

The Ethnobotanical Investigation around National Parks in the Northern Area of Province Gyeongsangbuk-do, Korea

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Abstract - We investigated traditional knowledge about ethnobotanical uses around national parks in the northern areas of Province Gyeongsangbuk-do, with the focus on the Sobeaksan National Park area. Interviews were carried out to 138 residents at 42 places from 7 counties and/or cities, and verified species and usage information were categorized by taxonomic groups, usage, and used parts. The ethnobotanical species of the regions consisted of a total of 277 taxa: 244 species, 3 subspecies, 28 varieties, and 2 forma in 213 genera of 79 families. The significant native plants included one Endangered Species (*Paeonia obovata* Max.) and four endemic species (*Salix hallaisanensis* H. Lev., *Aconitum pseudolaeve* Nakai, *Paulownia coreana* Uyeki, and *Cirsium setidens* (Dunn) Nakai, *Sasa coreana* Nakai). About 17 Approved Species for Delivering Overseas designated by Korea Ministry of Environment have been also traditionally valuable in the regions. The main usage of the plants were edible (185 taxa) and medicinal (175 taxa). Leaves were most commonly used parts (109 taxa), followed by stems (73 taxa), fruits (69 taxa), roots (67 taxa), and wholes (57 taxa). The traditional usage of plants were diverse as those useful parts. Leaves, fruits and seeds were used as edible and medicinal; sprouts (young shoots) were mainly used as edible; but roots and flowers were used as medicinal. The study does not only provides examples of traditional uses of native plants, but also facilitates sustainable managements and developments of ethnobotanical knowledge for the contemporary society.

Key words - Endemic species, Ethnobotanical, Korea national park, Traditional knowledge

Introduction

Biological resources have been an important contributor to human society as food, medicines, clothing, and other materials (Laird, 2002; Kunwar and Bussmann, 2008; Lee and Shin, 2009; Chung *et al.*, 2016). Since most biological resources have been used without controls and/or regulations among providing and utilizing countries, sometimes the counties have had trouble figuring out reasonable ways to share benefits from the resources (Kunwar and Bussmann, 2008; Ministry of Environment, 2011). To resolve the problem, at the 10th UN meeting 'Convention on Biological Diversity' in 2010, all the members of counties agreed on ABS (Access to Genetic Resources and Benefit Sharing) so

called Nagoya Protocol, which provides a platform for efficient utilization of biological resources and has stimulated research on traditional knowledge on native plants in each county (Choi *et al.*, 2012; Kim *et al.*, 2015).

A traditional knowledge is generally accepted as practical knowledge developed for generations by indigenous people in their own society to adopt to a certain natural, cultural, and local environments (Laird, 2002; Kim *et al.*, 2003; Chung *et al.*, 2016). In South Korea, The Act on the Conservation and Use of Biological Diversity (law) states that a traditional knowledge is 'Knowledge, technology and practice, etc. of individuals or local communities that has maintained a traditional life style suitable to the conservation of biodiversity and sustainable use of biological resources'. Most indigenous, local people (tribes) have accumulated knowledge on their own native plants; about 10-18% of known vascular

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plants (about 297,000 taxa) have been used traditionally as food and/or medicines (Kunwar and Bussmann, 2008). In the modern society, most drugs are from natural resources, and pharmaceutical companies in developed countries have made an effort to find novel remedies from natural extracts (nature) (Laird, 2002; Lee and Shin, 2009).

Recently in South Korea, research on ethnobotanical knowledge have been actively conducted especially by national institutes such as Korea National Arboretum, National Institute of Biological Resources, and Rural Development Administration (Chung *et al.*, 2010; Chung *et al.*, 2011a; Chung *et al.*, 2011b; Im *et al.*, 2011; Jeong *et al.*, 2011; Kim *et al.*, 2012; Jeong *et al.*, 2012a; Jeong *et al.*, 2012b; Shin *et al.*, 2012; Son *et al.*, 2012; Shin *et al.*, 2013; Chun and Park, 2014; Jeong *et al.*, 2014; Kim *et al.*, 2015; Park and Chun, 2015; Kim and Kang, 2016). Diverse resources were used to collect ethnobotanical information such as interviews and historical literatures. They surveyed local useful plants and figured out which plant species, which parts, and how to use them for what purposes. Lee *et al.* (2016) revealed traditional knowledge on Jeju Island plants from literatures written in Joseon dynasty (1392-1870 AD), and Chung *et al.* (2016) carried out qualitative analyses on accumulated data of traditional knowledge on vascular plants.

National parks are restricted areas for conservation purposes. There are 22 national parks in South Korea, and the parks exhibits high biological diversity including endemics and endangered species (Choi and Oh, 2009; Jang *et al.*, 2011). In the northern area of Province Gyeongsangbuk-do, it is very mountainous and several national parks are located such as Sobaksan, Woraksan, Songnisan, and Juwangsang national parks because two mountain ranges pass through: Baekdudaegan (the largest mountain range in the Korean Peninsula running north to south) and Taebaek Mountains (Choi and Oh, 2009; Jeong *et al.*, 2009; Jang *et al.*, 2011). The parks house of many native vascular plants, and previous floristic surveys on vascular plants reported more than 800 native vascular plants from the parks (Korea National Park Service, 2007; Choi and Oh, 2009; Jeong *et al.*, 2009; Jang *et al.*, 2011; Jang *et al.*, 2015). In the present study, we surveyed and analyzed botanical traditional knowledge in the northern area of Gyeongsangbuk-do to obtain and characterize

ethnobotanical information, which will provide insight on conservation and utilization of biological and genetic resources.

Methods and Materials

Botanical traditional knowledge were collected in 42 places from seven counties and/or cities adjacent areas of Sobaksan, Woraksan, Songnisan, and Juwangsang national parks in the northern area of Province Gyeongsangbuk-do from 2013 to 2014 (Fig. 1). Interviews with local, indigenous residents were conducted. We also collected information of interviewees such as addresses, genders, and ages; and recorded and dictated their statements on traditional plant usage. If possible, we collected used plants for species identification and verification. Interviews and plant collections were conducted as stated in Chung *et al.* (2011a) and Jeong *et al.* (2012a, b).

For plant species identifications, Lee (1996a, b), Lee (2003), Park (2009), and Korean Fern Society (2005) were used, and a taxonomic system and scientific names followed National Institute of Biological Resources (<http://species.nibr.go.kr/>). Native, cultivated and/or introduced plants were determined by National Institute of Biological Resources (2013) and Park



Fig. 1. Investigation sites.

(2009), respectively. The plants Approved Species for Delivering Overseas were identified based on the 'Biodiversity Conservation and Use' law by Ministry of Environment (2016).

Usage purposes were categorized as an edible, medicinal, beauty, dye, fiber, household item, insecticide, oil, ornamental, timber, and others. In addition, used parts were grouped into leaf, stem, root, flower, fruit, seed, whole, sprout (young shoot), and others. Raw data of records and dictations are retained at the National Institute of Biological Resources, and detailed methods of preparing plants are available at the database of National Institute of Biological Resources (<http://species.nibr.go.kr/>).

Results and Discussion

Interviewee Composition

Total of 138 persons (43 males and 95 females) were interviewed with a high percentage of female interviewees (68.8 %) in the study (Table 1). Among interviewees, 121 persons have lived in the Baekdudaegan region (Mt. Sobaeksan-Mt. Woraksan-Mt. Songnisan) Sobaksan national park area. The small number of 17 interviewees participated in the Junwangsang National Park region. 80s (44.2 %) and 70s

(34.1 %) are major interviewees. In average, female interviewees (79.9 years old in average) are four years older than male interviewees (75.7 years old in average). The oldest interviewee was a 95-year-old female, and a 56 years old male is youngest. For urban migrations and civilization, most towns in the surveyed areas have experienced population declines and become ageing societies. Traditional knowledge on native plants have been developed for generations, but there are not many people remaining to practice them due to natural and cultural structure changes in a society.

Ethnobotanical Composition

Around national park areas in the northern area of Gyeongsangbuk-do, traditional knowledge on 277 vascular plant taxa are collected (244 species, 3 subspecies, 28 varieties, and 2 forma in 213 genera of 79 families; Table 2, Appendix 1). Because the surveyed areas included habitats in high altitude exhibiting a great vascular plant diversity, various native plants growing in high mountains have been used: *Oplopanax elatus* (Nakai) Nakai, *Rhododendron brachycarpum* D. Don ex G. Don, *Parasenecio firmus* (Kom.) Y.L.Chen, *Acer tegmentosum* Max. The usage of *Oplopanax elatus*, *Rhododendron brachycarpum*, and *Acer tegmentosum* is revealed for the first time in the study. The species did not

Table 1. Gender and age ratios of respondents for interviews around national parks in northern area of Gyeongsangbuk-do, Korea

| Gender | Age | | | | | Sum | Ave. | Ratio (%) |
|-----------|-----|------|------|------|-----|-------|------|-----------|
| | 50s | 60s | 70s | 80s | 90s | | | |
| Male | 3 | 6 | 17 | 16 | 1 | 43 | 75.7 | 31.2 |
| Female | 0 | 8 | 30 | 45 | 12 | 95 | 79.9 | 68.8 |
| Total | 3 | 14 | 47 | 61 | 13 | 138 | 78.6 | 100.0 |
| Ratio (%) | 2.2 | 10.1 | 34.1 | 44.2 | 9.4 | 100.0 | - | - |

Table 2. The composition of ethnobotanical species around national parks in northern areas of Gyeongsangbuk-do, Korea

| Taxa | Fam. | Gen. | Sp. | Subsp. | Var. | For. | Total | Ratio (%) |
|----------------|------|------|-----|--------|------|------|-------|-----------|
| Pteridophyta | 3 | 3 | 3 | - | - | - | 3 | 1.1 |
| Gymnospermae | 3 | 5 | 6 | - | - | - | 6 | 2.1 |
| Angiospermae | 73 | 206 | 238 | 3 | 28 | 2 | 271 | 96.8 |
| Dicotyledons | 66 | 178 | 208 | 3 | 22 | 1 | 234 | 83.6 |
| Monocotyledons | 7 | 28 | 30 | - | 6 | 1 | 37 | 13.2 |
| Total | 79 | 214 | 247 | 3 | 28 | 2 | 280 | 100.0 |

included in the previous, comprehensive ethnobotanical investigation in the interior region of Gyeongsangbuk-do province (Chung *et al.*, 2010). *Cinnamomum camphora* (L.) J. Presl and *Taxillus yadoriki* (Siebold ex Maxim.) Danser are native to southern part of the Korean peninsula. In the investigated areas, the species should have been obtained as a dried material at traditional markets.

Major diversities of ethnobotanical species in the regions belong to dicotyledons (Table 2). The highest diversity is found in Compositae with 37 taxa; and Rosaceae (25 taxa), Fabaceae (17 taxa), Poaceae (15 taxa), and Liliaceae (15 taxa) follow (Table 3). Previous ethnobotanical studies in South Korea also demonstrate that Compositae has been the most commonly used taxonomic group, which should relate to great diversity of Compositae species in the Korean Peninsula (Chung *et al.*, 2010; Chung *et al.*, 2011a; Chung *et al.*, 2011b; Im *et al.*, 2011; Jeong *et al.*, 2011; Jeong *et al.*, 2012a; Jeong *et al.*, 2012b; Kim *et al.*, 2012; Shin *et al.*, 2012; Son *et al.*, 2012; Shin *et al.*, 2013; Chun and Park, 2014; Jeong *et al.*, 2014; Kim *et al.*, 2015; Park and Chun, 2015; Kim and Kang, 2016). In addition, most commonly used plant groups provide foods such as vegetables, salads, soups, and desserts. The Korean culture of having several vegetables in daily foods have also increased consumption of wild and native plants.

In the investigation, 79 cultivated and/or planted taxa are included (Appendix 1). Various cultivated species with a long history have been grown and naturalized in the Korean

peninsula for diverse usage. Most cultivated species are edible (58 taxa), which includes daily foods for main and side dishes as well as seasoning such as *Oryza sativa* L., *Raphanus sativus* L., and *Allium scorodorpasum* var. *viviparum* Regel. It is far from understanding when and where initially the species became cultivated and introduced to Korea. Ethnobotanical and biological investigations on cultivated species are desired to foster cultivated plant usage in the World.

Important Ethnobotanical Species

The surveyed plants include endangered species, endemics, and Approved Species for Delivering Overseas (Table 4). *Paeonia obovata* Max., an endangered species degree II, has been collected for a medicinal usage; and Korean Endemics have been also used (*Salix hallaisanensis* H. Lev., *Aconitum pseudolaeye* Nakai, *Paulownia coreana* Uyeki, *Cirsium setidens* (Dunn) Nakai, *Sasa coreana* Nakai). Furthermore, about 17 Approved Species for Delivering Overseas such as *Codonopsis pilosula* (Franch.) Nannf. and *Cirsium setidens* (Dunn) Nakai have been consumed without any regulations (Table 4).

About 543 endangered vascular plants (about 7% of Korean vascular plants) are designated by Korea Ministry of Environment (Kim *et al.*, 2008; National Institute of Biological Resources, 2012), and 979 vascular plants are in the list of Approved Species for Delivering Overseas (Ministry of Environment, 2016). Because most endangered plants have long been used by local people without any

Table 3. The family composition of ethnobotanical species around national parks in northern areas of Gyeongsangbuk-do, Korea

| Family name | No. of taxa | Ratio (%) |
|--------------------|-------------|-----------|
| Compositae 국화과 | 37 | 13.4 |
| Rosaceae 장미과 | 25 | 9.0 |
| Fabaceae 콩과 | 17 | 6.1 |
| Poaceae 화본과 | 15 | 5.4 |
| Liliaceae 백합과 | 15 | 5.4 |
| Apiaceae 미나리과 | 8 | 2.9 |
| Solanaceae 가지과 | 7 | 2.5 |
| Campanulaceae 초롱꽃과 | 7 | 2.5 |
| Lamiaceae 꿀풀과 | 6 | 2.2 |
| Others | 143 | 50.5 |
| Total | 280 | 100.0 |

Table 4. The important native ethnobotanical species around national parks in northern area of Gyeongsangbuk-do, Korea

| Category | Scientific name and Korean name |
|---|---|
| Endangered species (Ministry of Environment) | <i>Paeonia obovata</i> Max. 산작약 |
| Endemic species | <i>Salix hallaisanensis</i> H. Lev. 떡버들 |
| | <i>Aconitum pseudolaeve</i> Nakai 진범 |
| | <i>Paulownia coreana</i> Uyeki 오동나무 |
| | <i>Cirsium setidens</i> (Dunn) Nakai 고려엉겅퀴 |
| | <i>Sasa coreana</i> Nakai 고려조릿대 |
| | <i>Salix hallaisanensis</i> H. Lev. 떡버들 |
| | <i>Taxillus yadoriki</i> (Siebold ex Maxim.) Danser 참나무겨우살이 |
| | <i>Aconitum pseudolaeve</i> Nakai 진범 |
| | <i>Epimedium koreanum</i> Nakai 삼지구엽초 |
| | <i>Glycine soja</i> Siebold & Zucc. 돌콩 |
| Approved species for delivering overseas | <i>Acer tegmentosum</i> Max. 산겨릅나무 |
| | <i>Oplopanax elatus</i> (Nakai) Nakai 땃두릅나무 |
| | <i>Bupleurum falcatum</i> L. 시호 |
| | <i>Rhododendron brachycarpum</i> D. Don ex G. Don 만병초 |
| | <i>Lithospermum erythrorhizon</i> S. et Z. 지치 |
| | <i>Paulownia coreana</i> Uyeki 오동나무 |
| | <i>Codonopsis pilosula</i> (Franch.) Nannf. 만삼 |
| | <i>Cirsium setidens</i> (Dunn) Nakai 고려엉겅퀴 |
| | <i>Acorus calamus</i> L. 창포 |
| | <i>Allium microdictyon</i> Prokh. 산마늘 |
| <i>Lilium callosum</i> Siebold & Zucc. 땅나리 | |
| | <i>Gastrodia elata</i> Blume 천마 |

awareness of conservation concerns, local residents utilize them as before. However, a biological conservation law in South Korea prohibits collections from natural habitats in national parks. Local, and indigenous people should be informed about regulations that apply to use native plants. Traditionally widely used native plants have high potentials to contribute to human well-being in the contemporary society. We need to develop agreeable ways to use native plants to achieve sustainable use of biological resources.

Usage of Ethnobotanical Species

In the surveyed areas, ethnobotanical species are used for various purposes (Table 5). Most common usage is for food (185 taxa), and medicinal use is the second most frequent purpose with 175 taxa. Household items (24 taxa), beauty (8 taxa), fiber (8 taxa), oil (8 taxa) are also main usage.

Table 5. The usage of ethnobotanical species around national parks in northern area of Gyeongsangbuk-do, Korea

| Usage | No. of taxa |
|-----------------|-------------|
| Edible | 185 |
| Medicinal | 174 |
| Household items | 24 |
| Beauty | 8 |
| Fiber | 8 |
| Oil | 8 |
| Timber | 6 |
| Insecticide | 4 |
| Others | 25 |

Traditionally in Korea, wild plants have been used greatly for vegetables (Chung *et al.*, 2010; Chung *et al.*, 2011a; Chung *et al.*, 2011b; Im *et al.*, 2011; Jeong *et al.*, 2011; Jeong *et al.*,

2012b; Kim *et al.*, 2012; Shin *et al.*, 2012; Son *et al.*, 2012; Shin *et al.*, 2013; Chun and Park, 2014; Jeong *et al.*, 2014; Kim and Kang, 2016). In contrast, native plants have been used for medicines most in Jeju (the largest island off the coast of the Korean Peninsula) and Ulleung-do (120 km east of the Korean Peninsula) islands (Jeong *et al.*, 2012a; Kim *et al.*, 2015). Ethnobotanical usage are diverse in different areas and also reflecting their natural and artificial environments.

Useful Parts of Ethnobotanical Species

Various parts of vascular plant species are used (Fig. 2). Leaves are most commonly used part in 109 taxa, and stems (73 taxa), fruits (69 taxa), roots (67 taxa), and wholes (57 taxa) are also used in various occasions.

Useful parts of ethnobotanical species are somehow related to purposes (Table 6). Leaves, fruits, and seeds are

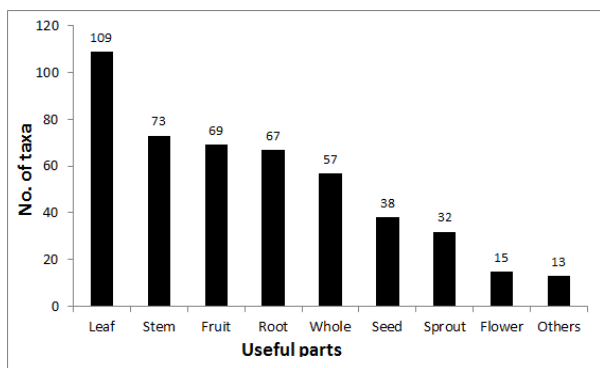


Fig. 2. The distribution of useful parts of ethnobotanical species surveyed around national parks in northern area of Gyeongsangbuk-do, Korea.

used for food or medicines. Shoots are mainly edibles whereas roots and flowers are usually utilized for medicines. Roots are well-known storage organs to have bioactive substances, and they have been used in (Oriental) Herbal Medicine (Chung *et al.*, 2016; Srithi *et al.*, 2009; Teklehaymanot, 2009). Stems are used for medicines, but show great utilization in household items.

The survey of traditional knowledge on vascular plant usage in the national parks and adjacent areas exhibits high correlations with natural and cultural environments. Diverse native vascular plants have provided nutrition, cure, entertainment, and convenience in daily life. In particular, high-mountain growing species such as *Oplopanax elatus*, *Rhododendron brachycarpum*, *Parasenecio firmus*, and *Acer tegmentosum* have been utilized in the areas. They are expected to provide untapped, natural substances for human well-being in the contemporary society. It is good news that there are much information on ethnobotanical knowledge, but the bad news is that those who have the traditional knowledge are decreasing and the knowledge will soon disappear. To practice most traditional knowledge, long-time training and exercises are required thus, it is urgent to obtain and learn traditional knowledge and skills. Most societies are also losing natural resources due to social and environment changes such as urbanization, global warming. The development of native plant conservations and utilizations will make it possible to connect generations from ancient to future in a sustainable society, and biological resources will be appreciated.

Table 6. The correlation between usage and useful parts around national parks in northern area of Gyeongsangbuk-do, Korea

| | Leaf | Stem | Fruit | Root | Whole | Seed | Sprout | Flower | Others |
|-----------------|------|------|-------|------|-------|------|--------|--------|--------|
| Edible | 73 | 12 | 51 | 19 | 22 | 27 | 30 | 4 | 1 |
| Medicinal | 39 | 47 | 34 | 55 | 35 | 26 | 8 | 10 | 11 |
| Household items | 2 | 21 | 2 | - | 1 | 2 | - | - | - |
| Beauty | 4 | 4 | 2 | - | - | 2 | - | 1 | - |
| Fiber | 1 | 4 | - | - | - | 2 | - | - | 1 |
| Oil | - | - | 4 | - | - | 4 | - | - | 1 |
| Timber | 0 | 6 | - | - | - | - | - | - | - |
| Insecticide | 1 | - | - | 1 | 2 | - | - | 1 | - |
| Others | 7 | 6 | 1 | 6 | 5 | 2 | - | 2 | - |

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Appendix 1. Ethnobotanical inventory around national parks in northern area of Gyeongsangbuk-do, Korea

| Scientific and Korean name | Usage ^z | Significance ^y |
|--|--------------------|---------------------------|
| Pteridophyta 양치식물문 | | |
| Equisetaceae 속새과 | | |
| <i>Equisetum hyemale</i> L. 속새 | Ed | |
| Osmundaceae 고비과 | | |
| <i>Osmunda japonica</i> Thunb. 고비 | Ed | |
| Aspleniaceae 잔고사리과 | | |
| <i>Pteridium aquilinum</i> var. <i>latiusculum</i> (Desv.) Underw. ex A.Heller 고사리 | Ed | |
| Gymnospermae 나자식물문 | | |
| Ginkgoaceae 은행나무과 | | |
| <i>Ginkgo biloba</i> L. 은행나무 | Ed, Ho, Me | Cul |
| Pinaceae 소나무과 | | |
| <i>Abies holophylla</i> Max. 전나무 | Me | |
| <i>Larix kaempferi</i> (Lamb.) Carriere 일본잎갈나무 | Fi | Cul |
| <i>Pinus densiflora</i> S. et Z. 소나무 | Ed, Ho, Me, Oi, Ti | |
| <i>Pinus koraiensis</i> Siebold & Zucc. 잣나무 | Ed | |
| Cupressaceae 측백나무과 | | |
| <i>Juniperus rigida</i> Siebold & Zucc. 노간주나무 | Ho | |
| Angiospermae 피자식물문 | | |
| Dicotyledoneae 쌍자엽식물아강 | | |
| Chloranthaceae 홀아피꽃대과 | | |
| <i>Chloranthus japonicus</i> Siebold 홀아비꽃대 | Ed | |
| Salicaceae 버드나무과 | | |
| <i>Populus deltoides</i> Marsh. 미류나무 | Ho | |
| <i>Salix babylonica</i> L. 수양버들 | Me | |
| <i>Salix gracilistyla</i> Miq. 갯버들 | Ed | |
| <i>Salix hallaisanensis</i> H.Lev. 떡버들 | Me | Ap, En |
| <i>Salix koreensis</i> Andersson 버드나무 | Ed, Ho, Me, Ot | |
| Juglandaceae 가래나무과 | | |
| <i>Juglans mandshurica</i> Maxim. 가래나무 | Ed, Ot | |
| <i>Juglans regia</i> L. 호두나무 | Ed, Me, Ot | Cul |
| Betulaceae 자작나무과 | | |
| <i>Betula platyphylla</i> var. <i>japonica</i> (Miq.) H. Hara 자작나무 | Me | |
| <i>Betula schmidtii</i> Regel 박달나무 | Ho, Ti | |
| <i>Corylus heterophylla</i> Fisch. ex Trautv. 개암나무 | Ed | |
| Fagaceae 참나무과 | | |
| <i>Castanea crenata</i> S. et Z. 밤나무 | Ed, Me | |
| <i>Castanea crenata</i> var. <i>kusakuri</i> (Blume) Nakai 산밤나무 | Ed | |
| <i>Quercus acutissima</i> Carruth. 상수리나무 | Ed | |
| <i>Quercus aliena</i> Bl. 갈참나무 | Ed, Ho, Ot, Ti | |
| <i>Quercus serrata</i> Thunb. 졸참나무 | Me | |
| Ulmaceae 느릅나무과 | | |
| <i>Ulmus davidiana</i> var. <i>japonica</i> (Rehder) Nakai 느릅나무 | Dy, Ed, Me, Ot | |
| <i>Zelkova serrata</i> (Thunb.) Makino 느티나무 | Me, Ti | |

^zUsage: Be (Beauty), Dy (Dye), Ed (Edible), Fi (Fiber), Ho (Household items), In (Insecticide), Me (Medicinal), Oi (Oil), Or (Ornamental), Ti (Timber).

^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|--|--------------------|---------------------------|
| Moraceae 뽕나무과 | | |
| <i>Cudrania tricuspidata</i> (Carr.) Bureau ex Lavallee 꾸지뽕나무 | Ed, Me | |
| <i>Morus alba</i> L. 뽕나무 | Ed, Me, Ot | |
| <i>Morus bombycis</i> Koidz. 산뽕나무 | Me, Ot | |
| <i>Broussonetia kazinoki</i> Siebold 닥나무 | Ed, Ho, Me | |
| Cannabinaceae 삼과 | | |
| <i>Cannabis sativa</i> L. 삼 | Ed, Fi, Me, Ot | Cul |
| Urticaceae 켜기풀과 | | |
| <i>Boehmeria nivea</i> (L.) Gaudich. 모시풀 | Ed, Fi | |
| Loranthaceae 겨우살이과 | | |
| <i>Taxillus yadoriki</i> (Siebold ex Maxim.) Danser 참나무겨우살이 | Me | Ap |
| <i>Viscum album</i> var. <i>coloratum</i> (Kom.) Ohwi 겨우살이 | Me | |
| Polygonaceae 마디풀과 | | |
| <i>Fagopyrum esculentum</i> Moench 메밀 | Ed, Me | Cul |
| <i>Fallopia japonica</i> (Houtt.) RonseDecr. 호장근 | Me | |
| <i>Fallopia multiflora</i> (Thunb.) Haraldson 하수오 | Me | |
| <i>Persicaria hydropiper</i> (L.) Spach 여뀌 | Ot | |
| <i>Persicaria tinctoria</i> H. Gross 쪽 | Fi | |
| Chenopodiaceae 명아주과 | | |
| <i>Chenopodium album</i> var. <i>centrorubrum</i> Makino 명아주 | Ed | |
| <i>Kochia scoparia</i> (L.) Schrad. 땃싸리 | Ho, Me | |
| <i>Spinacia oleracea</i> L. 시금치 | Ed | Cul |
| Amaranthaceae 비름과 | | |
| <i>Achyranthes japonica</i> (Miq.) Nakai 쇠무릎 | Me | |
| <i>Amaranthus mangostanus</i> L. 비름 | Ed | |
| <i>Celosia cristata</i> L. 맨드라미 | Ed | Cul |
| Nyctaginaceae 분꽃과 | | |
| <i>Mirabilis jalapa</i> L. 분꽃 | Be | Cul |
| Portulacaceae 쇠비름과 | | |
| <i>Portulaca oleracea</i> L. 쇠비름 | Ed, Me | |
| Caryophyllaceae 석죽과 | | |
| <i>Arearia serpyllifolia</i> L. 벼룩이자리 | Ed | |
| <i>Silene firma</i> Siebold & Zucc. 장구채 | Me | |
| <i>Stellaria alsine</i> var. <i>undulata</i> Ohwi 벼룩나물 | Ed | |
| Ranunculaceae 미나리아재비과 | | |
| <i>Aconitum ciliare</i> DC. 늦것가락나물 | Ed, Me, Ot | |
| <i>Aconitum pseudolaeve</i> Nakai 진범 | Ot | Ap, En |
| <i>Caltha palustris</i> L. 동의나물 | Ed | |
| <i>Pulsatilla koreana</i> (Yabe ex Nakai) Nakai ex Nakai 할미꽃 | Ed, In, Me | |
| <i>Thalictrum filamentosum</i> var. <i>tenerum</i> (Huth) Ohwi 산뿔의다리 | Ed | |
| Paeoniaceae 작약과 | | |
| <i>Paeonia lactiflora</i> Pall. 작약 | Me | |
| <i>Paeonia obovata</i> Max. 산작약 | Me | Ke |
| <i>Paeonia suffruticosa</i> Andrews 모란 | Ed | Cul |

^zUsage: Be (Beauty), Dy (Dye), Ed (Edible), Fi (Fiber), Ho (Household items), In (Insecticide), Me (Medicinal), Oi (Oil), Or (Ornamental), Ti (Timber).

^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|---|--------------------|---------------------------|
| Lardizabalaceae 으름덩굴과 | | |
| <i>Akebia quinata</i> (Houtt.) Decne. 으름 | Ed, Me | |
| Berberidaceae 매자나무과 | | |
| <i>Epimedium koreanum</i> Nakai 삼지구엽초 | Me | Ap |
| Schisandraceae 오미자과 | | |
| <i>Schisandra chinensis</i> (Turcz.) Baill. 오미자 | Ed, Me | |
| Lauraceae 녹나무과 | | |
| <i>Cinnamomum camphora</i> (L.) J.Presl 녹나무 | Me | |
| <i>Lindera obtusiloba</i> Blume 생강나무 | Me, Oi | |
| Papaveraceae 양귀비과 | | |
| <i>Papaver somniferum</i> L. 양귀비 | Me | Cul |
| Cruciferae 십자화과 | | |
| <i>Brassica rapa</i> var. <i>glabra</i> Regel 배추 | Me | Cul |
| <i>Capsella bursapastoris</i> (L.) Medicus 냉이 | Ed | |
| <i>Draba nemorosa</i> L. 꽃다지 | Ed | |
| <i>Erysimum amurense</i> Kitag. 부지깽이나물 | Ed | |
| <i>Raphanus sativus</i> L. 무 | Ed, Me | Cul |
| Crassulaceae 돌나물과 | | |
| <i>Orostachys japonica</i> (Maxim.) A.Berger 바위솔 | Me | |
| <i>Sedum sarmentosum</i> Bunge 돌나물 | Ed | |
| Eucommiaceae 두충과 | | |
| <i>Eucommia ulmoides</i> Oliver 두충 | Me | Cul |
| Rosaceae 장미과 | | |
| <i>Aruncus dioicus</i> var. <i>kamtschaticus</i> (Maxim.) H.Hara 눈개승마 | Ed | |
| <i>Chaenomeles sinensis</i> (Thouin) Koehne 모과나무 | Ed, Me | Cul |
| <i>Crataegus pinnatifida</i> Bunge 산사나무 | Ed | |
| <i>Duchesnea indica</i> (Andr.) Focke 뱀딸기 | Ed, Me | |
| <i>Malus pumila</i> Mill. 사과나무 | Ed, Me | Cul |
| <i>Malus sieboldii</i> (Regel) Rehder 아그베나무 | Ed | |
| <i>Prunus armeniaca</i> var. <i>ansu</i> Max. 살구나무 | Ed | Cul |
| <i>Prunus davidiana</i> (Carriere) Franch. 산복사나무 | Me | |
| <i>Prunus mume</i> (Siebold) Siebold & Zucc. 매실나무 | Ed, Me | Cul |
| <i>Prunus persica</i> (L.) Batsch 복사나무 | Ed, Me | Cul |
| <i>Prunus salicina</i> Lindl. 자두나무 | Ed | Cul |
| <i>Prunus tomentosa</i> Thunb. 앵도나무 | Ed | Cul |
| <i>Pyrus pyrifolia</i> (Burm.f.) Nakai 돌배나무 | Ed, Me | |
| <i>Pyrus pyrifolia</i> var. <i>culta</i> Nak. 배나무 | Me | Cul |
| <i>Rosa multiflora</i> Thunb. 찔레꽃 | Ed, Me | |
| <i>Rubus coreanus</i> Miq. 복분자딸기 | Ed | |
| <i>Rubus corchorifolius</i> L. fil. 수리딸기 | Ed | |
| <i>Rubus crataegifolius</i> Bunge 산딸기 | Ed, Me | |
| <i>Rubus idaeus</i> var. <i>microphyllus</i> Turcz. 멥떡딸기 | Ed | |
| <i>Rubus matsumuranus</i> var. <i>concolor</i> (Kom.) Kitag. 나무딸기 | Ed, Me | |
| <i>Rubus oldhamii</i> Miq. 줄딸기 | Ed | |

^zUsage: Be (Beauty), Dy (Dye), Ed (Edible), Fi (Fiber), Ho (Household items), In (Insecticide), Me (Medicinal), Oi (Oil), Or (Ornamental), Ti (Timber).

^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|---|--------------------|---------------------------|
| <i>Rubus parvifolius</i> L. 명석딸기 | Ed, Me | |
| <i>Sanguisorba officinalis</i> L. 오이풀 | Me | |
| <i>Sorbus alnifolia</i> (Siebold & Zucc.) C.Koch 팔배나무 | Ed | |
| <i>Stephanandra incisa</i> (Thunb.) Zabel 국수나무 | Ed | |
| Fabaceae 콩과 | | |
| <i>Albizia julibrissin</i> Durazz. 자귀나무 | Me | |
| <i>Astragalus mongholicus</i> Bunge 황기 | Ed, Me | Cul |
| <i>Caragana sinica</i> (Buc'hoz) Rehder 골담초 | Me | |
| <i>Cercis chinensis</i> Bunge 박태기나무 | Ot | Cul |
| <i>Glycine max</i> (L.) Merr. 콩 | Be, Ed, Me, Ot | Cul |
| <i>Glycine soja</i> Siebold & Zucc. 들콩 | Me | Ap |
| <i>Glycyrrhiza uralensis</i> Fisch. 감초 | Me | Cul |
| <i>Indigofera kirilowii</i> Maxim. ex Palib. 땅비싸리 | Ed | |
| <i>Lespedeza bicolor</i> Turcz. 싸리 | Ed, Ho, Me | |
| <i>Lespedeza x schindleri</i> T.B.Lee 잡싸리 | Me | |
| <i>Phaseolus angularis</i> (Willd.) Ohwi & H.Ohashi 팔 | Ed | Cul |
| <i>Phaseolus vulgaris</i> var. <i>humilis</i> Alef. 강낭콩 | Ed | Cul |
| <i>Pisum sativum</i> L. 완두 | Ed | Cul |
| <i>Pueraria lobata</i> (Willd.) Ohwi 칩 | Ed, Me | |
| <i>Sophora flavescens</i> Solander ex Aiton 고삼 | Me, Ot | |
| <i>Vigna radiata</i> (L.) Wilczek 녹두 | Ed, Me | Cul |
| <i>Vigna unguiculata</i> (L.) Walp. 동부 | Ed | Cul |
| Geraniaceae 쥐손이풀과 | | |
| <i>Geranium thunbergii</i> Siebold & Zucc. 이질풀 | Me | |
| Balsaminaceae 봉선화과 | | |
| <i>Impatiens balsamina</i> L. 봉선화 | Be, Ot | Cul |
| <i>Impatiens textori</i> Miq. 물봉선 | Me | |
| Euphorbiaceae 대극과 | | |
| <i>Ricinus communis</i> L. 피마자 | Ed, Me, Oi | Cul |
| <i>Securinega suffruticosa</i> (Pall.) Rehder 광대싸리 | Ed | |
| Rutaceae 운향과 | | |
| <i>Phellodendron amurense</i> Rupr. 황벽나무 | Me | |
| <i>Poncirus trifoliata</i> Rafin. 탕자나무 | Ed, Me | Cul |
| <i>Zanthoxylum piperitum</i> (L.) DC. 초피나무 | Be, Ed, Me, Ot | |
| <i>Zanthoxylum schinifolium</i> S. et Z. 산초나무 | Ed, Me, Oi | |
| Simaroubaceae 소태나무과 | | |
| <i>Picrasma quassioides</i> (D. Don) Benn. 소태나무 | Me, Oi | |
| Meliaceae 털구슬나무과 | | |
| <i>Cedrela sinensis</i> A. Juss. 참죽나무 | Ed, Me | Cul |
| Celastraceae 노박덩굴과 | | |
| <i>Euonymus alatus</i> (Thunb.) Siebold 화살나무 | Ed, Me | |
| Staphyleaceae 고추나무과 | | |
| <i>Staphylea bumalda</i> Dc. 고추나무 | Ed | |

^zUsage: Be (Beauty), Dy (Dye), Ed (Edible), Fi (Fiber), Ho (Household items), In (Insecticide), Me (Medicinal), Oi (Oil), Or (Ornamental), Ti (Timber).

^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|--|--------------------|---------------------------|
| Anacardiaceae 욱나무과 | | |
| <i>Rhus javanica</i> L. 붉나무 | Me | |
| <i>Rhus verniciflua</i> Stokes 윣나무 | Ed, Me | |
| Aceraceae 단풍나무과 | | |
| <i>Acer pictum</i> subsp. <i>mono</i> (Maxim.) Ohashi 고로쇠나무 | Ed | |
| <i>Acer tataricum</i> subsp. <i>ginnala</i> (Maxim.) Wesm. 신나무 | Dy, Fi | |
| <i>Acer tegmentosum</i> Max. 산겨릅나무 | Me | Ap |
| Rhamnaceae 갈매나무과 | | |
| <i>Hovenia dulcis</i> Thunb. 헛개나무 | Me | Ap |
| <i>Zizyphus jujuba</i> var. <i>inermis</i> (Bunge) Rehder 대추나무 | Ed, Me | Cul |
| Vitaceae 포도과 | | |
| <i>Ampelopsis brevipedunculata</i> (Maxim.) Trautv. 개머루 | Me | |
| <i>Vitis coignetiae</i> Pulliat ex Planch. 머루 | Ed | |
| <i>Vitis vinifera</i> L.. 포도 | Ed | Cul |
| Malvaceae 아욱과 | | |
| <i>Althaea rosea</i> Cav. 접시꽃 | Me | Cul |
| <i>Gossypium indicum</i> Lam. 목화 | Ed, Fi, Oi | Cul |
| <i>Malva verticillata</i> L.. 아욱 | Ed | Cul |
| Actinidiaceae 다래나무과 | | |
| <i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex Miq. 다래 | Ed, Ho | |
| Theaceae 차나무과 | | |
| <i>Camellia japonica</i> L. 동백나무 | Ed, Oi | |
| Violaceae 제비꽃과 | | |
| <i>Viola acuminata</i> Ledeb. 줄방제비꽃 | Ed | |
| Cucurbitaceae 박과 | | |
| <i>Citrullus vulgaris</i> Schrad. 수박 | Ed | Cul |
| <i>Cucumis sativus</i> L. 오이 | Ed, Me | Cul |
| <i>Cucurbita moschata</i> Duchesne 호박 | Ed, Me | Cul |
| <i>Lagenaria leucantha</i> Rusby 박 | Ed, Ho, Me | Cul |
| <i>Luffa cylindrica</i> Roem. 수세미오이 | Ho, Me | Cul |
| Elaeagnaceae 보리수나무과 | | |
| <i>Elaeagnus umbellata</i> Thunb. 보리수나무 | Ed, Me | |
| Punicaceae 석류과 | | |
| <i>Punica granatum</i> L. 석류나무 | Ed | Cul |
| Onagraceae 바늘꽃과 | | |
| <i>Oenothera biennis</i> L. 달맞이꽃 | Ed, Me | |
| Araliaceae 두릅나무과 | | |
| <i>Aralia elata</i> (Miq.) Seemann 두릅나무 | Ed, Me | |
| <i>Eleutherococcus sessiliflorus</i> (Rupr. & Maxim.) S.Y.Hu 오갈피나무 | Ed, Me | |
| <i>Kalopanax septemlobus</i> (Thunb.) Koidz. 음나무 | Ed, Me | |
| <i>Oplopanax elatus</i> (Nakai) Nakai 땃두릅나무 | Ed | Ap |
| <i>Panax ginseng</i> C.A.Mey. 인삼 | Ed, Me | Cul |
| Apiaceae 미나리과 | | |
| <i>Angelica dahurica</i> (Fisch. ex Hoffm.) Benth. & Hook.f. ex Franch. & Sav. 구릿대 | Me | |

^zUsage: Be (Beauty), Dy (Dye), Ed (Edible), Fi (Fiber), Ho (Household items), In (Insecticide), Me (Medicinal), Oi (Oil), Or (Ornamental), Ti (Timber).

^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|--|--------------------|---------------------------|
| <i>Angelica polymorpha</i> Max. 궁궁이 | Be, Ed, In, Me, Or | |
| <i>Bupleurum falcatum</i> L. 시호 | Me | Ap |
| <i>Cnidium officinale</i> Makino 천궁 | Me | |
| <i>Heracleum moellendorffii</i> Hance 어수리 | Ed | |
| <i>Oenanthe javanica</i> (Bl.) DC. 미나리 | Ed, Me | |
| <i>Pimpinella brachycarpa</i> (Kom.) Nakai 참나물 | Ed | |
| <i>Pleurospermum camtschaticum</i> Hoffm. 왜우산풀 | | |
| Cornaceae 층층나무과 | | |
| <i>Cornus officinalis</i> Siebold & Zucc. 산수유 | Me | Cul |
| <i>Cornus walteri</i> F.T.Wangerin 말채나무 | Me | |
| Ericaceae 진달래과 | | |
| <i>Rhododendron brachycarpum</i> D.Don ex G.Don 만병초 | Me | Ap |
| Ebenaceae 감나무과 | | |
| <i>Diospyros kaki</i> Thunb. 감나무 | Ed, Fi, Me | Cul |
| <i>Diospyros lotus</i> L. 고욤나무 | Ed | |
| Oleaceae 물푸레나무과 | | |
| <i>Fraxinus rhynchophylla</i> Hance 물푸레나무 | Ho | |
| Convolvulaceae 메꽃과 | | |
| <i>Ipomoea batatas</i> Lam. 고구마 | Ed, Me | Cul |
| Solanaceae 가지과 | | |
| <i>Capsicum annuum</i> L. 고추 | Ed, Me | Cul |
| <i>Lycium chinense</i> Mill. 구기자나무 | Ed, Me | |
| <i>Nicotiana tabacum</i> L. 담배 | Me, Ot | Cul |
| <i>Physalis alkekengi</i> var. <i>francheti</i> (Masters) Hort. 파리 | Ed, Ot | |
| <i>Solanum melongena</i> L. 가지 | Me | Cul |
| <i>Solanum nigrum</i> L. 까마중 | Ed, Me | |
| <i>Solanum tuberosum</i> L. 감자 | Ed, Me | Cul |
| Borraginaceae 지치과 | | |
| <i>Lithospermum erythrorhizon</i> S. et Z. 지치 | Me | Ap |
| Lamiaceae 꿀풀과 | | |
| <i>Lamium amplexicaule</i> L. 광대나물 | Me | |
| <i>Leonurus japonicus</i> Houtt. 익모초 | Me | |
| <i>Mentha piperascens</i> (Malinv.) Holmes 박하 | Me | |
| <i>Perilla frutescens</i> var. <i>japonica</i> (Hassk.) Hara 들깨 | Ed, Me, Oi | Cul |
| <i>Phlomis umbrisa</i> Turcz. 속단 | Me | |
| <i>Prunella vulgaris</i> var. <i>lilacina</i> Nakai 꿀풀 | Ed, Me | |
| Scrophulariaceae 현삼과 | | |
| <i>Paulownia coreana</i> Uyeki 오동나무 | Ed, Me, Ti | Ap, En |
| <i>Rehmannia glutinosa</i> (Gaertn.) Libosch. ex Steud. 지황 | Me | Cul |
| Pedalidaceae 참깨과 | | |
| <i>Sesamum indicum</i> L. 참깨 | Ed, Me | Cul |
| Plantaginaceae 질경이과 | | |
| <i>Plantago asiatica</i> L. 질경이 | Ed, Me | |

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^ySignificance: Ap (Approved species for delivering overseas), Cul (Cultivated and/or planted), En (Endemic species), Ke (Korean endangered species designated by Ministry of Environment).

Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|---|--------------------|---------------------------|
| Valerianaceae 마타리과 | | |
| <i>Patrinia villosa</i> (Thunb.) Juss. 쪽갈 | Ed | |
| <i>Valeriana fauriei</i> Briq. 쥐오줌풀 | Ed | |
| Campanulaceae 초롱꽃과 | | |
| <i>Adenophora remotiflora</i> (S. et Z.) Miq. 모시대 | Ed | |
| <i>Adenophora triphylla</i> var. <i>japonica</i> (Regel) H.Hara 잔대 | Ed, Me | |
| <i>Campanula punctata</i> Lam. 초롱꽃 | Ed | |
| <i>Codonopsis lanceolata</i> (S. et Z.) Trautv. 더덕 | Ed, Me | |
| <i>Codonopsis pilosula</i> (Franch.) Nannf. 만삼 | Ed | Ap |
| <i>Platycodon grandiflorum</i> (Jacq.) A. Dc. 도라지 | Ed, Me | |
| <i>Platycodon grandiflorum</i> for. <i>albiflorum</i> (Honda) H.Hara 백도라지 | Me | |
| Compositae 국화과 | | |
| <i>Arctium lappa</i> L. 우엉 | Ed | Cul |
| <i>Artemisia annua</i> L. 개똥쑥 | Me | |
| <i>Artemisia capillaris</i> Thunb. 사철쑥 | Me | |
| <i>Artemisia montana</i> (Nakai) Pamp. 산쑥 | Me | |
| <i>Artemisia princeps</i> Pamp. 쑥 | Ed, In, Me | |
| <i>Aster scaber</i> Thunb. 참취 | Ed | |
| <i>Aster tataricus</i> L.f. 개미취 | Ed | |
| <i>Aster yomens</i> (Kitam.) Honda 쑥부쟁이 | Ed | |
| <i>Atractylodes ovata</i> (Thunb.) DC. 삼주 | Ed, Me | |
| <i>Bidens parviflora</i> Willd. 까치발 | Ed, Me | |
| <i>Breca segeta</i> (Willd.) Kitam. f. <i>segeta</i> 조뱅이 | Ed | |
| <i>Carthamus tinctorius</i> L. 잇꽃 | Me | Cul |
| <i>Chrysanthemum coronarium</i> L. 쑥갓 | Ed | Cul |
| <i>Cirsium japonicum</i> var. <i>maackii</i> (Maxim.) Matsum. 영경귀 | Ed, In, Me | |
| <i>Cirsium setidens</i> (Dunn) Nakai 고려영경귀 | Ed | Ap, En |
| <i>Conyza canadensis</i> (L.) Cronquist 망초 | Ed | |
| <i>Crepidiastrum sonchifolium</i> (Bunge) Pak & Kawano 고들빼기 | Ed | |
| <i>Dendranthema indicum</i> (L.) DesMoul. 감국 | Me | |
| <i>Dendranthema zawadskii</i> var. <i>latilobum</i> (Maxim.) Kitam. 구절초 | Me | |
| <i>Hemistepta lyrata</i> Bunge 지칭개 | Ed, Me | |
| <i>Ixeridium dentatum</i> (Thunb. ex Mori) Tzvelev 씬바귀 | Ed | |
| <i>Lactuca indica</i> L. 왕고들빼기 | Ed | |
| <i>Lactuca sativa</i> L. 상추 | Ed, Me | Cul |
| <i>Leibnitzia anandria</i> (L.) Turcz. 숨나물 | Ed | |
| <i>Ligularia fischeri</i> (Ledeb.) Turcz. 곰취 | Ed | |
| <i>Parasenecio firmus</i> (Kom.) Y.L.Chen 병풍쌈 | Ed | |
| <i>Petasites japonicus</i> (Siebold & Zucc.) Maxim. 머위 | Ed, Me | |
| <i>Rhaponticum uniflorum</i> (L.) DC. 뽕꼭채 | Me | |
| <i>Saussurea grandifolia</i> Max. 서털취 | Ed | |
| <i>Solidago virgaurea</i> subsp. <i>asiatica</i> Kitam. ex H. Hara 미역취 | Ed | |
| <i>Syneilesis palmata</i> (Thunb.) Max. 우산나물 | Ed, Me | |
| <i>Synurus deltoides</i> (Aiton) Nakai 수리취 | Ed | |

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Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|---|--------------------|---------------------------|
| <i>Tagetes patula</i> L. 만수국 | Me | Cul |
| <i>Taraxacum coreanum</i> Nakai 흰민들레 | Me | |
| <i>Taraxacum platycarpum</i> Dahlst. 민들레 | Ed, Me | |
| <i>Xanthium strumarium</i> L.. 도꼬마리 | Me | |
| <i>Zinnia violacea</i> Cav. 백일홍 | Me | Cul |
| Monocotyledoneae 단자엽식물아강 | | |
| Typhaceae 부들과 | | |
| <i>Typha orientalis</i> C.Presl 부들 | Ho, Me | |
| Poaceae 화본과 | | |
| <i>Avena sativa</i> L. 귀리 | Ed, Ot | Cul |
| <i>Echinochloa utilis</i> Ohwi & Yabuno 피 | Ed | |
| <i>Hordeum vulgare</i> var. <i>hexastichon</i> (L.) Asch. 보리 | Ed, Me | Cul |
| <i>Imperata cylindrica</i> var. <i>koenigii</i> (Retz.) Pilg. 락 | Ed, Ho | |
| <i>Oryza sativa</i> L. 벼 | Be, Ed, Ho, Me, Ti | Cul |
| <i>Oryza sativa</i> var. <i>glutinosa</i> Blanco 찰벼 | Ed, Me | Cul |
| <i>Panicum miliaceum</i> L. 기장 | Ed | |
| <i>Phyllostachys bambusoides</i> S. et Z. 왕대 | Ho, Me | |
| <i>Phyllostachys nigra</i> (Lodd.) Munro 오죽 | Ho | |
| <i>Sasa borealis</i> (Hack.) Makino 조릿대 | Ho, Me | |
| <i>Sasa coreana</i> Nakai 고려조릿대 | Me | En |
| <i>Setaria italica</i> (L.) Beauv. 조 | Ed, Fi, Ho, Me | Cul |
| <i>Sorghum bicolor</i> (L.) Moench 수수 | Ed, Ho, Me | Cul |
| <i>Triticum aestivum</i> L. 밀 | Ed, Ho, Me, Ot | Cul |
| <i>Zea mays</i> L. 옥수수 | Ed, Me | Cul |
| Cyperaceae 사초과 | | |
| <i>Cyperus exaltatus</i> var. <i>iwasakii</i> T.Koyama 왕골 | Ho | |
| Araceae 천남성과 | | |
| <i>Acorus calamus</i> L. 창포 | Be, Me | Ap |
| <i>Arisaema amurense</i> for. <i>serratum</i> (Nakai) Kitag. 천남성 | Ed, Me | |
| <i>Colocasia esculenta</i> (L.) Schott 토란 | Ed | Cul |
| Liliaceae 백합과 | | |
| <i>Allium cepa</i> L. 양파 | Ed | Cul |
| <i>Allium fistulosum</i> L. 파 | Me | Cul |
| <i>Allium microdictyon</i> Prokh. 산마늘 | Me | Ap |
| <i>Allium monanthum</i> Max. 달래 | Ed | Cul |
| <i>Allium scorodorpasum</i> var. <i>viviparum</i> Regel 마늘 | Ed, Me | Cul |
| <i>Allium tuberosum</i> Rottler ex Spreng. 부추 | Ed, Me | Cul |
| <i>Hemerocallis fulva</i> (L.) L. 원추리 | Ed | |
| <i>Hosta longipes</i> (Fr. et Sav.) Matsumura 비비추 | Ed | |
| <i>Lilium callosum</i> Siebold & Zucc. 땅나리 | Me | Ap |
| <i>Liriope platyphylla</i> Wang et Tang 맥문동 | Me | |
| <i>Paris verticillata</i> M.Bieb. 샷갓나물 | Ed | |
| <i>Polygonatum odoratum</i> var. <i>pluriflorum</i> (Miq.) Ohwi 둥굴레 | Ed, Me | |
| <i>Scilla scilloides</i> (Lind.) Druce 무릇 | Ed, Me, Ot | |

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Appendix 1. Continued

| Scientific and Korean name | Usage ^z | Significance ^y |
|-------------------------------------|--------------------|---------------------------|
| <i>Smilax china</i> L. 청미래덩굴 | Ed, Me, Ot | |
| Zingiberaceae 생강과 | | |
| <i>Zingiber officinale</i> Rosc. 생강 | Me | Cul |
| Orchidaceae 난초과 | | |
| <i>Gastrodia elata</i> Blume 천마 | Me | Ap |

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