Analysis of Designation and Symbolic Meanings of Floral Emblems in South Korea as Elements of Garden Tourism and Design

Inhea Kim^{1,4}, Jin-Sil Park², and Kyoung-Ok Choi^{3,4*}

¹Lecturer, Department of Horticulture, Gyeongnam National University of Science and Technology, Jinju 52725, Korea

²Master program in Horticulture, Gyeongnam National University of Science and Technology, Jinju 52725, Korea

³Professor, Department of Horticulture, Gyeongnam National University of Science and Technology, Jinju 52725, Korea

⁴International Garden Institute, Gyeongnam National University of Science and Technology, Jinju 52725, Korea

ABSTRACT

This study was conducted to analyze the current state and symbolic meanings of floral emblem designation in local governments of South Korea. The scope of local governments subject to analysis was limited to special city, metropolitan city, province, self-governing province, city, self-governing city, county and district based on their administrative divisions. The floral emblems of local governments and their symbolic meanings as of 2019 were examined. A total of 44 plant species were designated as floral emblems. Many plant species with high designation frequency were included in *Rhododendron* spp., *Rosa* spp., *Camellia* spp., *Magnolia* spp., and *Prunus* spp.. Plant species with higher designation frequency tended to have more symbolic meanings. A total of 155 terms were used for the symbolic meanings assigned to all the designated floral emblems. The major symbolic meanings were relevant to material affluence or economic growth, community spirit, and personality generally required from local residents. Most of the plant species linked to the top 10 most frequently assigned terms in symbolic meaning were those of the top 10 most frequently designated floral emblems. In the case of floral emblems with high designation frequency, it was shown that they were linked with various symbolic meanings in order to grant identity with regional distinctiveness and differentiation, regardless of the symbolic meaning that the designated flowers generally have. However, the floral emblems with low designation frequency seem to have relatively strong physical or emotional relevance with local governments and thus are expected to have high utilization in regional branding and tourism marketing.

Keywords: city flower, floral trees, local government, national flower, regional identity

Introduction

Gardens, which have long provided the beauty of nature and recreation for people, have now become major tourist sites. For example, the Suncheonman National Garden opened in 2014 after hosting the Suncheon Bay Garden EXPO 2013. The total number of visitors in 2017 was 6,117,633 persons (6,098,849 natives and 18,784 foreigners), which is remarkably higher than historic sites such as Naganeupseong Walled Town, Songgwangsa Temple,

and Seonamsa Temple in Suncheon (Kim and Huh, 2019; Korean Statistical Information Service, 2019). Wyse Jackson and Sutherland (2000) reported that the number of visitors in public gardens worldwide was 150 million as of 2000, and Benfield (2013) estimated that the number of visitors who visited private gardens through open houses operated by institutes such as the Garden Conservancy (USA) and National Gardens Scheme (UK and Australia) and the number of visitors in gardens run by nonprofit organizations like the National Trust (UK) add up to approx-

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First author: Inhea Kim, inhyekim@hanmail.net, <https://orcid.org/0000-0001-9915-1623>

***Corresponding author:** Kyoung-Ok Choi, choiok@gntech.ac.kr, <https://orcid.org/0000-0001-7990-7606>

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imately 300 million. As such, many people are enjoying garden tourism both locally and globally, but there is insufficient research on garden tourism and its importance is not receiving attention even in tourism, which is the world's biggest industry (Benfield, 2013; Connell, 2004).

Flowers, a major component of gardens, is a symbol of beauty that is constantly been perceived as an aesthetic object throughout the history of humanity, and it is one of the motifs most frequently used in formative arts (Chang, 2016). For a long time, flowers have been a symbol or an icon that expresses various emotions and represents physical and psychological state. Thus, flower designers sublimate or commercialize the beauty and symbolism of flowers into art, provide education to the community, present floral designs in flower shows, weddings and funerals, and use them in horticultural therapy (Chu et al., 2018). In the South Korean design industry, to not only inherit and develop traditional culture but also lead to development of the tourism industry by promoting the originality and excellence of South Korean culture, there has been constant research on design development using traditional floral patterns such as plum blossom, peony, and lotus flower (Chang, 2016; Hong and Kim, 2011; Jung, 2004; Kim, 2009; Song, 2010). Moreover, many countries in the world are designating floral emblems representing the national or regional characteristics and sentiments, which contribute to regional branding and commercialization of tourism resources. The traditional wreath called 'Lei' in Hawaii, a world-renowned tourist site, has a regional meaning depending on the type of flower, and it is known to be a case that has performed an effective role in the tourism industry by applying the culture of presenting the lei to visitors (Bird et al., 1987; Criley, 1992). In South Africa, bird of paradise flower is used to represent the identity of a new nation that integrated multiple ethnicities, and it is perceived as the best icon of tourism advertising for South Africa (Benfield, 2013).

Through a case study on fashionable culture, Goss (1993) suggested that the prominent leisure activities in the modern lifestyle are visiting malls or going shopping, whereas the prominent symbol of attachment is flowers. Ziegler (2007) studied the traces of the changing tastes and traditions in the floricultural culture and industry in the

sociological view, discussed the role of flowers in terms of joy, social status and creation of the sense of belonging, and led to the conclusion that one of the sources of various horticultural activities widely in fashion today is creation of identity. In sum, designating a flower as a national or regional symbol can help its members perceive the important symbolic meaning, give them an identity, and cultivate community spirit. Furthermore, floral emblem designation may bring economic benefits to the national and regional community as an element of garden tourism or design. Therefore, this study is conducted to expand the scope of floral emblem designation and use that can increase regional competitiveness by analyzing the current state of floral emblem designation in South Korean local governments and their symbolic meaning, and to provide basic data to come up with designs that reflect regional identity and commercialize the emblems for tourism.

Research Methods

Research perspectives

Flowers have a symbolic meaning formed in history and culture along with the external beauty that physically shows, and are used in many countries as a national or regional symbol. Floral emblem designation and symbolic meaning can be understood through the rose of Sharon (*Hibiscus syriacus* L.), which is the flower that symbolizes South Korea. A national symbol is described as an official symbol represented by images, texts or figures that are distinctive, differentiated and relatable to promote the consistent national identity to the global society while also having citizens perceive a unified national identity and cultivate community spirit. The South Korean national symbols include Taegeukgi (national flag), Aegukga (national anthem), rose of Sharon (national flower), great seal (seal of state), national emblem, etc. The rose of Sharon, which has been loved in South Korean gardens for a long time, indicates an "eternal blossom that never fades". Due to its meaning and emotional communion, it is designated as the national flower that symbolizes the toughness of our people that have overcome foreign invasion due to its geographical position

of a peninsula (Ministry of the Interior and Safety, 2019). South Africa designated king protea (*Protea cynaroides*) as the national flower in 1976, but later, the bird of paradise flower (*Strelitzia reginae*) was used to newly depict the nature of the nation that integrated multiple ethnicities, and it is now perceived as an icon that appears more frequently in the tourism advertisements in South Africa (Benfield, 2013). Based on the context of these cases, research on floral emblem designation and analysis of symbolic meaning is premised on the two following perspectives. First, like the case of the rose of Sharon, the species that has formed the perception of beauty connected to history and culture and that has formed intimate sentiment among flowers that have inhabited the region for a long time as native species is first designated as the floral emblem, after which it is given the symbolic meaning. Second, like the case of the bird of paradise flower, the symbolic meaning that coincides with the goal, identity and community spirit pursued by the local government is first selected, after which the suitable plant species is chosen.

From the first perspective, we investigated the frequency of plants designated as floral emblems by the local governments, assessed the preference tendency and rarity, and analyzed the symbolic meaning given in the process of floral emblem designation for plant species with high designation frequency. From the second perspective, we investigated the frequency of the symbolic meaning given to the floral emblem, assessed the preference tendency and specificity of the symbol, and analyzed the plant species assigned to the symbolic meaning with high frequency. Through the results of analysis in these two aspects, we comprehensively assessed floral emblem designation and symbolic meaning.

Survey and analysis

South Korean local governments are divided largely into 17 provincial-level administrative divisions such as Seoul special city, Sejong special self-governing city, eight provinces (Gangwon-do, Gyeonggi-do, Chungcheongbuk-do, Chungcheongnam-do, Gyeongsangbuk-do, Gyeongsangnam-do, Jeollabuk-do, Jeollanam-do), six metropolitan cities (Incheon, Daejeon, Daegu, Ulsan, Gwangju, Busan), and Jeju special self-governing province. More specifically, they are sub-

divided into municipal-level administrative divisions such as cities (si), counties (gun), and districts (gu). Most provinces, cities, counties and districts have designated symbolic flowers. Thus, the subjects of this study was limited to the provincial-level administrative divisions and the municipal-level administrative divisions, and the current state of floral emblem designation in total 245 local governments was investigated. Data was collected from November 20, 2018 to June 8, 2019 through the website of each local government and phone interviews with the relevant staff. Frequency analysis was conducted on the collected data with focus on whether a floral emblem is designated in each administrative division, the designated plant species, and its symbolic meaning. Even though the floral emblem is designated in the provincial-level administrative division, a separate floral emblem is designated again in the municipal-level administrative division. Thus, the floral emblem designation frequency was calculated independently in all local governments regardless of the hierarchy of the administrative division. To discuss from the first research perspective, we analyzed the types of plants designated as the floral emblems as well as the frequency, after which we analyzed the symbolic meanings given to the top 10 plant species in designation frequency. To discuss from the second research perspective, we drew terms used as the symbolic meanings of the floral emblems and conducted a frequency analysis, after which we analyzed the plant species assigned to the top 10 terms, and comprehensively discussed the results in the two aspects.

Results and Discussion

The total floral emblem designation rate of the 245 local governments examined in this study was 97.6%, indicating that most local governments were designating their own floral emblems in general (Table 1). However, the floral emblem designation rate of Daejeon metropolitan city was 33.3%, which was remarkably lower than other local governments. The floral emblem designation rates of Incheon metropolitan city, Busan metropolitan city, and Gyeonggi-do province were 90.9%, 94.1% and 93.8% respectively, showing that some local governments in the administrative divisions did

Table 1. Floral emblem designation in the local governments of South Korea

Provincial-level administrative divisions	Municipal-level administrative divisions ^z	Number of administrative divisions ^y	Floral emblem designation frequency	Floral emblem designation rate ^x (%)	Number of plant species designated as floral emblem
Seoul special city	25 districts	26	26	100.0	12
Incheon metropolitan city	8 districts 2 counties	11	10	90.9	6
Daejeon metropolitan city	5 districts	6	2	33.3	2
Gwangju metropolitan city	5 districts	6	6	100.0	3
Daegu metropolitan city	7 districts 1 county	9	9	100.0	7
Ulsan metropolitan city	4 districts 1 county	6	6	100.0	5
Busan metropolitan city	15 districts 1 county	17	16	94.1	10
Sejong special self-governing city	-	1	1	100.0	1
Gyeonggi-do province	28 cities 3 counties	32	30	93.8	12
Gangwon-do province	7 cities 11 counties	19	19	100.0	11
Chungcheongbuk-do province	3 cities 8 counties	12	13	108.3	8
Chungcheongnam-do province	8 cities 7 counties	16	16	100.0	8
Jeollabuk-do province	6 cities 8 counties	15	15	100.0	7
Jeollanam-do province	5 cities 17 counties	23	24	104.3	13
Gyeongsangbuk-do province	10 cities 13 counties	24	24	100.0	13
Gyeongsangnam-do province	8 cities 10 counties	19	19	100.0	13
Jeju special self-governing province	2 cities	3	3	100.0	3
Total		245	239	97.6	

^zProvincial-level administrative divisions are subdivided into municipal-level administrative divisions including cities (si), counties (gun), and districts (gu).

^yNumber of administrative divisions is calculated as the total sum of the number of provincial-level and municipal-level administrative divisions.

^xFloral emblem designation rate is calculated by (floral emblem designation frequency/number of administrative divisions)×100.

not designate floral emblems. The floral emblem designation rates of Chungcheongbuk-do province and Jeollanam-do province were 108.3% and 104.3% respectively, indicating that some local governments in the administrative divisions designated two or more floral emblems.

Seoul special city, the capital of South Korea, was designating floral emblems, and 25 districts in the administrative division were independently designating floral emblems.

However, 12 types of flowers were designated as floral emblems, indicating that local governments were designating the same plant species as the floral emblems. Incheon metropolitan city and Gyeonggi-do province in the capital area also showed a similar tendency. Jeju special self-governing province showed a 100% floral emblem designation rate, and in total three local governments (Jeju special self-governing province in the provincial-level and two cit-

ies in the municipal-level administrative division), there were three types of flowers designated as the floral emblems, thereby not overlapped. Sejong special self-governing city was designating one floral emblem. Among the metropolitan cities, Busan metropolitan city had 10 types of plants designated as the floral emblems, showing the greatest variety, and among the provinces, Jeollanam-do province, Gyeongsangbuk-do province, and Gyeongsangnam-do province had 13 types, showing the greatest variety of plants. The types of plants designated as floral emblems were more diverse in the southern region than the central region, due to the climatic features and extensive flora of the southern region where not only temperate plants but also warm temperate plants can grow.

Total 44 plant species were designated by the local governments as their floral emblems as shown in Table 2, which did not include rose of Sharon, the national flower of South Korea. The plant species of floral emblems with high designation frequency were mostly flowering trees or shrubs, including *Rhododendron* spp., *Rosa* spp., *Camellia* spp., *Magnolia* spp., *Prunus* spp., etc. They were plant species popular worldwide and thus easily found in botanical gardens or parks in not only South Korea but also overseas. Among them, *Rhododendron* spp., *Camellia* spp., *Magnolia* spp., and *Prunus* spp. are known as plant species that are produced extensively as landscaping materials in South Korea (Korea Forest Service, 2007). On the other hand, plant species of floral emblems with low designation frequency included relatively more perennial herbaceous flowering plants. The designation rates of the top 5 species such as *Rhododendron schlippenbachii* Max. (17.4%), *Forsythia koreana* Nakai. (13.0%), *Camellia japonica* L. (8.9%), *Rhododendron mucronulatum* Turcz. (7.7%), and *Rosa hybrida* Hort. (7.3%) added up to 54.3%, indicating that floral emblem designation was concentrated in certain plant species. This result is similar to that of previous research in which city flower designation was concentrated in *Forsythia koreana* Nakai., *Rhododendron schlippenbachii* Max., *Camellia japonica* L., and *Rosa hybrida* Hort. (Rho, 1998).

In particular, *Forsythia koreana* Nakai. and *Rhododendron mucronulatum* Turcz., the native habitat of which is South Korea, showed the second-highest and fourth-highest des-

ignation frequency respectively. *Forsythia koreana* Nakai. and *Rhododendron mucronulatum* Turcz. are flowering shrubs that grow in various places of South Korea in spring, and they are native plants that have provided deep emotional connection throughout the history and culture of South Korea, which is why many local governments have designated them as the floral emblems. Bang and Lee (1995) who analyzed the plantation distribution of landscaping trees in South Korea also proved that *Forsythia koreana* Nakai. and *Rhododendron mucronulatum* Turcz. showed extensive plantation distribution. Moreover, *Camellia japonica* L. is a flowering tree that grow only in the southern region but not in the central region of South Korea, and its flowers create the exotic and unique landscape of the southern region, which is why many local governments in the southern region have designated *Camellia japonica* L. as the floral emblem to differentiate themselves from the central region.

Floral emblems with low designation frequency tended to show relatively high physical/emotional correlation with local governments. Yeongdeok-gun county, where peach is its regional specialty, designated *Prunus persica* L. as the floral emblem, whereas Cheongsong-gun county that is a famous apple producer designated *Malus pumila* Miller as the floral emblem, which shows the correlation between floral emblem designation and regional specialty. Moreover, *Abeliophyllum distichum* Nakai, which is a world-renowned rare plant that naturally grows only in South Korea, was designated as the floral emblem of Goesan-gun county where the plant was first discovered. *Pulsatilla tongkangensis* Y.N. Lee & T.C. Lee (Donggang pasqueflower) was designated as the floral emblem of Jeongseon-gun county, which is its native habitat. Jeongseon-gun county not only designated *Pulsatilla tongkangensis* Y.N. Lee & T.C. Lee as its floral emblem but also designated the Donggang Pasqueflower Village, hosting the Jeongseon Donggang Pasqueflower Festival at the end of March every year (Jeongseon, 2019). These cases prove the strong connectivity between floral emblems and regional characteristics.

As a result of analyzing the symbolic meanings given to the plant species with the top 10 highest designation frequency to analyze the symbolic meanings of floral emblems, it was found that 40 symbolic meanings were given

Table 2. Plant species ranks based on floral emblem designation frequency

Rank	Plant species designated as floral emblem	Administrative division	Frequency	Percentage (%)
1	<i>Rhododendron schlippenbachii</i> Max.	Boseong-gun, Buan-gun, Busan Buk-gu, Busanjin-gun, Cheolwon-gun, Cheongdo-gun, Cheongyang-gun, Daegu Dong-gu, Danyang-gun, Gangwon-do, Gokseong-gun, Goryeong-gun, Guri-si, Gurye-gun, Gwacheon-si, Gwanak-gu, Gwangju Dong-gu, Gwangju metropolitan city, Gwangju Nam-gu, Gyeryong-si, Hadong-gun, Hamyang-gun, Incheon Dong-gu, Incheon Jung-gu, Inje-gun, Jinan-gun, Jongro-gu, Milyang-si, Muju-gun, Mungyeong-si, Namwon-si, Pyeongchang-gun, Sacheon-si, Samcheok-si, Sasang-gu, Seongnam-si, Suncheon-si, Uijeongbu-si, Uiwang-si, Wanju-gun, Yeongju-si, Yeongwol-gun, Youngin-si	43	17.4
2	<i>Forsythia koreana</i> Nakai.	Anseong-si, Anyang-si, Boeun-gun, Cheonan-si, Chuncheon-si, Daegu Nam-gu, Eumseong-gun, Gapyeong-gun, Geochang-gun, Gongju-si, Gumi-si, Gunwi-gun, Gwangju-si, Gyeonggi-do, Gyeongju-si, Heungseong-gun, Imsil-gun, Incheon Namdong-gu, Jecheon-si, Jeonju-si, Kimpo-si, Namyangju-si, Nonsan-si, Okcheon-gun, Seongdong-gu, Seongju-gun, Seoul special city, Songpa-gu, Yangju-si, Yeosu-si, Yeoncheon-gun, Yesan-gun	32	13.0
3	<i>Camellia japonica</i> L.	Boryeong-si, Busan Jung-gu, Busan metropolitan city, Gangjin-gun, Geoje-si, Gochang-gun, Goheung-gun, Gunsan-si, Gwangyang-si, Haenam-gun, Haeundae-gu, Jeollanam-do, Jindo-gun, Seochon-gun, Taean-gun, Tongyeong-si, Ulleung-gun, Ulsan Dong-gu, Ulsan Jung-gu, Wando-gun, Yeongdo-gu, Yeosu-si	22	8.9
4	<i>Rhododendron mucronulatum</i> Turcz.	Daegu Seo-gu, Dangjin-si, Gangbuk-gu, Ganghwa-gun, Geumcheon-gu, Geumjeong-gu, Gijang-gun, Gwangjin-gun, Gyeyang-gu, Hongcheon-gun, Hwacheon-gun, Icheon-si, Jangheung-gun, Seongbuk-gu, Suwon-si, Uiryeong-gun, Yangpyeong-gun, Yeongdong-gun, Yeonsu-gu	19	7.7
5	<i>Rosa hybrida</i> Hort.	Ansan-si, Dalseo-gu, Goyang-si, Gwangmyeong-si, Gyeongsangnam-do, Incheon metropolitan city, Jincheon-gun, Pohang-si, Saha-gu, Sangju-si, Secho-gu, Seodaemun-gu, Seoul Jung-gu, Suseong-gu, Ulsan metropolitan city, Wonju-si, Yeongcheon-si, Yongsan-gu	18	7.3
6	<i>Chrysanthemum morifolium</i> Ram.	Bupyeong-gu, Changyeong-gun, Cheongcheongnam-do, Chungju-si, Dongjak-gu, Gangseo-gu, Goseong-gun, Gujeong-gu, Iksan-si, Incheon Seo-gu, Muan-gun, Seosan-si, Sokcho-si	13	5.3
7	<i>Magnolia kobus</i> DC.	Asan-si, Busan Nam-gu, Busan Seo-gu, Daegu metropolitan city, Dongdaemun-gu, Gangnam-gu, Guro-gu, Gwangju Seo-gu, Gwangsan-gu, Gyeongsan-si, Mapo-gu, Yangsan-si, Yecheon-gun, Yeongdeungpo-gu	14	5.7
8	<i>Prunus mume</i> Sieb. et Zucc.	Andong-si, Chilgok-gun, Damyang-gun, Donghae-si, Dongrae-gu, Gangdong-gu, Hapcheon-gun, Kimhae-si, Osan-si, Uljin-gun, Yeongam-gun	11	4.5
9	<i>Zinnia elegans</i> Jacq.	Daegu Jung-gu, Gwangju Buk-gu, Gyeongsangbuk-do, Haman-gun, Jeollabuk-do, Kimje-si	6	2.4
10	<i>Magnolia denudata</i> Desroux.	Cheongju-si, Chungcheongbuk-do, Daejeon metropolitan city, Jeungpyeong-gun, Mokpo-si	5	2.0
	<i>Pyrus serotina</i> Rehder	Busan Gangseo-gu, Jungrang-gu, Naju-si, Pyeongtaek-si, Ulju-gun	5	2.0
11	<i>Rosa rugosa</i> Thunb.	Goseong-gun, Ongjin-gun, Sinan-gun, Yangyang-gun	4	1.6
	<i>Lagerstroemia indica</i> L.	Daegu Buk-gu, Gangneung-si, Hwaseong-si, Sunchang-gun	4	1.6

Table 2. (continued)

Rank	Plant species designated as floral emblem	Administrative division	Frequency	Percentage (%)
12	<i>Cosmos bipinnatus</i> Cav.	Eunpyeong-gun, Gokseong-gun, Paju-si	3	1.2
	<i>Magnolia parviflora</i> Sieb. et Zucc.	Hoengseong-gun, Suyeong-gun, Taebaek-si	3	1.2
	<i>Nelumbo nucifera</i> Gaertn.	Buyeo-gun, Yeongyang-gun, Yeonje-gu	3	1.2
	<i>Prunus persica</i> L.	Bucheon-si, Sejong special self-governing city, Yeongdeok-gun	3	1.2
13	<i>Chrysanthemum zawadskii</i> Herbach var. <i>latilobum</i> (Maxim.) Kitamura	Jeongeup-si, Pochen-si	2	0.8
	<i>Prunus serrulata</i> Thunb. var. <i>spontanea</i> Max. Wils.	Changwon-si, Ulsan Nam-gu	2	0.8
	<i>Rhododendron weyrichii</i> Maxim.	Dalseong-gun, Jeju special self-governing province	2	0.8
	<i>Rhododendron yedoense</i> Maxim. ex Regel var. <i>poukhanense</i>	Jangsu-gun, Nowon-gu	2	0.8
	<i>Abeliophyllum distichum</i> Nakai	Goesan-gun	1	0.4
	<i>Chrysanthemum indicum</i> L.	Hwasun-gun	1	0.4
	<i>Convallaria keiskei</i> (Miq.) Miquel	Hanam-si	1	0.4
	<i>Cornus officinalis</i> Sieb. et Zucc.	Uiseong-gun	1	0.4
	<i>Cymbidium goeringii</i> (Reichb. fil.) Reichb. fil.	Hampyeong-gun	1	0.4
	<i>Cymbidium kanran</i> Makino	Seogwipo-si	1	0.4
	<i>Gardenia jasminoides</i> Ellis var. <i>grandiflora</i> Nakai	Namhae-gun	1	0.4
	<i>Gossypium indicum</i> Lam.	Sancheong-gun	1	0.4
	<i>Helianthus annuus</i> L.	Yangcheon-gu	1	0.4
14	<i>Impatiens balsamina</i> L.	Goesan-gun	1	0.4
	<i>Iris ensata</i> var. <i>spontanea</i> (Makino) Nakai	Dobong-gu	1	0.4
	<i>Kerria japonica</i> (L.) DC.	Dongducheon-si	1	0.4
	<i>Lilium tigrinum</i> Ker-Gawl.	Ulsan Buk-gu	1	0.4
	<i>Lycoris sanguinea</i> var. <i>koreana</i> (Nakai) T. Koyama	Jangseong-gun	1	0.4
	<i>Lycoris squamigera</i> Maxim.	Yeonggwang-gun	1	0.4
	<i>Magnolia sieboldii</i> K. Koch	Bonghwa-gun	1	0.4
	<i>Malus pumila</i> Miller	Cheongsong-gun	1	0.4
	<i>Narcissus</i> spp.	Jeju-si	1	0.4
	<i>Paeonia suffruticosa</i> Andr.	Geumsan-gun	1	0.4
	<i>Prunus armeniaca</i> L. var. <i>ansu</i> Max.	Yanggu-gun	1	0.4
	<i>Prunus salicina</i> Lindl.	Gimcheon-si	1	0.4
	<i>Pulsatilla tongkangensis</i> Y. N. Lee & T. C. Lee	Jeongseon-gun	1	0.4
	<i>Punica granatum</i> L.	Jinju-si	1	0.4
	No floral emblem	Busan Dong-gu, Daejeon Daedeok-gu, Daejeon Dong-gu, Daejeon Seo-gu, Gunpo-si, Michuhol-gu, Siheung-si, Yuseong-gu	8	3.2
Total			247	100.0

to *Rhododendron schlippenbachii* Max., at least 20 meanings to *Forsythia koreana* Nakai., *Camellia japonica* L., *Rhododendron mucronulatum* Turcz., *Rosa hybrida* Hort.,

and *Magnolia kobus* DC., and at least 10 to other plant species. Plant species with higher designation frequency tended to have more symbolic meanings (Table 3). Compared

Table 3. Symbolic meanings of the top ten designation ranking floral emblems

Designation rank	Floral emblem	Number of meanings	Symbolic meanings (Assignment frequency)
1	<i>Rhododendron schlippenbachii</i> Max.	40	Prosperity(7), Mental(5), Vigor(5), Combination(4), Love(4), Patience(4), Richness(4), Fidelity(3), Amiable(2), Beauty(2), Development(2), Endurance(2), Joy(2), Local patriotism(2), Passion(2), Politeness(2), Pure(2), Strength(2), Wise(2), Citizenship(1), Clarity(1), Cohesion(1), Concession(1), Democratization(1), Exuberancy(1), Faith(1), Familiarity(1), Foreknowledge(1), Growth(1), Honor(1), Hospitality(1), Industry(1), Loyalty(1), Moderation(1), Pioneer(1), Potential(1), Recognition(1), Rusticity(1), Tender(1), Youth(1)
2	<i>Forsythia koreana</i> Nakai	25	Hope(10), Prosperity(7), Cohesion(4), Development(3), Fighting spirit(3), Vigor(3), Cooperation(2), Friendly(2), Patience(2), Peace(2), Unsophisticated(2), Assiduity(1), Combination(1), Desire(1), Future(1), Hospitality(1), Light(1), Liveliness(1), Love(1), Pioneer(1), Positive thinking(1), Power(1), Stability(1), Tidings of spring (1), Virtue(1)
3	<i>Camellia japonica</i> L.	27	Love(3), Prosperity(3), Vigor(3), Passion(2), Sea(2), Will(2), Backbone(1), Beach(1), Beauty(1), Chastity(1), Cohesion(1), Combination(1), Courage(1), Endurance(1), Exuberancy(1), Friends of Korean traditional scholar(1), Fruition(1), Hope(1), Industry(1), Local patriotism(1), Luck(1), Patience(1), Potential(1), Rusticity(1), Strength(1), Talent producing(1), Victory(1)
4	<i>Rhododendron mucronulatum</i> Turcz.	20	Cohesion(5), Combination(5), Rusticity(4), Industry(3), Love(3), Familiarity(1), Filial duty(1), Hope(1), Independence(1), Iron hand in a velvet glove (1), Life force(1), Local patriotism(1), Mind(1), Moderation(1), Mountain filled with azalea(1), Personality(1), Prosperity(1), Strength(1), Tender(1), Warmth(1)
5	<i>Rosa hybrida</i> Hort.	21	Passion(5), Beauty(4), Courage(3), Love(3), Prosperity(3), Wisdom(3), Development(2), Local patriotism(2), Active(1), Chastity(1), Combination(1), Concord(1), Dignity(1), Elegance(1), Enthusiasm(1), Fragrant(1), Future(1), Grace(1), Longing(1), Possibility(1), Proud(1)
6	<i>Chrysanthemum morifolium</i> Ram.	17	Richness(4), Patience(2), Prosperity(2), Stability(2), Vigor(2), Constancy(1), Development(1), Fidelity(1), Friendly(1), Loyalty(1), Mild(1), Personality(1), Politeness(1), Pure(1), Sophisticated(1), Tender(1)
7	<i>Magnolia kobus</i> DC.	23	Chastity(2), Cohesion(2), Grace(2), Heart(2), Mental(2), Neat(2), Capacity(1), Combination(1), Decent(1), Elegance(1), Favor(1), Love(1), Peace(1), Pure(1), Recognition(1), Richness(1), Sacrifice(1), Smooth(1), Stability(1), Thermal water(1), Unsophisticated(1), Verdure(1), Will(1)
8	<i>Prunus mume</i> Sieb. et Zucc.	17	Noble(4), Fidelity(2), Strength(2), Backbone(1), Creation(1), Development(1), Endurance(1), Grace(1), Heart(1), Humility(1), Moral character(1), Morality(1), Personality(1), Prosperity(1), Seonbijeongsin (Korean traditional scholar spirit)(1), Self-help(1), Virtue(1)
9	<i>Zinnia elegans</i> Jacq.	11	Patience(4), Endurance(2), 100-day blooming(1), Development(1), Familiarity(1), Force(1), Grace(1), Mental(1), Potential(1), Vigor(1), Will(1)
10	<i>Magnolia denudata</i> Desroux.	11	Chastity(2), Art(1), Combination(1), Cooperation(1), Decent(1), Elegance(1), Mental(1), Mild(1), Naive(1), Self-help(1), Self-reliance(1)
	<i>Pyrus serotina</i> Rehder	11	Unsophisticated(2), Assiduity(1), Backbone(1), Beauty(1), Cohesion(1), Creation(1), Ethnicity(1), Hope(1), Recognition(1), Seonbijeongsin(Korean traditional scholar spirit)(1), Will(1)

to the fact that each flower generally has 2-5 commonly used languages of flowers, there were extremely diverse symbolic meanings given to the plant species with the top 10 highest floral emblem designation frequency. Most flo-

ral emblems were given at least 2 symbolic meanings, and a comparison of symbolic meanings given by multiple local governments to the same floral emblem shows that not only the same or similar terms but also special and distinctive

terms were used. This result can be analyzed in line with the argument by Ziegler (2007) that “creation of identity is an activity fundamental to several of today’s widespread flower practices”. In terms of establishing an identity distinguished from other regions and giving the sense of belonging or homogeneity, even if the members of the community agreed to designate the universally preferred plants such as *Rhododendron schlippenbachii* Max., *Forsythia koreana* Nakai., *Rosa hybrida* Hort., and *Camellia japonica* L. as the floral emblems, it seems that differentiated identity is attempted to be given to those plants in terms of symbolic meaning. This indicates that, since the same plant species can be perceived with different emotions, symbolic meanings of floral emblems are used to establish an identity among regions with diverse historical and cultural backgrounds.

Regarding the symbolic meanings of floral emblems, some local governments have given symbolic meanings with commonly used floriography to the flowers designated as the floral emblems, while others have given symbolic meanings with special historical/cultural sentiments or pursued values regardless of floriography. *Rhododendron schlippenbachii* Max. was given 40 symbolic meanings, which was the biggest number, and ‘joy’ and ‘passion’ were equivalent or similar to the widely used floriography, whereas ‘prosperity’, ‘richness’, ‘local patriotism’, and ‘citizenship’ were values pursued by the local governments. Other emotional meanings seemed to have reflected the special historical/cultural sentiments of the region. *Rosa hybrida* Hort. was given 25 symbolic meanings, which was approximately 50% lower than *Rhododendron schlippenbachii* Max., and the meanings were mostly equivalent or similar to the widely used floriography, while some local governments gave symbolic meanings of ‘prosperity’, ‘local patriotism’, ‘development’, and ‘concord’. Among the symbolic meanings of *Camellia japonica* L., ‘sea’ seems to be correlated with the distinctive marine landscape of the southern Korean region, which is the habitat of *Camellia japonica* L. Symbolic meanings such as ‘iron hand in a velvet glove’ given to *Rhododendron mucronulatum* Turcz., ‘fidelity’ and ‘Seonbijeongsin (Korean traditional scholar spirit)’ given to *Prunus mume* Sieb. et Zucc., and ‘ethnicity’ given to *Pyrus serotina* Rehder showed correla-

tion to historical/cultural sentiments.

Total 155 terms were used as symbolic meanings of floral emblems, with ‘prosperity’ showing the highest frequency (23 times), followed by ‘cohesion’ and ‘combination’ (Table 4). Major terms used as symbolic meanings were related to material affluence and economic aspects such as ‘prosperity’, ‘development’, ‘exuberancy’, ‘richness’, and ‘growth’; local community spirit such as ‘cohesion’, ‘combination’, ‘cooperation’, ‘citizenship’, and ‘local patriotism’; and personality generally required from local residents such as ‘love’, ‘patience’, ‘hope’, and ‘peace’. Terms such as ‘Bulgap mountain’, ‘herbal town’, ‘first discovered’, ‘the first plantation’, ‘beach’, ‘thermal water’, and ‘mountain filled with azalea’ represented symbolic meanings that are strongly connected to the regional landscapes or features. Moreover, terms that represented the traditional value system or Confucian ideas of Korea such as ‘Seonbijeongsin (Korean traditional scholar spirit)’ or ‘friends of Korean traditional scholar’ were also used as symbolic meanings.

Table 5 shows the plant species associated with the terms with the top 10 frequency in symbolic meanings, most of which were plant species included in the top 10 floral emblem designation frequency (Tables 2 and 3). ‘Prosperity’ was associated with 9 plant species, and seven of them excluding *Kerria japonica* (L.) DC. and *Lilium tigrinum* Ker-Gawl. were included in the ones with the top 10 floral emblem designation frequency. ‘Cohesion’ was associated with 10 plant species, among which *Forsythia koreana* Nakai., *Magnolia kobus* DC., *Pyrus serotina* Rehder, and *Rhododendron schlippenbachii* Max. were the plant species included among the top 10 designation frequency. ‘fidelity’, ‘noble’, and ‘peace’ that were among the top 10 frequency in symbolic meanings also showed a similar tendency. This result is consistent with the results that local governments designated plant species with high historical/cultural intimacy as the floral emblems (Table 2), that the symbolic meanings given to the floral emblems were more associated with various terms that reveal the differentiated identity of the local governments than the common floriography (Table 3), and that the symbolic meanings related to regional economy, local community spirit, and personality required from local residents were highly perceived (Table 4).

Table 4. Symbolic meaning of floral emblem ranked by the semantic assignment frequency of administrative divisions

Rank	Symbolic meaning of floral emblem	Number of meanings within the same rank	Assignment frequency of each meaning (Percent)		Subtotal assignment frequency ^z (Percent)	
1	Prosperity	1	23	(5.3 %)	23	(5.3 %)
2	Cohesion	1	19	(4.3 %)	19	(4.3 %)
3	Combination	1	18	(4.1 %)	18	(4.1 %)
4	Love	1	17	(3.9 %)	17	(3.9 %)
5	Mental, Patience, Vigor	3	13	(3.0 %)	39	(8.9 %)
6	Hope, Passion, Richness	3	10	(2.3 %)	30	(6.9 %)
7	Development, Personality, Will	3	8	(1.8 %)	24	(5.5 %)
8	Beauty, Chastity, Local patriotism, Strength	4	7	(1.6 %)	28	(6.4 %)
9	Industry, Unsophisticated	2	6	(1.4 %)	12	(2.7 %)
10	Fidelity, Noble, Peace	3	5	(1.1 %)	15	(3.4 %)
11	Backbone, Courage, Endurance, Rusticity, Stability	5	4	(0.9 %)	20	(4.6 %)
12	Cleanliness, Enthusiasm, Ethos, Fighting spirit, Friendly, Grace, Heart, Joy, Luck, Mild, Moderation, Politeness, Potential, Pure, Recognition, Tender, Wise, Youth	18	3	(0.7 %)	54	(12.4 %)
13	Amiable, Aspiration, Autogenous, Citizenship, Desire, Dignity, Elegance, Emotion, Ethnicity, Exuberancy, Familiarity, Figure, Fruition, Future, Life force, Neat, Patiently, Pioneer, Seonbijeongsin(Korean traditional scholar spirit), Sea, Virtue, Warmth	22	2	(0.5 %)	44	(10.1 %)
14	100-day blooming, Active, Appearance, Art, Aspect, Assiduity, Beach, Bulgap Mountain, Capacity, Charm, Cheerful, Clarity, Concession, Concord, Constancy, Cooperation, Creation, Decent, Democratization, Dream, Energy, Faith, Favor, Filial duty, First discovered, First plantation, Foreknowledge, Fragrant, Friends of Korean traditional scholar, Generosity, Growth, Gumption, Harmony, Herbal town, Holiness, Honor, Hospitality, humility, Independence, Innocence, Iron hand in a velvet glove, Jump, Knowledge-morals-body, Life, Light, Liveliness, Living, Longing, Loyalty, Lustiness, Lyrical meaning, Mind, Moral character, Morality, Mountain filled with azalea, Naive, News, Noble man, Order, Origin, Patriotic loyalty, Patriotic spirit, Plain, Pledge, Positive thinking, Possibility, Power, Pride, Proud, Resident character, Sacrifice, Self-help, Self-reliance, Smooth, Sophisticated, Stamina, Status, Talent producing, Temperament, Thermal water, Tidings of spring, Time, Utility, Verdure, Viability, Victory, Vitality, Wisdom	88	1	(0.2 %)	88	(20.1 %)
	No symbolic meaning	-	-	-	6	(1.4 %)
	Total	155			437	(100.0 %)

^zSubtotal assignment frequency is calculated by (number of meanings within the same rank)×(assignment frequency of each meaning).

Conclusion

As a symbol or an icon designated by the national or regional community, floral emblems can not only provide members with an identity through important symbolic meanings and cultivate community spirit, but also bring

economic benefits to the national and local governments as a component of tourism or design. This study was conducted to analyze the current state of floral emblem designation in the South Korean local governments as well as the symbolic meanings as part of research to promote floral emblem designation and utilization. In general, most local

Table 5. Plant species frequency of the top ten assignment ranking symbolic meanings

Assign-ment rank	Symbolic meaning	Assigned plant species	Frequ-ency
1	Prosperity	<i>Camellia japonica</i> L., <i>Chrysanthemum morifolium</i> Ram., <i>Forsythia koreana</i> Nakai, <i>Kerria japonica</i> (L.) DC., <i>Lilium tigrinum</i> Ker-Gawl., <i>Prunus mume</i> Sieb. et Zucc., <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max., <i>Rosa hybrida</i> Hort.	9
2	Cohesion	<i>Cymbidium goeringii</i> (Reichb. fil.) Reichb. fil., <i>Forsythia koreana</i> Nakai, <i>Magnolia kobus</i> DC., <i>Magnolia parviflora</i> Sieb. et Zucc., <i>Punica granatum</i> L., <i>Pyrus serotina</i> Rehder, <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max., <i>Rhododendron weyrichii</i> Maxim., <i>Rosa rugosa</i> Thunb.	10
3	Combination	<i>Camellia japonica</i> L., <i>Cosmos bipinnatus</i> Cav., <i>Forsythia koreana</i> Nakai, <i>Magnolia denudata</i> Desroux., <i>Magnolia kobus</i> DC., <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max., <i>Rosa hybrida</i> Hort., <i>Rosa rugosa</i> Thunb.	9
4	Love	<i>Abeliophyllum distichum</i> Nakai, <i>Camellia japonica</i> L., <i>Chrysanthemum zawadskii</i> Herbach var. <i>latilobum</i> (Maxim.) Kitamura, <i>Convallaria keiskei</i> (Miq.) Miquel, <i>Cornus officinalis</i> Sieb. et Zucc., <i>Cosmos bipinnatus</i> Cav., <i>Forsythia koreana</i> Nakai, <i>Magnolia kobus</i> DC., <i>Prunus persica</i> L., <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max., <i>Rosa hybrida</i> Hort.	12
5	Mental	<i>Convallaria keiskei</i> (Miq.) Miquel, <i>Magnolia denudata</i> Desroux., <i>Magnolia kobus</i> DC., <i>Rhododendron schlippenbachii</i> Max., <i>Zinizia elegans</i> Jacq.	5
	Patience	<i>Chrysanthemum morifolium</i> Ram., <i>Cymbidium goeringii</i> (Reichb. fil.) Reichb. fil., <i>Forsythia koreana</i> Nakai, <i>Rhododendron schlippenbachii</i> Max., <i>Rosa rugosa</i> Thunb., <i>Zinizia elegans</i> Jacq.	6
	Vigor	<i>Camellia japonica</i> L., <i>Chrysanthemum morifolium</i> Ram., <i>Forsythia koreana</i> Nakai, <i>Rhododendron schlippenbachii</i> Max., <i>Rhododendron yedoense</i> Maxim. ex Regel var. <i>poukhanense</i> . <i>Zinizia elegans</i> Jacq.	6
	Hope	<i>Forsythia koreana</i> Nakai, <i>Pyrus serotina</i> Rehder, <i>Rhododendron mucronulatum</i> Turcz.	3
6	Passion	<i>Camellia japonica</i> L., <i>Rhododendron schlippenbachii</i> Max., <i>Rhododendron weyrichii</i> Maxim., <i>Rosa hybrida</i> Hort.	4
	Richness	<i>Chrysanthemum morifolium</i> Ram., <i>Nelumbo nucifera</i> Gaertn. <i>Rhododendron schlippenbachii</i> Max.	3
	Development	<i>Forsythia koreana</i> Nakai, <i>Prunus mume</i> Sieb. et Zucc., <i>Prunus persica</i> L., <i>Rhododendron schlippenbachii</i> Max., <i>Rhododendron weyrichii</i> Maxim., <i>Rosa hybrida</i> Hort., <i>Zinizia elegans</i> Jacq.	7
	Personality	<i>Chrysanthemum morifolium</i> Ram., <i>Cornus officinalis</i> Sieb. et Zucc., <i>Magnolia sieboldii</i> K. Koch, <i>Prunus mume</i> Sieb. et Zucc., <i>Prunus persica</i> L., <i>Rhododendron mucronulatum</i> Turcz.,	6
7	Will	<i>Camellia japonica</i> L., <i>Chrysanthemum indicum</i> L., <i>Pulsatilla tongkangensis</i> Y. N. Lee & T. C. Lee, <i>Punica granatum</i> L., <i>Pyrus serotina</i> Rehder, <i>Zinizia elegans</i> Jacq.	6
	Chastity	<i>Camellia japonica</i> L., <i>Magnolia denudata</i> Desroux., <i>Magnolia kobus</i> DC., <i>Magnolia parviflora</i> Sieb. et Zucc., <i>Rosa hybrida</i> Hort., <i>Rosa rugosa</i> Thunb.	6
	Local patriotism	<i>Camellia japonica</i> L., <i>Gardenia jasminoides</i> Ellis var. <i>grandiflora</i> Nakai, <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max., <i>Rosa hybrida</i> Hort.	5
	Strength	<i>Camellia japonica</i> L., <i>Helianthus annuus</i> L., <i>Prunus mume</i> Sieb. et Zucc., <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max.	5
9	Beauty	<i>Camellia japonica</i> L., <i>Narcissus</i> spp., <i>Pyrus serotina</i> Rehder, <i>Rhododendron schlippenbachii</i> Max., <i>Rosa hybrida</i> Hort.	5
	Industry	<i>Camellia japonica</i> L., <i>Prunus armeniaca</i> L. var. <i>ansu</i> Max., <i>Rhododendron mucronulatum</i> Turcz., <i>Rhododendron schlippenbachii</i> Max.	4
	Unsophisticated	<i>Chrysanthemum indicum</i> L., <i>Forsythia koreana</i> Nakai, <i>Magnolia sieboldii</i> K. Koch, <i>Magnolia parviflora</i> Sieb. et Zucc., <i>Pyrus serotina</i> Rehder, <i>Rhododendron yedoense</i> Maxim. ex Regel var. <i>poukhanense</i>	6
	Fidelity	<i>Chrysanthemum morifolium</i> Ram., <i>Prunus mume</i> Sieb. et Zucc., <i>Rhododendron schlippenbachii</i> Max.	3
10	Noble	<i>Prunus mume</i> Sieb. et Zucc.	1
	Peace	<i>Convallaria keiskei</i> (Miq.) Miquel, <i>Forsythia koreana</i> Nakai, <i>Magnolia kobus</i> DC., <i>Prunus armeniaca</i> L. var. <i>ansu</i> Max.	4

governments in South Korea had designated floral emblems. Total 44 plant species were designated as floral emblems, and these did not include rose of Sharon, which is the national flower of South Korea. Most plant species used as floral emblems with high designation frequency were flowering trees or shrubs, and the ones with high frequency were *Rhododendron* spp., *Rosa* spp., *Camellia* spp., *Magnolia* spp., and *Prunus* spp. As a result of analyzing the symbolic meanings given to the plant species with top 10 designation frequency, it was found that each plant species had at minimum 11 to maximum 40 symbolic meanings, and the plant species with higher designation frequency tended to have more symbolic meanings. This result is due to the fact that, even if the same plant species is designated as the floral emblem, each local government used special, differentiated terms as the symbolic meaning. Many symbolic meanings of the floral emblems were historical/cultural sentiments or terms that reflected the values pursued by the local governments such as 'prosperity', 'richness', 'local patriotism', and 'citizenship' rather than the generally used florigraphy. Total 155 terms were used as symbolic meanings of floral emblems, with 'prosperity', 'cohesion', and combination' showing high frequency. Most plant species connected to the terms with top 10 frequency in symbolic meanings were the ones included in the top 10 floral emblem designation frequency.

The following summarizes the results of analyzing the symbolic meanings given to the plant species with high floral emblem designation frequency and the plant species assigned to the symbolic meanings that showed high frequency based on the two perspectives presented in the research methods. First, floral emblem designation frequency was high in plant species with high historical/cultural intimacy, and the symbolic meanings given to plant species showed high frequency in terms related to regional economic growth, cultivation of local community spirit, and personality required from local residents rather than florigraphy that is commonly perceived as the image of the plant itself. Moreover, various terms were connected to consciously reflect the goal or identity pursued by the local governments. As such, without sufficiently publicizing the diverse symbolic meanings given to the same plant species depending on the region, it is unlikely for the members

of the community to perceive the specificity and distinction of the floral emblem and to give identity through the floral emblem. Thus, it is necessary to actively publicize the floral emblems to promote the awareness of the local residents. Second, floral emblems with low designation frequency tended to have relatively strong physical/emotional correlation with the local governments, and thus are expected to have high utilization in regional branding and tourism marketing. Therefore, it is necessary to establish a rational designation process and seek efficient utilization plans so that floral emblems can adequately reflect the regional characteristics and values pursued by the local governments.

This study can be used as the basic data when the local governments host festivals or exhibitions in flower themes for garden tourism, in the design industry such as symbols, icons and sculptures reflecting the symbolic meanings of the floral emblems, or when the floral emblems are newly designated with change in the administrative division. Since the scope of this research is limited to the investigation and analysis of the current state of floral emblem designation by the local governments as well as symbolic meanings, there were limitations in that more concrete research could not be conducted on the perception of the members of the community about the floral emblems, or their social and cultural use. It is necessary to conduct further studies on use of floral emblems and perception of local residents in tourism and the design industry.

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