

A Historical Study on the Utilization of Wild Vegetables as Foods in Korea

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한국 산채류 이용의 역사적 고찰

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Summary

The first historical record on the use of wild edible plants as foods in Korea involves sswuk and manul concerned with the mythology of Tangun. Numerous names of wild vegetables had been recorded in various ancient books.

Wild edible plants are of great value as food resources and for domestication, since they have variable edible portions and quite a long picking season.

Several kinds of wild edible plants have been already grown as vegetable crops. Doragi (*Platycodon grandiflorum*) is probably the one with the longest history of cultivation.

During World War II, an attempt had been made to substitute vegetable crops for wild edible plants. As picking wild greens requires a great deal of labor and plants of wild growth are limited in the amount, domestication of wild vegetables as crops appears to be an urgent need for securing food resources in Korea.

Ancient Record

It is probable that edible plants growing wild in fields and mountain have been used as food resources from the prehistoric age.⁽¹⁾ The first historical record on the use of wild edible plants as foods in Korea involves sswuk (*Artemisia princeps* var. *orientalis*) and manul (garlic; *Allium sativum* for. *pekinense*) appeared in the mythology of Tangun, the founding father of the Korean nation. Along with a view^(1,2) that manul might be the one resembling sandalrae (*Allium grayi*) of the present day, the above fact suggests that wild edible plants might play an important part in dietary pattern of ancient society.

In "hyangyakkwukubbang" (藥救急方; 1236-1251), the oldest existing medical book of Korea, wild vegetables were recorded along with medicinal herbs. These include meutminari (뽕미나리; *Ostercicum sieboldii*), doraji (도라지; *Platycodon grandiflorum*), sswuk (쑥), seubirum (쇠비름; *Portulaca oleracea*), soguinamul

1. Sung Woo Lee. 1978. Studies On The Dietary History in Korea. Hyangmoonsa (In Korean).

2. Chi Hyun Chang. 1972. History of Vegetable Growing in Korea. A treatise of Seoul Agricultural College, 6 (In Korean).

(소귀나물; *Sagittaria trifolia*), jarikong (자리공; *Phytolacca esculenta*), gunggungee (궁궁이; *Angelica polymorpha*), sabju (삼주; *Atractylodes japonica*), seumwurup (쇠무릅; *Achyranthes japonica*), jilkyungee (질경이; *Plantago asiatica*), urum (으름; *Akebia quinata*), and mal (말; *Potamogeton oxyphyllus*).

Kosari (고사리) appeared in "dongmun sun" (東文選), a collection of poems. Historically doduck (더덕; *Codonopsis lanecolata*) had been called as sasam (沙參) or kaduck (加德) in "hyangyakjibsongbang" (鄉藥集成方) a herbal, and "dongeuibogam" (東醫寶鑑), a medical book, published at the time of the Chosun dynasty. Numerous names of wild vegetables had been also recorded in "sanrimkyungjey" (山林經濟) and "jungbosanrimkyungjey" (增補山林經濟) published during the Chosun dynasty period, the books which describe information necessary for daily affairs in framing.⁽³⁾

Wild vegetables were frequently used as foods for the relief of the sufferers from famine,⁽⁴⁾ at the time of war, disaster, the spring food shortage or crop failures.

Edible Value

Wild vegetables compare quite well with vegetable crops in nutritive aspects. In addition, quite a few of those wild plants are regarded as delicacies of the season because of peculiar flavor. Accordingly the problem of cropping wild vegetables is very important task to be solved in the area of agricultural production.

Edible portion varies with kinds of wild plants. It includes young leaves of kosari, young shoots of dwurub (두릅; *Aralia elata* SEEM), petiole of mowii (머위; *Petasites japonicus* MAX.), tender stalks of singah (싱아; *Aconogonum polymorphum*), roots of doraji and doduck, and the underground stems of dalrae.⁽⁵⁾ Thus wild vegetables have promising value as food resources in respect that their edible portions are variable.

The picking period of wild vegetables depends on their edible portion or seasonal weather fluctuation. In case young leaves and tender sprouts are utilized, it is feasible to pick them several times over the spring period, although delayed picking results in fibrousness or toughness of wild vegetables and accompanied poor flavor.

Since fresh and tender young leaves or sprouts can be continuously gathered throughout considerable picking season, edible wild plants have great value for growing as vegetable crops.

Domestication

Several kinds of these wild plants have been already grown as vegetable crops. The one with the longest history of cultivation is probably doraji.

Valuable information of historical background on the utilization of edible wild plants was taken from Mr. Kim Yi Man, who had worked in Forest Experiment Station for about 30 years. He was eighty two years old when the author met him in the summer of 1982 (Mr. Kim continued to work in Forest Experiment Station after retirement and was called Tree Grandfather).

He recalled that Forest Experiment Station in Kwangnung attempted to cultivate approximately 230 kinds of medicinal plants around 1930. According to him, this seems to be the first event of growing doraji and other wild vegetables.

Then people used to dig up baek doraji (white *Platycodon*) from the mountain and plant them around a soy-jar terrace of the house. The first case who had grown baek doraji as vegetable crops on large scale was shown after 10 years from that time. A certain monk living in a small hermitage near Yongmwun temple at Yangpyung of Kyunggi Province, drove a good income from intercropping doraji plants by seed propagation in a forest of about 2,000 pyung.

Since then, cultivation of doraji plants gradually began using the field or mountain of every village. It appears that the history of cultivating doduck was similar to the one of doraji.

3. Sung Woo Lee. 1981. Studies on the literatures of dietary history. Hankuk shikkyung daechun: 韓國食經大典, Hyangmoonsa. (In Korean).

4. Chun Ryun Kim. 1983. Survey on the foods for the relief of the sufferers from famine. With special reference to Kangwon area. A treatise of Kwandong College, 11 (In Korean).

5. Chang Bok Lee. 1985. Illustrated Flora of Korea. Hyangmoonsa.

In historical records concerned with domestication of wild vegetables, what is specially noteworthy would be "short course on edible plants" held by Forest Experiment Station in 1942.

The aim was to recommend the utilization of wild edible plants in place of vegetable crops, since the production of vegetables was scarce because of World War II. Around the area of Yungdungpo where Chosun textile company was located, the sponsor gathered hundreds of housewives together and let them pick herbs from the ridge between fields and bring washed greens till noon. The greens, identical as the ones housewives picked, were previously mixed with seasonings and distributed on the lunch box lid of the pickers so that they can be tasted.

It was great event to renew the recognition on food value of wild edible plants and to achieve innovative turning point in the utilization aspect. Considering that numerous wild edible plants have been maintaining in arboretum of Forest Experiment Station, it is presumed that most of wild vegetables could be domesticated.

The intensive research concerned with the domestication of wild vegetables was accomplished in research institutes under Office of Rural Development. A hindrance in domestication of wild vegetables is low germination rate. Accordingly the study on the germination physiology of wild vegetables would be the greatest problem to be solved for cultivation of wild vegetables.

Concluding Remarks

Wild edible plants, herbs or trees, distributed in Korea, include 851 species, and 70% of representative and elementary 304 species of edibility are herbaceous. At present, 115 species of wild edible plants are gathered in arboretum of Forest Experiment Station, except poisonous or medicinal ones.

Table I presents the kinds of wild vegetables which had been recognized valuable for domestication or already domesticated. These have good flavors, suit Korean's taste, and are easily cultivated kinds.

Table I. Kinds of wild vegetables valuable for domestication.

Name of Wild Vegetables		Scientific Name
kaemichwi	(개미취)	<i>Aster tataricus</i> L.
kaebirum	(개비름)	<i>Amaranthus lividus</i> L.
kokkaljeybikkoch	(고갈채비꽃)	<i>Viola rossii</i> Hemsf.
kobi	(고 비)	<i>Osmunda japonica</i> Thunb.
komchwi	(곰 취)	<i>Ligularia fischeri</i> Threz.
kwibakjwinamul	(귀박취나물)	<i>Cacalia auriculata</i> var. DC.
kunulchwi	(그늘취)	<i>Saussurea uchiyamana</i> Nakai.
kumnangwha	(금낭화)	<i>Dicentra spectabilis</i> Lem.
kkeymwuk	(개 목)	<i>Hololeion maximowiczii</i> Kitamura
nabinamul	(나비나물)	<i>Vicia unijuga</i> A. Br.
nwulwukchi	(누룩치)	<i>Pleurosperum kamschaticum</i> Hoffm.
doduck	(더 덕)	<i>Codonopsis lanceolata</i> Trautv.
doraji	(도라지)	<i>Platycodon grandiflorum</i> A. DC.
dockwhal (ddatdwurub)	(독활 : 맛두릅)	<i>Aralia continentalis</i> Kitagawa
dongjakkoch	(동자꽃)	<i>Lychnis cognata</i> Max.
dwungkwulley	(둥굴래)	<i>Polygonatum odoratum</i> var. <i>pluriflorum</i> Ohwi
ddwukkal	(독 갈)	<i>Patrinia villosa</i> Juss.
malgundaesswuk	(맑은대쭈)	<i>Artemisia keiskeana</i> Miq.
mosidae	(모시대)	<i>Adenophora remotiflora</i> Miq.
mowii	(머 위)	<i>Petasites japonicus</i> Max.
meutminari	(윗미나리)	<i>Ostericum sieboldii</i> Nakai
mwulsswuk	(물 쭈)	<i>Artemisia selengensis</i> Turcz.
miyekchwi	(미역취)	<i>Solidago virga-aurea</i> var. <i>asiatica</i> Nakai

milnamul	(밀나물)	<i>Smilax riparia</i> var. <i>ussuriensis</i> Hara et T. Kiyama
baemmwu	(뻬 무)	<i>Geum japonicum</i> Thunb.
bodulbwunchwi	(버들분취)	<i>Saussurea maximowiczii</i> Herd
bolkkaedongkwul	(벌개덩굴)	<i>Meehania urticifolia</i> Makino
bibichwi	(비비취)	<i>Hosta longipes</i> Matsumura
bijjarwu	(비짜루)	<i>Asparagus schoberioides</i> Kunth
sabjwu	(삼 주)	<i>Atractylodes japonica</i> Koidz.
sodolchwi	(서덜취)	<i>Saussurea grandifolia</i> Max.
solijaengi	(소리쟁이)	<i>Rumex crispus</i> L.
seubirum	(쇠비름)	<i>Portulaca oleracea</i> L.
swulichwi	(수리취)	<i>Synurus deltooides</i> Nakai
sswuk	(쑥)	<i>Artemisia princeps</i> var. <i>orientalis</i> Hara
aengcho	(앵 초)	<i>Primula sieboldi</i> E. Morr.
youngaja	(영아자)	<i>Phyteuma japonicum</i> Miq.
jandae	(잔 대)	<i>Adenophora triphylla</i> var. <i>japonica</i> Hara
jeybisswuk	(제비쑥)	<i>Artemisia japonica</i> Thunb.
jolbangjeybikkoch	(줄방제비꽃)	<i>Viola acuminata</i> Ledeb.
jilkyungee	(질경이)	<i>Plantago asiatica</i> L.
chamnamu	(참나무)	<i>Pimpinella brachycarpa</i> Nakai
chamdangkwi	(참당귀)	<i>Angelica gigas</i> Nakai
chamsanbuchwu	(참산부추)	<i>Allium sacculiferum</i> Max.
cham-sswuk	(참 쑥)	<i>Artemisia lavandulaefolia</i> DC.
khunwenchwuli	(큰원추리)	<i>Hemerocallis middendorfi</i> Trautv. et Meyer
whallyangnamul	(활랑나물)	<i>Lathyrus davidii</i> Hance.

Most of wild vegetables are gathered from fields or mountains at present and only several of them have been cultivated as vegetable crops. Now the production of doraji is entirely dependent upon cultivation. Doduck, dalrae, kkeymwuk (깨묵; *Hololeion maximowiczii* KITAMURA), kodulbbaegi (고들빼기; *Youngia sonchifolia* MAX.), dockwhal (独活; *Aralia continentalis* KITAGAWA), and dwurub (두릅; *Aralia elata* SEEM.) are also supplied as vegetable crops.

In case wild vegetables are attempted to cultivate, a few kinds require high degree of cultivating skill. However, most of wild plants do not require particular cultivating technique, as they are resistant to disease and insects. Recently the utilization of wild vegetables is very popular in respect that agricultural chemical was not used for them.

As picking wild greens requires a great deal of labor and plants of wild growth are limited in the amount, domestication of wild edible plants as vegetable crops seems to be an urgent need for establishment of food resources in Korea.