) Siebold 화살나무 E, M, P[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-018[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-049 [HNHM]
301. *Euonymus alatus* (Thunb.) Siebold f. *ciliato-dentatus*(Franch. & Sav.) Hiyama 회잎나무 E, P [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-074[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-050 [HNHM]; Geomangsang Mt., 180619-125[KB]
302. *Euonymus hamiltonianus* Wall. 참빗실나무 M, P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-072[KB]
303. *Euonymus oxyphyllus* Miq. 참회나무 P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-020[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-049 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-017[HNHM]; Geomangsang Mt., 180619-040 [KB]
304. *Euonymus sachalinensis* (F. Schmidt) Maxim. 회나무 U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-101[HNHM]
305. *Tripterygium regelii* Sprague & Takeda 미역줄나무 U[1, 2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-019[KB]
- Staphyleaceae 고추나무과**
306. *Staphylea bumalda* DC. 고추나무 E [1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-077[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-072 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-073[HNHM]; Geomangsang Mt., 180619-007 [KB]
- Rhamnaceae 갈매나무과**
- ★307. *Hovenia dulcis* Thunb. 헛개나무(식) E [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-111[KB]; Hwangseoksan Mt., 170713-076 [KB]
308. *Rhamnus yoshinoi* Makino 짹자래나무 U [1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-117[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-196 [HNHM]
- Vitaceae 포도과**
309. *Ampelopsis heterophylla* (Thunb.) Siebold & Zucc. 개머루 U[1, 2, 3, 4]

**Appendix 1. Continued.**

- Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-108 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-091 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-07 [HNHM]; Geomangs-san Mt., 180731-218 [KB]
310. *Parthenocissus tricuspidata* (Siebold & Zucc.) Planch. 담쟁이  
덩굴 O, P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-054 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-015 [HNHM]
311. *Vitis amurensis* Rupr. 왕머루 E, M, P [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-014 [HNHM]
312. *Vitis flexuosa* Thunb. 새머루 E, P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-061 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-029 [HNHM]
- Tiliaceae 괴나무과**
313. *Corchoropsis tomentosa* (Thunb.) Makino 수까치깨 U [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-255 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-109 [HNHM]
314. *Tilia taquetii* C. K. Schneid. 뽕잎괴나무 P, T [2, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-172 [KB]; Geomangs-san Mt., 180619-021 [KB]
- Elaeagnaceae 보리수나무과**
315. *Elaeagnus umbellata* Thunb. 보리수나무 E, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-040 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-156 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-027 [HNHM]
- Violaceae 제비꽃과**
316. *Viola acuminata* Ledeb. 졸방제비꽃 E [1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-027 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-115 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-001 [HNHM]; Geomangs-san Mt., 180619-054 [KB]
317. *Viola albida* Palib. 태백제비꽃 E [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-014 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-118 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-017 [HNHM]; Geomangs-san Mt., 180418-065 [KB]
- ★318. *Viola albida* Palib. var. *takahashii* (Makino) Nakai 단풍제비꽃 U [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-199 [HNHM]
319. *Viola arcuata* Blume 콩제비꽃 E, P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-017 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-172 [HNHM]
320. *Viola japonica* Langsd. ex Ging. 애제비꽃 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-034 [HNHM]
321. *Viola keiskei* Miq. 잔털제비꽃 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-033 [HNHM]
322. *Viola lactiflora* Nakai 흰 젖제비꽃 U [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-029 [KB]
323. *Viola mandshurica* W. Becker 제비꽃 E, M, P [1, 3, 4]
- Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-081 [HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-004 [HNHM]; Geomangs-san Mt., 180418-110 [HNHM]
324. *Viola orientalis* (Maxim.) W. Becker 노랑제비꽃 U [1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-038 [HNHM]; Hwangseoksan Mt., 170525-243 [KB]; Geomangs-san Mt., 180419-041 [KB]
325. *Viola patrinii* DC. ex Ging. 흰제비꽃 U [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-013 [HNHM]
326. *Viola philippica* Cav. 호제비꽃 U [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-027 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-004 [HNHM]
327. *Viola rossii* Hemsl. 고깔제비꽃 M [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-024 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-014 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-015 [HNHM]; Geomangs-san Mt., 180419-056 [KB]
328. *Viola selkirkii* Pursh ex Goldie 꾀제비꽃 U [3]  
Hwangseoksan Mt., 170525-009 [KB]
329. *Viola variegata* Fisch. ex Link 알록제비꽃 E, O [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-052 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-003 [HNHM]; Geomangs-san Mt., 180418-010 [KB]
- Cucurbitaceae 박과**
330. *Trichosanthes kirilowii* Maxim. 하늘타리 E, M [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-174 [KB]
- Onagraceae 바늘꽃과**
- ★331. *Circaeа alpina* L. 쥐털이슬 U [4]  
Geomangs-san Mt., 180731-063 [KB]
332. *Circaeа cordata* Royle 쇠털이슬 P [4]  
Geomangs-san Mt., 180731-058 [KB]
333. *Circaeа lutetiana* L. subsp. *quadrисulcata* (Maxim.) Asch. & Magnus 말털이슬 P [3, 4]  
Hwangseoksan Mt., 180801-116 [HNHM]; Geomangs-san Mt., 180731-096 [KB]
- ★334. *Circaeа mollis* Siebold & Zucc. 털이슬 P [2]  
Gibaeksan Mt., 150709-047 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-001 [HNHM]; Geomangs-san Mt., 180419-060 [KB]
335. *Oenothera biennis* L. 달맞이꽃 O, P [1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-064 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-202 [KB]; Geomangs-san Mt., 180731-107 [KB]
- Halorragaceae 개미탑과**
- ★336. *Haloragis micrantha* (Thunb.) R.Br. ex Siebold & Zucc. 개미탑 U [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-036 [KB]
- Alangiaceae 박쥐나무과**
337. *Alangium platanifolium* (Siebold & Zucc.) Harms var. *trilobum* (Miq.) Ohwi 박쥐나무 E, P [1, 2, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-096 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-040 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-022 [HNHM]; Geomangs-san Mt., 180619-128 [KB]
- Cornaceae 쟁쟁나무과**

**Appendix 1. Continued.**

338. *Cornus controversa* Hemsl. 층층나무 U[1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-043 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-105 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-015 [HNHM]; Geomangsan Mt., 180731-073 [KB]
339. *Cornus kousa* F.Buerger ex Miquel 산딸나무 U[1, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-081 [HNHM]; Geomangsan Mt., 180731-260 [KB]
340. *Cornus officinalis* Siebold & Zucc. 산수유 (식) M, O[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-187 [KB]; Hwangseoksan Mt., 160922-034 [KB]
341. *Cornus walteri* Wangerin 말채나무 U[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-114 [HNHM]
- Araliaceae 두릅나무과**
342. *Aralia cordata* Thunb. var. *continentalis* (Kitag.) Y. C. Chu 독활 E, M[1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-013 [HNHM]
343. *Aralia elata* (Miq.) Seem. 두릅나무 E, M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-207 [KB]
- ★344. *Eleutherococcus divaricatus* (Siebold & Zucc.) S. Y. Hu 털오갈피나무 (식) M[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-190 [HNHM]
345. *Eleutherococcus sessiliflorus* (Rupr. & Maxim.) S. Y. Hu 오갈피나무 (식) E, M[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-046 [HNHM]
- Apiaceae 산형과**
346. *Angelica cartilaginomarginata* (Makino ex Y. Yabe) Nakai 치녀바디 U[3]  
Hwangseoksan Mt., 160921-117 [KB]
347. *Angelica decursiva* (Miq.) Franch. & Sav. 바디나물 E, M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-040 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-198 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-012 [HNHM]
348. *Angelica polymorpha* Maxim. 궁궁이 E, M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-192 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-268 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-042 [HNHM]
349. *Angelica reflexa* B.Y. Lee 강활 E, M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-026 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-036 [HNHM]; Hwangseoksan Mt., 160922-065 [KB]
- ★350. *Anthriscus sylvestris* (L.) Hoffm. 전호 M, P[3, 4]  
Hwangseoksan Mt., 170525-228 [KB]; Geomangsan Mt., 180619-184 [KB]
351. *Cryptotaenia japonica* Hassk. 파드득나물 E[3]  
Hwangseoksan Mt., 170713-033 [KB]
352. *Cymopterus melanotilingia* (H. Boissieu) C.Y.Yoon 큰참나물 E[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-048 [KB]; Hwangseoksan Mt., 160921-116 [KB]
353. *Heracleum moellendorffii* Hance 어수리 E, P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-013 [HNHM]
354. *Oenanthe javanica* (Blume) DC. 미나리 E, M[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-022 [KB]
355. *Osmorrhiza aristata* (Thunb.) Rydb. 긴사상자 U[4]  
Geomangsan Mt., 180619-016 [KB]
356. *Ostericum grosseserratum* (Maxim.) Kitag. 신감채 P[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-127 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-011 [HNHM]
357. *Peucedanum terebinthaceum* (Fisch. ex Trevir.) Fisch. ex Turcz. 기름나물 E[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-057 [HNHM]; Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-005 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-062 [HNHM]
358. *Pimpinella brachycarpa* (Kom.) Nakai 참나물 E, P[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-117 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-014 [HNHM]
- ★359. *Pimpinella koreana* (Yabe) Nakai 가는참나물 E, P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-061 [HNHM]
360. *Sanicula chinensis* Bunge 참반디 E, M[1, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-001 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-033 [HNHM]; Geomangsan Mt., 180731-272 [KB]
- ★361. *Sium ninsi* L. 감자개발나물 U[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-124 [HNHM]
362. *Sium suave* Walter 개발나물 M[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-160 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-081 [KB]
363. *Torilis japonica* (Houtt.) DC. 사상자 M[1, 2]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-107 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-045 [KB]
- Ericaceae 진달래과**
364. *Chimaphila japonica* Miq. 매화노루발 U[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-025 [KB]; Hwangseoksan Mt., 170713-100 [KB]
365. *Pyrola japonica* Klenze ex Alef. 노루발 M[1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-005 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-050 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-062 [HNHM]; Geomangsan Mt., 180619-049 [KB]
366. *Rhododendron mucronulatum* Turcz. 진달래 E, O[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-008 [HNHM]; Geochang-gun (Gohak-ri, Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-098 [HNHM]); Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-080 [KB]
367. *Rhododendron schlippenbachii* Maxim. 철쭉 O[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-025 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-112 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-016 [HNHM]; Geomangsan Mt., 180619-018 [KB]
368. *Rhododendron yedoense* Maxim. f. *poukhanense* (H.Lév.) M. Sugim. ex T. Yamaz. 산철쭉 O[1, 2, 3, 4]

**Appendix 1. Continued.**

- Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-021[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-004 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-014[HNHM], Geomangsan Mt., 180418-038 [KB]
369. *Vaccinium hirtum* Thunb. var. *koreanum*(Nakai) Kitam. 산앵도나무E[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-243[HNHM]; Hwangseoksan Mt., 170525-063 [KB]
370. *Vaccinium oldhamii* Miq. 정금나무 E [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-149[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-018 [HNHM]
- Primulaceae 앵초과**
- ★371. *Androsace umbellata* (Lour.) Merr. 봄맞이 U[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-003[HNHM]
372. *Lysimachia clethroides* Duby 큰까치수염E, P[1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-021[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-164 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-061[HNHM]; Geomangsan Mt., 180731-340 [KB]
- ★373. *Lysimachia japonica* Thunb. 좀가지풀U[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-257[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-075 [HNHM]; Geomangsan Mt., 180619-069[KB]
374. *Lysimachia vulgaris* L. var. *davurica*(Ledeb.) R. Kunth 좀쌀풀 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-063[KB]
- Ebenaceae 감나무과**
375. *Diospyros lotus* L. 고욤나무 E, M [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-169[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-076 [HNHM]
- Styracaceae 때죽나무과**
376. *Styrax japonicus* Siebold & Zucc. 때죽나무O, P[1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-104[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-044 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-001[HNHM]
377. *Styrax obassia* Siebold & Zucc. 쪽동백나무O, P[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-103[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-020 [HNHM]; Geomangsan Mt., 180619-001[KB]
- Symplocaceae 노린재나무과**
378. *Symplocos sawafutagi* Nagam. 노린재나무P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-156[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-130 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-003[HNHM]; Geomangsan Mt., 180619-004 [KB]
- Oleaceae 물푸레나무과**
- ★379. *Abeliophyllum distichum* Nakai 미선나무(식)O[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-001[HNHM]
380. *Chionanthus retusus* Lindl. & Paxton ♂팝나무(식)O[3]  
Hwangseoksan Mt., 180801-035 [KB]
381. *Fraxinus chiisanensis* Nakai 물들메나무U[2, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-082[KB]; Geomangsan Mt., 180418-082 [KB]
382. *Fraxinus mandshurica* Rupr. 들메나무P, T[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-036[KB]
383. *Fraxinus rhynchophylla* Hance 물푸레나무M, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-051[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-054 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-028[HNHM]
384. *Fraxinus sieboldiana* Blume 쇠물푸레나무M[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-061[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-091 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-037[HNHM]
385. *Ligustrum obtusifolium* Siebold & Zucc. 쥐똥나무M[1, 2, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-146[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-219 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-032[HNHM]
- Gentianaceae 용담과**
386. *Gentiana scabra* Bunge 용담M, P[2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-002[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-098 [HNHM]
- ★387. *Gentiana triflora* Pall. var. *japonica*(Kusn.) H.Hara 과남풀 M[1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-066[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-019 [KB]
388. *Gentiana zollingeri* Fawc. 큰구슬봉이U[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-029[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-009 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-023[HNHM]; Geomangsan Mt., 180418-029 [KB]
- Apocynaceae 협죽도과**
389. *Cynanchum paniculatum* (Bunge) Kitag. ex H. Hara 산해박 M[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-109[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-134 [HNHM]
390. *Metaplexis japonica* (Thunb.) Makino 박주가리E, M, P[3]  
Hwangseoksan Mt., 180801-077 [KB]
- ★391. *Tylophora floribunda* Miq. 왜박주가리U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-023[KB]
- Rubiaceae 꼈두서니과**
392. *Galium bungei* Steud. var. *trachyspermum*(A. Gray) Cufod. 네잎갈퀴U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-057[KB]
393. *Galium dahuricum* Turcz. ex Ledeb. 큰잎갈퀴U[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-096[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-105 [HNHM]; Geomangsan Mt., 180619-205[KB]
- ★394. *Galium gracilens* (A. Gray) Makino 좀네잎갈퀴U[1, 3]  
395. *Galium maximowiczii* (Kom.) Pobed. 개갈퀴 U[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-022[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-046 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-042[HNHM]; Geomangsan Mt., 180731-288 [KB]
396. *Galium paradoxum* Maxim. 두메갈퀴 U [4]  
Geomangsan Mt., 180619-201 [KB]

**Appendix 1. Continued.**

397. *Galium pogananthum* Franch. & Sav. 산갈퀴 U[3, 4]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-039 [HNHM]; Geomangsan Mt., 180619-097 [KB]
398. *Galium spurium* L. 갈퀴덩굴 E, M [1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-097 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-012 [HNHM]
399. *Galium verum* L. 솔나물 P [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-060 [KB]
400. *Paederia foetida* L. 계요등 M [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-043 [KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-015 [HNHM]
401. *Rubia argyi* (H. Lév. & Vaniot) H. Hara ex Lauener 꼭두서니 U[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-025 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-048 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-091 [HNHM]
402. *Rubia cordifolia* L. 갈퀴꼭두서니 M [4]  
Geomangsan Mt., 180731-031 [KB]
- Convolvulaceae 페꽃과**
403. *Cuscuta australis* R. Br. 실새삼 U[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-086 [HNHM]
404. *Cuscuta japonica* Choisy 새삼 M[2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-045 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-015 [HNHM]
- Boraginaceae 지치과**
405. *Bothriospermum tenellum* (Hornem.) Fisch. & C. A. Mey. 꽃받이 U[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-038 [HNHM]
406. *Trigonotis icumae* (Maxim.) Makino 덩굴꽃마리 E[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-012 [HNHM]
407. *Trigonotis peduncularis* ((Trevis.) Benth. ex Baker & S. Moore 꽂마리) E[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-036 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-028 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-073 [HNHM]
- Verbenaceae 바뀐초과**
408. *Callicarpa japonica* Thunb. 작살나무 O[1, 2, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-083 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-057 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-025 [HNHM]; Geomangsan Mt., 180731-136 [KB]
409. *Clerodendrum trichotomum* Thunb. 누리장나무 E, M, P[2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-131 [KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-073 [HNHM]; Geomangsan Mt., 180731-183 [KB]
410. *Tripora divaricata* (Maxim.) P. D. Cantino 누린내풀 M[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-017 [HNHM]
- Labiatae 꿀풀과**
411. *Agastache rugosa* (Fisch. & Mey.) Kuntze 배초향 E[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-091 [KB];  
Hwangseoksan Mt., 160921-178 [KB]
- ★412. *Ajuga spectabilis* Nakai 자란초 U [4]  
Geomangsan Mt., 180619-225 [KB]
413. *Chinopodium chinense* (Benth.) Kuntze var.  
*parviflorum* (Kudô) H. Hara 총총이꽃 E[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-128 [KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-026 [HNHM]
- ★414. *Clinopodium micranthum* (Regel) Hara 두메총총이 U[2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-269 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-066 [HNHM]; Geomangsan Mt., 180731-068 [KB]
415. *Elsholtzia ciliata* (Thunb.) Hyl. 향유 M [1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-092 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-008 [KB]
416. *Elsholtzia splendens* Nakai ex Maekawa 꽃향유 M[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-062 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-079 [HNHM]
- ★417. *Glechoma longituba* (Nakai) Kuprian. 긴병꽃풀 M[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-039 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-008 [HNHM]
418. *Isodon excisus* (Maxim.) Kudô 오리방풀 E[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-115 [KB];  
Hwangseoksan Mt., 160921-010 [KB]
419. *Isodon inflexus* (Thunb.) Kudô 산박하 E[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-019 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-160 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-068 [HNHM]; Geomangsan Mt., 180731-090 [KB]
420. *Isodon japonicus* (Burm.f.) H. Hara 방아풀 E[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-024 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-003 [HNHM]
421. *Lamium album* L. subsp. *barbatum* (Siebold & Zucc.)  
Mennema 광대수염 E, P[1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-075 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-038 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-009 [HNHM]
422. *Lamium amplexicaule* L. 광대나물 E [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-067 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-121 [HNHM]
423. *Leonurus japonicus* Houtt. 익모초 M[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-145 [KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-044 [HNHM]
424. *Leonurus macranthus* Maxim. 송장풀 M[3]  
Hwangseoksan Mt., 160921-080 [KB]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-167 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-159 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-135 [HNHM]; Geomangsan Mt., 180731-341 [KB]
425. *Lycopus lucidus* Turcz. ex Benth. 쉽싸리 M[1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-171 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-075 [KB]; Geomangsan Mt., 180731-175 [KB]

**Appendix 1. Continued.**

426. *Meehania urticifolia* (Miq.) Makino 벌깨덩굴 E, P[1, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-011 [HNHM]; Geomangsan Mt., 180619-052 [KB]
427. *Mosla scabra* (Thunb.) C. Y. Wu & H. W. Li 들깨풀 M[1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-292 [HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-032 [HNHM]
428. *Phlomis umbrosa* Turcz. 속단 E, M[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-063 [HNHM]
429. *Prunella vulgaris* L. subsp. *asiatica* (Nakai) H. Hara 꿀풀 E, M [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-050 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-186 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-086 [HNHM]; Geomangsan Mt., 180731-146 [KB]
430. *Salvia plebeia* R.Br. 배암차즈기 U [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-004 [KB]
431. *Scutellaria indica* L. 골무꽃 M [3]  
Hwangseoksan Mt., 170525-219 [KB]
432. *Scutellaria pekinensis* Maxim. var. *transitria* (Makino) H. Hara 산골무꽃 U [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-045 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-008 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-014 [HNHM]; Geomangsan Mt., 180619-013 [KB]
- ★433. *Scutellaria pekinensis* Maxim. var. *ussuriensis* (Regel)  
Hand.-Mazz. 호골무꽃 U [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-246 [HNHM]
- ★434. *Teucrium viscidum* Blume var. *miquelianum* (Maxim.) H. Hara 덩굴파향 U [3, 4]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-092 [HNHM]; Geomangsan Mt., 180731-233 [KB]
- Solanaceae 가지과**
- ★435. *Physaliastrum echinatum* (Yatabe) Makino 가시파리 U [4]  
Geomangsan Mt., 180731-273 [KB]
436. *Solanum lyratum* Thunb. 배꽃등 U [3]  
Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 151023-033 [HNHM]
437. *Solanum nigrum* L. 까마중 E, M, P [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-025 [HNHM]
- Scrophulariaceae 현삼과**
438. *Mazus pumilus* (Burm.f.) Steenis 주름잎 E [1, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-062 [HNHM]; Geomangsan Mt., 180418-066 [KB]
439. *Melampyrum roseum* Maxim. 꽂며느리밥풀 U [1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-045 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-118 [KB]
440. *Melampyrum roseum* Maxim. var. *ovalifolium* Nakai ex Beauverd 알며느리밥풀 U [4]  
Geomangsan Mt., 180731-088 [KB]
- ★441. *Mimulus tenellus* Bunge var. *nepalensis* (Benth.) P. C. Tsoong 물꽈리아재비 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-101 [HNHM]
442. *Paulownia coreana* Uyeki 오동나무 (식) T [1, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-
- 078 [HNHM]; Hwangseoksan Mt., 170525-156 [KB]
443. *Pedicularis resupinata* L. 송이풀 E, M [1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-235 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-069 [KB]; Geomangsan Mt., 180731-173 [KB]
444. *Phtheirospermum japonicum* (Thunb.) Kanitz 나도송이풀 U [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-215 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-101 [HNHM]
445. *Pseudolysimachion longifolium* (L.) Opiz 긴산꼬리풀 U [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-017 [KB]
446. *Scrophularia buergeriana* Miq. 현삼 M [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-067 [HNHM]
447. *Veronica polita* Fr. 개불알풀 U [4]  
Geomangsan Mt., 180418-072 [KB]
- Phrymaceae 파리풀과**
448. *Phryma leptostachya* L. var. *oblongifolia* (Koidz.) Honda 파리풀 M [1, 2, 3, 4]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-127 [HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-201 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-103 [HNHM]; Geomangsan Mt., 180731-013 [KB]
- Plantaginaceae 질경이과**
449. *Plantago asiatica* L. 질경이 E, M, P [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-025 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-058 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-083 [HNHM]; Geomangsan Mt., 180619-238 [KB]
- ★450. *Plantago depressa* Willd. 텔질경이 E, M, P [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-025 [HNHM]
- Caprifoliaceae 인동과**
451. *Lonicera japonica* Thunb. 인동덩굴 M, P [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-174 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-067 [HNHM]
452. *Sambucus racemosa* L. subsp. *kamtschatica* (E. Wolf) Hultén 지렁쿠나무 E, M, P [1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-054 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-014 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150423-020 [HNHM]
453. *Viburnum opulus* var. *calvescens* (Rehder) H. Hara 백당나무 O [1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-097 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-127 [KB]
454. *Weigela florida* (Bunge) A. DC. 붉은병꽃나무 O, P [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-212 [KB]
455. *Weigela subsessilis* (Nakai) L.H.Bailey 병꽃나무 O, P [1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-080 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-085 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150423-009 [HNHM]; Geomangsan Mt., 180619-107 [KB]
- Valerianaceae 마타리과**
456. *Patrinia saniculaefolia* Hemsl. 금마타리 U [2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-250 [KB]

**Appendix 1. Continued.**

457. *Patrinia scabiosaeifolia* Fisch. ex Trevir. 마타리 E, M, P[1, 2, 3, 4]
458. *Patrinia villosa* (Thunb.) Juss. 뚝갈 E [1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-063[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-088 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-104[HNHM]; Geomangsan Mt., 180731-006 [KB]
459. *Valeriana fauriei* Briq. 쥐오줌풀 E [1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-001[HNHM]
- Campanulaceae 초롱꽃과**
460. *Adenophora remotiflora* (Siebold & Zucc.) Miq. 모시대 E, M[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-232[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-093 [KB]
461. *Adenophora triphylla* (Thunb.) A. DC. var. *japonica*(Regel) H. Hara 잔대 E, M [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-204[KB]; Hwangseoksan Mt., 160922-044 [KB]; Geomangsan Mt., 180731-264 [KB]
462. *Adenophora verticillata* Fisch. var. *hirsuta*F. Schmidt 털잔대 E[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-114[HNHM]
463. *Asyneuma japonicum* (Miq.) Briq. 영아자 E[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-211[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-110 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-118[HNHM]; Geomangsan Mt., 180731-102 [KB]
464. *Codonopsis lanceolata* (Siebold & Zucc.) Benth. & Hook. f. ex Trautv. 더덕 (식) E, M, P [3]  
Hwangseoksan Mt., 170525-111 [KB]
- ★465. *Codonopsis ussuriensis* (Rupr. & Maxim.) Hemsl. 소경불알 E[3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-076[HNHM]
- ★466. *Lobelia chinensis* Lour. 수염가래꽃 M [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-173[KB]
467. *Platycodon grandiflorum* (Jacq.) A. DC. 도라지 (식)E, M, O[3]  
Hwangseoksan Mt., 180801-097 [KB]
- Compositae 국화과**
468. *Adenocaulon himalaicum* Edgew. 멀가치 E[3]  
Hwangseoksan Mt., 160922-067 [KB]
469. *Ainsliaea acerifolia* Sch. Bip. 단풍취 E[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-209[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-051 [KB]; Hwangseoksan Mt., 160922-019[HNHM]
470. *Ambrosia artemisiifolia* L. 돼지풀 U[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-134[HNHM]
471. *Artemisia capillaris* Thunb. 사철쑥 E, P[2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-075[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-027 [HNHM]
472. *Artemisia japonica* Thunb. 제비쑥 E, P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-133[KB]
473. *Artemisia keiskeana* Miq. 맑은대쑥 E, M, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-297[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-188 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-075[HNHM]
474. *Artemisia montana* (Nakai) Pamp. 산쑥 P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-134[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-031 [HNHM]
475. *Artemisia stolonifera* (Maxim.) Kom. 넓은잎외잎쑥 E, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-202[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-049 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-022[HNHM]
476. *Aster ageratoides* Turcz. 까실쑥부쟁이 U[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-063[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-132 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-051[HNHM]
- ★477. *Aster incisus* Fisch. 가새쑥부쟁이 U [1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-289[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-176 [KB]
478. *Aster koraiensis* Nakai 별개미취 E [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-068[HNHM]
479. *Aster meyendorffii* (Regel & Maack) Voss 개쑥부쟁이 U[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-078[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-123 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-005[HNHM]
480. *Aster scaber* Thunb. 참취 E, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-018[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-107 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-095[HNHM]; Geomangsan Mt., 180731-126 [KB]
481. *Atractylodes ovata* (Thunb.) DC. 삼주 E, M, P [2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-003[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-048 [HNHM]
482. *Bidens bipinnata* L. 도깨비바늘 E, M, P [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-088[HNHM]
483. *Bidens tripartita* L. 가막사리 E, M [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-059[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-089 [HNHM]
484. *Carpesium abrotanoides* L. 담배풀 M[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-069[KB]
485. *Carpesium divaricatum* Siebold & Zucc. 긴담배풀 E, M[2, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-009[KB]; Geomangsan Mt., 180731-257 [KB]
- ★486. *Carpesium glossophyllum* Maxim. 천일담배풀 U[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-117[HNHM]
487. *Carpesium triste* Maxim. 두메담배풀 U [3, 4]  
Hwangseoksan Mt., 160921-020 [KB]; Geomangsan Mt., 180731-323[KB]
488. *Chrysanthemum boreale* (Makino) Makino 산국 M, P [2, 3]  
Geochang-gun (Sangcheon-ri, Gibaeksan Mt.), 151015-066[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-083 [HNHM]

**Appendix 1.** Continued.

489. *Chrysanthemum zawadskii* Herbich 산구절초 M, P[1] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-048[HNMH]
490. *hrysanthemum zawadskii* Herbich var. *latilobum*(Maxim.) Kitam. 구절초 M, P[1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-286[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-058 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-094[HNMH]
491. *Cirsium chanroenicum* (L.) Nakai 정영경퀴 U[1] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-059[HNMH]
492. *Cirsium japonicum* Fisch. ex DC. var. *maackii*(Maxim.) Matsum. 엉겅퀴 E, M, P[1, 2, 3, 4] Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-171[HNMH]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-187 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-085[HNMH]; Geomangsan Mt., 180731-001 [KB]
- ★493. *Cirsium pendulum* Fisch. ex DC. 큰엉겅퀴 E[2] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-267[KB]
494. *Cirsium setidens* (Dunn) Nakai 고려엉겅퀴 E[1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-287[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-126 [KB]; Hwangseoksan Mt., 160921-082[KB]
495. *Conyza canadensis* (L.) Cronquist 망초 E [3] Hwangseoksan Mt., 180801-038 [KB]
496. *Cosmos bipinnatus* Cav. 코스모스 U [3] Hwangseoksan Mt., 160922-011 [KB]
497. *Crepidiastrum chelidoniifolium*(Makino) J. H. Pak & Kawano 까치고들빼기 E [1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-111[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-025 [KB]; Hwangseoksan Mt., 160921-124[KB]
498. *Crepidiastrum denticulatum*(Houtt.) J. H. Pak & Kawano 고들빼기 E, P [1, 2, 3] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-001[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-163 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 151023-066[HNMH]
499. *Crepidiastrum koidzumianum*(Kitam.) J.H.Pak & Kawano 리고들빼기 U [2] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-149[KB]
500. *Crepidiastrum sonchifolium*(Maxim.) J. H. Pak & Kawano 고들빼기 E, P [1, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-005[HNMH]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-010 [HNHM]
501. *Erechtites hieraciifolius* (L.) Raf. ex DC. 붉은서나물 E[3] Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 151023-085[HNMH]
502. *Erigeron annuus* (L.) Pers. 개망초 E[1, 2, 3, 4] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-049[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-184 [KB]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-095[HNMH]; Geomangsan Mt., 180619-127 [KB]
503. *Euchiton japonicus* (Thunb.) Holub 풀솜나물 E[4] Geomangsan Mt., 180731-122 [KB]
504. *Eupatorium japonicum* Thunb. 등골나물 E, P[1, 2, 3, 4] Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-061[HNMH]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-124 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-113[HNMH]; Geomangsan Mt., 180731-140 [KB]
505. *Eupatorium lindleyanum* DC. 골등골나물 E, P[3] Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 151023-078[HNMH]
- ★506. *Eupatorium makinoi* Kawah. & Yahara var. *oppositifolium*(Koidz.) Kawah. & Yahara 별등골나물 E, P [3, 4] Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 151023-036[HNMH]; Geomangsan Mt., 180731-178 [KB]
507. *Galinsoga ciliata* (Raf.) S.F.Blake 텔별꽃아재비 U[3, 4] Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-052[HNMH]; Geomangsan Mt., 180731-196 [KB]
- ★508. *Galinsoga parviflora* Cav. 별꽃아재비 U[2] Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-198[KB]
509. *Hemistepta lyrata* (Bunge) Bunge 지청개 E, P[1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-248[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-054 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-029[HNMH]
510. *Hieracium umbellatum* L. 조밥나물 E, P [2, 3] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-056[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-034 [HNHM]
511. *Ixeridium dentatum* (Thunb.) Tzvelev 씀바귀 E, M, P[1, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-047[HNMH]; Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-128 [HNHM]
- ★512. *Ixeris chinensis* (Thunb.) Nakai 노랑선씀바귀 U[3] Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-058[HNMH]
513. *Ixeris polyccephala* Cass. 별씀바귀 E, P[1, 2, 3] Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-042[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 151016-011 [KB]; Hwangseoksan Mt., 170525-237[KB]
514. *Ixeris strigosa* (H.Lev. & Vaniot) J. H. Pak & Kawano 선씀바귀 E, P[1, 2, 3] Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-057[HNMH]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-108 [KB]; Hwangseoksan Mt., 180801-149[KB]
515. *Lactuca indica* L. 왕고들빼기 E, M, P [1, 2, 3] Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-088[HNMH]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-046 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-035[HNHM]
516. *Leibnitzia anandria* (L.) Turcz. 솜나물 E, P[2] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-077[KB]
517. *Petasites japonicus* (Siebold & Zucc.) Maxim. 머위 E, M, P [3] Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-085[HNMH]
518. *Pseudognaphalium affine* (D. Don) Anderb. 떡쑥 E, M [3] Hamyang-gun (Hwangs-san-ri, Hwangseoksan Mt.), 150604-144[HNMH]
519. *Rudbeckia bicolor* Nutt. 원추천인국 O [4] Geomangsan Mt., 180731-010 [KB]
- ★520. *Rudbeckia laciniata* L. 삼잎국화 O [4] Geomangsan Mt., 180731-344 [KB]
521. *Saussurea gracilis* Maxim. 은분취 P[2] Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-016[KB]

**Appendix 1. Continued.**

522. *Serratula coronata* L. subsp. *insularis*(Iljin) Kitam. 산비장이 E[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-123[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-073 [KB]
523. *Sigesbeckia glabrescens* (Makino) Makino 진득찰 M, P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-192[KB]
524. *Solidago virgaurea* L. subsp. *asiatica*Kitam. ex H. Hara 미역취 E, M[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-136[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-057 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-061[HNNM]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-053[HNNM]
525. *Syneilesis palmata* (Thunb.) Maxim. 우산나물U[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-129[HNNM]; Hwangseoksan Mt., 160921-081 [KB]; Geomangsan Mt., 180731-306[KB]
526. *Synurus deltoides* (Aiton) Nakai 수리취 E, P[1, 2]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-060[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-003 [KB]
- ★527. *Synurus excelsus* (Makino) Kitam. 큰수리취 E, P[1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-073[HNNM]
528. *Taraxacum officinale* Weber 서양민들레E[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-026[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-054 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-084[HNNM]
- ★529. *Taraxacum ohwianum* Kitam. 산민들레E[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-059[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-084 [HNHM]
530. *Taraxacum platycarpum* Dahlst. 민들레 E, M[1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-110[HNNM]
531. *Tephroseris kirilowii* (Turcz. ex DC.) Holub 솜방망이E[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-002[HNNM]
532. *Tephroseris pseudosonchus* (Vaniot) C. Jeffrey & Y. L. Chen 물솜방망이U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-094[HNNM]
533. *Youngia japonica* (L.) DC. 흰리بغ이E[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-146[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-031 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-049[HNNM]
- Alismataceae 택사과**
- ★534. *Sagittaria aginashi* Makino 보풀 U [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-020[KB]
- Liliaceae 백합과**
535. *Allium macrostemon* Bunge 산달래 E, M[1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-004[HNNM]
536. *Allium monanthum* Maxim. 달래E[4]  
Geomangsan Mt., 180419-021 [KB]
537. *Allium thunbergii* G. Don 산부추 E[2, 3]
- Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-064[KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150519-026 [HNNM]
538. *Asparagus schoberioides* Kunth 비짜루 E[3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-119[HNNM]
539. *Barnardia japonica* (Thunb.) Schult. f. 무릇 E [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-179[KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-038 [HNNM]
540. *Convallaria keiskei* Miq. 은방울꽃M[2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-103[KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-117 [HNNM]
541. *Disporum smilacinum* A. Gray 애기나리E, P[1, 2, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-007[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-176 [KB]; Hwangseoksan Mt., 170525-245[HNNM]
542. *Disporum uniflorum* Baker 윤판나풀E, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-176[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-014 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-044[HNNM]
543. *Disporum viridescens* (Maxim.) Nakai 큰애기나리E, P[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-052[HNNM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-100 [HNNM]; Geomangsan Mt., 180619-179[KB]
544. *Heloniopsis koreana* Fuse, N. S. Lee & M. N. Tamura 쳐녀치마U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-025[HNNM]
545. *Hemerocallis fulva* (L.) L. 원추리 E, M, O, P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-077[HNNM]
- ★546. *Hemerocallis hakuunensis* Nakai 백운산원추리E, M, O, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-173[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-041 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-073[HNNM]; Geomangsan Mt., 180731-085 [KB]
547. *Hosta capitata* (Koidz.) Nakai 일월비비주E, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-059[HNNM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-131 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-004[HNNM]; Geomangsan Mt., 180731-243 [KB]
548. *Lilium amabile* Palib. 텔중나리 E, M [1, 2, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-031[HNNM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-081 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-037[HNNM]
549. *Lilium lancifolium* Thunb. 참나리 E, M[1, 2]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-089[HNNM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-190 [KB]
550. *Lilium tsingtauense* Gilg 하늘말나리E, M, O, P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-072[HNNM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-012 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-014[HNNM]

**Appendix 1.** Continued.

551. *Liriope spicata* (Thunb.) Lour. 개맥문동 M, P[2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-181[KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-108  
[HNHM]; Geomangsan Mt., 180731-119[KB]
552. *Lloydia triflora* (Ledeb.) Baker 나도개감채 U[4]  
Geomangsan Mt., 180419-015 [KB]
553. *Maianthemum japonicum* (A. Gray) LaFrankie 풀솜대 E[1, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110420-  
011[HNHM]; Geomangsan Mt., 180619-165 [KB]
554. *Paris verticillata* M. Bieb. 삿갓나물 E[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-  
028[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-024 [HNHM]; Geomangsan Mt., 180619-142[KB]
- ★555. *Polygonatum humile* Fisch. ex Maxim. 각시등굴레 E, P[1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-  
013[HNHM]
556. *Polygonatum inflatum* Kom. 통등굴레 U[1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-  
001[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan  
Mt.), 150604-041 [HNHM]
557. *Polygonatum involucratum* (Franch. & Sav.) Maxim. 용등굴  
레 E, P[1]
558. *Polygonatum lasianthum* Maxim. 죽대 M [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-  
004[HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan  
Mt.), 151022-001 [HNHM]
559. *Polygonatum odoratum* var. *pluriflorum*(Miq.) Ohwi 등굴레  
E, P[1, 2, 3, 4]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-  
018[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.),  
150709-188 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan  
Mt.), 150604-002[HNHM]; Geomangsan Mt., 180619-168 [KB]
560. *Smilax china* L. 청미래덩굴 E, M, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
199[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-005 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan  
Mt.), 150423-026[HNHM]
561. *Smilax nipponica* Miq. 선밀나물 E, P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
068[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan  
Mt.), 150423-032 [HNHM]
562. *Smilax riparia* A. DC. 밀나물 E, P [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-  
113[HNHM]
- ★563. *Smilax sieboldii* Miq. f. *inermis*(Nakai ex T. Mori) H.Hara  
민청가시덩굴 E, P [2, 3]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-146[KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-034  
[HNHM]
564. *Tricyrtis macropoda* Miq. 뼈꽃나리 E[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-  
087[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan  
Mt.), 150812-059 [KB]; Hamyang-gun (Hwangsan-ri,  
Hwangseoksan Mt.), 150604-197[HNHM]
565. *Veratrum maackii* Regel var. *japonicum*(Baker) Schmizu 여로  
M [1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-  
032[HNHM]
- ★566. *Veratrum maackii* Regel var. *parviflorum*(Maxim.) H. Hara  
파란여로 M[2, 3]
- Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-092[KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-122  
[HNHM]
567. *Veratrum versicolor* Nakai 흰여로 U[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 120721-  
002[KB]
- Dioscoreaceae 마과**
568. *Dioscorea japonica* Thunb. 참마 E, M [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-127[KB]
569. *Dioscorea nipponica* Makino 부채마 E, P[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-  
008[HNHM]
570. *Dioscorea tenuipes* Franch. & Sav. 각시마 M[2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-009[KB];  
Hwangseoksan Mt., 180801-084, Geomangsan Mt., 180731-189  
[HNHM]
- Pontederiaceae 물옥잠과**
571. *Monochoria vaginalis* (Burm.f.) C.Presl var. *plantaginea*(Roxb.)  
Solms 물달개비 U[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-183[KB]
- Iridaceae 봇꽃과**
572. *Iris ensata* Thunb. var. *spontanea*(Makino) Nakai 꽃창포 O,  
P[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-  
140[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan  
Mt.), 150605-159 [KB]
- ★573. *Iris koreana* Nakai 노랑봇꽃 (식) O, P [3]  
Hwangseoksan Mt., 170525-182 [KB]
574. *Iris rossii* Baker 각지봇꽃 O, P [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150423-  
019[HNHM]
575. *Iris sanguinea* Donn ex Hornem. 봇꽃 M, O, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-  
063[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan  
Mt.), 150709-193 [KB]; Hamyang-gun (Hwangsan-ri,  
Hwangseoksan Mt.), 150604-137[HNHM]
- Juncaceae 골풀과**
576. *Juncus decipiens* (Buchenau) Nakai 골풀 M, P [2, 3, 4]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-069[KB];  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-165  
[HNHM]; Geomangsan Mt., 180731-295[KB]
- ★577. *Juncus papillosum* Franch. & Sav. 청비녀골풀 U[1, 2]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-  
165[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan  
Mt.), 150812-146 [KB]
- ★578. *Juncus tenuis* Willd. 길골풀 U [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-  
159[HNHM]
579. *Luzula capitata* (Miq. ex Franch. & Sav.) Kom. 꿩의밥 U[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-  
005[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.),  
150424-010 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan  
Mt.), 150423-082[HNHM]; Geomangsan Mt., 180418-049  
[KB]
- Commelinaceae 닭의장풀과**
580. *Commelina communis* L. 닭의장풀 E, M, P [1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-  
091[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan  
Mt.), 150709-012 [KB]; Hamyang-gun (Hwangsan-ri,  
Hwangseoksan Mt.), 150604-136[HNHM]

**Appendix 1. Continued.**

- ★581. *Commelina communis* L. var. *angustifolia* Nakai 좀닭의장풀 E, M, P[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-115 [HNHM]
582. *Streptolirion volubile* Edgew. 덩굴닭의장풀 E[2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-084 [KB]
- Gramineae 벼과**
583. *Achnatherum pekinense* (Hance) Ohwi 나래새 P[3, 4]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 151023-012 [HNHM]; Geomangsan Mt., 180731-302 [KB]
584. *Alopecurus aequalis* Sobol. 똑새풀 P[1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-046 [HNHM]
585. *Arthraxon hispidus* (Thunb.) Makino 조개풀 P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-084 [HNHM]
586. *Arundinella hirta* (Thunb.) Tanaka var. *ciliata* (Thunb.) Koidz.  
새 P [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-117 [KB];  
Hwangseoksan Mt., 160921-027 [KB]; Geomangsan Mt.,  
180731-026 [KB]
- ★587. *Brachypodium sylvaticum* (Huds.) P. Beauv. 숲개밀 P[4]  
Geomangsan Mt., 180619-159 [KB]
- ★588. *Bromus catharticus* Vahl 큰이삭풀 U [3]  
Hwangseoksan Mt., 170525-176 [HNHM]
589. *Bromus remotiflorus* (Steud.) Ohwi 꼬리새 P[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-062 [HNHM]
590. *Calamagrostis arundinacea* (L.) Roth 실새풀 P[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-004 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-112 [KB]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-017 [HNHM]
591. *Dactylis glomerata* L. 오리새 P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-077 [KB];  
Hwangseoksan Mt., 170526-106 [HNHM]
592. *Diarrhena japonica* (Franch. & Sav.) Franch. & Sav. 용수염 P[1, 3]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 120721-035 [KH]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-002 [HNHM]
- ★593. *Diarrhena mandshurica* Maxim. 껍질용수염 P[1]  
Hamyang-gun (Sangwon-ri, Geumwonsan Mt.), 110716-093 [HNHM]
594. *Digitaria ciliaris* (Retz.) Koeler 바랭이 P[3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-086 [HNHM]
595. *Echinochloa crus-galli* (L.) P. Beauv. 들꼬 E, S [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-036 [HNHM]
596. *Agropyron ciliare* (Trin.) Franch. 속털개밀 P[3]  
Hwangseoksan Mt., 170525-105 [KB]
597. *Eragrostis ferruginea* (Thunb.) P. Beauv. 그령 P [1, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-010 [HNHM]; Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-138 [HNHM]
598. *Eragrostis multicaulis* Steud. 비노리 P[4]  
Geomangsan Mt., 180731-018 [KB]
599. *Festuca arundinacea* Schreb. 큰김의털 U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-001 [HNHM]
- ★600. *Festuca rubra* L. 왕김의털 P [3]  
Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-096 [HNHM]
601. *Lolium perenne* L. 호밀풀 U [3]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-104 [HNHM]
- ★602. *Microstegium vimineum* (Trin.) A. Camus 나도바랭이새 P[1]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110918-093 [HNHM]
603. *Milium effusum* L. 나도겨이삭 P [3, 4]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 150710-127 [HNHM]; Geomangsan Mt., 180619-251 [KB]
604. *Misanthus sinensis* Andersson var. *purpurascens* (Andersson)  
Matsum. 억새 P [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-258 [KB];  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-137 [HNHM]
605. *Muhlenbergia japonica* Steud. 쥐꼬리새 P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-042 [KB]
- ★606. *Oplismenus burmanni* (Retz.) P. Beauv. 민주름조개풀 P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-278 [HNHM]
607. *Oplismenus undulatifolius* (Ard.) P. Beauv. 주름조개풀 P[1, 2, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-258 [HNHM];  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-148 [KB];  
Geomangsan Mt., 180731-336 [KB]
608. *Panicum bisulcatum* Thunb. 개기장 E, P[3]  
Hwangseoksan Mt., 160922-060 [KB]
609. *Paspalum thunbergii* Kunth ex Steud. 참새피 M, P[3, 4]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-141 [HNHM]; Geomangsan Mt., 180731-116 [KB]
610. *Pennisetum alopecuroides* (L.) Spreng. 수크령 P[2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150918-146 [KB];  
Hwangseoksan Mt., 160922-055 [KB]
611. *Poa acroleuca* Steud. 실포아풀 P [1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-028 [HNHM]
612. *Poa annua* L. 새포아풀 P [3]  
Hamyang-gun (Bongjeon-ri, Hwangseoksan Mt.), 151022-045 [HNHM]
613. *Poa pratensis* L. 왕포아풀 P [3]  
Hwangseoksan Mt., 180619-185 [KIOM]
614. *Sasa borealis* (Hack.) Makino & Shibata 조릿대 E, M, P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-060 [HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-076 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-006 [HNHM]; Geomangsan Mt., 180619-241 [KB]
615. *Setaria viridis* (L.) P. Beauv. 강아지풀 P[3, 4]  
Hwangseoksan Mt., 180801-119 [KB]; Geomangsan Mt., 180731-052 [KB]
616. *Spodipogon cotulifer* (Thunb.) Hack. 기름새 P[2]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-109 [KB]
617. *Spodipogon sibiricus* Trin. 큰기름새 P[3, 4]  
Hwangseoksan Mt., 160921-092 [KB]; Geomangsan Mt., 180731-083 [KB]
618. *Trisetum bifidum* (Thunb.) Ohwi 잡자리피 P[1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-152 [HNHM]; Hwangseoksan Mt., 170525-099 [KB]

**Appendix 1.** Continued.**Araceae 천남성과**

★619. *Arisaema amurense* Maxim. 등근잎천남성 M, P[1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-111[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-018 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-035[HNHM]; Geomangsan Mt., 180418-074 [KB]

620. *Arisaema amurense* Maxim. f. *serratum*(Nakai) Kitag. 천남성 M, P[1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-114[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-034 [HNHM]

621. *Arisaema serratum* (Thunb.) Schott 접박이 천남성 M, P[1, 2, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-010[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150812-034 [KB]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-057[HNHM]; Geomangsan Mt., 180731-215 [KB]

622. *Pinellia ternata* (Thunb.) Makino 반하 M [1, 2]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-099[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-081 [KB]

**Cyperaceae 사초과**

★623. *Carex aphanolepis* Franch. & Sav. 골사초 P[3, 4]  
Hwangseoksan Mt., 180619-178 [KIOM], Geomangsan Mt., 180619-094[KB]

★624. *Carex biwensis* Franch. & Sav. 솔잎사초 P[1]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-065[HNHM]  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-071[HNHM]

625. *Carex bostrychostigma* Maxim. 길뚝사초 P[3]  
Hwangseoksan Mt., 170526-024 [KB]

626. *Carex breviculmis* R. Br. 정사초 P[1, 3, 4]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-109[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-041 [HNHM]; Geomangsan Mt., 180418-114[KB]

★627. *Carex capillacea* Boott 찬솔잎사초 P [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-251[HNHM]

★628. *Carex doniana* Spreng. 흰사초 P [4]  
Geomangsan Mt., 180731-284 [KB]

★629. *Carex fernaldiana* H. Lev. & Vaniot 실사초 P[3]  
Hwangseoksan Mt., 170525-028 [KB]

★630. *Carex forficula* Franch. & Sav. 산뚝사초 P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-138[HNHM]

631. *Carex gibba* Wahlenb. 나도별사초 P [3]  
Hwangseoksan Mt., 170525-101 [KB]

632. *Carex japonica* Thunb. 개찌버리사초 P [1, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-009[HNHM]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-098 [HNHM]

★633. *Carex laevissima* Nakai 꽈꽝이사초 P [1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-197[HNHM]

634. *Carex lanceolata* Boott 그늘사초 P [2, 3, 4]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150424-024[KB];  
Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-070[HNHM]; Geomangsan Mt., 180418-013[KB]

635. *Carex leiorhyncha* C.A.Mey. 산팽이사초 P[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110604-027[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150605-061 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-139[HNHM]; Geomangsan Mt., 180619-043 [KB]

636. *Carex maximowiczii* Miq. 왕비늘사초 P [1, 3]  
Geochang-gun (Changseon-ri, Geumwonsan Mt.), 110519-154[HNHM]; Hwangseoksan Mt., 170525-108 [KB]

★637. *Carex papulosa* Boott 쇠낚시사초 P [3]

★638. *Carex polyschoena* H. Lév. & Vaniot 가지청사초 P[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-008[HNHM]

★639. *Carex sabynensis* Less. ex Kunth 실청사초 P[1, 3]  
Geochang-gun (Wolseong-ri, Geumwonsan Mt.), 110514-004[HNHM]; Hwangseoksan Mt., 170526-108 [KB]

640. *Carex siderosticta* Hance 대사초 P[1, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110515-017[HNHM]; Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150423-031 [HNHM]; Geomangsan Mt., 180419-061[KB]

641. *Cyperus americanus* Maxim. 방동사니 M [2]  
Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-039[KB]

642. *Cyperus iria* L. 참방동사니 U [2, 3]  
Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-031[KB];  
Hwangseoksan Mt., 180801-095 [KB]

643. *Scirpus karuizawensis* Makino 솔방울고랭이 U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-269[HNHM]

644. *Scirpus wickurae* Boeck. 방울고랭이 U [3]

Hamyang-gun (Sangwon-ri, Hwangseoksan Mt.), 150813-028[HNHM]

**Orchidaceae 난초과**

645. *Cephalanthera erecta* (Thunb.) Blume 은난초 U[1]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110519-034[HNHM]

646. *Cephalanthera longibracteata* Blume 은대난초 U[1, 2, 3, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110518-081[HNHM]; Geochang-gun (Gohak-ri, Gibaeksan Mt.), 150709-102 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-061[HNHM]; Geomangsan Mt., 180731-109 [KB]

647. *Gastrolezia elata* Blume 천마 M[3]  
Hwangseoksan Mt., 170714-041 [KB]

648. *Liparis kumokiri* F. Maek. 옥잠난초 U[1, 2, 3]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110830-138[HNHM]; Hamyang-gun (Sangwon-ri, Gibaeksan Mt.), 150917-047 [KB]; Hamyang-gun (Hwangsan-ri, Hwangseoksan Mt.), 150604-203[HNHM]

★649. *Oreorchis patens* (Lindl.) Lindl. 감자난초 U[1, 4]  
Geochang-gun (Sangcheon-ri, Geumwonsan Mt.), 110514-008[HNHM]; Geomangsan Mt., 180619-215 [KB]

1, Geumwonsan Mt.; 2, Gibaeksan Mt.; 3, Hwangseoksan Mt.; 4, Geomangsan Mt. E, edible plant; F, fiber plant; M, medicinal plant; O, ornamental plant; P, pasture plant; R, industrial raw material plant; S, stain plant; T, timber source plant; U, unknown use plant; The number behind scientific name means voucher specimen number submitted to National History Museum, Hannam University[HNHM], Korea National Arboretum[KH], National Institute of Biological Resources[KB], Korean Institute of Oriental Medicine[KIOM]; ?, Newly found taxa in this investigation.