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FROM LOCAL FLORA TO NEW WORLD PLANTS: THE TRANSFORMATION OF TRADITIONAL GARDEN DIVERSITY IN ROMANIA – GRANDMOTHER'S GARDEN AND THE HISTORICAL GARDEN AS HORTICULTURAL MODELS

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ABSTRACT

The research is focused on two traditional gardens belonging to Botanical Garden "D. Brandza" of the University of Bucharest, the Historical Garden and Grandmother's Garden, from the perspective of taxonomic diversity, origin, status and use of plants. The inventory includes 323 distinct taxon entries, of which 75 are recorded in the Historical Garden and 269 in Grandmother's Garden, with 21 entries common to both gardens. The two gardens present clear differences in terms of plant function: in the Historical Garden, food and medicinal taxa predominate, while Grandmother's Garden is characterized by a high diversity of ornamental plants and horticultural forms. The analysis of food plants highlights the presence of both native species and non-native species with a long history of cultivation, illustrating the importance of historical plant circulation between the Near East, Asia and Europe. The subsequent introduction of plants native to the Americas contributed to the diversification of food and horticultural resources. The study highlights that traditional plant heritage is the result of the interaction between spontaneous flora, cultivated plants and horticultural forms selected and propagated over time.

INTRODUCTION

The traditional Romanian garden has been an important component of the rural household, reflecting the way of life, occupations, available resources, and the level of well-being of communities (Antofie et al. 2023). Its organization and composition varied depending on the region, environmental conditions, and social and economic particularities of the community (Antofie 2020). In the peasant household, the garden had mainly a utilitarian function, intended to produce an important part of the family's food. Vegetables, fruit trees, aromatic and medicinal plants occupied an important place, and crops were often associated and arranged in such a way as to efficiently capitalize on the available space (Antofie & Sava 2020).

Plants grown in traditional households, however, did not have exclusively food value. Ornamental plants, although they usually occupied smaller areas, had an important cultural and symbolic role, being used in celebrations, rituals and in the decoration of household and textile objects (Papp & Bencsik 2013, Micu 2014). At

the same time, the relationship of communities with plant resources was not limited to cultivated species. Many medicinal plants were harvested from spontaneous flora, and some spontaneous species were also used as a source of food, highlighting the close connection between the garden, the household and the surrounding vegetation (Sõukand & Pieroni 2016, Vári et al. 2020). Therefore, the plant diversity of the traditional household needs to be understood in the broader context of the plant resources available and used by the community.

The composition of traditional gardens has not been static but has been continuously changing as a result of plant circulation, trade and cultural exchanges, and the introduction and adoption of new crops (Calvet-Mir et al. 2016, Nunn & Qian 2010). However, the geographical origin of a plant is not, in itself, sufficient to establish its 'traditional' character in a given space. Many plants native to other regions of the world were introduced to Europe long before the modern period and were gradually integrated into agriculture, food and horticultural practices (Colledge et al. 2004). Such plants, although biogeographically alien, became part of Europe's agricultural and food heritage long before transatlantic trade (Colledge et al. 2004, Nunn & Qian 2010).

A landmark moment in this evolution is the beginning of plant exchanges between Europe and the Americas after 1492. The process known as the "Columbian exchange" led to the progressive introduction into Europe of numerous species native to the Americas and changed European agriculture, food and horticulture in the long term (Nunn & Qian 2010, Janick 2010, Gutaker & Purugganan 2024). Among the plants that later came to have a special importance in agriculture and nutrition in the Romanian space are corn, beans, pumpkin, tomatoes, peppers, potatoes and sunflowers. Their integration was neither simultaneous nor uniform, but took place in different periods and through successive processes of introduction, cultivation, adaptation and spread.

In the Romanian space, some of these crops became over time important components of traditional agricultural systems. Maize spread relatively quickly in southern Europe and the Balkans, later becoming an important crop in the territories that correspond to Romania today (Stoianovich 1966). The potato was later introduced into the Romanian space, being cultivated in Transylvania since the second half of the eighteenth century (Soare 2018, Bredt 2000). An example of the integration of these plants into traditional agricultural practices is the cultivation of maize in association with beans and pumpkins, a practice that contributed to the diversification of agricultural production and the efficient use of cultivated land (Giușcă & Velican 1937, Dusa & Roman 2012, Brezeanu et al. 2023).

Other American plants were progressively integrated into the diet and household horticulture, some becoming staple crops, and others being used on a smaller scale. The introduction of these plants did not lead to the complete replacement of the existing plant repertoire, but led to the superimposition of a new set of resources on top of a fund of already used plants.

Therefore, the transformation of the traditional garden can be seen as a process of accumulation and reorganization of cultivated diversity. The plant background used before 1500 included both native species and plants native to other regions of the Old World, which had already been integrated into European agriculture and food. After 1500, this repertoire expanded with the introduction of plants native to the New World. Some of these later acquired such importance that they became associated with traditional local agriculture and food, although their biogeographical origin is American. This perspective highlights the need to

differentiate between the geographical origin of a species, the time of its introduction and the degree to which it was integrated into local practices.

In this sense, traditional gardens can be seen not only as production spaces, but also as social-ecological systems and as a repository of a biocultural heritage in which plant diversity, horticultural practices and local knowledge are transmitted and transformed over generations (Calvet-Mir et al. 2016, Antofie 2020, Ibarra et al. 2026). Their composition reflects both the plants available and used in a given period, as well as the economic, cultural and horticultural changes that have occurred over time (Antofie 2020, Calvet-Mir et al. 2016). Consequently, the analysis of the cultivated floristic composition, geographical origin, period of introduction and uses of plants can contribute to the understanding of how traditional horticultural repertoires have been constituted and modified.

In the "D. Brandza" Botanical Garden of the University of Bucharest, the Grandmother's Garden and the Historical Garden provide a framework for comparing two traditional garden models, characterized by different historical and horticultural contexts. The Historical Garden is designed to illustrate the plants used in food in the Romanian space before 1500, while the Grandmother's Garden represents a more recent traditional garden model, in which the old plant background is associated with plants introduced and adopted later. The comparison of the composition of the two gardens allows us to investigate how historical changes in the circulation and adoption of plants, especially the introduction of crops originating from the New World, are reflected in the diversity and structure of the traditional garden.

The aim of this paper is to analyze and compare the diversity of plants grown in the Grandmother's Garden and the Historical Garden, in order to highlight the transformation of the composition of the traditional Romanian garden and the contribution of plants introduced from the New World to this transformation.

MATERIAL AND METHODS

The study was carried out in two botanical, horticultural, educational and demonstration spaces within the "D. Brandza" Botanical Garden of the University of Bucharest: the Grandmother's Garden and the Historical Garden.

Between 2023 and 2026, the taxa grown in the two gardens were inventoried. The identified taxa were centralized in an Excel database. For each taxon, the scientific name, botanical family, presence in Grandmother’s Garden and/or Historical Garden, life form, native or allochthonous status, geographical origin and main uses were recorded.

In both gardens, cultivars of species grown for food purposes were also used. The choice of cultivars was determined by the availability of plant material and, in the case of certain plants, by the fact that the wild form is not available as suitable growing material. The use of cultivars allowed the representation of the plants grown in the specific conditions of the two gardens. In Grandmother’s Garden, they also contributed to highlighting the horticultural diversity existing within traditionally cultivated plants. The identification and verification of the nomenclature of taxa, geographical origin were carried out according to Plants of the World Online (POWO 2026). For horticultural taxa, the names of the cultivars were preserved, in relation to the corresponding species. For some well-known food plants, for which the currently accepted scientific name differs from the traditionally used name, the traditional scientific name has been retained.

In this study, the native or non-native status of species was established in relation to the current spontaneous flora of Romania. Species occurring naturally in the spontaneous flora of Romania were considered native, regardless of whether the specimens included in the study were cultivated in the garden or collected from spontaneous flora. Species that do not occur naturally in the spontaneous flora of Romania were considered non-native. Consequently, species originating from the Mediterranean region, Western Europe or other regions outside their natural distribution range in Romania were classified as non-native, even if they have been cultivated in Romania for a long time or have a long history of use in Europe.

Depending on the status in the Romanian flora and the mode of use in the two gardens, the taxa were classified into the following categories: (1) cultivated alien plants; (2) subspontaneous alien plants; (3) cultivated native plants; (4) spontaneous native plants in the flora of Romania, harvested from the spontaneous flora for food purposes; and (5) cultivated hybrids. The hybrids were included in the "cultivated" category, regardless of the origin of the parental taxa.

RESULTS AND DISCUSSIONS

The inventory of the two gardens comprises a total of 323 cultivated taxa and highlights a significant difference in the diversity of plants grown in the two gardens. The Historical Garden comprises 75 taxa, belonging to 22 families and 54 genera, while the Grandmother's Garden is much more diverse, with 269 taxa, 34 families and 83 genera. In the Historical Garden, the best represented families are the Apiaceae, Rosaceae and Asteraceae with 10 taxa each, followed by Lamiaceae (9) and Brassicaceae (7). The high representation of the Apiaceae family is mainly related to the presence of traditional aromatic and spice plants, such as dill (*Anethum graveolens* L.), parsley, (*Petroselinum crispum* (Mill.) Fuss) lovage (*Levisticum officinale* W.D.J.Koch), chervil (*Anthriscus cerefolium* (L.) Hoffm.), celery (*Apium graveolens* L.) and fennel (*Foeniculum vulgare* Mill.), along with food species such as carrot (*Daucus carota* L.). The Rosaceae family is well represented by taxa that illustrate both fruit shrubs of spontaneous flora, such as blackberries and raspberries, as well as fruit trees and allochthonous shrubs whose fruits were eaten before 1500 (*Cydonia oblonga* Mill., *Prunus amygdalus* Batsch, *Prunus armeniaca* L., *Mespilus germanica* L.). Asteraceae and Lamiaceae bring together both food and aromatic plants such as basil (*Ocimum basilicum* L.), mint (*Mentha* × *piperita* L.), lemon balm (*Melissa officinalis* L.), and species with traditional uses, while Brassicaceae is represented by cultivated forms that illustrate the early diversity of plants of the genus Brassica, as well as radish and horseradish.

In Grandmother's Garden, the best-represented families are Asteraceae (54 taxa), Solanaceae (36), Lamiaceae (25), Liliaceae (23), and Paeoniaceae (16). The high share of the Asteraceae family is determined in particular by the large number of ornamental plants and horticultural varieties, including *Rudbeckia laciniata* L., *Dahlia* × *hortensis* Guillaumin, *Echinacea purpurea* (L.) Moench, *Helenium autumnale* L., *Achillea* × *hybrida* hort. and *Cosmos bipinnatus* Cav. Solanaceae is mainly represented by vegetables such as tomatoes (*Solanum lycopersicum* L.), eggplants (*Solanum melongena* L.) and peppers (*Capsicum annuum* L.). Lamiaceae and Liliaceae bring together both aromatic and food plants, as well as numerous ornamental species, and Paeoniaceae is represented mainly by ornamental peony taxa.

In terms of life forms, perennial taxa predominate in both gardens, representing 54.7 % of the total taxa in the Historical Garden (41 taxa) and 53.9 %

in Grandmother's Garden (145 taxa). Annual taxa represent 32.0 % in the Historical Garden (24 taxa) and 37.2 % in Grandmother's Garden (100 taxa), while biennial plants represent 12.0 % (9 taxa) and 8.6 % (23 taxa), respectively. One taxon in each garden is mixed, being classified as annual/perennial. Although the general structure of the life forms is similar in the two gardens, the predominance of perennials in Grandmother's Garden is largely influenced by the high number of ornamental perennials. In order to highlight more clearly the differences between the two gardens in terms of plants used for food, a separate analysis of the 59 unique food taxa in the Historical Garden and the 48 in Grandmother's Garden was carried out. In the Historical Garden, perennial food taxa (35; 59.3 %) predominate, followed by annual (17; 28.8 %) and biennial (6; 10.2 %), to which is added an annual/perennial taxon (1.7 %). In Grandmother's Garden, the largest share is held by annual taxa (21; 43.8 %), followed by perennials (19; 39.6 %) and biennials (7; 14.6 %), to which is added an annual/perennial taxon (2.1 %).

The difference reflects, in the case of Grandmother's Garden, the higher share of annual and biennial vegetable plants, while the Historical Garden includes a higher proportion of perennial food plants, such as fruit trees and shrubs, but also other species cultivated for their underground organs or for food uses.

Table 1

Distribution of plant taxa by biogeographical and cultivation status in the Historical Garden and Grandmother's Garden.

Category	**Historical Garden**	**Grandmother's Garden**
Native – spontaneous	14 (18.7 %)	3 (1.1 %)
Native – cultivated	12 (16.0 %)	14 (5.2 %)
Non-native – cultivated	44 (58.7 %)	225 (83.6 %)
Non-native – subspontaneous	5 (6.7 %)	0 (0 %)
Cultivated hybrids	0 (0 %)	27 (10 %)
Total	75	269

The analysis of the origin and status of the taxa highlights clear differences between the two gardens (Table 1). In the Historical Garden, 14 taxa (18.7 %) are native and represent plants that can be found growing spontaneously in the flora of Romania, and 12 taxa (16.0 %) are cultivated natives, respectively cultivars of native species. The cultivated non-native taxa represent 44 taxa (58.7 %), while 5 taxa (6.7 %) are spontaneous non-natives. The category of cultivated non-natives mainly includes food archaeophytes (*Allium cepa* L., *Allium sativum* L., *Anethum graveolens* L., *Cucumis sativus* L., *Cicer arietinum* L.), plants coming especially from the Near East, introduced and cultivated in Romania long time ago and used in food before 1500. On the other hand, the category of subspontaneous non-native plants includes taxa introduced in earlier historical periods that subsequently spread beyond cultivation and are currently found in the spontaneous flora of Romania, such as *Juglans regia* L., *Cannabis sativa* L. and *Portulaca oleracea* L.The presence of these categories in the Historical Garden is related to the historical character of the garden and the early circulation and use of plants. No cultivated hybrids have been recorded in this garden. In Grandmother's Garden, cultivated non-native taxa clearly predominate, representing 225 taxa (83.6 %), followed by cultivated hybrids, with 27 taxa (10.0 %), and cultivated native taxa, with 14 taxa (5.2 %). Spontaneous native taxa represent

only 3 taxa (1.1 %), and sub-spontaneous non-native taxa are not represented. The predominance of cultivated non-native taxa and hybrids mainly reflects the high diversity of ornamental plants and horticultural forms in this garden. The differences between the two gardens primarily reflect their function and concept. The Historical Garden includes an important proportion of native plants, spontaneous or cultivated, along with non-native plants introduced long ago and associated with the traditional diet before 1500. Therefore, the non-native character of a plant does not exclude its historical value, as some of these species have been cultivated and used in Romania for several centuries. In contrast, Grandmother's Garden is dominated by cultivated non-native plants and hybrids, a situation associated in particular with the high diversity of ornamental plants and horticultural forms.

Table 2

Comparison of plant uses in the Historical Garden and Grandmother's Garden

Usage	**The Historical Garden**	**Grandmother's Garden**
Food	68 (90.7%)	125 (46.5%)
Ornamental	28 (37.3%)	181 (67.3%)
Medicinal	53 (70.7%)	49 (18.2%)

The analysis of uses highlights important differences between the two gardens (Table 2). In the Historical Garden, food plants represent the dominant category, with 68 taxa (90.7 %), followed by medicinal plants, with 53 taxa (70.7 %), and ornamental plants, with 28 taxa (37.3 %). In Grandmother's Garden, ornamental plants predominate, with 181 taxa (67.3 %), while food plants are represented by 125 taxa (46.5 %), and medicinal plants by 49 taxa (18.2 %). The categories of use are not exclusive; a taxon can have one, two or even all three uses, so the percentages do not add up to 100 %. The differences reflect the function and concept of the two gardens. The very high share of food and medicinal plants in the Historical Garden is consistent with its role in illustrating plants used in the past, while the predominance of ornamental plants in Grandmother's Garden reflects the greater diversity of species and horticultural forms cultivated, especially for decorative purposes. Given the important share of food plants, they were analyzed separately, each species being represented only once, regardless of the garden in which it is present or the number of cultivars recorded. Of the 90 food species, 25 (27.8 %) are native and 63 (70.0 %) are non-native, while for 2 species (2.2 %) the biogeographical origin is not specified in the inventory.

The year 1500 is used as a reference point in this analysis to distinguish earlier plant exchanges between Europe and Eurasian regions from the period following contact with the New World and the intensification of intercontinental exchanges. However, the available inventory does not provide sufficient information to establish the exact number of archaeophytes and neophytes among the non-native food species. Among the plants with a long history of cultivation are the cucumber (*Cucumis sativus* L.), native to Asia and spread westward through Persia and the Near East, as well as legumes such as chickpeas (*Cicer arietinum* L.) and peas (*Pisum sativum* L.), associated with early agricultural traditions in the Near East. Garlic (*Allium sativum* L.), native to Central Asia, is another example of a plant cultivated long before 1500 and later integrated into European agriculture and food. Thus, an important part of the food plants considered traditional today are not native to the flora of Romania, but were introduced a long time ago and became part of the

local food culture. In contrast, non-native taxa introduced after 1500 reflect a more recent stage of diversification of food plants. This category includes plants native to the Americas, such as tomatoes (*Solanum lycopersicum* L.), peppers (*Capsicum annuum* L.), common beans (*Phaseolus vulgaris* L.) and pumpkin species (*Cucurbita* spp.). The introduction of American plants after 1500 considerably expanded the geographical diversity of food resources available in Europe and contributed, over time, to the transformation of agricultural crops and diet.

Although the number of food plants native to America and introduced after 1500 is relatively small compared to the total taxa analyzed, their contribution to the current horticultural diversity is considerable. Tomatoes, peppers, beans and pumpkins have been subjected over time to selection and breeding processes that have led to the emergence of a large number of horticultural varieties and forms. Thus, in Grandmother's Garden, the current diversity is not only reflected by the number of species, but also by the variety of cultivated varieties, which contribute significantly to the character and richness of this garden. The maintenance and cultivation of several horticultural varieties and forms of the same species also respond to educational and didactic objectives, being used for carrying out ecological education workshops for children, as well as practical activities with the students of the Faculty of Biology. The diversity of plant material allows the observation and comparison of morphological characteristics, growth and development particularities, as well as differences between varieties, facilitating the understanding of the selection and breeding processes of cultivated plants. In this way, the plant collection fulfills both a role of capitalizing on horticultural diversity and an educational function, constituting a living didactic resource for familiarizing participants with the diversity of cultivated plants.

The structure of the food plants in the two gardens reflects several stages of plant circulation: an important fund of native species, complemented by non-native plants introduced long before 1500, coming especially from the ancient agricultural centers of the Near East and Asia, and a later contribution of plants from America and other regions of the world. The results thus support the idea that "traditional" is not synonymous with "autochthonous", many of the food plants considered traditional today being the result of historical introductions and their integration over time into agriculture and food culture in Romania.

CONCLUSIONS

The comparative analysis of the Historical Garden and Grandmother's Garden highlights the fact that traditional plant heritage is the result of a dynamic relationship between spontaneous flora, cultivated plants and horticultural forms developed later. The Historical Garden stands out for the high share of food and medicinal plants and for a more diverse structure in terms of the origin and status of the taxa. The presence of native plants, along with non-native food plants with a long history of cultivation, reflects both the use of local plant resources and the circulation and integration of plants introduced long ago. The presence of food plants originating from the Near East and Asia highlights the historical importance of plant exchanges between these regions and Europe. Therefore, the traditional character of a plant is not determined solely by its geographical origin, but also by the age of its introduction and its integration into local practices.

Grandmother's Garden has a different structure, dominated by ornamental plants and numerous horticultural forms. Food plants native to the Americas and

introduced into Europe after 1500 represent another important stage in the diversification of cultivated plants, with considerable horticultural significance. The selection and breeding of plants such as tomatoes, peppers, beans and pumpkins contributed to the emergence of a wide diversity of horticultural varieties and forms, reflected in the current structure of the garden.

The two gardens illustrate two complementary aspects of traditional plant heritage: the relationship with spontaneous resources and with plants traditionally used for food and medicine, on the one hand, and the process of horticultural selection, cultivation and diversification, on the other. Traditional plant heritage cannot therefore be reduced to an inventory of cultivated plants, but must be seen as a continuum between spontaneous flora and cultivated plants, between resources available in the environment and plants selected, propagated and deliberately integrated into gardens.

This perspective also highlights changes in the ways plants have been valued over time: from the use of available resources for food and medicine, including as complementary resources in times of scarcity, to the cultivation of plants for more predictable production, the specialization of uses and ornamental diversification. The differences between the two gardens thus reflect not only variations in plant composition, but also broader transformations in the relationship between communities and plant resources, as well as in the ways plants have been selected, cultivated and valued.

Through the integration of ecological education activities and practical workshops, the Historical Garden and Grandmother's Garden represent not only spaces for the conservation and presentation of plant diversity, but also tools for transmitting knowledge and bringing the public closer to botanical and horticultural heritage.

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Appendix 1

Inventory of plant taxa recorded in the Historical Garden (HG) and Grandmother's Garden (GG), including their taxonomic classification, life forms, biogeographical status, and uses.

No	Taxon	Garden	Family	Life form	Statut	Edible	Orn.	Med.
1.	*Ablution theosophist* Medik.	HG	Malvaceae	Annual	Non native/ subspontaneous	No	Yes	Yes
2.	*Achillea* × *hybrida* hort. 'Skysail Fire'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
3.	*Achillea* × *hybrida* hort. 'Tutti frutti pomegranate'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
4.	*Achillea millefolium* L. 'Summer berries'	GG	Asteraceae	Perennial	native/ cultivated	No	Yes	No
5.	*Agastache* × *hybrida* hort. 'Kudos red'	GG	Lamiaceae	Perennial	cultivated	No	Yes	No
6.	*Alcea rosea* L.	GG	Malvaceae	Perennial	non-native/ cultivated	No	Yes	Yes
7.	*Allium cepa* L.	GG, HG	Amaryllidaceae	Biennial	non-native/ cultivated	Yes	No	Yes
8.	*Allium hollandicum* R.M.Fritsch 'Purple Sensation'	GG	Amarylidaceae	Perennial	non-native/ cultivated	No	Yes	No
9.	*Allium obliquum* L.	GG	Amaryllidaceae	Perennial	native/cultivated	Yes	No	No
10.	*Allium sativum* L.	GG, HG	Amaryllidaceae	Perennial	non-native/cultivated	Yes	No	Yes
11.	*Allium schoenoprasum* L.	HG	Amaryllidaceae	Perennial	non-native/cultivated	Yes	Yes	Yes
12.	*Allium ursinum* L.	HG	Amaryllidaceae	Perennial	native/spontaneous	Yes	No	Yes
13.	*Amaranthus caudatus* L. 'Love Lies Bleeding'	GG	Amaranthaceae	Annual	non-native/cultivated	Yes	Yes	Yes
14.	*Amaranthus cruentus* L. 'Oeschberg'	GG	Amaranthaceae	Annual	non-native/cultivated	Yes	Yes	Yes
15.	*Amaranthus cruentus* L. 'Red Spike'	GG	Amaranthaceae	Annual	non-native/cultivated	Yes	Yes	Yes
16.	*Anchusa officinalis* L.	HG	Boraginaceae	Perennial	native/spontaneous	Yes	Yes	Yes
17.	*Anethum graveolens* L.	GG, HG	Apiaceae	Annual	non-native/cultivated	Yes	No	Yes
18.	*Anthriscus cerefolium* (L.) Hoffm.	HG	Apiaceae	Annual	native/cultivated	Yes	No	Yes
19.	*Apium graveolens* L.	GG, HG	Apiaceae	Biennial	non-native/cultivated	Yes	No	Yes
20.	*Armoracia rusticana* P.Gaertn., B.Mey. & Scherb.	HG	Brassicaceae	Perennial	non-native/cultivated	Yes	No	Yes
21.	*Artemisia absinthium* L.	HG	Asteraceae	Perennial	native/cultivated	Yes	No	Yes
22.	*Artemisia dracunculus* L.	GG, HG	Asteraceae	Perennial	non-native/cultivated	Yes	No	Yes
23.	*Asparagus officinalis* L.	HG	Asparagaceae	Perennial	native/cultivated	Yes	Yes	Yes
24.	*Atriplex hortensis* L.	HG	Amaranthaceae	Annual	non-native/cultivated	Yes	No	No
25.	*Beta vulgaris* L. 'Bright Lights'	GG	Amaranthaceae	Biennial	non-native/cultivated	Yes	No	No
26.	*Beta vulgaris* L. 'Moneta'	GG	Amaranthaceae	Biennial	non-native/cultivated	Yes	No	No
27.	*Beta vulgaris* L. 'Moulin Rouge'	GG	Amaranthaceae	Biennial	non-native/cultivated	Yes	No	No
28.	*Beta vulgaris* L.'Crosbys Egyptian'	GG	Amaranthaceae	Biennial	non-native/cultivated	Yes	No	Yes

29.	*Borago officinalis* L.	HG	Boraginaceae	Annual	non-native/cultivated	No	No	Yes
30.	*Brassica napus* L. 'Jaune a Collet Vert'	HG	Brassicaceae	Annual	non-native/cultivated	Yes	Yes	No
31.	*Brassica oleracea* convar. *acephala* (DC.) Alef. 'Dwarf Green Curled'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	Yes	No
32.	*Brassica oleracea* convar. *acephala* (DC.) Alef. 'Scarlet '	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	Yes	No
33.	Brassica *oleracea* L. 'Nero di Toscana'	GG, HG	Brassicaceae	Biennial	non-native/cultivated	Yes	Yes	No
34.	*Brassica oleracea* L. gemmifera 'Brodie F1'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	Yes	No
35.	*Brassica oleracea* L. 'Kurly Scarlet'	GG, HG	Brassicaceae	Biennial	non-native/cultivated	Yes	Yes	No
36.	*Brassica oleracea* L. 'Mondrava F1'	HG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
37.	*Brassica oleracea* L. 'Ramoso'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
38.	*Brassica oleracea* L. 'Romanesco Natalino'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
39.	*Brassica oleracea* L. 'Summer Purple'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
40.	*Brassica oleracea* L. var. *capitata* 'Filderkraut'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
41.	*Brassica oleracea* L. var. *capitata* 'Golden Acre'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
42.	*Brassica oleracea* L. var. *gongylodes* 'Olivia F1'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
43.	*Brassica oleracea* L. 'Westland Winter ORG'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
44.	*Brassica rapa* L. 'Purple top Milan'	GG	Brassicaceae	Biennial	non-native/cultivated	Yes	No	No
45.	*Calendula officinalis* L.	GG, HG	Asteraceae	Annual/Perennial	non-native/cultivated	Yes	Yes	Yes
46.	*Callistephus chinensis* (L.) Nees 'Aster'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
47.	*Camassia leichtlinii* (Baker) S.Watson 'Caerulea'	GG	Asparagaceae	Perennial	non-native/cultivated	No	Yes	No
48.	*Campanula* × *hybrida* 'Genti Blue'	GG	Campanulaceae	Perennial	cultivated	No	Yes	No
49.	*Canna indica* L.'Tropical Sunrise'	GG	Cannaceae	Perennial	non-native/cultivated	No	Yes	No
50.	*Cannabis* sativa L.	HG	Cannabaceae	Annual	non-native/subspontaneous	Yes	No	Yes
51.	*Capsicum annuum* ‘Topepo Rosso’	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
52.	*Capsicum annuum* 'De Cayenne'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
53.	*Capsicum annuum* 'Devils Brew'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
54.	*Capsicum annuum* L. 'Anaheim'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
55.	*Capsicum annuum* L. 'Corno di Torro Rosso'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
56.	*Capsicum annuum* L. 'Fresno'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No

57.	*Capsicum annuum* L. 'Jalapeno'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
58.	*Capsicum annuum* L. 'Little Wonder'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
59.	*Capsicum annuum* L. 'Redskin F1'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
60.	*Capsicum annuum* L. 'Rokita'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
61.	*Capsicum annuum* L. 'Uchu'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
62.	*Capsicum annuum* L. 'Paper Lantern'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
63.	*Capsicum annuum* L. 'Red Cherry'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	Yes
64.	*Capsicum annuum* L. 'Sweet Banana'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
65.	*Capsicum annuum* L. 'Sweet Colour Spectrum'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
66.	*Capsicum baccatum* L. Rodschied 'Bishops Cap'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
67.	*Capsicum chinense* Jacq. 'Habanero'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	Yes
68.	*Ceanothus* × *delilianus* hort. 'Victoria'	GG	Rhamnaceae	Perennial	cultivated	No	Yes	No
69.	*Cenchrus alopecuroides* (L.) Thunb.	GG	Poaceae	Perennial	non-native/cultivated	No	Yes	No
70.	*Chrysanthemum* ' Duchess of Edinburg'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
71.	*Chrysanthemum* 'Pandion Bronze'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
72.	*Chrysanthemum* 'Dixter Orange'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
73.	*Chrysanthemum* 'Mrs. Jessie Cooper'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
74.	*Cicer arietinum* L.	HG	Fabaceae	Annual	non-native/cultivated	Yes	No	Yes
75.	*Cichorium intybus* L.	HG	Asteraceae	Perennial	native/spontaneous	Yes	No	Yes
76.	*Coreopsis grandiflora* Hogg ex Sweet 'Sunset Burst'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
77.	*Coreopsis tinctoria* Nutt. 'Roulette'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
78.	*Coreopsis tinctoria* Nutt. 'Sizzle & Spice Crazy Cayenne'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
79.	*Coriandrum sativum* L.	HG	Apiaceae	Annual	non-native/cultivated	Yes	No	Yes
80.	*Cosmos bipinnatus* Cav. 'Candy Stripe'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
81.	*Cosmos bipinnatus* Cav. 'Fizzy Pink'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
82.	*Cosmos bipinnatus* Cav. 'Rubenza'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
83.	*Cosmos bipinnatus* Cav. 'Seashells Mixed'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
84.	*Cosmos bipinnatus* Cav. 'Sweet Kisses'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
85.	*Cosmos bipinnatus* Cav. 'Tetra Versailles Flush'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
86.	*Cosmos sulphureus* Cav.	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
87.	*Cucumis melo* L. 'Emir F1'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	No	No
88.	*Cucumis melo* L. 'Melba'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	No	No

89.	*Cucumis sativus* L.	HG	Cucurbitaceae	Annual	non-native/cultivated	Yes	No	No
90.	*Cucurbita maxima* Duchesne 'Squash Winter'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	No	Yes
91.	*Cucurbita moschata* Duchesne 'Squash Hercules F1'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	No	No
92.	Cucurbita pepo L. 'Atlantic Giant'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
93.	*Cucurbita pepo* L. 'Courgette – Black Beauty'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
94.	*Cucurbita pepo* L. 'Courgette – Soleil F 1'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
95.	*Cucurbita pepo* L. 'Patriot F1'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
96.	*Cucurbita pepo* L. 'Squash – Scallop Blend F1'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
97.	*Cuphea viscosissima* Jacq.	GG	Lythraceae	Annual	non-native/cultivated	No	Yes	No
98.	*Cydonia oblonga* Mill.	HG	Rosaceae	Perennial	non-native/cultivated	Yes	No	No
99.	Cynara cardunculus L.	HG	Asteraceae	Perennial	non-native/cultivated	Yes	Yes	Yes
100.	*Cynara scolymus* L. 'Green Globe'	HG	Asteraceae	Perennial	non-native/cultivated	Yes	Yes	Yes
101.	*Dahlia* × *hortensis* Guillaumin 'Emory Paul'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
102.	*Dahlia* × *hortensis* Guillaumin 'Gloriosa'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
103.	*Dahlia* × *hortensis* Guillaumin 'Myrties Folly'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
104.	*Dahlia* × *hortensis* Guillaumin 'Take Off '	GG	Asteraceae	Perennial	cultivated	No	Yes	No
105.	*Dahlia pinnata* Cav. |	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
106.	*Daucus carota* L.	HG	Apiaceae	Biennial	native/spontaneous	Yes	No	No
107.	*Daucus carota* L. 'Amsterdam'	GG, HG	Apiaceae	Biennial	native/cultivated	Yes	No	No
108.	*Daucus carota* L. 'Burpees Short 'n' Sweet'	GG	Apiaceae	Biennial	native/cultivated	Yes	No	No
109.	*Daucus carota* L. 'Purple Sun F1'	GG	Apiaceae	Biennial	native/cultivated	Yes	No	No
110.	*Echinacea pallida* (Nutt.) Nutt.	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
111.	*Echinacea purpurea* (L.) Moench 'Eccentric'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes
112.	*Echinacea purpurea* (L.) Moench 'Magnus'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes
113.	*Echinacea purpurea* (L.) Moench 'Mama Mia'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes
114.	*Echinacea purpurea* (L.) Moench 'Red Sunseekers'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes

115.	*Echinacea purpurea* (L.) Moench 'Supreme Cantaloupe'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes
116.	*Echinacea purpurea* (L.) Moench 'White Swan'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	Yes
117.	*Echinops bannaticus* Rochel ex Schrad.'Blue Globe'	GG	Asteraceae	Perennial	native/cultivated	No	Yes	Yes
118.	*Eryngium* × *zabelii* 'Big Blue'	GG	Apiaceae	Perennial	cultivated	No	Yes	No
119.	*Erysimum* × *cheiri* (L.) Crantz 'Wallflower'	GG	Brassicaceae	Annual	non-native/cultivated	Yes	Yes	Yes
120.	*Euphorbia marginata* Pursh	GG	Euphorbiaceae	Annual	non-native/cultivated	No	Yes	No
121.	*Fagopyrum esculentum* Moench	HG	Polygonaceae	Annual	non-native/cultivated	Yes	Yes	No
122.	*Ficus carica* L. 'Little Miss Figgy'	HG	Moraceae	Perennial	non-native/cultivated	Yes	Yes	Yes
123.	*Ficus carica* L. 'Royal Black'	HG	Moraceae	Perennial	non-native/cultivated	Yes	Yes	Yes
124.	*Foeniculum vulgare* Mill. 'Chiarino'	HG	Apiaceae	Perennial	non-native/cultivated	Yes	Yes	Yes
125.	*Foeniculum vulgare* Mill. 'Di Firenze'	GG	Apiaceae	Perennial	non-native/cultivated	Yes	Yes	Yes
126.	*Fragaria* × *ananassa* (Weston) Duchesne 'Albion'	GG	Rosaceae	Perennial	cultivated	Yes	No	No
127.	*Fragaria* × *ananassa* (Weston) Duchesne 'Elegance'	GG	Rosaceae	Perennial	cultivated	Yes	No	No
128.	*Fragaria* × *ananassa* (Weston) Duchesne 'Gigantella'	GG	Rosaceae	Perennial	cultivated	Yes	No	No
129.	*Fragaria vesca* L.	HG	Rosaceae	Perennial	native/spontaneous	Yes	No	No
130.	Fraxinus *angustifolia* Vahl	GG	Oleaceae	Perennial	native/spontaneous	No	Yes	No
131.	*Fritillaria* × hybrida hort. 'William Rex'	GG	Liliaceae	Perennial	cultivated	No	Yes	No
132.	*Fritillaria uva-vulpis* Rix	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
133.	*Gladiolus* × *hybridus* C.Morren 'Fire Ruffle'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
134.	*Gladiolus* × *hybridus* C.Morren 'Garden Velvet'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
135.	*Gladiolus* × *hybridus* C.Morren 'Kiss Ruffle'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
136.	*Gladiolus* × *hybridus* C.Morren 'Pink Lady'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
137.	*Helenium autumnale* L. 'Double Trouble'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
138.	*Helenium autumnale* L. 'Ranchera'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
139.	*Helenium autumnale* L. 'Ruby Tuesday'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
140.	Heliopsis helianthoides (L.) Sweet 'Bleeding Hearts'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No

141.	*Hemerocallis fulva* (L.) L.	GG	Asphodelaceae	Perennial	non-native/cultivated	Yes	Yes	No
142.	*Heracleum sphondylium* L.	HG	Apiaceae	Perennial	native/spontaneous	Yes	No	Yes
143.	*Humulus lupulus* L.	HG	Cannabaceae	Perennial	native/spontaneous	Yes	Yes	Yes
144.	*Hyacinthus orientalis* L. 'Pink Pearl'	GG	Asparagaceae	Perennial	non-native/cultivated	No	Yes	Yes
145.	*Hyacinthus orientalis* L. 'Splendid Cornelia'	GG	Asparagaceae	Perennial	non-native/cultivated	No	Yes	No
146.	Hyacinthus *orientalis* L. 'White Pearl'	GG	Asparagaceae	Perennial	non-native/cultivated	No	Yes	No
147.	*Hydrangea macrophylla* (Thunb.) Ser.	GG	Hydrangeaceae	Perennial	non-native/cultivated	No	Yes	No
148.	*Ipomoea lobata* (Cerv.) Thell.	GG	Convolvulaceae	Annual	non-native/cultivated	No	Yes	No
149.	*Iris* × *germanica* L. 'Black Princess'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
150.	*Iris* × *germanica* L. 'Blue-Red'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
151.	*Iris* × *germanica* L. 'Pink Tafette'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
152.	*Iris* × *germanica* L. 'Supreme Sultan'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
153.	*Iris* × *germanica* L. 'Wild West'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
154.	*Iris reticulata* M.Bieb. 'Harmony'	GG	Iridaceae	Perennial	non-native/cultivated	No	Yes	No
155.	*Iris spuria* L. 'Premier'	GG	Iridaceae	Perennial	native/cultivated	No	Yes	No
156.	*Ismelia carinata* (Schousb.) Sch.Bip.	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
157.	*Jacobaea maritima* (L.) Pelser & Meijden	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
158.	*Juglans regia* L.	HG	Juglandaceae	Perennial	non-native/subspontaneous	Yes	No	Yes
159.	*Lactuca sativa* L. 'Feska'	GG	Asteraceae	Annual	non-native/cultivated	Yes	No	No
160.	*Lactuca sativa* L. 'Headed Mixed'	GG	Asteraceae	Annual	non-native/cultivated	Yes	No	No
161.	*Lactuca sativa* L. 'Lollo Rosa'	GG	Asteraceae	Annual	non-native/cultivated	Yes	No	No
162.	*Lactuca sativa* L. 'Rosa di Toronto'	GG	Asteraceae	Annual	non-native/cultivated	Yes	No	No
163.	*Lagenaria siceraria* (Molina) Standl. 'Giant Botlle'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
164.	*Lagenaria siceraria* (Molina) Standl. 'Speckled Swan'	GG	Cucurbitaceae	Annual	non-native/cultivated	Yes	Yes	No
165.	*Lamprocapnos spectabilis* (L.) Fukuhara 'Valentine 2'	GG	Papaveraceae	Perennial	non-native/cultivated	No	Yes	No
166.	*Leucanthemum* × *superbum* (J.W.Ingram) Bergmans 'Western Star Double Croux'	GG	Asteraceae	Perennial	cultivated	No	Yes	No
167.	*Leucanthemum vulgare* Lam.	HG	Asteraceae	Perennial	native/spontaneous	No	Yes	No
168.	*Levisticum officinale* W.D.J.Koch	GG, HG	Apiaceae	Perennial	non-native/cultivated	Yes	No	No
169.	*Lilium lancifolium* Thunb.	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
170.	*Lilium regale* E.H.Wilson 'African Quenn'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
171.	*Lilium regale* E.H.Wilson 'Album'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
172.	*Lilium regale* E.H.Wilson 'Angela'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No

173.	*Lilium speciosum* Thunb. 'Double Dream'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
174.	*Lilium speciosum* Thunb. 'Elodie'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
175.	*Malus domestica* (Suckow) Borkh. 'Vampira'	GG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
176.	*Matricaria chamomilla* L.	HG	Asteraceae	Annual	native/cultivated	No	No	Yes
177.	Medicago *sativa* L.	HG	Fabaceae	Perennial	non-native/cultivated	No	No	Yes
178.	*Melissa officinalis* L.	HG	Lamiaceae	Perennial	native/spontaneous	No	No	Yes
179.	*Mentha* × *piperita* L. 'Chocolate'	GG	Lamiaceae	Perennial	cultivated	No	No	Yes
180.	*Mentha* × piperita L. 'Orange Bergamot'	GG	Lamiaceae	Perennial	cultivated	No	No	Yes
181.	*Mespilus germanica* L.	HG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
182.	*Mirabilis jalapa* L.	GG	Nyctaginaceae	Perennial	non-native/cultivated	Yes	Yes	No
183.	*Monarda didyma* L. 'Cranberry Lace'	GG	Lamiaceae	Perennial	non-native/cultivated	Yes	Yes	No
184.	*Monarda didyma* L. 'Fireball'	GG	Lamiaceae	Perennial	non-native/cultivated	Yes	Yes	No
185.	*Monarda didyma* L. 'Purple Lace'	GG	Lamiaceae	Perennial	non-native/cultivated	Yes	Yes	No
186.	*Narcissus* × *incomparabilis* (Haw.) Sweet 'Gold Medal Double'	GG	Amaryllidaceae	Perennial	cultivated	No	Yes	No
187.	*Narcissus* × *incomparabilis* (Haw.) Sweet 'Sinopel'	GG	Amaryllidaceae	Perennial	cultivated	No	Yes	No
188.	*Narcissus* × *incomparabilis* (Haw.) Sweet 'Tiritomba'	GG	Amaryllidaceae	Perennial	cultivated	No	Yes	No
189.	Narcissus × *incomparabilis* (Haw.) Sweet 'White Cheerfulness'	GG	Amaryllidaceae	Perennial	cultivated	No	Yes	No
190.	*Nigella sativa* L.	HG	Ranunculaceae	Annual	non-native/cultivated	Yes	Yes	Yes
191.	*Nigella damascena* L.	GG	Ranunculaceae	Annual	non-native/cultivated	No	Yes	No
192.	*Ocimum basilicum* L. 'Aromat de Buzău'	GG, HG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
193.	*Ocimum basilicum* L. 'Cinnamon'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
194.	*Ocimum basilicum* L. 'Grand vert'	GG, HG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
195.	*Ocimum basilicum* L. 'Italianno Clasico'	GG, HG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
196.	*Ocimum basilicum* L. 'Lemon'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
197.	*Ocimum basilicum* L. 'Minette'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
198.	*Ocimum basilicum* L. 'Minimum'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
199.	*Ocimum basilicum* L. 'Pesto'	GG, HG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
200.	*Ocimum basilicum* L. 'Piccolino'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
201.	*Ocimum basilicum* L. 'Red Leaves'	GG, HG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
202.	*Ocimum basilicum* L. 'Sweet'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
203.	*Ocimum basilicum* L. 'Thai'	GG	Lamiaceae	Annual	non-native/cultivated	Yes	Yes	Yes
204.	*Origanum vulgare* L.	GG, HG	Lamiaceae	Annual	native/cultivated	Yes	Yes	Yes

205.	*Paeonia lactiflora* Pall. 'Bowl of Beauty'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
206.	*Paeonia lactiflora* Pall. 'Catharina Fontijn'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
207.	*Paeonia lactiflora* Pall. 'Coral 'n Gold'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
208.	*Paeonia lactiflora* Pall. 'Coral Sunset'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
209.	*Paeonia* lactiflora Pall. 'Francoise Ortegat'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
210.	*Paeonia lactiflora* Pall. 'Itoh Bartzella'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
211.	*Paeonia lactiflora* Pall. 'Itoh Garden Treasure'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
212.	*Paeonia lactiflora* Pall. 'Itoh Hillary'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
213.	*Paeonia lactiflora* Pall. 'Ivory Victory'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
214.	*Paeonia lactiflora* Pall. 'Karl Rosenfield'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
215.	*Paeonia lactiflora* Pall. 'Monsieur Jules Elie'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
216.	*Paeonia lactiflora* Pall. 'Paul M Wild'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
217.	*Paeonia lactiflora* Pall. 'Peter Brand'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
218.	*Paeonia lactiflora* Pall. 'Pink Parfait'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
219.	Paeonia *lactiflora* Pall. 'Red Charm'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
220.	*Paeonia lactiflora* Pall. 'Superba'	GG	Paeoniaceae	Perennial	non-native/cultivated	No	Yes	No
221.	*Papaver orientale* L. 'Beauty of Livermere'	GG	Papaveraceae	Perennial	non-native/cultivated	No	Yes	No
222.	*Papaver orientale* L. 'Brilliant'	GG	Papaveraceae	Perennial	non-native/cultivated	No	Yes	No
223.	*Papaver rhoeas* L.	GG	Papaveraceae	Annual	native/spontaneous	Yes	Yes	Yes
224.	*Pastinaca sativa* L. 'Javelin F1'	GG	Apiaceae	Biennial	native/cultivated	Yes	No	No
225.	*Petroselinum crispum* (Mill.) Fuss	HG	Apiaceae	Biennial	non-native/cultivated	Yes	No	No
226.	*Phaseolus vulgaris* L. 'Amethyst'	GG	Fabaceae	Annual	non-native/cultivated	Yes	No	No
227.	*Phaseolus vulgaris* L. 'Borlotto'	GG	Fabaceae	Annual	non-native/cultivated	Yes	No	No
228.	*Phaseolus vulgaris* L. 'Borlotto di Vigevano nano'	GG	Fabaceae	Annual	non-native/cultivated	Yes	No	No
229.	*Phaseolus vulgaris* L. 'Dwarf Purple Queen'	GG	Fabaceae	Annual	non-native/cultivated	Yes	No	No
230.	*Phaseolus vulgaris* L. 'Sonesta'	GG	Fabaceae	Annual	non-native/cultivated	Yes	No	No
231.	*Phlox paniculata* L. 'Ice cream'	GG	Polemoniaceae	Perennial	non-native/cultivated	No	Yes	No
232.	*Phlox paniculata* L. 'Juliglut'	GG	Polemoniaceae	Perennial	non-native/cultivated	No	Yes	No
233.	*Phlox paniculata* L. 'Midnight Candy'	GG	Polemoniaceae	Perennial	non-native/cultivated	No	Yes	No
234.	*Phlox paniculata* L. 'Perfection'	GG	Polemoniaceae	Perennial	non-native/cultivated	No	Yes	No

235.	*Physostegia virginiana* (Walter) Benth. ex E. Fourn. 'Crown of snow'	GG	Lamiaceae	Perennial	non-native/cultivated	No	Yes	No
236.	*Physostegia virginiana* (Walter) Benth. ex E. Fourn. 'Pink Manners'	GG	Lamiaceae	Perennial	non-native/cultivated	No	Yes	No
237.	*Pisum sativum* L.	HG	Fabaceae	Annual	native/cultivated	Yes	No	No
238.	*Platycodon grandiflorus* (Jacq.) A.DC.'Fuji Blue'	GG	Campanulaceae	Perennial	non-native/cultivated	No	Yes	No
239.	*Portulaca oleracea* L.	HG	Portulacaceae	Annual	non-native/subspontaneous	Yes	No	No
240.	*Prunus armeniaca* L.	GG, HG	Rosaceae	Perennial	non-native/cultivated	Yes	No	No
241.	Prunus *armeniaca* L.'Flacăra'	GG	Rosaceae	Perennial	non-native/cultivated	Yes	No	No
242.	*Prunus avium* (L.) L.	GG, HG	Rosaceae	Perennial	native/cultivated	Yes	No	Yes
243.	*Prunus cerasus* L.	GG, HG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
244.	*Prunus domestica* L.	GG, HG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
245.	*Prunus amygdalus* Batsch	GG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
246.	*Prunus persica* (L.) Batsch	GG	Rosaceae	Perennial	non-native/cultivated	Yes	No	Yes
247.	*Prunus spinosa* L.	HG	Rosaceae	Perennial	native/cultivated	Yes	No	Yes
248.	*Raphanus sativus* L.	HG	Brassicaceae	Annual	non-native/cultivated	Yes	No	No
249.	*Ribes rubrum* L.	HG	Grossulariaceae	Perennial	non-native/cultivated	Yes	No	No
250.	*Ribes uva-crispa* L. 'Rezistent de Cluj'	HG	Grossulariaceae	Perennial	native/cultivated	Yes	No	No
251.	*Rosa* × *hybrida* hort. 'Des Peintres'	GG	Rosaceae	Perennial	cultivated	No	Yes	No
252.	*Rosa* × *hybrida* hort. 'Eminence' Teahybrid	GG	Rosaceae	Perennial	cultivated	No	Yes	No
253.	*Rosa* × *hybrida* hort. 'Hansa'	GG	Rosaceae	Perennial	cultivated	No	Yes	No
254.	*Rosa* × *hybrida* hort. 'Jaques Cartier'	GG	Rosaceae	Perennial	cultivated	No	Yes	No
255.	*Rubus idaeus* L.	HG	Rosaceae	Perennial	native/spontaneous	Yes	No	Yes
256.	*Rubus idaeus* L. 'Polka'	HG	Rosaceae	Perennial	native/cultivated	Yes	No	Yes
257.	*Rudbeckia laciniata* L. 'Orange Summerina'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
258.	*Rudbeckia laciniata* L. 'Pumpernickel Summerina'	GG	Asteraceae	Perennial	non-native/cultivated	No	Yes	No
259.	*Rumex acetosa* L.	GG, HG	Polygonaceae	Perennial	native/spontaneous	Yes	No	Yes
260.	*Rumex patientia* L.	HG	Polygonaceae	Perennial	native/cultivated	Yes	No	No
261.	*Salvia officinalis* L.	HG	Lamiaceae	Perennial	non-native/cultivated	Yes	Yes	Yes
262.	*Salvia yangii* B.T.Drew 'Fashionista Pretty in Pink'	GG	Lamiaceae	Perennial	non-native/cultivated	No	Yes	No
263.	*Salvia yangii* B.T.Drew 'Nemorosa Crystal Blue'	GG	Lamiaceae	Perennial	non-native/cultivated	No	Yes	No
264.	*Sambucus nigra* L.	HG	Adoxaceae	Perennial	native/spontaneous	Yes	Yes	Yes

265.	*Sinapis alba* L.	HG	Brassicaceae	Annual	non-native/cultivated	Yes	No	No
266.	*Solanum lycopersicum* L. 'Black Cherry'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
267.	*Solanum lycopersicum* L. 'Black Opal'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
268.	*Solanum lycopersicum* L. 'Buzau 22'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
269.	*Solanum lycopersicum* L. 'Costoluto Fiorentino'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
270.	*Solanum lycopersicum* L. 'Cuor di Bue'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
271.	*Solanum lycopersicum* L. 'Gardener's Delight '	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
272.	*Solanum lycopersicum* L. 'Golden Sunrise'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
273.	*Solanum lycopersicum* L. 'Moneymaker'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
274.	*Solanum lycopersicum* L. 'Montserrat'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
275.	*Solanum lycopersicum* L. 'Orange Paruche F 1'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
276.	*Solanum lycopersicum* L. 'Red Cherry'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
277.	*Solanum lycopersicum* L. 'Red Pear'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
278.	*Solanum lycopersicum* L. 'Sunchocola F 1'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
279.	*Solanum lycopersicum* L. 'Super mama'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
280.	*Solanum lycopersicum* L. 'Tigerella'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
281.	*Solanum melongena* L. 'Black Beauty'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
282.	*Solanum melongena* L. 'Clara F1 ORG'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
283.	*Solanum melongena* L. 'Pot Black F1'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
284.	*Solanum melongena* L. 'White Egg'	GG	Solanaceae	Annual	non-native/cultivated	Yes	No	No
285.	*Spinacia oleracea* L. 'Emilia F1'	GG	Amaranthaceae	Annual	non-native/cultivated	Yes	No	No
286.	*Stachys* × *hybrida* hort. 'Summer Crush'	GG	Lamiaceae	Perennial	cultivated	No	Yes	No
287.	*Syringa vulgaris* L. 'Black Purple'	GG	Oleaceae	Perennial	native/cultivated	No	Yes	No
288.	*Syringa vulgaris* L. 'Lemoine'	GG	Oleaceae	Perennial	native/cultivated	No	Yes	No
289.	*Syringa vulgaris* L. 'Pink'	GG	Oleaceae	Perennial	native/cultivated	No	Yes	No
290.	*Tagetes erecta* L. 'Double Mixed'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
291.	*Tagetes erecta* L. 'Dwarf Double Mixed'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
292.	*Tagetes erecta* L. 'Jolly Jester'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
293.	Tagetes *erecta* L. 'Starfire Mixed'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
294.	Tagetes *lucida* Cav. 'Sweet Mace'	GG	Asteraceae	Annual	non-native/cultivated	Yes	Yes	No
295.	*Tanacetum balsamita* L.	HG	Asteraceae	Perennial	non-native/subspontaneous	No	Yes	Yes
296.	*Thymus* × *citriodorus* (Pers.) Schreb. 'Silver Queen'	GG	Lamiaceae	Perennial	cultivated	Yes	Yes	Yes
297.	*Thymus* vulgaris L.	HG	Lamiaceae	Perennial	non-native/cultivated	Yes	Yes	Yes

298.	Tithonia rotundifolia (Mill.) S.F.Blake	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
299.	*Trachelospermum jasminoides* (Lindl.) Lem. 'Pink'ik	GG	Apocynaceae	Perennial	non-native/cultivated	No	Yes	No
300.	*Trachelospermum jasminoides* (Lindl.) Lem. 'Yellow'	GG	Apocynaceae	Perennial	non-native/cultivated	No	Yes	No
301.	*Tragopogon porrifolius* L.	HG	Asteraceae	Biennial	non-native/cultivated	Yes	No	Yes
302.	*Trigonella foenum-graecum* L.	HG	Fabaceae	Annual	non-native/cultivated	Yes	No	Yes
303.	*Tulipa gesneriana* L. 'Angelique'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
304.	Tulipa *gesneriana* L. 'Claudia'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
305.	*Tulipa gesneriana* L. 'Darwin- Novi Sun'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
306.	*Tulipa gesneriana* L. 'Double Fringed Brisbane'	GG	Liliaceae	Annual	non-native/cultivated	No	Yes	No
307.	*Tulipa gesneriana* L. 'Double Fringed Perth'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
308.	*Tulipa gesneriana* L. 'Estella Rijnveld'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
309.	*Tulipa gesneriana* L. 'Fringed Philly Belle'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
310.	*Tulipa gesneriana* L. 'Golden Apeldoorn'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
311.	*Tulipa gesneriana* L. 'Pacific Pearl'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
312.	*Tulipa gesneriana* L. 'Sunlover'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
313.	*Tulipa gesneriana* L. 'Triumph Hermitage'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
314.	*Tulipa gesneriana* L. 'Triumph Ile de France'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
315.	*Tulipa gesneriana* L. 'Triumph Jacuzzi'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
316.	*Tulipa gesneriana* L. 'Viridiflora'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
317.	*Tulipa gesneriana* L. 'Yasmine'	GG	Liliaceae	Perennial	non-native/cultivated	No	Yes	No
318.	*Urtica dioica* L.	HG	Urticaceae	Perennial	native/spontaneous	Yes	No	Yes
319.	*Valeriana rubra* L. 'Ruber'	GG	Caprifoliaceae	Perennial	non-native/cultivated	No	Yes	No
320.	*Viola odorata* L.	HG	Violaceae	Perennial	native/spontaneous	Yes	Yes	Yes
321.	*Vitis vinifera* L. 'Afuz Ali'	GG	Vitaceae	Perennial	native/cultivated	Yes	No	Yes
322.	*Zinnia elegans* Jacq. 'Thumbelina'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No
323.	*Zinnia haageana* Regel 'Sombrero'	GG	Asteraceae	Annual	non-native/cultivated	No	Yes	No