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Ethnobotanical review of wild edible plants in Spain

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This paper compiles and evaluates the ethnobotanical data currently available on wild plants traditionally used for human consumption in Spain. Forty-six ethnobotanical and ethnographical sources from Spain were reviewed, together with some original unpublished field data from several Spanish provinces. A total of 419 plant species belonging to 67 families was recorded. A list of species, plant parts used, localization and method of consumption, and harvesting time is presented. Of the seven different food categories considered, green vegetables were the largest group, followed by plants used to prepare beverages, wild fruits, and plants used for seasoning, sweets, preservatives, and other uses. Important species according to the number of reports include: *Foeniculum vulgare*, *Rorippa nasturtium-aquaticum*, *Origanum vulgare*, *Rubus ulmifolius*, *Silene vulgaris*, *Asparagus acutifolius*, and *Scolymus hispanicus*. We studied data on the botanical families to which the plants in the different categories belonged, overlapping between groups and distribution of uses of the different species. Many wild food plants have also been used for medicinal purposes and some are considered to be poisonous. This review highlights the rich traditional knowledge on edible plants that has remained in rural Spain. Until recently, many wild plants were used as dietary supplements. However, most of this knowledge survives only in the memory of the elderly, and will probably disappear in a few decades. © 2006 The Linnean Society of London, *Botanical Journal of the Linnean Society*, 2006, **152**, 27–71.

ADDITIONAL KEYWORDS: beverages – condiments – ethnobotany – fruits – vegetables – wild food plants.

INTRODUCTION

With a surface area of nearly 500 000 km^2, mainland Spain is located on the Iberian Peninsula in southwestern Europe. It is a mountainous region isolated from the rest of Europe by the Pyrenees. Its great climatic, geographical, and geological diversity gives rise to biological and ecological diversity. During the last Ice Age, the Iberian Peninsula served as a biological refuge for a large number of species, and its vascular flora, numbering about 7000 species, is the richest in Europe. Many of these species are endemic to the Iberian Peninsula or Europe.

The Spanish landscape chiefly consists of forest, scrubland, pasture land, and arable fields, and can be divided into two distinct areas. So-called 'Green Spain' in northern Spain has a temperate climate, including a strip of land from Galicia to the Pyrenees. The vegetation predominantly consists of deciduous forest and meadows that remain green throughout the summer. The area often known as 'Dry Spain' is much larger. Its Mediterranean climate features a characteristic drought period with high summer temperatures. However, marked variations exist between different areas in terms of annual rainfall, temperature, and duration of the drought period. In general, the climate is more arid in the east and south of the Peninsula, becoming more continental in the centre. The vegetation is mainly evergreen forest, although mountain ranges contain green areas, especially at a certain altitude.

Spain has historically been a crossroads of civilizations. Currently, it has more than 40 million inhabitants, with a cultural mosaic of different languages and traditions and a complex history. A thorough knowledge of the natural environment lives on as a result of high biodiversity and ethnographical variety.

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Although agricultural societies chiefly rely on domesticated plants and animals for food, whereas hunters and gatherers depend on wild plants and game, the tradition of consuming wild plants has not been erased. Some agricultural populations include significant quantities of forage plants in their diets and may, in fact, exploit a greater variety of plants than do some hunters and gatherers (Etkin, 1994).

Another important and often controversial point is the distinction between 'wild' and 'domesticated' plants. The controversy arises as a result of the many intermediate stages between the use of wild plants and true domestication. This had led several authors to use different terms to describe the various stages along the continuum. Dufour & Wilson (1994), for instance, used the terms 'wild', 'managed', 'cultivated', 'semidomesticated', and 'domesticated'. Thus, wild plants that are neither managed nor cultivated may be used. At the other extreme, domesticated plants are genetically modified species that completely depend on humans for survival. A problem often arises with species classified in the intergrading categories (Etkin, 1994). Many wild species can occasionally be cultivated, and some cultivated plants that are not completely domesticated sometimes grow as feral species. Furthermore, following Harlan (1975), a range of morphological differentiation may be observed in the plants themselves 'from forms identical to wild races to fully domesticated races'. Thus, in many cases, it is almost impossible to distinguish wild forms of a certain species from cultivated ones. For all these reasons, some authors prefer the terms 'noncrop food' (Bonet & Vallès, 2002) and 'noncultivated' (Pieroni *et al*., 2005) plants to the more common term 'wild' food plants.

An increasing interest in wild edible plants, even in modern societies, has led to many local ethnobotanical studies (e.g. Turner, 1975; Pieroni, 1999; Crowe, 2001; Bonet & Vallès, 2002; Pieroni *et al*., 2002; Tardío, Pascual & Morales, 2002; Arenas, 2003; Ogoye-Ndegwa & Aagaard-Hansen, 2003; Van den Eyden, Cueva & Cabrera, 2003; Ertug, 2004; Ogle *et al*., 2004). This topic is relevant at the moment, as biodiversity conservation and its links with nutrition and human health is the subject of a recent cross-cutting initiative by the Convention on Biological Diversity (CBD, 2005). As the relevant documents state, although only three crops provide around 50% of human energy intake, some 10 000 species are used, or have been used, for food. Wild sources of food, in general, remain particularly important for the poor and landless, and are especially important during times of famine or conflict when normal food supply mechanisms are disrupted and local or displaced populations have limited access to other kinds of food. However, even under normal conditions, wild plants have played an important role in complementing staple foods to provide a balanced diet by supplying trace elements, vitamins, and minerals, and may do so again in the future. Their interest as a source of 'nutraceuticals' has been highlighted in recent studies (Heinrich *et al*., 2005; The Local Food-Nutraceutical Consortium, 2005).

The aim of this study was to compile and evaluate current available data on the wild plants traditionally used in Spain for human food over the last 100 years. Most of this information is scattered and difficult for the international scientific community to access.

MATERIAL AND METHODS

After an exhaustive search in ethnobotanical and ethnographical works, we constructed a database with just over 3000 records on Spanish wild food plants. Most of these data were from 46 bibliographical sources, which included information gathered during field work on local uses of plants. Eight of these studies (601 records) were conducted or supervised by our research group (Blanco, 1996, 1998, 2002; Blanco & Cuadrado, 2000; Pardo-de-Santayana, 2003; San Miguel, 2004; Blanco & Diez, 2005; Tardío, Pascual & Morales, 2005). Some of our original unpublished field data were also included from several Spanish provinces (81 records). All the information compiled in this work therefore refers to wild plants used in folk culture at least during the last 50–100 years. An analogous methodology was recently adopted in a review of wild food plants traditionally consumed in Italy (Pieroni & Pieroni, 2005).

Table 1 indicates the list of sources consulted, each with a reference number (RN), also used in the Appendix. Almost all of the literature sources were primary ethnobotanical sources, except for four: the numbers 37 (Font Quer, 1990) and 44 (Rivera & Obón, 1991) were books about Spanish medicinal plants and useful plants, respectively, which included some primary ethnobotanical references; numbers 38 (González Turmo, 1997) and 39 (Barandiarán & Manterola, 1990) were ethnographical studies about traditional food in various Spanish provinces in which no recent ethnobotanical data were available. For our original and unpublished ethnobotanical data, the reference number '00' was used. The number of the herbarium voucher was included in the Appendix only for those species not previously reported. These vouchers were deposited at IMIDRA (Madrid Institute for Agricultural Research) and the Herbarium of the Real Jardín Botánico (MA).

The research areas for each bibliographical reference, as well as the provinces or regions in which they were located in Spain, are also given in Table 1. The database contains data from nearly all 17 Spanish political regions (no data were available from La Rioja

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Table 1. References consulted, with their reference number (RN), research area, and number of species from each source included in the database

RN	Reference cited	Research area	Province(s) or region (code)	No. of species
1	Sánchez López *et al*. (1994)	La Manchuela	Albacete (Ab)	35
2	Verde *et al*. (1998)	Sierra de Segura y Alcaraz	Albacete (Ab)	69
3	Fajardo *et al*. (2000)	Whole province	Albacete (Ab)	32
4	Ríos & Martínez (2003)	Sierra Mariola	Alicante-Valencia (A-V)	16
5	Martínez Lirola *et al*. (1997)	Cabo de Gata	Almería (Al)	52
6	Estrella (1995)	El Tiemblo	Ávila (Av)	19
7	López Sáez & Martín Sánchez (1999)	Valle del Tiétar	Ávila (Av)	5
8	López Sáez (2002)	Valle del Tiétar	Ávila (Av)	4
9	Bonet & Vallès (2002)	Montseny	Barcelona (B)	84
10	Bonet (1993)	Vall del Tenes	Barcelona (B)	17
11	Parada *et al*. (2002)	Les Guilleries	Barcelona-Gerona (B-Ge)	51
		Alt Empordà	Gerona (Ge)	29
12	Blanco & Cuadrado (2000)	Fuenlabrada de los Montes	Badajoz (Ba)	54
13	Mulet (1991)	Whole province	Castellón (Cs)	63
14	Arauzo *et al*. (2004)	Villarrubia de los Ojos	Ciudad Real (CR)	17
15	Blanco (2002)	Montes de Toledo	Ciudad Real-Toledo (CR-To)	35
16	Verde *et al*. (2001)	Parque Nacional de Cabañeros	Ciudad Real-Toledo (CR-To)	57
17	Galán (1993)	Pedroches, Sierra Norte y Vega del Guadalquivir	Córdoba (Co)	46
18	Casana (1993)	Subbética, Campiña y Vega del Guadalquivir	Córdoba (Co)	46
19	Triano *et al*. (1998)	Carcabuey	Córdoba (Co)	79
20	González-Tejero (1990)	Whole province	Granada (Gr)	40
21	Gil Pinilla (1995)	Cantalojas	Guadalajara (Gu)	32
22	Villar *et al*. (1987)	Pirineo Aragonés	Huesca (Hu)	74
23	Ferrández & Sanz (1993)	Comarca de Monzón	Huesca (Hu)	54
24	Fernández Ocaña (2000)	Sierra de Cazorla	Jaén (J)	95
25	Mesa (1996)	Sierra de Mágina	Jaén (J)	74
26	Guzmán (1997)	Whole province	Jaén (J)	69
27	Muntané (1994)	La Cerdanya	Lérida-Gerona (L-Ge)	45
28	Blanco (1996)	Sierra de El Caurel	Lugo (Lu)	24
29	Tardío *et al*. (2005)	Whole province	Madrid (M)	122
30	Rabal (2000)	Torre Pacheco	Murcia (Mu)	32

Table 1. *Continued*

RN	Reference cited	Research area	Province(s) or region (code)	No. of species
31	Obón & Rivera (1991)	Whole province	Murcia (Mu)	23
32	San Miguel (2004)	Concejo de Piloña	Asturias (O)	36
33	Lastra (2003)	Picos de Europa	Asturias-Cantabria-León (O-S-Le)	36
34	Pardo-de-Santayana (2003)	Comarca de Campoo	Cantabria (S)	61
35	Granzow de la Cerda (1993)	Whole province	Salamanca (Sa)	40
36	Blanco (1998)	Whole province	Segovia (Sg)	51
37	Font Quer (1990)	Several Spanish regions (medicinal plants in Spain)	Ávila (Av), Barcelona (B), Granada (Gr), Lérida (L), Palencia (P), Tarragona (T), Teruel (Te), Mallorca (PM), Menorca (Mn), Andalucía (AND), Cataluña (CAT), Comunidad Valenciana (CVL)	23
38	González Turmo (1997)	West 'Andalucía'	Huelva (H), Sevilla (Se), Cádiz (Ca)	22
39	Barandiarán & Manterola (1991)	'País Vasco' and 'Navarra'	Guipúzcoa (SS), Álava (Vi), Vizcaya (Bi), Navarra (Na), País Vasco (PV)	24
40	Pellicer (2001; 2004a, b)	Central regions of 'Comunidad Valenciana'	Alicante (A)	91
			Valencia (V)	54
41	Blanco & Diez (2005)	Comarca de Sanabria	Zamora (Za)	31
42	Verde *et al.* (2003)	Serranía de Cuenca	Cuenca (Cu)	77
		Whole province	Albacete (Ab)	76
43	Oltra (1998)	Quatretonda	Valencia (V)	27
44	Rivera & Obón (1991)	Several Spanish regions (useful plants in Spain)	Albacete (Ab), Álava (Vi), Almería (A), Cádiz (Ca), Córdoba (Co), Granada (Gr), Ibiza (Ib), Jaén (J), Mallorca (PM), Menoría (Mn), Murcia (Mu), Navarra (Na), Valencia (V); Islas Baleares (PM), Galicia (GAL)	26
45	González-Hernández *et al.* (2004)	Galicia	Galicia (GAL)	15
46	Rivera *et al.* (2004)	Whole province	Albacete (Ab)	24
00	Personal communications	Several Spanish regions	Ávila (Av), Badajoz (Ba), Cáceres (Cc), Cantabria (S), Cuenca (Cu), Guadalajara (Gu), Granada (Gr), Madrid (M), Palencia (P), Soria (So), Toledo (To), Zamora (Za), Zaragoza (Z)	53

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and Canary Islands) and from 42 of the 50 provinces. The codes used for the Spanish provinces were the same as those used in *Flora Iberica* (Castroviejo *et al*., 1986–2005), and can be located on the map in Figure 1.

Finally, the last column in Table 1 lists the number of wild food species in the database for each research area and source. In reference numbers 3, 42, and 46, this was not the total number of species cited because these studies were partially based on some of the preceding references from the same province. Only novelties (new species consumed or new areas of consumption in the province) were included.

It is important to note the heterogeneity of the bibliographical sources. Firstly, with regard to the geographical range, most (20) focused on a 'comarca', a Spanish term referring to an area with a number of municipalities having a common historical, geographical, and cultural background; sometimes they occur within more than one political province. Five sources included several 'comarcas' from the same province, seven surveyed only one municipality, a few (nine) considered the whole province, four focused on several provinces, and only two reviewed the entire country. As a result of this heterogeneity, a number of records in the database do not refer to any particular province, but to an entire political region. Secondly, most studies (30) were general ethnobotanical surveys that included all the useful plants in the region, eight dealt with medicinal plants, and only five studied wild food plants. One of the latter studies was carried out by our group (Tardío *et al*., 2005) over a 4-year period in the province of Madrid (central Spain).

WILD SPECIES?

As with many other authors (e.g. Fleischhauer, 2003; Ertug, 2004; Ogle *et al*., 2004), we use the classical term 'wild' in this paper to refer to noncultivated plants gathered in the field.

Although most wild species used for food are native plants, introduced species that are now feral were also

Figure 1. Location of the Iberian Peninsula and most of the Spanish provinces and regions (except for the Canary Islands).

considered. Some allochthonous plants occasionally cultivated in gardens are often gathered from the wild as native species, e.g. *Opuntia maxima*, *Arundo donax*, *Robinia pseudoacacia*, *Prunus domestica*, *Prunus cerasus*, *Mespilus germanica*, *Chenopodium ambrosioides*, *Bidens aurea*, *Coriandrum sativum*, *Helianthus tuberosus*, and *Asparagus officinalis*.

It is sometimes hard to distinguish in the bibliographical sources whether a particular food plant comes from wild or cultivated specimens. Some species, such as *Laurus nobilis*, *Corylus avellana*, *Tilia platyphyllos*, *Prunus avium*, *Celtis australis*, *Sorbus domestica*, *Castanea sativa*, *Carum carvi*, and *Rosmarinus officinalis*, are only native to certain regions of Spain, although they are cultivated throughout the country. In some cases, wild forms and cultivars grow together in many areas of the country, e.g. *Matricaria recutita*, *Borago officinalis*, *Melissa officinalis*, *Vicia sativa*, and *Medicago sativa.* Such plants were only considered if known to be feral and they could be gathered from the wild.

Quantification and reliability of information

The number of sources that mentioned each species was considered to evaluate its relative importance. The great variability of the sources consulted meant that the frequency of citation (number of informants that mentioned each use) for every species could not be taken into account as such data were not available for many of them. A consideration of the frequency of citation would have enabled us to give greater weight to those species more frequently used in a particular region. Therefore, we gave equal weight to the use of a species regardless of the number of people who cited it in a certain work. In our opinion, this is not a major handicap in most cases, as many of the plant species frequently consumed in one region were also commonly consumed at least in neighbouring regions. Thus, those highly appreciated species will still show a greater number of citations. This is the case for *Silene vulgaris*, *Scolymus hispanicus*, and *Asparagus acutifolius*, three of the species most used for food in the whole country. Some other species were only consumed in a small area. In these cases, whenever possible, the frequency of citation in the original study was taken into account in order to decide whether or not to include a new reference in the database. A new species was only incorporated when its food use had been mentioned by more than two or three informants. For example, *Molopospermum peloponnesiacum*, of the Apiaceae, grows in the central and eastern Pyrenees and is used as a vegetable in some mountainous villages of Catalonia. Single citations for the consumption of some species were also considered when that use already existed in similar species.

For sources 37 (Font Quer, 1990) and 44 (Rivera & Obón, 1991), only uses referring to a particular region were accepted, avoiding generic references, such as 'are edible', when it was not clearly stated whether people from that region actually gathered and consumed the plants. Occasionally, some bibliographical sources for a specific region provided a few data about the consumption of edible plants in other areas. Whenever they were unpublished in other sources, such sources were included in the Appendix, e.g. Ca (26), CR (12), Gr (5), and Z (23).

In all cases, we included only data that appeared to be completely reliable based on our own experience in field ethnobotanical studies on wild food (Pardo-de-Santayana, 2003; Tardío *et al*., 2005).

Categories

Seven categories of food uses based on folk perceptions were established to classify wild food plants. Plants whose leaves, stems, or even unripe fruits or seeds were consumed were placed in the category of 'vegetables' (VEG) or 'greens' or 'green vegetables'. Only fruits or seeds consumed when ripe were considered as wild fruits (FRU). Other plants were used for making beverages (BEV), such as home-made liqueurs or other alcoholic drinks (BEVliq), herbal teas used in general as a digestive (BEVher), and other beverages such as coffee substitutes or chocolate aromatizers (BEVoth). In many cases, especially herbal teas and liqueurs, the plants were used as both food and medicine. We only included species that were consumed to help improve digestion after a large meal or as a tasty beverage, excluding plants used only to treat stomachache. Plants used for seasoning (SEA) and as preservatives (PRE), including to curdle milk (PREcur), were also considered. Sweets included plants whose flowers (SWEflw) or subterranean organs (SWEsub) were eaten for their sweet flavour. This category also included some plants whose exudates were consumed (SWEexu), such as species whose latex was used as chewing gum. Finally, there was a category for other food uses, such as oils (OTHoil), flours (OTHflo), and pickles (OTHpic).

Taxonomy

Several works were followed for taxonomy and plant nomenclature: *Flora Iberica* (Castroviejo *et al*., 1986–2005) for families included therein, and *Flora Europaea* (Tutin *et al*., 1964–1980) for the remaining families, except for the genus *Matricaria* (Bremer & Humphries, 1993) and for the Lamiaceae. In the latter family, the criterion of one of the authors (Ramón Morales), which will be included in Volume XII of *Flora Iberica*, was followed.

RESULTS AND DISCUSSION

The Appendix shows all the wild species used for food purposes in Spain, alphabetically ordered by families. The species marked with an asterisk (*) were not mentioned as edible in internationally well-known databases of useful plants, such as PFAF (2005), SEPASAL (2005), and GRIN (2005), or in other comprehensive compilations that deal with the wild food plants of Europe (Couplan, 1989; Rivera & Obón, 1991; Fleischhauer, 2003; Picchi & Pieroni, 2005). The Appendix also includes some local names, the category of use, and the number of reports for each one, the provinces in which these uses were recorded and the reference number of the literature source. Finally, the part(s) used, the mode of consumption, and the collecting season(s) are specified. Note that, in this study, the unit of citation is the report, i.e. the citation of a wild food plant species in a literature source (or unpublished field data) from a particular area.

Overall results

Four hundred and nineteen species belonging to 67 families were recorded, accounting for 6% of the Iberian flora.

Of the seven different food categories considered, green vegetables formed the largest group (49% of species), followed closely by plants used to prepare beverages (31%). Wild fruits and sweets each represented 16%, whereas plants used for seasoning accounted for 14% of species. Plants used as preservatives represented 6% and, finally, the group of other uses included 5% of species. Some species were included in more than one category. Therefore, the total number of plants and their related uses was 570, higher than the number of species (419).

There was an overlapping of species in nearly all categories, but mostly between beverages and seasonings and between wild fruits and beverages. Roughly 63% of the species used for seasoning were aromatic plants that were also used for making beverages, especially herbal teas (49%). Thirty-five per cent of wild fruits were also used for beverages, especially for making liqueurs (30%).

Most species (65%) were very sparsely represented (less than five reports), 18% were sparsely represented (five to nine reports), 12% were well represented (10–19 reports), and only just over 5% of the species could be considered to be very well represented (more than 20 reports). If the geographical distribution of the uses was considered, e.g. the number of provinces in which each wild plant was reported, similar results were obtained. Considering all food uses, the most important species according to the number of reports were: *Foeniculum vulgare* (49), *Origanum vulgare* (38), *Rorippa nasturtium-aquaticum* (37), *Rubus ulmifolius* and *Silene vulgaris* (36), *Asparagus acutifolius* (33), *Mentha pulegium* (31), *Prunus spinosa* and *Rosmarinus officinalis* (30), *Arbutus unedo* and *Malva sylvestris* (28), *Scolymus hispanicus* (27), *Matricaria recutita* (26), *Cichorium intybus* (23), *Crataegus monogyna*, *Portulaca oleracea*, and *Quercus ilex* (22), *Jasonia glutinosa* and *Thymus vulgaris* (21), and *Thymus zygis*, *Thymus mastichina*, *Glycyrrhiza glabra*, and *Castanea sativa* (20). Most were included in different usage groups. *Foeniculum vulgare*, for instance, appeared in five categories.

Figure 2 indicates the botanical families to which the main groups of wild food plants consumed in Spain belong. Almost one-third of the vegetables belonged to the Asteraceae family, whereas wild fruits were mainly Rosaceae, and plants used for beverages and seasonings belonged mostly to the Lamiaceae. The Asteraceae family was also very important for preparing beverages, Fagaceae for fruits, and Apiaceae for seasoning.

Most of the plants consumed were autochthonous species. Many were cosmopolitan plants, such as *Montia fontana*, *Urtica dioica*, and *Capsella bursa-pastoris*, or widely distributed species, such as *Lactula serriola* and *Eryngium campestre*. Some Iberian endemics were also included, such as *Thymus mastichina*, *Rubus castellarnaui*, *Fritillaria lusitanica*, and *Sonchus crassifolius*, and also local endemics, such as *Artemisia granatensis*, *Thymus serpylloides*, and *Sideritis glacialis* only from Sierra Nevada, near Granada, *Saxifraga vayredana* from Montseny, near Barcelona, and *Thymus piperella* only from southern Valencia and nearby areas. Other species, such as *Prunus cerasus*, *Chenopodium ambrosioides*, and *Arundo donax*, were allochthonous plants that now grow feral in Spain.

Comparison with international databases and comprehensive studies

Three hundred of the species listed in the Appendix were reported as edible in the databases and comprehensive works consulted, although sometimes the parts of the plants or consumption were different. *Carthamus lanatus*, for instance, mentioned for the oil obtained from its seeds (Couplan, 1989; PFAF, 2005), is eaten as a green vegetable in Spain. More than one-quarter of the species (119) were not reported as edible. However, species from the same genus were often found in these sources, e.g. some species of the genera *Conopodium*, *Carduus*, *Chamaemelum*, *Satureja*, and *Thymus*.

The plants marked with an asterisk include many species exclusive to the Iberian Peninsula or nearby countries (e.g. *Sonchus crassifolius*, *Thymus orospedanus*, *Jasonia glutinosa*, and *Rumex induratus*). Some,

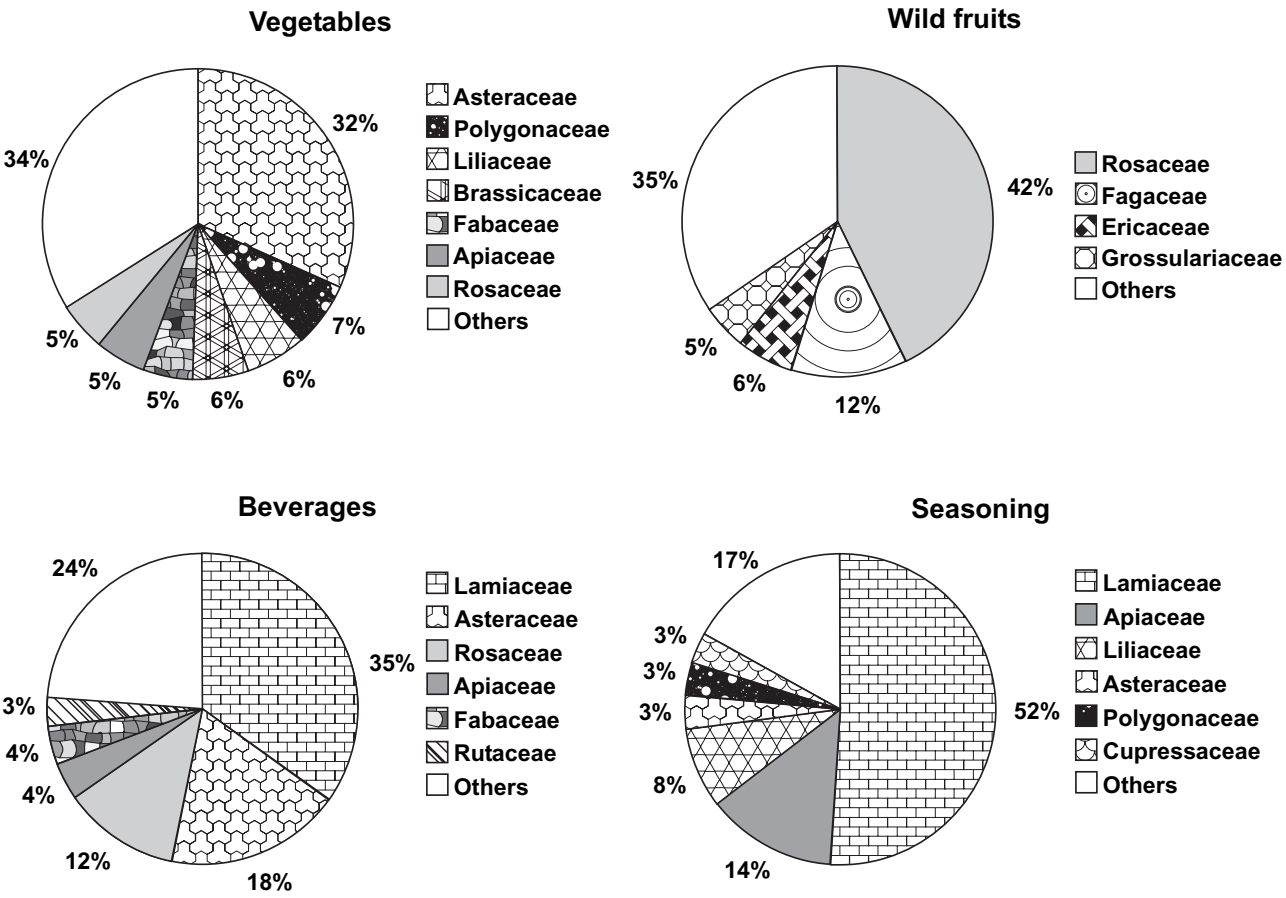

Figure 2. Botanical families with the greater number of species cited for the major food categories.

such as *Artemisia granatensis* and *Santolina oblongifolia*, are narrow-range endemics. The list also includes more common species that are only used for food purposes in certain places (*Inula salicina*). Many of these taxa were mentioned in one or two sources, and only five species had more than seven citations (*Jasonia glutinosa*, *Rumex induratus*, *Satureja obovata*, *Mantisalca salmantica*, and *Teucrium capitatum*). These species are widely and exclusively used in Spain, and therefore could be considered as 'typical Spanish wild edibles'. A large number of the species with an asterisk were consumed as sweets or beverages. The former category has often been ignored in comprehensive works about wild food plants in spite of its importance in children's diets. The latter category is sometimes not considered in food surveys and may therefore be over-represented on the list. Finally, over 30 green vegetables, such as *Carduncellus dianius* and *Salvia argentea*, were consumed very locally.

HARVESTING AND CONSUMPTION TIME

The Appendix also shows the harvesting season of each species for each food usage. In some cases, the harvesting time lasts for several seasons because of the great climatic diversity amongst Spain's various regions resulting from the range of latitude and altitude.

Most vegetables, fruits, and sweets were consumed fresh, and the harvesting and consumption times coincided. Sometimes simple preservation techniques were used to make food available throughout the year. For instance, plants used for seasoning and for herbal teas were dried and some wild fruits were picked to make jam (blackberries or raspberries) or for drying (hazelnuts).

In general, most species used as vegetables were collected in spring, but the exact time varied depending on the region and sometimes on the year. In warmer areas, especially in the lowlands of the south and east, wild vegetables could be harvested in winter, whereas, in colder and mountainous areas, harvesting could take place until summer.

Wild fruits were mainly harvested at the end of the summer and in autumn. Plants used for seasoning were usually gathered when they were at their period of peak growth, generally in spring, although they were not necessarily picked when in bloom. However,

species used for making herbal liqueurs or teas were collected at the flowering stage, usually in spring and summer.

Green vegetables

Although the Asteraceae showed the greatest number of species used as green vegetables in Spain, *Rorippa nasturtium-aquaticum* (Brassicaceae, watercress) was the species whose consumption was cited most often (37 reports). The tender leaves and stems of this widespread aquatic plant are consumed in a similar manner as in other regions of the world (Facciola, 2001), mainly raw in salads and also sometimes in stews and soups.

After watercress, the most cited species were *Silene vulgaris* (36), *Asparagus acutifolius* (33), and *Scolymus hispanicus* (27), all chiefly consumed stewed. The tender leaves and stems of the first species, known as 'colleja', are eaten in many parts of Spain, mainly in omelettes or with scrambled eggs, and also as a garnish for 'potaje', a typical Spanish dish often consumed during Lent. The use of this species has also been reported in other Mediterranean countries (Couplan, 1989; Cerne, 1992; Arcidiacono, Pavone & Salmeri, 1996; Ertug, 2000; Marco *et al*., 2003; Picchi & Pieroni, 2005).

The young shoots of the widespread *Asparagus acutifolius*, 'espárrago triguero', are also eaten in omelettes. Some other species of this genus, with a limited geographical distribution, were also harvested, e.g. *A. aphyllus*, *A. albus*, *A. stipularis*, and *A. officinalis*; the latter is cultivated and sometimes feral in wet sites.

The peeled basal leaves of *Scolymus hispanicus* are traditionally boiled and then fried lightly in olive oil with garlic to be served as a garnish for 'cocido', another traditional Spanish dish. They are also consumed lightly fried with garlic and cured ham and sometimes with hard-boiled or scrambled eggs. This species is also appreciated in other Mediterranean countries, such as Portugal (Barão & Soveral, 2004), France (Couplan, 1989), Morocco (Tanji & Nassif, 1995), Italy (Picchi & Pieroni, 2005), and Turkey (Ertug, 2004). Another species of the same genus, *S. maculatus*, coexists with the former in some warm areas of southern Spain. This species is probably used in the same way as *S. hispanicus* in some provinces of Andalusia, as they look quite similar when collected, although there was only one citation for this species from Jaén (Fernández Ocaña, 2000).

As stated above, the most cited species for all food uses was *Foeniculum vulgare* (fennel). Its tender leaves and stems, with a characteristic aniseed flavour, are commonly used as a vegetable (25 reports). They are eaten raw as a snack, added to salads and sometimes to different stews with vegetables, legumes, or rice ('potaje de habichuelas', 'trigo', 'olla gitana', 'cocido', 'potaje', 'ensalada de matas') and soups. The consumption of *F. vulgare* as a stewed green vegetable seems to be more common in gypsy communities (Pardo-de-Santayana, 2003). *Scandix australis*, another species with an aniseed flavour, is also used raw as a snack, although is less widely used than fennel.

Although not so common as *Asparagus acutifolius*, the young shoots of two climbing and toxic species, *Bryonia dioica* and *Tamus communis*, are eaten and popularly thought to be wild asparagus. They are consumed in the same way and have similar names (variations of 'espárragos'), perhaps as a reminder of their ancient medicinal use, cited by Dioscorides in the 1st century AD (Laguna, 1555). *Bryonia dioica* is also similarly used in Italy (Pieroni, 1999), whereas *Tamus communis* is consumed in France, Italy, and Turkey (Couplan, 1989; Guarrera, 2003; Ertug, 2004).

As stated in the 'Material and Methods' section, unripe fruits or seeds eaten raw as a snack were also included in the category of green vegetables. The consumption of unripe fruits of *Malva sylvestris* (mallow), called 'panecillos' (little bread), was once widespread in Spain, especially amongst children. The tender leaves and stems of this mallow and of other species of the same genus are also eaten stewed, although this practice is not so common nowadays and virtually limited to Andalusia. However, in ancient times, mallow was considered to be a medicinal vegetable, often consumed after boiling, as stated by Theophrastus (Teofrasto, 1988) and Dioscorides (Laguna, 1555). This custom still exists, at least in Italy (Picchi & Pieroni, 2005), Morocco (Font Quer, 1990; Tanji & Nassif, 1995), and Turkey (Ertug, 2004).

We have included in the same group 'raw consumption as a snack', the unripe fruits of several species of *Erodium*, immature seeds of several Fabaceae, such as *Vicia villosa*, *Vicia lutea*, and *Lathyrus cicera*, and the undeveloped seeds of *Pinus pinea.* The consumption of peeled young shoots of *Rubus ulmifolius* is quite common (16 reports), and sometimes various species of *Rosa*.

The fact that, in three provinces of south-eastern Spain, people consume a mix of different wild species in a vegetable stew (Martínez-Lirola, González-Tejero & Molero, 1997; Oltra, 1998; Verde, Rivera & Obón, 1998), similar to that cited for north-eastern Italy by Pieroni (1999), is also remarkable. In the Autonomous Region of 'Comunidad Valenciana' (east of Spain), mixed wild greens are sometimes included in a kind of vegetable pie. The varied recipes are known as 'minxos', 'pastissets', or 'coquetes' (Mulet, 1991; Oltra, 1998; Pellicer, 2001; Pellicer, 2004a).

Wild fruits

The most popular wild fruits in Spain are those from *Rubus ulmifolius* (34 reports), a species widely distributed over the Iberian Peninsula. They are usually eaten raw, but also sometimes used for home-made jam. Other species of the same genus with a much narrower distribution, such as *R. caesius*, *R. castellarnaui*, and *R. lainzii*, are also consumed.

The second most quoted species for its fruits is *Arbutus unedo* (26 reports), which occurs in Mediterranean areas and some northern parts of Spain. The fruits are consumed raw as a dessert, in jams, and in liqueurs (see below).

Quercus ilex ssp. *ballota* (22 reports) is widespread in Spain's Mediterranean regions, and was very important in the past, especially in times of scarcity. Its fruits (acorns, 'bellotas') were usually consumed raw, or sometimes boiled or roasted to make them sweeter. Occasionally, they were roasted and ground as a coffee substitute. Some recent references (Triano *et al*., 1998; Blanco & Cuadrado, 2000; Fernández Ocaña, 2000) still mention that, in times of scarcity, acorns were ground into flour for bread or other dishes, following the practice of the early inhabitants of the Iberian Peninsula, mentioned by Pliny, the Elder, and Estrabo in the 1st century AD (García y Bellido, 1968, 1978). This has also been recorded from archaeological evidence from Neolithic times (Buxó, 1997; Pereira & García Gómez, 2002).

Other species whose fruits are also consumed to a certain extent grow only in regions of higher rainfall, e.g. *Castanea sativa* (18 reports), *Fragaria vesca* (16), *Corylus avellana* (15), *Prunus avium* (13), and *Malus sylvestris* (12). Although more common in northern regions, they also grow in mountainous areas in the centre and south of the Peninsula. Some species, such as *Malus sylvestris* and *Prunus spinosa*, whose fruits are often unpalatable when eaten raw, were stored for several months in hay or grain to sweeten them. They were eaten in winter when fresh fruit was not as easily available as it is today. Nuts, such as chestnuts and hazelnuts, both of which are also cultivated, were also stored in winter.

Although the fruits of *Crataegus monogyna* were commonly consumed in the past (22 reports), especially by children in times of shortage, this custom is rare nowadays. The same could be said of many other species, such us *Sorbus aria*, *Rosa* spp. and *Arctostaphylos uva-ursi.*

Beverages

Most of the plants used for making beverages are aromatic species, mainly belonging to the Lamiaceae and Asteraceae families. The most remarkable of them, with the highest number of reports, are *Matricaria recutita* (26 reports), *Mentha pulegium* (25), and *Jasonia glutinosa* (21), largely prepared as herbal teas, and *Prunus spinosa* (24), *Prunus cerasus* (14), and *Arbutus unedo* (13), used to make liqueurs.

Nowadays, infusions of *Matricaria recutita* (chamomile, 'manzanilla') or *Mentha pulegium* (pennyroyal, 'poleo') are commonly drunk as simple beverages, although in the recent past they were mostly used for their medicinal properties (Pardo-de-Santayana, Blanco & Morales, 2005). Nowadays, they are available in tea bags at markets or bars, whereas *Jasonia glutinosa* (rock tea, 'té de roca'), also a very popular herbal tea in many parts of eastern Spain (Pardo-de-Santayana & Morales, 2004), is only sold in a few local markets or herbal shops.

'Pacharán' is one of the most popular liqueurs in Spain. Made at home as well as commercially produced, it is prepared by soaking *Prunus spinosa* fruits in anisette with a few coffee grains and a piece of cinnamon stick. Other Rosaceae fruits, such as *Prunus cerasus*, *Prunus avium*, *Rubus ulmifolius*, and *Malus sylvestris*, are used in a similar way to make liqueurs. A very popular liqueur in Catalonia is 'ratafia', a home-brewed herbal spirit made from unripe walnuts (*Juglans regia* L.) and up to 95 aromatic or medicinal plant species macerated in anisette or brandy (Bonet *et al*., 1999; Bonet & Vallès, 2002). The Appendix lists only the most frequently cited species.

In the Autonomous Region of Comunidad Valenciana (Castellón, Valencia, and Alicante), the herbal beverage 'herbero' or 'herberet' (Ríos & Martínez, 2003) is prepared by macerating in liquor or anisette several (8–23) aromatic species. In addition to several plants of the Lamiaceae, such as *Rosmarinus officinalis*, *Thymus vulgaris*, *Sideritis hirsuta*, *Sideritis angustifolia*, *Salvia lavandulifolia*, and *Micromeria fruticosa*, *Dictamnus hispanicus* is an important species for most of these recipes. A similar liqueur, called 'gitam', is made in Castellón, but only with the latter species (Mulet, 1991). In Jaén (Andalusia), an alcoholic drink known as 'risol' is prepared with coffee grains and some aromatic plants, such as *Matricaria recutita*, *Melissa officinalis*, and *Thymus mastichina*, macerated either in anisette or in alcohol (Mesa, 1996; Guzmán, 1997).

This category also includes other plants used for making other beverages, such as coffee substitutes, commonly employed in the period of shortage after the Spanish Civil War (1936–1939). One of the most used was *Cichorium intybus*, whose roasted roots (Guzmán, 1997; Triano *et al*., 1998; Fernández Ocaña, 2000; Bonet & Vallès, 2002) or dry leaves (Tardío *et al*., 2005) were boiled. The dry stems of *Taraxacum officinale* (Guzmán, 1997), the leaves and stems of *Helianthemum syriacum* (Verde *et al*., 1998), and the fruits of

Quercus ilex ssp. *ballota* (Ferrández & Sanz, 1993; Tardío *et al*., 2005) and *Ceratonia siliqua* (Obón & Rivera, 1991; Rabal, 2000) were also used in the same way.

Seasoning

Of the plants most frequently used for seasoning are many species of the Lamiaceae, such as *Origanum vulgare* (36 reports), *Rosmarinus officinalis* (24), several species of the genus *Thymus*, e.g. *T. zygis* (19), *T. vulgaris* (19), and *T. mastichina* (16), some species of the genus *Mentha*, such as *M. spicata* (13), and a few species from the genus *Satureja*, e.g. *Satureja obovata* (13), *Satureja intricata* (8), and *Satureja montana* (7). Other species frequently utilized as seasoning are *Foeniculum vulgare* (32, Apiaceae), *Laurus nobilis* (14, Lauraceae), and *Allium ampeloprasum* (8, Liliaceae).

Two major rural activities involving plants as seasoning are the preparation of olives in brine and the preservation of pig products for home use after slaughter. The many different ways of seasoning olives may involve a variety of aromatic plants. *Foeniculum vulgare* and several species of the genera *Thymus* and *Satureja* are some of the most commonly used. For seasoning pork, *Origanum vulgare* has been widely used, mainly in 'chorizo' (spicy dry pork sausage), 'morcillas' (black pudding), etc.

Preservatives

It is well known that many plants used for seasoning also have preserving properties. However, only plants mentioned by people as preservatives have been included in this category, e.g. *Arbutus unedo*, *Pistacia lentiscus*, and *Ceratonia siliqua*, whose stems and leaves are used for hardening olives. Other species are used for preserving dried figs (*Foeniculum vulgare*) and raisins (*Artemisia campestris* and *Dittrichia graveolens*), where the fruits are left in an aqueous infusion of these plants before being dried.

In warm weather, hunters prevent rabbits and hares from rotting by removing their viscera and inserting wild plants such as *Retama sphaerocarpa*. This is probably the origin of some game recipes where, once skinned and gutted, the animal is left overnight in the open air marinating with aromatic plants, such as *Satureja obovata*, in its cavity before it is stewed the following day (Verde *et al*., 1998).

Other examples of preservatives are the plant species used to curdle milk for making cheese or curd. Although the flowers of *Cynara cardunculus* are the most commonly employed for making cheese, other Asteraceae, such as *Cynara humilis*, *Silybum marianum* and *Onopordum macracanthum*, are also used. The latex of *Euphorbia serrata* and other species (*E. characias*, *E. helioscopia*, *E. nicaeensis*, and *E. segetalis*) was used by shepherds to make curd, adding a few drops into hot milk whilst stirring.

Sweets

The most frequently quoted species in this category is *Glycyrrhiza glabra* (19 reports). In the past, its roots were a very popular children's sweet, and were even sold in cities. The sweet roots of *Trifolium alpinum* (five reports), with similar local names and belonging to the same family, were also particularly consumed by children in some mountainous villages of the Cantabrian and Pyrenean ranges.

Other species whose underground organs were eaten mainly by children are: *Conopodium majus* (six reports) and other species (*C. marianum*, *C. pyrenaeum*, *C. subcarneum*, and *C. thalictrifolium*), *Bunium macuca* (three), *Merendera montana* (six), and *Romulea bulbocodium* (three). The consumption of the tubers of *Lathyrus tuberosus* is uncommon in Spain. Although this weed is used and well known in other European countries, such as France and the Netherlands (Couplan, 1989), and it grows in several provinces in the north and north-east of Spain, the tubers were only consumed in the north of Palencia province. Growing as a weed in cereal crops, tubers were collected when they reached the surface as the soil was being prepared for sowing.

Children also ate, chewed, or sucked as a sweet the flowers of many plants belonging to different families. One of the most commonly sought species for this reason was *Robinia pseudoacacia* (eight reports), a naturalized North American tree whose flowers, called 'pan y quesillo' (bread and cheese), were eaten raw as a snack. The flowers of many other species, such as *Cytinus hypocistis* (five), *Echium plantagineum* (four), *Trifolium pratense* (three), and *Anchusa azurea* (three), were commonly sucked by children to reach their sweet nectar.

Finally, the latex or sweet secretions from other species were consumed. One of the most frequently cited is the raw consumption of a sugary exudate from *Cistus ladanifer* (manna, called 'mángala' or 'miel de jara') in western Spain. In addition, although not so common, the milky latex of the roots of *Andryala ragusina* and the sap of *Prunus avium* were used as chewing gum.

Other uses

This category includes oils, flours, and pickles or brines. Oil is extracted from the fruits of wild forms of *Olea europaea* (var. *sylvestris* Brot.), called 'acebuche', in the same way as from the cultivated varieties, and thought to be even better quality. Although not com-

mon in the past, oil was also obtained from the fruits of *Fagus sylvatica* in the north of Spain.

The flour obtained from the seeds of *Aegilops geniculata*, a close relative of wheat, was used for making bread in times of shortage. Even flour from the seeds of *Caucalis platycarpos* and *Vicia lutea* or from rhizomes of *Cynodon dactylon*, mixed with wheat flour, was once used for bread-making. As mentioned previously, the most common bread amongst prehistoric Spanish settlers was made of acorn flour.

In addition to the olives from the wild olive trees, prepared in brine like the cultivated ones, one of the species most frequently consumed as a pickle is *Capparis spinosa*. Its immature flower buds ('alcaparras', capers), unripe fruits ('alcaparrones'), and young shoots are pickled either in vinegar or brine. Although much less well known, the bulbs and basal part of the stems of *Allium ampeloprasum*, stems of *Portulaca oleracea*, tubers of *Helianthus tuberosus*, and young shoots of *Inula crithmoides* have also been prepared as pickles in vinegar. In some villages in Albacete province, immature pine cones of *Pinus pinea* are prepared and preserved in brine, and unripe seeds are eaten with the shell still soft (Sánchez López *et al*., 1994; Blanco & López-Sánchez, 2004).

Medicinal and poisonous edibles

It is a well-known fact that many wild food plants are also used for medicinal purposes (Etkin, 1996; Bonet & Vallès, 2002; Guarrera, 2003). The Appendix contains many examples of this. Some of them are still used as medicinal herbs (e.g. *Hypericum perforatum* and *Malva sylvestris*), whereas, in other cases (*Tamus communis* and *Bryonia dioica*), the former medicinal purpose has been lost and the consumption of their young shoots is simply regarded as a food use. Most of the species used for herbal teas and liqueurs also have this double purpose. Initially utilized for their digestive properties, nowadays they are sometimes simply considered as beverages.

The 'medicinal properties' of wild edibles in the past included their contribution to health by adding variety to the human diet. Many wild plants were probably a good source of vitamins and minerals, especially for children, when cultivated fruits and vegetables were not as easily available as they are today.

Other interesting observations are some toxic plants traditionally eaten in Spain, as shown in the following examples. Young shoots (the least toxic part) of *Tamus communis*, *Bryonia dioica*, and *Clematis vitalba* were eaten after cooking had removed their toxicity (Couplan, 1990). Furthermore, in Quatretonda, in the province of Valencia, the tender sprouts with young leaves of *Atractylis gummifera* were stewed as an ingredient of some dishes traditionally eaten in Lent and on the Wednesday of Easter week. The two hepatotoxic compounds in this species can inhibit glycogen synthesis and therefore cause an often fatal liver disease (Larrey & Pageaux, 1995). The fact that local people mixed the stewed roots with wheat or corn to kill rats probably indicates that they were well aware that the toxins were concentrated there.

Some species of the genus *Rumex*, such as *Rumex acetosa* and *Rumex induratus*, and those of the genus *Oxalis*, e.g. *O. acetosella*, *O. latifolia*, and *O. pes-caprae*, contain a high level of oxalic acid in their leaves, which gives them their acid-lemon flavour. Although they cause no problems if consumed in small quantities, large amounts can be toxic, as the oxalic acid can lock up other nutrients, especially calcium, causing mineral deficiencies (Bown, 1996).

Tender leaves and stems of *Papaver rhoeas* are also consumed raw in salads or stewed. Although used since ancient times, they seem to contain an unidentified toxic compound that, in exceptional cases, causes mild poisoning in children, adults, and animals. From the same family, *Roemeria hybrida*, consumed in Albacete province, is said to contain toxic alkaloids, mainly in the roots (Couplan, 1990).

In several areas of Spain, the fruits of *Viburnum lantana* are said to be edible. Although thought to be toxic when not completely ripe (red), they are not dangerous if eaten when very ripe and in small quantities (Couplan, 1990; PFAF, 2005). Other fruits cited as edible are those from *Viscum album*, whose toxicity level is very low according to Frohne & Pfänder (1984), and the arils of *Taxus baccata*, the only nonpoisonous part of the tree.

Seeds of *Lathyrus cicera* are eaten raw when still immature, but, when ripe, they contain the same neurotoxic compounds as cultivated *Lathyrus sativus* (Frohne & Pfänder, 1984; Couplan, 1990); if consumed in large amounts, they can produce lathyrism, a neurological disease. The fruits of *Lathyrus clymenum*, consumed in periods of scarcity as a broad bean (*Vicia faba* L.) substitute, may also be toxic, as local people say they cause headache (Martínez-Lirola *et al*., 1997).

Of the sweets, *Merendera montana*, whose bulbs are eaten raw, contains toxic alkaloids, mainly colchicine, 3-demethylcolchicine, and colchicoside, but the alkaloid content is significantly lower in the subterranean corms than in the leaves (Gómez *et al*., 2003). In addition, *Digitalis thapsi*, whose flowers are occasionally sucked to reach the nectar, has been reported to be a toxic plant.

As all of these examples show, there are a lot of toxic species amongst the wild edibles. Fortunately, however, in all cases, the part consumed is apparently either free of toxic compounds or contains low levels.

CONCLUSIONS

This review clearly shows that a deep-rooted biocultural heritage surrounding wild edible plants still exists in rural Spain. Although, most species are not widely consumed throughout the country and only 5% of species are regarded as being of widespread use, many were, until quite recently, important as supplementary foods. They were used to vary cuisine and to flavour, garnish, or complement other foods. They were also a good source of vitamins and minerals, but have now become less important. Most of this traditional knowledge only survives in the memory of the elderly and is now in danger of vanishing. This paper attempts to compile and disseminate that knowledge in order to help maintain cultural traditions and facilitate research into food history and new food sources.

A comparison of the list of wild species used in Spain with similar lists from around the world seems to confirm the concept that people worldwide collect the same types of plants: vegetables, fruits and nuts, legumes, spices, roots, and tubers (King, 1994). People have often independently selected plants as food from similar taxa (e.g. many species of *Taraxacum*) or similar life forms (e.g. plants with a basal rosette of leaves as vegetables).

In Spain, wild plants are considered as famine food, eaten, above all, in times of scarcity. In fact, most wild edible species are not now gathered. Many of the informants from different sources often mention this fact, referring to the 1940s, after the Spanish Civil War. However, some species are so much appreciated, at least locally, that they are still gathered and even marketed. Some people still gather them because they like their taste and enjoy walking and collecting wild edibles. In the countryside, they are often considered an important part of the culture and included in traditional recipes of regional cuisines. Some species are so popular that they are regarded as a 'trademark' of local and regional gastronomic character, e.g. *Jasonia glutinosa* in Aragón, Cataluña, and Comunidad Valenciana, *Sideritis hyssopifolia* in the Cantabrian region, and *Asparagus acutifolius*, *Silene vulgaris*, and *Scolymus hispanicus* in several parts of central and western Spain. This, coupled with recent developments in rural tourism and attention to the health properties of natural foods, has increased interest in wild edible plants as potential new food sources.

Most of the edible plants mentioned are abundant species commonly found in the areas surrounding villages, including the weeds of field crops and gardens, and hedgerow and meadow plants (Díaz-Betancourt *et al*., 1999; Bonet & Vallès, 2002; Pieroni *et al*., 2002). Most utilized wild food plants have a vast distribution range and collection does not threaten the wild populations. However, they include quite a large number of species exclusive to the Iberian Peninsula, including some narrow endemic species. The way that each species is gathered needs to be taken into account. Destructive harvesting techniques, e.g. the removal of subterranean parts (bulbs, roots) or whole plants, are the most dangerous, and must be avoided, at least in the case of threatened species. It is well known that *Artemisia granatensis*, a narrow endemic from Sierra Nevada (Granada), is a critically endangered species as a result of over-collection (Blanca *et al*., 1998). Two other species on our list have been classed as threatened because of their narrow area of occupation, namely *Crataegus laciniata* (listed as endangered) and *Thymus moroderi* (vulnerable) (Ministerio de Medio Ambiente, 2000). Lange (1998) also pointed out that the boom in herbal medicine could be a serious threat to some aromatic and medicinal plants, such as species of the genera *Sideritis*, *Thymus*, and *Origanum,* and that collecting should be controlled. This is particularly important for taxa that are marketed. Sustainable harvesting would guarantee these renewable resources for the future.

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APPENDIX

Wild species used for food purposes in Spain. Codes for provinces are given in Figure 1 and reference numbers (RN) in Table 1. The species marked with an asterisk (*) are not cited as edible in the databases PFAF (2005), SEPASAL (2005), and GRIN (2005) or in other ethnobotanical works in the Mediterranean area (see 'Material and Methods')

Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Amaranthaceae				
Amaranthus blitum L.	blet[c]	VEG (1)	A (40)	Tender leaves and stems, stewed (SP)
Anacardiaceae				
Pistacia lentiscus L.	lentisco, matissa[c]	PRE (3)	Co (17, 18), Cs (13)	Branches with leaves, for hardening olives (AU)
Apiaceae				
Apium graveolens L.	apio	SEA (3), VEG (2)	Al (5), Co (18), Hu (22), J (26), M (29)	Condiment for soups; raw in salads or stewed (SP)
Apium nodiflorum (L.) Lag.	berra, berraza	VEG (11)	Ab (42, 46), B (9), Ba (12), CR-To (16), Cu (42), J (24), M (29), O (32), Sg (36), Za (41)	Tender leaves and stems, in salads (WI, SP)
Bifora testiculata (L.) Spreng.	culantro real	SEA (1)	Co (19)	Aerial part, condiment for a faba beans stew (SP)
Bunium balearicum (Sennen) Mateo & López Udías*	serelló[c]	SWEsub (1)	A (40)	Tubers, raw as a snack (WI, SP)
Bunium macuca Boiss.*	macuca, zamacuca	SWEsub (3)	Co (19), J (24, 25)	Tubers, raw as a snack (SP)
Bunium pachypodum P.W. Ball	macuca, zamacuco	SWEsub (2)	Co (19), Mu (30)	Tubers, raw as a snack, or stewed as potatoes (SP)
Bupleurum fruticosum L.*	limoncillo	PRE (1)	Co (19)	Aerial part, for hardening olives (AU)
Bupleurum gibraltarium Lam.*	crujía	PRE (1)	Co (19)	Aerial part, for hardening olives (AU)
Carum carvi L.	comí[c]	BEVher (1), BEVliq (2), SEA (2)	B (9), L-Ge (27)	Fruits (SU)
Caucalis platycarpos L.	caxurro[c]	OTHflo (1)	Cs (13)	Seeds milled, mixed with wheat flour, to make bread (SU)
Conopodium majus (Gouan) Loret	macuca, frexo[g]	SWEsub (6)	Ba (12), CR (14), CR-To (15, 16), Lu (28), P (00)	Tubers, raw as a snack (SP)
Conopodium marianum Lange*	macuca	SWEsub (3)	Ab (42), Ba (12), CR-To (16)	Tubers, raw as a snack (SP)
Conopodium pyrenaeum (Loisel.) Miégev.*	macucos, macuca	SWEsub (3)	Ab (42), O-Le-S (33), S (34)	Tubers, raw as a snack (SP)
Conopodium subcarneum (Boiss. & Reut.) Boiss. & Reut.*	macucos, macuca	SWEsub (1)	S (34)	Tubers, raw as a snack (SP)
Conopodium thalictrifolium (Boiss.) Calest.*	macuca, amacuca	SWEsub (1)	Co (19)	Tubers, raw as a snack (SP)
Coriandrum sativum L.	cilantro	BEVliq (1), SEA (2)	B (9), Co (44), J (25)	Fruits for liqueurs (SU?), aerial part for seasoning (SP, SU)

APPENDIX *Continued*

Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Crithmum maritimum L.	fenoll marí[c]	OTHpic (1), SEA (1), VEG (1)	A (40), CAT (37)	Leaves, for seasoning olives (AU), raw in salads or pickled (SP)
Daucus carota L.	zanorias bordes	SWEsub (2), VEG (1)	A (40), Ab (42)	Roots, raw as a snack (SP, SU); young leaves stewed (SP)
Eryngium campestre L.	cardo corredor, cardocuca, panical[c]	BEVliq (2), SEA (4), SWEsub (2), VEG (6)	A (40), Al (5), A-V (4), B-Ge (11), Co (17, 18, 19), Gu (21), J (25, 26), M (29), Mu (30)	Aerial part for liqueurs or seasoning (SU), bottom of young shoots as a raw or stewed vegetable and roots raw as a snack (SP)
Foeniculum vulgare Mill.	hinojo, fenoll[c], fiollo[g], millua[b]	BEVher (13), BEVliq (12), PRE (4), SEA (32), VEG (25)	A (40), Ab (1, 2, 3, 42, 46), Al (5), Av (6, 7), A-V (4), B (9, 10), B-Ge (11), Co (17, 18, 19), CR (14), CR-To (15, 16), Cs (13), Cu (42), Ge (11), Gr (00, 20), Hu (22, 23), J (24, 25, 26), L-Ge (27), Lu (28), M (29), Mu (30, 31), Na (39), O (32), O-Le-S (33), S (34), Sa (35), Se (38), Sg (36), SS (39), V (40, 43), Vi (39, 44), Za (41), GAL (44, 45)	Tender leaves and stems, raw as a snack, in salads or stewed (SP); Aerial part or seeds for seasoning olives, preservative for dry figs, preparing herbal tea or liqueur (SU, AU)
Meum athamanticum Jacq.	Prixel de monte[g]	SEA (1)	GAL (45)	Tender leaves and stems, as a condiment (SU)
Molopospermum peloponnesiacum (L.) W.D.J. Koch	coscoll[c]	VEG (1)	L-Ge (27)	Young shoots peeled, raw in salads (SP)
Scandix australis L.	quijones, hijones, anís	BEVliq (1), VEG (9)	Ab (2, 42), Co (19), CR-To (16), Cu (42), J (24, 25), M (29), S (34)	Tender leaves and stems, raw as a snack (SP)
Scandix pecten-veneris L.	agulletes[c]	VEG (2)	A (40), Ab (42)	Tender basal leaves, stewed (SP)
Smyrnium olusatrum L.	apio caballar	VEG (3)	Co (17, 18), CR-To (16)	Tender leaves and stems, in salads or stewed (SP)
Arecaceae				
Chamaerops humilis L.	palmito, margalló[c]	FRU (5), SWEsub (2), VEG (6)	A (40), Al (5), Ca (38), Co (17, 18), Cs (13), H (38), Se (38), V (40)	Fruits, eaten raw (SU); roots chewed; young shoots, in salads (WI)
Asclepiadaceae				
Periploca laevigata Aiton*	cornical	SWEflw (1)	Al (5)	Flowers, sucked (SP)
Asteraceae				
Aetheorhiza bulbosa (L.) Cass.*	castañuela	SWEsub (2)	Al (5), Gr (5)	Bulbs, raw as a snack (SP?)
Anacyclus clavatus (Desf.) Pers.*	mojino	VEG (5)	Ab (1, 2), Al (5), Hu (23), Mu (30)	Tender leaves and stems, in salads or stewed (SP)
Anacyclus valentinus L.*	pampotrejos	VEG (1)	Ab (42)	Tender leaves and stems, stewed (SP)

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Andryala integrifolia L.	herba blanca[c], pata de perro	VEG (3)	A (40), Ba (12), V (40)	Tender stems, raw as a snack (SP)
Andryala laxiflora DC.*	pata de perro	VEG (1)	Ba (12)	Tender stems, raw as a snack (SP)
Andryala ragusina L.*		SWEexu (1)	M (29)	Latex, as a chewing gum (SP)
Anthemis arvensis L.*	magarza, manzanilla	BEVher (6)	Ab (2), Co (17, 18), Hu (22), Lu (28), M (29)	Inflorescences, as herbal tea (SP)
Arctium minus Bernh.	lampazo, bardana	VEG (8)	Ab (2, 42), B (9), Cu (42), J (24, 25), M (29), Sa (35)	Basal leaves and stems peeled, stewed or raw (SP)
Artemisia abrotanum L.	broida[c]	BEVliq (1)	B (9)	Flowered aerial part, for making liqueur (SU)
Artemisia absinthium L.	axenxo[g], donzell[c]	BEVher (1), BEVliq (2)	B (9), B-Ge (11), GAL (45)	Inflorescences, for herbal tea; flowered aerial part, for making liqueur (SU)
Artemisia campestris L.	herba pansera[c]	PRE (2)	A (40), Cs (13)	Aerial part, for preserving raisins (AU)
Artemisia granatensis Boiss.*	manzanilla de la sierra	BEVher (2)	Gr (20, 37)	Inflorescences and aerial part, as herbal tea (SU)
Atractylis gummifera L.	card santo[c]	VEG (2)	V (40, 43)	Tender sprouts with young leaves, stewed (WI, SP)
Bidens aurea (Aiton) Sherff	té, te moruno	BEVher (8)	Ab (3), Ba (12), Co (19), CR-To (15), Lu (28), M (29), S (34), Sg (36)	Aerial part, as herbal tea (SU)
Calendula arvensis L.	pata gallina	VEG (1)	Al (5)	Basal leaves, stewed (WI)
Carduncellus dianius Webb*	herba santa[c]	VEG (1)	A (40)	Basal leaves, raw or stewed (SP)
Carduus meonanthus Hoffmanns. & Link*	cardo borriquero	VEG (1)	Ba (12)	Basal leaves, peeled; stewed (SP)
Carduus tenuiflorus Curtis*	cardo	VEG (1)	M (29)	Basal leaves and tender stems, peeled, raw or stewed (SP)
Carlina acanthifolia All. [ssp. *cynara* (Pourr. ex Duby) Rouy]	carlina[c]	VEG (1)	L-Ge (27)	Inmatured inflorescences, raw as a snack (SP)
Carthamus lanatus L.	cardo santo, coronicas	VEG (3)	Ab (2), Mu (30), V(43)	Basal leaves, raw in salads or stewed (SP)
Centaurea aspera L.*	bracera, herba del sucre[c]	BEVliq (1), VEG (1)	B (9), Cs (13)	Inflorescences, peeled and stewed; aerial part for making liqueur (ratafia) (SP)
Centaurea calcitrapa L.	obriülls[c]	VEG (2)	A (40), Ab (42)	Basal leaves and tender stems, stewed (SP)
Chamaemelum fuscatum (Brot.) Vasc.*	clavellina	BEVher (1)	Co (19)	Inflorescences, as herbal tea (SP)

APPENDIX *Continued*

Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Chamaemelum nobile (L.) All.	manzanilla, manzanilla amarga	BEVher (14), BEVliq (2)	Bi (39), Gu (21), Lu (28), M (29), Na (39), O (32), O-Le-S (33), S (34), Sa (35), Sg (36), SS (39), Vi (39), Za (41); GAL (45)	Inflorescences, as herbal tea and for making liqueur (SU)
Chondrilla juncea L.	ajonjera, alijonjera, talleras, màstec[c]	VEG (16)	A (40), Ab (1, 2), B (9), B-Ge (11), Ba (12), CR-To (15, 16), Cu (42), Ge (11), Hu (23), J (24), M (29), Sa (35), Sg (36), CAT (37)	Young shoots, basal leaves, raw in salads (SP)
Chrysanthemum coronarium L.	mojino amarillo	VEG (2)	Al (5), Mu (30)	Tender leaves and stems, stewed (SP)
Cichorium intybus L.	achicoria, camarroja	BEVoth (7), VEG (22)	A (40), Ab (2), B (9), Bi (39), Co (19), CR (14), CR-To (16), Cs (13), Cu (42), Gu (21), Hu (22, 23), J (24, 25, 26), M (29), Mu (30, 31), Na (39), Sg (36), V (40, 43), Z (00)	Root toasted, as a coffee substitute (SU) Young shoots, basal leaves, in salads or stews (SP)
Cirsium arvense (L.) Scop.	calcida	VEG (1)	A (40)	Young shoots, stewed (SP)
Crepis vesicaria L.	achicoria, camarroja	VEG (7)	A (40), Ab (3), Ba (12), CR-To (16), M (29), Mu (30), V (40)	Basal leaves, raw in salads or stewed (WI, SP)
Cynara cardunculus L.	herba-col[c], cardo de comer, alcachofas silvestres	PREcur (11), VEG (9)	A (40), Ab (46), B (9, 10), B-Ge (11), Ca (38), Co (17, 18), Cs (13), Ge (11), L-Ge (27), PM (44), Sa (35), Se (38), V (40)	Inflorescences, to curdle milk (SU) Basal leaves, peeled or artichokes, stewed (SP)
Cynara humilis L.*	alcachofa de campo	PREcur (3), VEG (2)	Ba (12), Co (19), CR-To (15, 16), J (25)	Inflorescences, to curdle milk (SU) Basal leaves, peeled or artichokes, stewed (SP)
Dittrichia graveolens (L.) Greuter*	herba pansera[c]	PRE (1)	B (9)	Aerial part, for preserving raisins (AU)
Dittrichia viscosa (L.) Greuter*	olivarda	PRE (2)	A (40), V (40)	Aerial part, for preserving raisins and potatoes (AU)
Hedypnois cretica (L.) Dum. Cours.	herba blanca	VEG (1)	A (40)	Basal leaves, raw in salads (SP)
Helianthus tuberosus L.	patatas de caña, nyàmeres	OTHpic (2), SWEsub (5)	Ab (42), B (9), Cu (42), J (26), L-Ge (27), Se (38)	Tubers; raw, cooked, or pickled (WI)
Helichrysum italicum (Roth) G. Don	manzanilla silvestre	BEVher (5), SEA (1)	Co (19), Cs (13), Ge (11), Gu (21), J (24), CVL (13)	Flowered aerial part as herbal tea; infloresences in olive oil, for seasoning roasted meat (SP, SU)

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Helichrysum stoechas (L.) Moench	mançanilla borda[c], manzanilla	BEVher (6), BEVliq (1)	B (9), B-Ge (11), Cs (13), Gr (20), P (00), S (34), V (40)	Flowered aerial part, as herbal tea or liqueur (SP, SU)
Hypochoeris glabra L.	trompera, lechera	VEG (3)	Ba (00, 12), M (29)	Tender galls; eaten raw (SP)
Hypochoeris radicata L.	almirón, peludos, zarrajuela	VEG (10)	A (40), Ab (2), B (9), Ba (12), Co (19), Cu (42), Hu (23), S (34), V (40, 43)	Basal leaves, raw or stewed (SP)
Inula crithmoides L.	fenolletes	OTHpic (1)	Hu (23)	Tender shoots; pickled (SP)
Inula salicina L.*	té	BEVher (1)	M (29)	Flowered aerial part, as herbal tea (SU)
Jasonia glutinosa (L.) DC.*	té de roca, té de peña, árnica	BEVher (20), BEVliq (2)	A (40), Ab (1, 2), A-V (4), B (9), Cs (13), Gr (20), Hu (22, 23), J (24, 25, 26), L-Ge (27), M (29), Mu (31), Na (39), S (34), Sg (36), T (37), V (40), PV (39)	Flowered aerial part, as herbal tea or liqueur (SU)
Jasonia tuberosa (L.) DC.*	té, té de tierra	BEVher (4)	Gu (21), Hu (22), M (29), Sg (36)	Flowered aerial part, as herbal tea (SU)
Lactuca saligna L.*	lechugueta, chicoria,	VEG (2)	Co (19), J (24)	Young shoots; raw in salads (SP)
Lactuca serriola L.	lechuguilla pinchosa, herba plana[c], lechera	VEG (11)	A (40), Ab (42), B (9), Co (19), CR-To (16), Cu (42), Hu (23), J (25), M (29), V (40, 43)	Young shoots and basal leaves, raw in salads (SP)
Lactuca tenerrima Pourr.*	pajarillas	VEG (1)	Ab (42)	Young leaves; raw in salads or stewed (SP)
Lactuca viminea (L.) J. Presl & C. Presl	achicoria	VEG (3)	Ab (42), Co (19), Cu (42)	Young shoots; raw in salads (SP)
Launaea nudicaulis (L.) Hook. f.*	pico pájaro	VEG (1)	Mu (30)	Young shoots, basal leaves; raw in salads or stewed (SP)
Leontodon taraxacoides (Vill.) Mérat*	almidón, herba redona[c]	VEG (3)	Ab (42), Ba (12), V (43)	Basal leaves; raw in salads or stewed (WI, SP)
Leontodon tuberosus L.	mamelletes[c]	SWEsub (2), VEG (2)	A (40), V (40)	Tubers raw as a snack; basal leaves, stewed (SP)
Leuzea conifera (L.) DC.*	cardo santo, alcachofilla	BEVher (1), VEG (2)	Cs (13), J (24, 26)	Flowered aerial part, as herbal tea; unripe inflorescences, eaten raw (SP)
Mantisalca salmantica (L.) Briq. & Cavill.*	pan de pastor	VEG (8)	A (40), Ab (2), Co (19), J (24, 25, 26), M (29), Mu (30)	Basal leaves, sometimes peeled; stewed or raw (SP)

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Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Matricaria aurea (Loefl.) Sch. Bip.	manzanilla	BEVher (3)	Hu (22), J (26), M (29)	Inflorescences, as herbal tea (SP)
Matricaria discoidea DC.	manzanilla, mencenilla	BEVher (2)	Lu (28), M (29)	Inflorescences, as herbal tea (SP)
Matricaria recutita L.	manzanilla	BEVher (24), BEVliq (7)	Ab (1, 2), Al (5), A-V (4), B (9), B-Ge (11), Ba (12), CR-To (15, 16), Cs (13), Ge (11), Gr (20), Hu (22, 23), J (25, 26), L-Ge (27), Lu (28), M (29), Mu (30, 31), PM (44), Sa (35), Sg (36), Za (41); GAL (45)	Inflorescences, as herbal tea (SP)
Onopordum acanthium L.	cardo borriqueño	VEG (2)	Ab (42), M (29)	Basal leaves peeled, stewed (SP)
Onopordum acaulon L.*	toba	VEG (2)	Ab (42, 46)	Basal leaves peeled, stewed (SP)
Onopordum corymbosum Willk.	tobas	VEG (2)	Ab (42, 46)	Basal leaves peeled, stewed (SP)
Onopordum macracanthum Schousb.	atoba, cardoncha	PREcur (1), VEG (2)	Al (5), Mu (30)	Flowers, to curdle milk; tender stems or basal leaves peeled; artichokes, raw or stewed (SP)
Onopordum nervosum Boiss.	toba	VEG (4)	Ab (42, 46), J (25), M (29)	Tender stems or basal leaves peeled, stewed (SP)
Picris comosa (Boiss.) B.D. Jacks.*	lenguaza fina	VEG (2)	Ab (2), CR-To (16)	Basal leaves, stewed (SP)
Picris echioides L.	llengua de bou[c]	VEG (2)	A (40), V (40)	Basal leaves, stewed (SP)
Reichardia intermedia (Sch. Bip.) Cout.*	herba dolça, cosconella[c]	VEG (2)	A (40), V (43)	Basal leaves, raw in salads or stewed (SP)
Reichardia picrioides (L.) Roth	cosconilles[c]	VEG (5)	A (40), B (9, 10), Ge (11), B-Ge (11)	Basal leaves, raw in salads (SP)
Reichardia tingitana (L.) Roth	herba dolça, cosconilla[c]	VEG (2)	A (40), V (43)	Basal leaves, raw in salads or stewed (SP)
Rhagadiolus stellatus (L.) Gaertn.	blandicas	VEG (1)	Ab (2)	Basal leaves, raw in salads or stewed (SP)
Santolina chamaecyparissus L.	camamilla, camamirla[c], manzanilla salvaje	BEVher (13), BEVliq (3)	A (40), Ab (3), A-V (4), B (9), B-Ge (11), Cs (13), Ge (11), Gr (20), Gu (21), Hu (22, 23), L-Ge (27), Mu (31), PM (37), V (40)	Flowered aerial part, as herbal tea (SU)
Santolina oblongifolia Boiss.*	manzanilla de gredos	BEVher (2)	Av (8, 37)	Flowered aerial part, as herbal tea (SU)
Santolina rosmarinifolia L.*	manzanilla blanca	BEVher (2)	Gr (20), J (26)	Flowered aerial part, as herbal tea (SU)

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[ssp. *canescens* (Lag.) Nyman]				
Scolymus hispanicus L.	cardillo, tagarnina	SEA (1), VEG (27)	Ab (1, 3, 44), Al (5), Av (6), Ba (12), Ca (26, 38), Cc (00), Co (17, 18, 19), CR (14), CR-To (15, 16), Cu (00, 42), Gu (21), H (38), J (24, 25, 26), M (29), Sa (35), Se (38), Sg (36), To (00)	Basal leaves peeled, stewed, seldom eaten raw (SP); young shoots peeled, eaten raw (SP); flowers, as a condiment (saffron substitute) (SU)
Scolymus maculatus L.	cardo de olla, tagarnina	VEG (1)	J (24)	Basal leaves peeled, stewed (SP)
Scorzonera crispatula (Boiss.) Boiss.*	chichirimamas	VEG (1)	Ab (42)	Basal leaves, raw in salads (SP)
Scorzonera angustifolia L.*	teta de vaca	VEG (7)	Ab (42, 46), Al (5), Co (19), CR-To (16), Cu (42), Mu (30)	Tender stems and leaves, bottom of unripe inflorescences; raw as a snack and salads (SP)
Scorzonera hispanica L.	escurzonera	VEG (3)	Co (19), Hu (22, 23)	Basal leaves, root; raw (SP)
Scorzonera laciniata L.*	verbaja, teta de vaca	VEG (10)	Ab (2, 46), Al (5), Co (19), CR-To (16), Hu (23), J (25), M (29), Sa (35), V (43)	Tender stems and leaves, bottom of unripe inflorescences; raw as a snack and salads (SP)
Silybum marianum (L.) Gaertn.	cardo borriquero, cardoncha	FRU (1), PREcur (3), VEG (18)	A (40), Ab (1, 2, 3, 46), Co (17, 18, 19), CR (14), Cu (42), Ge (11), Hu (23), J (24, 25, 26), M (29), Mu (30), Se (38), V (40)	Seeds, raw (SU); flowers, to curdle milk (SP); basal leaves, young shoots peeled, or tender parts of inflorescence, raw or stewed (SP)
Sonchus asper (L.) Hill	cerraja, llicsó bord[c]	VEG (7)	Ab (2), Co (19), Cs (13), Cu (42), J (26), M (29), V (43)	Basal leaves and tender stems; raw in salads or stewed (WI, SP)
Sonchus crassifolius Pourr. ex Willd.*	borraja, blanquilla	VEG (3)	Cu (00), M (29), To (00)	Young shoots, raw in salads (SP)
Sonchus oleraceus L.	cerraja, cerrajón, lecheras, lletsó[c], llicsó[c]	VEG (18)	A (40), Ab (2, 3), Al (5), B (9), Co (17, 18, 19), CR-To (16), Cs (13), Cu (42), Hu (23), J (24, 25), M (29), Mu (30), V (40, 43)	Basal leaves and tender stems; raw in salads or stewed (WI, SP)
Sonchus tenerrimus L.	cerraja, lletsó de pared[c]	VEG (9)	A (40), Ab (2), B (9), Ba (12), Cs (13), Mu (30), V (40, 43), CAT (37)	Basal leaves and tender stems; raw in salads or stewed (SP)
Tanacetum vulgare L.	tanarides[c]	BEVher (1)	L-Ge (27)	Flowered aerial part, as herbal tea (SU)
Taraxacum erytrospermum Andrz. ex Besser	picapollo, teta de vaca	VEG (4)	Ab (2, 42), J (24), M (29)	Peduncle of inflorescence, raw a snack; basal leaves in salads (WI, SP)
Taraxacum obovatum (Willd.) DC.	pajitos	VEG (3)	Ab (42), J (24), M (29)	Basal leaves, in salads (SP)

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Taraxacum officinale Weber	diente de león, dent de lleó[c], camarroja	BEVher (2), BEVoth (1), VEG (14)	Ab (1, 42), B (9, 10), Cs (13), Cu (42), Ge (11), Gr (20), Hu (22, 23), J (26), L-Ge (27), M (29), S (34); CVL (13), CAT (37)	Aerial part or peduncle of inflorescences, as herbal tea or coffee substitute (SP); peduncle of inflorescence and basal leaves, raw as a snack or in salads (WI, SP)
Taraxacum palustre (Lyons) Symons.*	pitones	VEG (1)	Ab (42)	Basal leaves; raw in salads or stewed (SP)
Taraxacum pyropappum Boiss. & Reut.*	pitones	VEG (1)	Ab (42)	Basal leaves; raw in salads or stewed (SP)
Tolpis barbata (L.) Gaertn.*	almiones, toquilla	VEG (2)	Ba (12), Cc (00)	Basal leaves; raw as a snack or in salads (WI, SP)
Tragopogon hybridus L.*	teta de vaca	VEG (1)	Co (19)	Tender leaves and stems; raw as a snack (SP)
Tragopogon porrifolius L.	teta de vaca, tetillón	VEG (3)	Co (19), J (25), M (29)	Tender leaves and stems, bottom of inflorescences; raw as a snack, salads, or stewed (SP)
Tragopogon pratensis L.	lecherín	VEG (1)	S (34)	Tender stems; raw as a snack (SP)
Urospermum picroides (L.) Scop. ex F.W. Schmidt	coleta	VEG (3)	A (40), V (40, 43)	Basal leaves, stewed (SP)
Berberidaceae				
Berberis vulgaris L.	agracejo, murtillo	FRU (3), VEG (3)	Cu (42), Hu (22), J (24), O-Le-S (33), S (00)	Fruits, eaten raw (SU, AU); tender leaves, raw as a snack (SP)
Betulaceae				
Corylus avellana L.	avellano	FRU (15), SEA (1)	Ab (2), CR-To (16), Cu (42), Hu (22, 23), J (24), M (29), O (32), O-Le-S (33), P (00), S (34), Sa (35), Sg (36), Za (41); PV (39)	Fruits, sometimes unripe; eaten raw, dried, added to cakes, or stews as a condiment (SU, AU)
Boraginaceae				
Anchusa azurea Mill.	lenguaza, chupamiel, lengua de buey	SWEflw (3), VEG (12)	Ab (2, 42), Ba (12), Ca (38), Co (18, 19), Cu (42), H (38), J (24, 25, 26), M (29), Se (38)	Flowers sucked; basal leaves, stewed (SP)
Anchusa undulata L.	alpuelas, lenguaza	VEG (2)	CR-To (16), J (24)	Basal leaves, stewed (SP)
Borago officinalis L.	borraja, borrainas	SWEflw (1), VEG (16)	A (40), Ab (2, 46), B (9, 10), B-Ge (11), Co (17, 18, 19), Cs (13), Hu (22), J (25, 26), L-Ge (27), L (37), PM (37)	Flowers, sucked; basal leaves and stems, stewed, sometimes fried in batter (WI, SP)
Buglossoides arvensis (L.) I.M. Johnst.*	rabo de ratón	VEG (1)	Ab (42)	Basal leaves, stewed (SP)

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Echium creticum L.*	chupamieles	SWEflw (1), VEG (1)	Ab (42)	Flowers sucked (SP, SU); basal leaves, stewed (SP)
Echium plantagineum L.*	argamula, chupamieles	SWEflw (4), VEG (2)	Ab (42), Ba (12), CR-To (15, 16), M (29)	Flowers sucked; basal leaves, stewed (SP)
Echium vulgare L.	chupamiel, bovina	SWEflw (2), VEG (2)	A (40), Ab (42), O-Le-S (33)	Flowers sucked, basal leaves, stewed (SP)
Lithodora fruticosa (L.) Griseb.*	sietesangrías	SWEflw (1)	Hu (23)	Flowers sucked (SP)
Lithospermum officinale L.	té, té de perla	BEVher (4), BEVliq (1)	B (9), Hu (22, 23), Na (44), S (34)	Aerial part with fruits, as herbal tea or liqueur (SU)
Brassicaceae				
Capsella bursa-pastoris (L.) Medik.	devanaeras, chorrontelas[b]	SWEflw (1), VEG (3)	Ab (2), J (24), M (29), Na (39)	Flowers eaten raw; basal leaves, stewed (SP)
Cardamine pratensis L.	berro de prado	VEG (1)	Hu (22)	Basal leaves, raw in salads (SP)
Coincya monensis (L.) Greuter & Burdet	jaramago	VEG (1)	Ba (12)	Basal leaves, stewed (SP)
Diplotaxis catholica (L.) DC.*	pan y quesito amarillo	SWEflw (1)	M (29)	Flowers eaten raw (SP)
Diplotaxis erucoides (L.) DC.	ravanell[c]	VEG (2)	A (40), V (40)	Basal leaves, raw in salads (WI, SP)
Eruca vesicaria (L.) Cav.	oruga, jaramago blanco	FRU (1), SEA (1), VEG (6)	A (40), Ab (2, 3, 44), Al (5), Co (19), J (25)	Seeds, eaten raw or seasoning for cakes (SP); basal leaves stewed (WI, SP)
Hirschfeldia incana (L.) Lagr.-Foss.	jamargo	VEG (1)	Al (5)	Tender stems, stewed (WI, SP)
Moricandia arvensis (L.) DC.*	collejón basto	VEG (1)	J (25)	Leaves, stewed (WI, SP)
Raphanus raphanistrum L.	jaramago	SWEflw (1), VEG (2)	Ba (12), CR-To (16), M (29)	Flowers eaten raw; basal leaves and tender stems stewed (SP)
Rapistrum rugosum (L.) All.	rabanizas	VEG (2)	Ab (1), J (24)	Basal leaves, raw in salads or stewed (SP)
Rorippa nasturtium-aquaticum (L.) Hayek	berros, creixens[c]	VEG (37)	A (40), Ab (1, 2, 42), Av (6), B (9), B-Ge (11), Ba (12), Co (17, 18, 19), CR (14), CR-To (15, 16), Cs (13), Cu (42), Ge (11), Gu (21), Hu (22, 23), J (24, 25, 26), L-Ge (27), Lu (28), M (29), Na (39), O (32), P (00), S (34), Sa (35), Se (38), Sg (36), V (40, 43), Vi (39), Za (41)	Tender leaves and stems; raw in salads, sometimes stewed (WI, SP)
Sinapis alba L.	jaramago amarillo	VEG (1)	Co (19)	Basal leaves, stewed in times of scarcity (SP)

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Sisymbrium crassifolium Cav.	espárrago de tamarilla	VEG (5)	Ab (1, 42), Cu (00), M (29), To (00)	Young shoots with floral buds, stewed (SP)
Cactaceae				
Opuntia maxima Mill.	chumbera, palas	FRU (18), SWEflw (1), VEG (2)	A (40), Ab (2, 46), Al (5), Av (8), B (9), Ba (12), Ca (38), Co (17, 18, 19), J (24, 25, 26), Mu (30), Sa (35), Se (38), V (40)	Fruits, eaten raw (SU); flowers, sucked (SU); cladodes, stewed
Campanulaceae				
Campanula rapunculus L.	repunxó[c]	VEG (3)	B (9), B-Ge (11), Ge (11)	Leaves and roots, raw in salads (SP)
Trachelium caeruleum L.*	orogal[c]	VEG (1)	A (40)	Basal leaves, stewed or raw in salads (SP)
Cannabaceae				
Humulus lupulus L.	lúpulo, espárragos de zarza	BEVliq (1), VEG (3)	Av (00), Cu (42), M (29), S (34)	Female inflorescences, to aromatize beer (SU); young shoots, stewed in omelettes as asparagus (SP)
Capparaceae				
Capparis spinosa L.	alcaparra, tapenera	OTHpic (13)	A (40), Al (5), Co (17, 18, 19), Hu (23), J (24, 25, 26), Mu (30, 31, 44), V (40)	Floral buds (alcaparras), unripe fruits (alcaparrones), or young shoots; pickled (SP, SU)
Caprifoliaceae				
Lonicera implexa Aiton	chupaores	SWEflw (1)	Ba (12)	Flowers sucked (SU?)
Lonicera periclymenum L.	xuclamel[c], lligabosc[c]	BEVliq (1), SWEflw (2)	B-Ge (11), Ge (11), S (00)	Flowers, sucked and added to liquor (ratafia) (SU?)
Sambucus nigra L.	sabuco, saúco, saüc[c]	BEVher (3), BEVliq (3), BEVoth (6), FRU (3)	B (9), B-Ge (11), Ge (11), Hu (22), L-Ge (27), S (34), Sa (35)	Flowers or fruits, for herbal tea, liqueur, or other beverages (SU); fruits for making jam (AU)
Viburnum lantana L.	matacano	FRU (4)	Cu (42), J (24), P (00), S (34)	Fruits; eaten raw, sometimes after stored in straw, or for making jam (SU)
Caryophyllaceae				
Herniaria glabra L.*	manzanilla del campo	BEVher (4), BEVliq (3)	Ab (3), B (9), B-Ge (11), J (24, 26), L-Ge (27)	Flowered aerial part, as herbal tea or liqueur (SP, SU)
Silene secundiflora Otth*	novias	VEG (1)	Ab (46)	Leaves and young stems, stewed (SP)
Silene diversifolia Otth*	conillets de Rafelguarf[c]	VEG (1)	V (43)	Leaves and young stems, stewed (AU, WI)
Silene latifolia Poir.*	xiulitera[c]	VEG (1)	A (40)	Leaves and young stems, stewed (SP)

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Silene vulgaris (Moench) Garcke	colleja, coletas, colissos[c], conillets[c]	VEG (36)	A (40), Ab (1, 2, 42, 44), Al (5), Av (6), B (9), Ba (12), Ca (38), Co (17, 18, 19), CR (14), CR-To (15, 16), Cs (13), Cu (00, 42), Ge (11), Gr (00, 20), Gu (21), Hu (22, 23), J (24, 25, 26), M (29), Mu (30), S (34), Se (38), Sg (36), To (00), V (40, 43)	Leaves and young stems, stewed; sometimes raw in salads (AU, WI, SP)
Stellaria media (L.) Vill.	pamplinas	VEG (1)	Ab (42)	Leaves and young stems, stewed (SP)
Vaccaria hispanica (Mill.) Rauschert	collejón	VEG (1)	Ab (42)	Leaves and young stems, stewed (SP)
Chenopodiaceae				
Atriplex hortensis L.	armuelle	VEG (1)	Cu (42)	Leaves and young stems, stewed (SU)
Atriplex prostrata Boucher ex DC.	espinaca	VEG (1)	Co (19)	Leaves, stewed (SP, SU)
Beta maritima L.	acelga de campo, acelguilla	VEG (12)	Ab (2, 42), Al (5), CR (14), Cu (42), Hu (23), J (25, 26), M (29), Mu (30, 44), V (43)	Basal leaves, stewed (WI, SP)
Chenopodium album L.	cenizo	VEG (2)	Ab (42), Cu (42)	Young leaves, stewed (SP, SU)
Chenopodium ambrosioides L.	te, te de Montserrat, te bord[c]	BEVher (7), BEVliq (1)	A (40), B (9), Cc (00), L-Ge (27), Lu (28), V (40), Za (41); GAL (45)	Flowered aerial part, as herbal tea or liqueur (SU)
Chenopodium bonus-henricus L.	sarrión, espinac de muntanya[c]	VEG (3)	Hu (22), L-Ge (27); CAT (37)	Leaves, stewed (SP)
Chenopodium murale L.	cenizos	VEG (2)	Ab (42), Cu (42)	Leaves, stewed (SP, SU)
Cistaceae				
Cistus ladanifer L.	jara	FRU (3), SWEexu (4), SWEflw (1)	Ba (12), Cc (37), CR-To (15, 16), M (29)	Seeds, eaten raw (SU); flowers chewed (SP); sap (sweet secretions) sucked (SU)
Helianthemum cinereum (Cav.) Pers.*	té de monte, setge[c]	BEVher (2)	A (40), Ab (3)	Flowered aerial part, as herbal tea (SP)
Helianthemum syriacum (Jacq.) Dum. Cours.*	té o café de campo	BEVher (2), BEVoth (1)	Ab (2), J (24)	Flowered aerial part, as herbal tea and as a coffee substitute (SP)
Clusiaceae				
Hypericum perforatum L.	pericón, herba de Sant Joan[c]	BEVher (3), BEVliq (2)	Ab (2), B (9), B-Ge (11), Ge (11), O (32)	Flowered aerial part, as herbal tea or making liqueur (ratafia) (SU)

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Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Convolvulaceae				
Convolvulus arvensis L.	correhuela	SWEflw (2)	Ab (46), J(24)	Flowers, sucked (SP)
Crassulaceae				
Sedum album L.	uña de gato	VEG (3)	CR-To (15, 16), J (26)	Leaves, raw as a snack (SP)
Sedum sediforme (Jacq.) Pau (SP)	crespinell[c], raïm de pastor[c]	OTHpic (2), SWEflw (1), VEG (3)	A (40), Ab (46), Cs (13), V (40, 43)	Leaves, raw in salads, stewed, or pickled in brine
Cucurbitaceae				
Bryonia dioica Jacq.	espárragos de nuez, tuca	VEG (18)	Ab (1, 2, 42), Av (00, 7), B (9), Ba (12), R-To (15, 16), Cs (13), Cu (42), Hu (22, 23), M (29), Sa (35), Sg (36), Te (37), Z (37)	Young shoots with leaves, stewed (SP)
Cupressaceae				
Juniperus communis L.	enebro, ginebre, chinarro	BEVliq (8), SEA (2)	B (9, 10), B-Ge (11), Cs (13), Cu (42), Hu (22), J (24), L-Ge (27), Za (41)	Fruits or branches with fruits, for seasoning stews or making liqueur (gin, ratafia) (SU, AU)
Juniperus oxycedrus L.	enebro, ginebre[c]	SEA (5)	A (40), Ab (1, 2), Co (18), J (24)	Fruits, for seasoning meat stews (SU, AU); branches with leaves for seasoning cheese in olive oil
Cyperaceae				
Scirpus holoschoenus L.	junco, jonc[c]	VEG (16)	A (40), Ab (1, 42, 44, 46), Av (6), B (9), Co (17, 18, 19), Cu (42), Hu (23), J (25), M (29), Mu (44), V (40)	Basal part of stems, raw as a snack (SP)
Dioscoreaceae				
Tamus communis L.	esparraguilla, lupios, espárragos de culebra	VEG (12)	Av (6, 8), Ba (12), Co (17, 18, 19), CR-To (15, 16), J (25), M (29), Sa (35), Se (38)	Young shoots, stewed, sometimes raw (SP)
Ericaceae				
Arbutus unedo L.	madroño, arboç[c], albornial, erbedo[g]	BEVliq (13), FRU (26), PRE (3)	A (40), Ab (1, 2, 3, 42), B (9, 10), B-Ge (11), Ba (12), Co (17, 18, 19), CR-To (15, 16), Cs (13), Cu (42), Ge (11), Hu (22, 23), J (24, 25, 26), Lu (28), O (32), O-Le-S (33), Sa (35), Se (38), V (40)	Fruits, eaten raw, sometimes for making jam and liqueur; branches with leaves, wood, as preservative for olives (AU)

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Arctostaphylos uva-ursi (L.) Spreng.	gayuba	FRU (7)	Cu (42), Gu (21), Hu (22, 23), M (29), O-Le-S (33), S (34)	Fruits, eaten raw (SU)
Vaccinium myrtillus L.	arándano, ráspano, murtilo	BEVliq (5), FRU (9)	Cu (42), Gu (21), Hu (22), L-Ge (27), Lu (28), O (32), O-Le-S (33), P (00), S (34), Sg (36), Za (41)	Fruits, eaten raw, for making jam and liqueur (SU)
Euphorbiaceae				
Euphorbia characias L.*	lecheinterna	PREcur (1)	J (25)	Latex, to curdle milk (SP, SU)
Euphorbia helioscopia L.	lechiterna	PREcur (1)	Ab (46), Mu (44)	Latex, to curdle milk (SP, SU)
Euphorbia nicaeensis All.*	lecheinterna	PREcur (1)	J (25)	Latex, to curdle milk (SP, SU)
Euphorbia segetalis L.*	lecheruela	PREcur (1)	Na (39)	Latex, to curdle milk (SP, SU)
Euphorbia serrata L.*	lechiterna, lletreguera[c]	PREcur (7)	A (40), Ab (1, 3), Al (5), J (24), M (29), Sg (36)	Latex, to curdle milk (SP, SU)
Fabaceae				
Astragalus cymbaecarpos Brot.* (238JT)	cornizuelos	VEG (1)	M (00)	Unripe seeds, raw as a snack (SP)
Ceratonia siliqua L.	algarrobo, garrofer[c]	BEVoth (3), FRU (13), OTHflo (2), PRE (3),	A (40, 44), Al (5), Ca (38), Co (17, 18, 19), Cs (13), Gr (20), J (25, 26), Mu (30, 31), V (40)	Fruits for making a chocolate or coffee substitute, eaten raw, or ground into flour (SU); leaves, as a preservative for olives (AU)
Glycyrrhiza glabra L.	regaliz, palodú, regalíssia[c]	BEVher (1), BEVliq (1), SWEsub (18)	A (40), Ab (1, 2), B (9), B-Ge (11), Co (17, 18, 19), Cs (13), Cu (42), Ge (11), Hu (22, 23), J (25, 26), M (29), Mu (31), Sg (36), V (40)	Roots and rhizomes, chewed and sucked; digestive infusions with other plants; add to liqueur (ratafia) (AU, WI)
Lathyrus cicera L.	alcaballares, guijilla	VEG (4)	Ab (3), Ba (12), Cu (42), M (29)	Unripe seeds and sometimes whole fruit, raw as a snack (SP)
Lathyrus clymenum L.*	guija	VEG (1)	Al (5)	Unripe fruits, stewed (SP)
Lathyrus tuberosus L.	loncejas	SWEsub (2)	P (00, 37)	Tubers, eaten raw as a sweet (AU, SP)
Medicago sativa L.	alfalfa, mielga	VEG (8)	A (40), B-Ge (11), Gu (21), Hu (22), J (24, 26), M (29), V (40)	Tender leaves and stems, stewed or raw in salads (SP, SU)
Onobrychis humilis (L.) G. López	sangre de dios	SWEflw (1)	Ba (12)	Flowers sucked (SP)
Ononis viscosa L.*	gorromino[c]	BEVher (2)	A (40), V (40)	Flowered aerial part, as herbal tea (SP)
Pterospartum tridentatum (L.) Willk.*	carquesa, carquexa[a]	BEVher (3)	Ba (12), CR-To (16), O (32)	Flowered aerial part, as herbal tea (SP)

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Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Retama sphaerocarpa (L.) Boiss.*	retama	PRE (1)	J (25)	Stems, as a preservative of wild rabbit meat (AU)
Robinia pseudoacacia L.	acacia, pan y quesito	SWEflw (8)	Ab (1, 42), Co (19), CR (14), Cu (42), J (26), M (29), Sg (36)	Flowers, eaten raw (SP)
Scorpiurus muricatus L.	oreja de liebre	VEG (3)	Al (5), J (24), Mu (30)	Tender leaves, raw in salads and stewed (SP)
Scorpiurus subvillosus L.	orellola[c]	VEG (1)	A (40)	Basal leaves stewed (SP)
Spartium junceum L.	ginesta[c]	BEVliq (2), BEVoth (1)	B (9), B-Ge (11)	Flowers, for making liqueur or other beverages (SP)
Trifolium alpinum L.	regaliz, regaliz de puerto	SWEsub (5)	Hu (22), O-Le-S (33), P (00), S (34), Za (41)	Roots, chewed and sucked (SU, AU)
Trifolium pratense L.	trébol	SWEflw (3), VEG (1)	Hu (22), M (29), S (34), Sg (36)	Flowers, sucked; leaves, stewed (SP, SU)
Trifolium repens L. (1484MP)	trébol, teble	SWEflw (1)	S (00)	Flowers, sucked (SU)
Vicia lutea L.	alverja, arvejana	OTHflo (1), VEG (2)	Ba (12), M (29), Sg (36)	Unripe seeds, raw as a snack (SP); ripe seed milled, mixed with wheat flour, to make bread (SU)
Vicia peregrina L.	crisoles	VEG (1)	J (24)	Unripe seeds, raw as a snack (SP)
Vicia sativa L.	alverjana, arvejana	VEG (6)	Ab (1, 42), Al (5), Cu (42), J (25), M (29)	Unripe seeds, raw as a snack (SP)
Vicia villosa Roth	arvejana, alverjón	VEG (3)	J (25), M (29), Sg (36)	Unripe seeds, raw as a snack (SP)
Fagaceae				
Castanea sativa Mill.	castaño, castañeiro[g], castanyer[c]	FRU (18), OTHflo (1), PRE (1), SEA (2)	Av (6, 7), B (9), B-Ge (11), Ba (12), Bi (39), Cc (00), Co (19), CR (14), CR-To (16), Ge (11), J (26), Lu (28), M (29), O (32), O-Le-S (33), Sa (35), Se (38), SS (39), Za (41)	Fruits (chestnuts, castañas); eaten raw, dried, roasted, or added as a condiment to stews, sometimes ground into flour; boiled with cabbage to avoid fermentation (AU)
Fagus sylvatica L.	haya, faya[a]	FRU (9), OTHoil (1), SWEexu (1)	Gu (21), Hu (22), Lu (28), M (29), O (32), O-Le-S (33), P (00), S (34), Sg (36)	Fruits (beech nuts, hayucos), eaten raw or for extracting oil (AU); sap, sucked as a sweet (SP)
Quercus coccifera L.	maraña, coscoja	FRU (1), VEG (1)	J (24), M (29)	Fruits (acorns, bellotas), eaten raw (AU); green galls, raw as a snack (both rare) (SP)
Quercus faginea Lam.*	roble	FRU (1)	M (29)	Fruits, roasted (AU)

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Quercus ilex L. [ssp. *ballota* (Desf.) Samp.]	encina, carrasca	BEVoth (2), FRU (22), OTHflo (6), PRE (1)	A (40), Ab (1, 42), Ba (12), Co (17, 18, 19, 44), CR-To (15, 16), Cu (42), Gr (20), Gu (21), Hu (23), J (24, 25, 26), M (29), Sa (35), Sg (36), V (40), Za (41)	Fruits (acorns, bellotas), eaten raw, boiled, or roasted; sometimes roasted and ground to make a coffee substitute; ground into flour to make bread in scarcity periods (AU); twigs with leaves as a preservative for hardening olives (AU)
Quercus petraea (Matt.) Liebl.	roble	FRU (1)	O-Le-S (33)	Fruits, eaten raw (rare) (AU)
Quercus pyrenaica Willd.	roble	FRU (1)	M (29)	Fruits, eaten raw or roasted (rare) (AU)
Quercus robur L.	roble	FRU (2)	O-Le-S (33), GAL (45)	Fruits, eaten raw or roasted (rare) (AU)
Gentianaceae				
Centaurium erythraea Rafn	hierba amargosa	BEVliq (1)	CR-To (16)	Flowered aerial part, soaking in wine, as aperitif (SU)
Centaurium linariifolium (Lam.) Beck*	pericó[c]	BEVher (3)	A (40), Cs (13), V (40)	Aerial part, herbal tea and aperitif (SU)
Gentiana lutea L.	genciana	BEVliq (3)	Hu (22), L-Ge (27), S (34)	Roots, boiled or soaking in wine or in a liqueur, as aperitif or as a digestive beverage (AU)
Geraniaceae				
Erodium ciconium (L.) L'Hér.*	alfileres	VEG (1)	M (29)	Bottom of immature fruits, raw as a snack (SP)
Erodium cicutarium (L.) L'Hér.	alfileres, relojes	VEG (3)	Hu (23), J (25), M (29)	Bottom of immature fruits, raw as a snack (SP)
Erodium malacoides (L.) L'Hér.	alfileteros	VEG (1)	J (25)	Bottom of immature fruits, raw as a snack (SP)
Grossulariaceae				
Ribes alpinum L.	grosella, raspanilla	BEVliq (3), FRU (6)	B (9), Cu (42), J (26), Na (39), O-Le-S (33), S (34), Sg (36), Vi (39)	Fruits, eaten raw or for making jam or liqueur (SU)
Ribes petraeum Wulfen (03JT)	amiérganos	FRU (1)	P (00)	Fruits, eaten raw (SU)
Ribes rubrum L.	grosellas	FRU (1)	Cu (42)	Fruits, eaten raw (SU)
Ribes uva-crispa L.	uva de espino, escrébene	FRU (6)	Cu (42), J (26), L-Ge (27), M (29), S (34), Sg (36)	Fruits, eaten raw (SU)
Iridaceae				
Crocus nevadensis Amo*	macucas	SWEsub (2)	Ab (42), Cu (42)	Bulbs, raw as a snack (AU)
Crocus nudiflorus Sm.	zargateña	FRU (1)	O (32)	Seeds, raw as a snack (SU)

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Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Crocus serotinus Salisb.	azafrán	SEA (1), SWEsub (1)	Ab (42), Co (19)	Flowers, as a condiment (saffron substitute) (SP); bulbs, raw as a snack (AU)
Romulea bulbocodium (L.) Sebast. & Mauri	leza, calabacilla	FRU (1), SWEsub (3)	Ba (12), O-Le-S (33), S (34), So (00)	Bulbs, raw as a snack; fruits, eaten raw (SP)
Lamiaceae				
Acinos alpinus (L.) Moench	té de sierra, té del monte	BEVher (11)	Ab (2), Al (5, 44), Gr (20, 44), Gu (21), J (24, 25, 26, 44), AND (37)	Flowered aerial part, as herbal tea (SP, SU)
Calamintha nepeta (L.) Savi	hierba nieta, menta borda[c], ñota, orégano	BEVher (8), BEVliq (2), SEA (6)	A (40), Ab (2), B (9), B-Ge (11), CR (10), Cs (13), Hu (23), J (24, 26), Lu (28), V (40); GAL (45)	Aerial part, flowered or not, as herbal tea, added to liqueur, or as a condiment for snails, soups, meat stews, or olives (SP, SU, AU)
Hyssopus officinalis L.	hisop[c]	BEVliq (1), BEVoth (1), SEA (2)	B (9, 10), L-Ge (27)	Aerial part, added to liqueur or a chocolate beverage; for seasoning soups or stews (SU)
Lamium maculatum L.	chupamieles	SWEflw (2)	O (32), S (34)	Flowers, sucked (SP)
Lavandula angustifolia Mill.	espígol[c]	BEVher (1)	Hu (22)	Flowered aerial part, as herbal tea (SU)
Lavandula dentata L.*	cantueso	BEVliq (1)	Mu (31)	Aerial part, for making liqueur (SP, SU)
Lavandula latifolia Medik.	alhucema, espígol[c]	BEVher (8), BEVliq (2), SEA (3)	A (40), B (9), B-Ge (11), Cs (13), Hu (22, 23), J (25, 26), Mu (31)	Inflorescences or flowered aerial part, as herbal tea and for making liqueur; condiment for olives (SU)
Lavandula multifida L.*	cantueso	BEVliq (1)	Mu (31)	Aerial part, for making liqueur (SP, SU)
Lavandula pedunculata L.*	cantueso	SEA (1)	Sa (35)	Flowered aerial part, as a condiment for meat dishes (SP)
Lavandula stoechas L.	cantueso, cap díase[c], bofarull	BEVher (4), BEVliq (2)	B (9), B-Ge (11), Cs (13), Gr (20)	Flowered aerial part, as herbal tea and for making liqueur (SP)
Melissa officinalis L.	toronjil, tarongina[c], melisa	BEVher (12), BEVliq (5), SEA (4)	A (40), Al (5), A-V (4), B (9, 10), B-Ge (11), Co (17), Cs (13), Gr (20), Hu (22, 23), J (24, 25, 26), L-Ge (27), O (32)	Aerial part, as herbal tea, for making liqueur (risol, ratafia), or as a condiment for stews (cocido, faves) (SP, SU)

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Mentha aquatica L.	té de río, herba sana[c], menta	BEVher (6), SEA (2)	Ab (3), Cs (13), Ge (11), Gr (20), Sg (36), GAL (45)	Aerial part, as herbal tea or as a condiment (SP)
Mentha longifolia (L.) Huds.	mentastro, herba sana borda[c]	BEVher (4)	Ab (2), Cs (13), J (24), P (00)	Aerial part, as herbal tea (SP)
Mentha pulegium L.	poleo, poliol[c], poniol[c]	BEVher (24), BEVliq (7), SEA (7)	A (40), Ab (1, 2), Av (6), A-V (4), B (9), B-Ge (11), Ba (00), Ca (38, 44), Co (17, 18, 19), CR-To (15, 16), Cs (13), Ge (11), Gr (20), Gu (21), J (24, 25, 26), L-Ge (27), M (29), Mu (31), S (34), Sa (35), Se (38), Sg (36), Za (41); CVL (13)	Flowered aerial part, as herbal tea or for making liqueur (SU); tender stems with leaves, as a condiment for soups (sopas, gazpacho de invierno) or snails (SP)
Mentha spicata L.	hierbabuena, menta	BEVher (10), BEVliq (1), BEVoth (1), SEA (13)	A (40), Ab (1, 2), Av (6), B (9, 10), B-Ge (11), Cs (13), Gr (20), Hu (23), J (26), L-Ge (27), M (29), Mu (31), V (40)	Tender stems with leaves as herbal tea, for making liqueur or other beverages, and as a condiment for soups or stews (SP, SU)
Mentha suaveolens Ehrh.	mastranzo, matroncho	BEVher (3), SEA (5)	Ab (2), Al (5), J (24, 25), M (29), PM (44), GAL (45)	Tender stems with leaves as herbal tea and as a condiment for stews (SP)
Micromeria fruticosa (L.) Druce	albaca de monte, poleo de serra, poliol	BEVher (5), BEVliq (2)	A (40), A-V (4), Cs (13), Hu (22, 23), L-Ge (27), CAT (37)	Aerial part, as herbal tea and for making liqueur ('herberet') (SU)
Origanum vulgare L.	oregano, orenga[c], ourego[g], oriénganu[a]	BEVher (11), BEVliq (3), SEA (36)	A (40), Ab (2, 3), Av (6), B (9, 10), B-Ge (11), Ba (12), Co (17, 18, 19), CR-To (15, 16), Cs (13), Ge (11), Gr (20), Gu (21), Hu (22), J (24, 25, 26), L-Ge (27), Lu (28), M (29), Mu (30), Na (39), O (32, 37), O-Le-S (33), P (00), S (34), Sa (35), Se (38), Sg (36), SS (39), Vi (39), Za (41), GAL (45)	Flowered aerial part, as herbal tea, for making liqueur (ratafia), and for seasoning pork (black pudding, morcillas, chorizo, marinated pork), olives, stews, roasted meat (SU) (included *O. vulgare* ssp. *virens* Hoffmanns. & Link)
Phlomis lychnitis L.	té, oreja de liebre	BEVher (6), SWEflw (1)	Ab (3), Ba (12), CR (12), Hu (22), J (24, 26), Sg (36)	Flowered aerial part, as herbal tea; flowers, sucked (SP)
Phlomis purpurea L.*	matagallo	SWEflw (1)	Al (5)	Flowers, sucked (SP)
Prunella grandiflora (L.) Scholler	herba melera	SWEflw (1)	B (9)	Flowers, sucked (SP)

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Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Rosmarinus officinalis L.	romero, romer[c], roman[xc]	BEVher (9), BEVliq (4), BEVoth (1), PRE (2), SEA (24)	A (40), Ab (1, 2, 3, 44), Al (5), A-V (4), B (9), B-Ge (11), Co (17, 18, 19), CR-To (15, 16), Cs (13), Ge (11), Gr (20), Gu (21), Hu (22, 23), J (24, 25, 26), L-Ge (27), M (29), Mu (31), Na (39), Sa (35), V (40), Vi (39)	Aerial part (flowered or not), as herbal tea, for making liqueur, as a preservative of meat or fish, and as a condiment for olives, roasted meat, and different stews (WI, SP, SU, AU)
Salvia argentea L.*	gordolobo	VEG (1)	Ab (42)	Basal leaves, peeled, stewed (WI, SP)
Salvia lavandulifolia Vahl	salvia, savia	BEVher (7), BEVliq (4), SEA (3)	A (40), Ab (2), A-V (4), B (9), Gr (20), Hu (23), J (25), L-Ge (27), M (29), Mu (31)	Flowered aerial part, as herbal tea, for making liqueur; leaves, as a condiment for olives and other stews (SP, SU)
Satureja innota (Pau) G. López*	saboritja[c]	BEVliq (1), SEA (1)	Cs (13)	Flowered aerial part as a condiment for olives and for flavouring wine (SU, AU)
Satureja intricata Lange	ajedrea, morquera, saboritja[c]	SEA (8)	Ab (1, 2, 3), Cs (13), Cu (00), J (24, 26), M (29)	Flowered aerial part as a condiment for olives and meat (SU, AU)
Satureja montana L.	sajolida[c], saboritja[c], salseta de pastor	BEVher (5), BEVliq (2), SEA (7)	B (9, 10), B-Ge (11), Cs (13), Ge (11), Hu (22, 23), L-Ge (27); ARA (37), CAT (37), CVL (37)	Flowered aerial part, as herbal tea, for making liqueur (ratafia), and for seasoning olives, stews, or roasted meat (SU, AU)
Satureja obovata Lag.*	ajedrea, sejolina[c]	BEVher (4), SEA (13)	A (40), Ab (2, 3), Al (5), Co (19), J (24, 26), Mu (30, 31, 37), V (40, 43), CVL (37)	Flowered aerial part as herbal tea and as a condiment for olives and game (SU, AU)
Sideritis fruticulosa Pourr.*	herba de Sant Antoni[c]	BEVher (1)	Cs (13)	Flowered aerial part, as herbal tea (SP)
Sideritis glacialis Boiss.*	zahareña	BEVher (1)	Gr (20)	Flowered aerial part, as herbal tea (SU)
Sideritis hirsuta L.*	zahareña, rabogato, garranchillo	BEVher (9), BEVliq (1)	Ab (2), A-V (4), Co (19), Cs (13), Gr (20), Gu (21), J (24, 25, 26), CVL (37)	Flowered aerial part, as herbal tea, for making liqueur ('herberet') (SP, SU)
Sideritis hyssopifolia L.*	té, té de lastra	BEVher (7), BEVliq (1)	Hu (22, 23), L-Ge (27), O (32), O-Le-S (33), P (00), S (34)	Flowered aerial part, as herbal tea, for making liqueur (SU)
Sideritis tragoriganum Lag.*	rabo de gato, rabet de gat[c], garranchuelo	BEVher (3), BEVliq (1)	A (40), A-V (4), Cs (13), Gr (20)	Flowered aerial part, as herbal tea, for making liqueur ('herberet') (SP)

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Teucrium capitatum L.*	zamarrilla, timó mascle[c]	BEVher (6), BEVliq (1), SEA (2)	A (40), Ab (2), A-V (4), Cs (13), Hu (22), J (24), Mu (30, 31)	Flowered aerial part, as herbal tea, for making liqueur ('herberet') and seasoning olives or soups (SP, SU)
Teucrium chamaedrys L.	camedro	BEVher (3)	Cs (13), Gu (21), Hu (22)	Flowered aerial part, as herbal tea (SP, SU)
Teucrium marum L.	–	BEVliq (1)	PM (44)	Flowered aerial part for making liqueur (SP)
Teucrium polium L.	zamarrila, poleo de monte	BEVher (4), SEA (1)	Gr (20), Hu (23), J (24, 26), L-Ge (27)	Flowered aerial part, as herbal tea (SP, SU)
Teucrium pyrenaicum L.*	angelins[c]	BEVher (1)	B (37)	Flowered aerial part, as herbal tea (SP, SU)
Thymbra capitata (L.) Cav.	tomillo real	BEVher (2), SEA (2)	A (40), Co (19), Gr (20)	Flowered aerial part, as herbal tea and for seasoning olives, meat stews (SU)
Thymus baeticus Boiss. ex Lacaita	tomillo fino	BEVher (1), SEA (1)	Gr (20), J (24)	Flowered aerial part, as herbal tea (SP)
Thymus bracteatus Lange ex Cutanda*	tomillo	SEA (1)	Gu (21)	Flowered aerial part for seasoning stews (SU)
Thymus hyemalis Lange	tomillo, tomillo negro	BEVher (3), SEA (2)	Al (5), Mu (30, 31)	Flowered aerial part, as herbal tea and for seasoning olives, rice, and roasted meat (chicken, rabbit, or lamb) (AU, WI)
Thymus mastichina (L.) L.	mejorana, almoraduz, tomillo blanco	BEVher (9), BEVliq (1), SEA (16)	Ab (2, 3), Al (5), Ba (12), Ca (38), Co (17, 18, 19), CR (14), CR-To (15, 16), Gr (20), J (24, 25, 26), M (29), Mu (31), S (34), Sa (35), Sg (36)	Aerial part (flowered or not), as herbal tea, for making liqueur ('risol') and for seasoning olives, snails, or meat stews (especially game) (SP, SU)
Thymus moroderi Pau ex Martínez	cantueso	BEVher (2), BEVliq (3)	A (40, 44), A-V (4)	Aerial part, as herbal tea and for making liqueur (SP)
Thymus orospedanus Villar*	tomillo	BEVher (3), SEA (4)	Ab (2, 3), J (24, 26)	Flowered aerial part, as herbal tea and for seasoning meat stews (SP)
Thymus piperella L.	pebrella[c], pebrilla	SEA (7)	A (40, 44), Ab (3), V (40, 43, 44), CVL (37)	Aerial part, for seasoning olives or stews (SP)
Thymus praecox Opiz	serpol	BEVher (2), SEA (1)	L-Ge (27), S (34)	Flowered aerial part, as herbal tea (SU)
Thymus pulegioides L.	serpol, farigoleta[c], té fino	BEVher (8), BEVliq (2), SEA (4)	B (9), B-Ge (11), Gr (20), Gu (21), Hu (22), S (34), Za (00, 41); GAL (45)	Flowered aerial part, as herbal tea, for making liqueur (ratafia), and for seasoning stews (SU)

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Thymus serpylloides Bory*	tomillo de la sierra	BEVher (1), SEA (1)	Gr (20), J (24)	Flowered aerial part, as herbal tea (SU)
Thymus vulgaris L.	tomillo, farigola[c], timonet[c]	BEVher (11), BEVliq (4), SEA (19)	A (40), Ab (1, 2, 3), A-V (4), B (9, 10), B-Ge (11), Cs (13), Ge (11), Hu (22, 23), J (25), L-Ge (27), M (29), Mu (31, 44), Na (39), S (34), V (43), Vi (39)	Flowered aerial part, as herbal tea, for making liqueur ('herberet', 'ratafia'), and for seasoning olives, stews, or roasted meat (SP, SU)
Thymus zygis Loefl. ex L.	tomillo sansero, tomillo aceitunero	BEVher (7), SEA (19)	Ab (3), Al (5), Av (6), Ba (12), Co (17, 18, 19), CR-To (15, 16), Gr (20), Gu (21), J (24, 25, 26), M (29), S (34), Sa (35), Sg (36), To (00), Za (41)	Aerial part (flowered or not), as herbal tea and for seasoning olives or stews (especially meat stews) (SP, SU)
Ziziphora aragonensis Pau*	poleo	BEVher (1)	Ab (3)	Flowered aerial part, as herbal tea (SP)
Ziziphora hispanica L.*	menta, té de espiguilla	BEVher (2)	Gr (20), M (29)	Flowered aerial part, as herbal tea (SP)
Lauraceae				
Laurus nobilis L.	laurel, loureiro[g], llor[c], erramu[b]	BEVliq (1), SEA (14)	B (9), B-Ge (11), Bi (39), Cs (13), Ge (11), J (26), L-Ge (27), Lu (28), Na (39), O (32), O-Le-S (33), S (00), SS (39), Vi (39), GAL (45)	Leaves, as a condiment for stews or olives and for making liqueur (ratafia) (WI, SP, SU, AU)
Liliaceae				
Allium ampeloprasum L.	ajo porro, porro, puerro silvestre	OTHpic (1), SEA (8), VEG (14)	A (40), Ab (2, 42), Al (5), Ba (12), Co (17, 18, 19), CR (14), CR-To (16), Hu (22), J (24, 25, 26), M (29), Mu (44), Na (39), V (40)	Bulbs and bottom of stems, stewed in omelettes or with scrambled eggs, sometimes raw as a snack, in salads or pickled; also as a condiment, e.g. garlic substitute (WI, SP)
Allium moly L.	ajo porro	VEG (1)	Ab (42)	Bulbs, stewed in omelettes or with scrambled eggs (SP)
Allium neapolitanum Cirillo	ajo porro	VEG (1)	J (25)	Bulbs and bottom of stems, stewed in omelettes or with scrambled eggs, sometimes raw as a snack or in salads (WI, SP)
Allium pallens L.*	ajo porro	SEA (1)	Ab (2)	Bulbs and bottom of stems, as a garlic substitute (SP)

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Allium roseum L.	ajo, all porro[c]	SEA (1), VEG (4)	A (40), Ab (42), Al (5), Na (39), V (40)	Bulbs and bottom of stems, as a garlic substitute; stewed in omelettes (SP)
Allium schoenoprasum L.	cebollino de puerto	SEA (1)	Hu (22)	Tender leaves and stems, as a condiment (SP, SU)
Allium sphaerocephalon L.	ajestrino	SEA (1), VEG (1)	J (24), S (34)	Tender leaves and stems, as a condiment (SP, SU)
Aphyllanthes monspeliensis L.*	chunquetas	SWEflw (2), VEG (2)	Ab (42), Hu (23), J (24)	Flowers, sucked; tender stems, raw as a snack (SP)
Asparagus acutifolius L.	espárrago triguero, esparraguera silvestre	VEG (32)	A (40), Ab (1, 2), Al (5), Av (6, 7), B (9), Ba (00, 12), Ca (38), Co (17, 18, 19), CR (14), CR-To (15, 16), Cu (42), Gr (20), H (38), Hu (22, 23), J (24, 25, 26), M (29), Sa (35), Se (38), Sg (36), To (00); V (40, 43); CVL (13)	Young shoots, stewed, often in omelettes, sometimes with scrambled or fried eggs and rarely raw as a snack (SP)
Asparagus albus L.	espárrago blanco	VEG (10)	Al (5), Ca (38), Co (17, 18, 19), Gr (20), H (38), J (26), Mu (30), Se (38)	Young shoots, stewed, in omelettes or with scrambled eggs (SP)
Asparagus aphyllus L.	espárrago negro	VEG (6)	Ba (00), Ca (38), Co (17, 18), H (38), Se (38)	Young shoots, stewed, in omelettes or with scrambled eggs (SP)
Asparagus officinalis L.	espárrago de jardín	VEG (2)	Hu (22), M (29)	Young shoots, stewed, in omeletters or with scrambled eggs (SP)
Asparagus stipularis Forssk.	esparraguera, espárrago negro	VEG (7)	Al (5), Co (17, 18, 19), Cs (13), J (25), Mu (30)	Young shoots, stewed, in omelettes or with scrambled eggs (SP)
Fritillaria lusitanica Wikstr.*	campanicas	SWEflw (1)	Ab (2)	Flowers, sucked (SP)
Fritillaria pyrenaica L.*	jarras	SWEflw (1)	S (34)	Flowers, sucked (SP)
Merendera montana (L.) Lange*	quitameriendas	FRU (1), SWEsub (6)	Ab (2), CR-To (16), Cu (42), O (32), O-Le-S (33), S (34), Za (41)	Seeds, eaten raw; bulbs, peeled, eaten raw (AU)
Muscari neglectum Guss. ex Ten.	matacandiles	VEG (2)	J (24), M (29)	Peduncle of inflorescence, raw as a snack (SP)
Ruscus aculeatus L.	rusco	VEG (1)	Ab (42)	Young shoots, stewed, in omelettes or with scrambled eggs (SP)
Malvaceae				
Althaea officinalis L.	malvavisco	BEVliq (2), SWEsub (1)	B-Ge (11), CR (14), L-Ge (27)	Root, for making liqueur and sweets (AU)
Lavatera cretica L.*	malva	VEG (4)	Co (19), J (24, 26), V (43)	Immature fruits raw as a snack; tender leaves and stems stewed (SP)
Malva neglecta Wallr.	malva	VEG (2)	J (24), M (29)	Immature fruits raw as a snack (SP)
Malva nicaeensis All.	malva	VEG (4)	Co (19), CR (14), J (24), M (29)	Immature fruits raw as a snack; tender leaves and stems stewed (SP)
Malva parviflora L.	malva	VEG (5)	Co (19), J (24, 25, 26), M (29)	Immature fruits raw as a snack; tender leaves and stems stewed (SP)

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Malva sylvestris L.	malva	BEVher (2), BEVliq (2), VEG (25)	A (40), Ab (1, 2, 44), Al (5), Av (6), B (9), B-Ge (11), Ba (12), Co (17, 18, 19), CR-To (15), Cu (42), Gr (20), Gu (21), Hu (22, 23), J (24, 25), L-Ge (27), M (29), S (34), Sa (35), Sg (36), To (00), V (43), Vi (44)	Flowers, as herbal tea and for making liqueur (ratafia); immature fruits ('panecillos') raw as a snack; tender leaves and stems stewed (SP)
Myrtaceae				
Myrtus communis L.	arriján, mirto, murteras	FRU (4), SEA (3)	Ba (12), Cc (00), Co (17, 18, 19), Mu (31), PM (44)	Fruits, eaten raw (AU); branches with leaves as a condiment for olives (AU)
Nymphaeaceae				
Nymphaea alba L.	panets[c]	FRU (2)	V (40), Za (41)	Fruits, eaten raw (SU)
Oleaceae				
Olea europaea L. [var. *sylvestris* Brot.]	acebuche	OTHoil (5), OTHpic (5)	Al (5), Co (17, 18), CR-To (15), Cs (13), J (24, 26)	Fruits (olives), for oil (AU, WI), prepared in brine (AU)
Oxalidaceae				
Oxalis acetosella L.	carnero, tárrago de monte	VEG (5)	B (9), Hu (22), O (32), O-Le-S (33), S (34)	Leaves, raw as a snack (SP)
Oxalis latifolia Kunth	trébol	VEG (2)	J (25), S (00)	Leaves, raw as a snack (SP)
Oxalis pes-caprae L.	agrio, alelías	VEG (4)	Al (5), Ba (00), J (25), Mu (30)	Leaves and peduncle of inflorescence, raw as a snack (SP)
Papaveraceae				
Papaver rhoeas L.	amapola, babaol, rosella[c], ruelles[c]	SWEflw (2), VEG (17)	A (40), Ab (1, 2), Al (5), Ba (12), Co (17, 18), Cs (13), Cu (42), Hu (23), J (25), M (29), Mu (44), Sa (35), Se (38), V (40, 43), CAT (37)	Flowers, chewed and sucked (SP); tender leaves and stems, raw in salads or stewed (WI, SP)
Roemeria hybrida (L.) DC.	babaol dulce	VEG (1)	Ab (2)	Tender leaves and stems, raw in salads or stewed (SP)
Pinaceae				
Abies alba	avet[c]	BEVoth (1)	B (9)	Cones, for making a refreshing beverage (AU)
Pinus halepensis Mill.	pino	FRU (2)	J (24, 25)	Seeds, eaten raw (SP)
Pinus pinaster Aiton	pino rodeno	OTHflw (1)	Cu (42)	Male flowers, eaten raw (SP)

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Pinus pinea L.	pino piñonero, pino doncel, pi pinyer[c]	FRU (15), OTHpic (3), PRE (2), SEA (5), VEG (3)	A (40), Ab (1, 2, 3), Av (36), B (9), B-Ge (11), Co (17, 18), CR-To (16), Cu (42), J (24), M (29), Mu (31), Sg (36), V (40), Va (36)	Ripe seeds, eaten raw, dried, or as a condiment for black pudding ('morcillas') or other dishes (AU); unripe seeds, raw as a snack or prepared in brine (SU); pine cones, as a preservative for olives (AU)
Plantaginaceae				
Plantago albicans L.*	pelosilla	VEG (1)	Al (5)	Basal leaves, stewed (SP)
Plantago coronopus L.	rampetes, muixana[c]	VEG (4)	A (40), Mu (30), V (40, 43)	Basal leaves, stewed (SP)
Plantago lanceolata L.	plantatge[c]	BEVliq (2)	B (9), B-Ge (11)	Basal leaves, for making liqueur (SP)
Plantago major L.	plantatge ample[c]	BEVliq (1)	B-Ge (11)	Basal leaves, for making liqueur (SP)
Plumbaginaceae				
Armeria arenaria (Pers.) Schult.*	patitas de cigueña	VEG (1)	M (29)	Tender part of peduncle of inflorescence, raw as a snack (SP)
Limonium sinuatum (L.) Mill.	capitana	VEG (1)	Al (5)	Young shoots of stem, peeled, raw or stewed; leaves, stewed (SP)
Poaceae				
Aegilops geniculata Roth	rompisacos, rompesacos	OTHflo (4), VEG (1)	Ab (1, 42), Cu (42), J (25), To (00)	Immature seeds, raw as a snack (SP); mature seeds ground into flour to make bread (SU)
Aegilops triuncialis L.	rompisacos	VEG (1)	J (25)	Immature seeds, raw as a snack (SP)
Arundo donax L.	caña	PRE (3)	Ab (1, 3), B-Ge (11)	Stems, as a presevative of tomates and olives in brine (SU, AU)
Cynodon dactylon (L.) Pers.	grama, gram[c]	OTHflo (4), SWEsub (4)	Ab (42), Al (5), B-Ge (11), Co (17, 18), Cu (42), J (24), M (29)	Rhizomes, raw as a snack, ground into flour to make bread (WI)
Stipa gigantea Link*	berceo, esparteras	VEG (2)	M (29), Sa (35)	Basal part of stems, raw as a snack (SP)
Polygonaceae				
Emex spinosa (L.) Campd.	naba	VEG (1)	Mu (30)	Tender leaves and stems, stewed (SP)
Fallopia convolvulus (L.) Á. Löve	habichuelones	VEG (1)	Ab (46)	Young shoots, stewed (SP)
Polygonum persicaria L.	vinagrera, hierba carbunquera	VEG (1)	J (24)	Leaves, raw as a snack (SP)
Rumex acetosa L.	acedera, agrietes[a], tárrago, vinagrera	VEG (14)	Ab (42), Av (6), B (9), Gr (20), Gu (21), Hu (22), M (29), O (32), O-Le-S (33), S (34), Sa (35), Sg (36), Za (41); GAL (45)	Basal leaves, raw as a snack or in salads (SP)

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Rumex acetosella L.	acedera, acedera de lagartija	VEG (10)	Ab (2, 42), B (9), Ba (12), CR-To (15, 16), Gu (21), J (26), Lu (28), Za (41)	Tender leaves and stems, raw as a snack, in salads, or stewed (SP)
Rumex bucephalophorus L.	acedera, vinagrera	VEG (4)	Ab (42), CR-To (16), J (24, 25)	Tender leaves and stems, raw as a snack, in salads, or stewed (WI, SP)
Rumex conglomeratus Murray	vinagrera	VEG (2)	Co (19), J (24)	Basal leaves, stewed (SP)
Rumex crispus L.	vinagrera, llengua de bou[c]	VEG (12), SEA (1)	A (40), Ab (42, 46), B (9), Co (17, 18, 19), Cs (13), Cu (42), Hu (23), J (24), M (29), V (40)	Basal leaves, stewed as a vegetable or for making sauces, as a condiment (SP)
Rumex induratus Boiss. & Reut.*	acedera, acederón, piallos	VEG (10)	Al (5), Av (6), Ba (00, 10), CR-To (15, 16), Gr (20), M (29), Sa (35), Z (23)	Tender leaves and stems, raw as a snack, in salads (SP)
Rumex intermedius DC.*	vinagrera	VEG (1)	M (29)	Tender leaves and stems, raw as a snack (SP)
Rumex obtusifolius L. (0113MP)	ramaza	VEG (1)	B (9), S (00)	Basal leaves, stewed (SP)
Rumex papillaris Boiss. & Reut.*	acedera	VEG (2)	M (29), Sg (36)	Basal leaves, raw as a snack or in salads (SP)
Rumex pulcher L.	romaza, romanza	BEVher (1), VEG (10), SEA (1)	Ab (1, 42, 46), B (9), Ba (12), Co (19), CR-To (15, 16), Cu (42), J (25), M (29)	Basal leaves, stewed as a vegetable or for making sauces, as a condiment (WI, SP)
Rumex scutatus L.	acedera, agrietas	VEG (6)	Ab (42), Hu (22), J (24, 26), O-Le-S (33), S (00)	Tender leaves and stems, raw as a snack, in salads (SP)
Portulacaceae				
Montia fontana L.	coruja, boruja	VEG (8)	Av (6), Ba (12), Gu (21), M (29), Sa (35), Sg (36), Za (00, 41)	Tender leaves and stems, raw in salads (SP)
Portulaca oleracea L.	verdolaga	OTHpic (1), VEG (22)	A (40), Ab (3, 42), Al (5), B (9), Ba (12), Co (17, 18, 19), CR (14), CR-To (16), Cs (13), Cu (42), Ge (11), Gr (20), J (24, 25, 26), M (29), Sa (35), Se (38), V (40)	Tender leaves and stems, raw in salads or stewed (SP, SU)
Primulaceae				
Primula acaulis (L.) L.	panqueixo[g], pan y queso	SWEflw (2)	Lu (28), O (32)	Flowers, sucked (SP)
Primula elatior (L.) L.	bragas de cuco	SWEflw (1)	S (34)	Flowers, sucked (SP)
Primula veris L.	chocolateras	SWEflw (1), VEG (1)	Hu (22), Sg (36)	Flowers, sucked; basal leaves, stewed (SP)
Samolus valerandi L.	enciamet[c], dolceta[c]	VEG (1)	CAT (37)	Basal leaves, raw in salads (SP)

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Rafflesiaceae				
Cytinus hypocistis (L.) L.	melera, mamelletes[c]	SWEflw (5)	A (40), Ab (2, 46), Av (00), Za (41)	Flowers, sucked (SP)
Ranunculaceae				
Clematis vitalba L.	virgazas buenas	VEG (1)	Ab (2)	Young shoots, stewed (SP)
Rhamnaceae				
Rhamnus alaternus L.*	maraña fina	FRU (2)	J (24), M (29)	Fruits, eaten raw (SU)
Ziziphus lotus (L.) Lam.	arto	FRU (2)	Al (5), Mu (30)	Fruits, eaten raw (AU)
Rosaceae				
Agrimonia eupatoria L.	agrimonia	BEVliq (1)	B (9)	Young aerial part, for making liqueur (ratafia) (SP)
Amelanchier ovalis Medik.	galluvera, sorbo	BEVliq (1), FRU (8)	Cs (13), Cu (42), Hu (22, 23), L-Ge (27), P (00), S (34), Sg (36)	Fruits, eaten raw and for making liqueur (SU)
Cotoneaster granatensis Boiss.*	durillo	FRU (1)	J (24)	Fruits, eaten raw (SU)
Crataegus laciniata Ucria	majoletas	FRU (1)	Ab (42)	Fruits, eaten raw (AU)
Crataegus monogyna Jacq.	majoleto, majuelo, espino	BEVliq (1), FRU (22), VEG (2)	A (40), Ab (42), Av (6), B (9), Co (17, 19), CR- To (15, 16), Cu (42), Hu (22, 23), J (24, 25, 26), M (29), O (32), O-Le-S (33), S (34), Sa (35), Sg (36), V (40), Za (41)	Fruits, eaten raw and for making liqueur (AU); leaves and young shoots, raw as a snack (SP)
Fragaria vesca L.	fresa silvestre, miruéndano, maduixera[c]	FRU (16)	Ab (2), B (9), B-Ge (11), Cs (13), Cu (42), Gu (21), Hu (22), J (24, 26), Lu (28), M (29), O (32), O-Le-S (33), Sa (35), Sg (36), Za (41)	Fruits, eaten raw; sometimes for making jam (SU)
Fragaria viridis Weston	fresas	FRU (1)	Cu (42)	Fruits, eaten raw; cooked in jam (SU)
Malus sylvestris (L.) Mill.	maíllo, maguillo, pomera borda[c], sagar miñ[b]	BEVliq (8), FRU (12), SEA (1)	Ab (2, 46), B (9), CR-To (15, 16), Hu (22), J (26), M (29), Na (39), O (32), P (00), S (34), Sa (35), Sg (36), Vi (39), Za (41)	Fruits, eaten raw, for making liqueur; its juice for seasoning salads as a subsitute for vinegar (AU)
Mespilus germanica L.	níspero, cíparu[a], mizpira[b]	FRU (8)	Bi (39), Hu (22, 23), Na (39), O-Le-S (33), S (34), SS (39), Vi (39)	Fruits, eaten raw after stored (AU)
Prunus avium L.	cerezo silvestre, cereixo[g], cirer[c]	BEVliq (9), FRU (13), SWEexu (1)	Ab (42), Av (8), B (9), CR-To (16), Cs (13), Cu (42), Ge (11), Hu (22), J (24, 26), Lu (28), M (29), O (32), S (34), Sa (35), Sg (36), Za (41)	Fruits, eaten raw, for making liqueur (SU); its hardened sap, chewed as as chewing gum

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Prunus cerasus L.	guindo	BEVliq (14), FRU (4)	Ab (42), Bi (39), Co (19), CR-To (16), Cu (42), Hu (22), Lu (28), M (29), Na (39), O (32), S (34), Sa (35), Sg (36), Vi (39)	Fruits, eaten raw and for making liqueur (SU)
Prunus domestica L.	ciruelo	FRU (3)	Hu (22), O (32), S (34)	Fruits, eaten raw (SU)
Prunus insititia L.	andriniega	BEVliq (4), FRU (4)	Co (19), Cu (42), M (29), P (00), S (34)	Fruits, eaten raw and for making liqueur (AU)
Prunus mahaleb L.	cerecino	BEVher (1), FRU (3)	Ab (3), Hu (22), J (26), S (34)	Flowers and leaves, as herbal tea; fruits, eaten raw
Prunus spinosa L.	endrino, arç negre[c]	BEVliq (24), FRU (15), OTHpic (1)	Ab (2, 42), Av (6), B (10), B-Ge (11), Co (17, 18, 19), CR-To (15, 16), Cs (13), Cu (42), Gu (00, 21), Hu (22, 23), J (24, 25, 26), Lu (28), M (29), Na (39), O (32), O-Le-S (33), P (00), S (34), Sa (35), Sg (36), Vi (39), Za (41)	Fruits, eaten raw, after stored and for making liqueur (AU); unripe fruits in brine (SU)
Pyrus bourgaeana Decne.	piruétano, guapero	FRU (7)	Ab (46), Ba (12), Co (17, 18), CR-To (15, 16), Cu (42)	Fruits, eaten raw, after stored (AU)
Pyrus cordata Desv.	perojo, peruyes[a]	BEVliq (2), FRU (2)	O (32), S (34)	Fruits, eaten raw, after stored and for making liqueur (AU)
Rosa agrestis Savi	tallos de zarza	VEG (1)	Cu (42)	Young shoots peeled, raw as a snack (SP)
Rosa canina L.	tapaculos, escaramujo	BEVliq (2), FRU (11), SWEflw (1), VEG (5)	Ab (42), Av (7), B-Ge (11), Co (19), CR-To (15), Cu (42), Gr (20), Gu (21), Hu (22), J (24), M (29), O (32), S (34), Sg (36), Za (41)	Fruits, eaten raw, and for making liqueur (AU); flowers eaten raw; young shoots peeled, raw as a snack (SP)
Rosa micrantha Borrer ex Sm.	tallos de zarza	VEG (1)	Cu (42)	Young shoots peeled, raw as a snack (SP)
Rosa pimpinellifolia L.	abrojo	BEVliq (1), FRU (2), VEG (1)	L-Ge (27), S (34)	Fruits, eaten raw, for making liqueur (AU); young shoots peeled, raw as a snack (SP)
Rosa pouzinii Tratt.*	escaramujo	FRU (2), SWEflw (1), VEG (2)	Co (19), Cu (42), J (25), M (29)	Fruits, and flowers eaten raw (AU); young shoots peeled, raw as a snack (SP)

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Rosa sicula Tratt.*	tallos de zarza	VEG (1)	Cu (42)	Young shoots peeled, raw as a snack (SP)
Rubus caesius L.	zarza, zarzamora	BEVliq (1), FRU (7), VEG (1)	CR-To (16), Cu (42), Hu (22), J (24), Lu (28), M (29), Sg (36), Za (41)	Fruits, eaten raw (SU); young shoots peeled, raw as a snack (SP)
Rubus castellarnaui Pau*	zarza	FRU (1)	M (29)	Fruits, eaten raw (SU, AU)
Rubus idaeus L.	frambueso, gerdera[c]	BEVliq (4), BEVoth (1), FRU (10)	B (9), B-Ge (11), Cu (42), Gu (21), Hu (22), L-Ge (27), M (29), Na (39), O-Le-S (33), Sa (35), Sg (36), Vi (39)	Fruits, eaten raw, and for making liqueur and other refreshing beverages (SU)
Rubus lainzii H.E. Weber*	zarza	FRU (1)	M (29)	Fruits, eaten raw (SU, AU)
Rubus ulmifolius Schott	zarza, zarzamora, silva[g], esbarzer[c]	BEVliq (8), BEVoth (2), FRU (34), VEG (16)	A (40), Ab (1, 2, 46), Al (5), Av (6), B (9, 10), B-Ge (11), Ba (12), Co (17, 18, 19), CR (14), CR-To (15, 16), Cs (13), Cu (42), Ge (11), Gr (20), Hu (22, 23), J (24, 26), Lu (28), M (29), Na (39), O (32), O-Le-S (33), S (34), Sg (36), SS (39), V (40), Za (41); GAL (45)	Fruits, eaten raw, cooked in jams, and for making liqueur (SU, AU); flowers eaten raw; young shoots peeled, raw as a snack (SP)
Sanguisorba minor Scop.	pempinela	VEG (1)	Hu (22)	Tender leaves and stems, raw in salads (SP)
Sanguisorba verrucosa (Link ex G. Don) Ces.*	fresillas	VEG (1)	Co (19)	Tender leaves and stems, raw in salads (SP)
Sorbus aria (L.) Crantz	mostajo, mostayal	BEVliq (2), FRU (9)	Ab (42), CR-To (16), Cu (42), J (25), M (29), O (32), O-Le-S (33), P (00), S (34)	Fruits, eaten raw, for making liqueur (AU)
Sorbus aucuparia L.	argumenu[a], cerolera de puerto	FRU (2)	Hu (22), O-Le-S (33)	Fruits, eaten raw (AU)
Sorbus domestica L.	serbal, servera[c]	FRU (10)	Ab (2), B (9, 10), B-Ge (11), Cu (42), Gr (20), Hu (22, 23), Na (39), Te (22)	Fruits, eaten raw after stored or for making jam (AU)
Sorbus intermedia (Ehrh.) Pers.	morzal	FRU (1)	O-Le-S (33)	Fruits, eaten raw after stored (AU)
Sorbus torminalis (L.) Crantz	mostajo, arceyes	FRU (7)	Ab (42), CR-To (15, 16), Cu (42), M (29), O-Le-S (33), Sa (35)	Fruits, eaten raw after natural fermentation (AU)
Rubiaceae				
Cruciata glabra (L.) Ehrend.*	té de guara	BEVher (1)	Hu (22)	Flowered aerial part, as herbal tea (SP)
Galium verum L.	cuajaleches	PREcur (1)	Hu (22)	Flowered aerial part, to curdle milk (SU)
Rutaceae				
Dictamnus hispanicus Webb ex Willk.*	gitam[c], tarragillo, timó real[c]	BEVliq (5)	A (40), Ab (3), A-V (4), Cs (13), V (40)	Flowered aerial part, for making liqueur (SP, SU)

APPENDIX *Continued*

Family/species/(voucher number)	Local names	Use categories (no. of reports)	Provinces or regions (RN)	Part used, mode of consumption (collecting season)
Ruta angustifolia Pers.*	ruda	BEVher (3), BEVliq (3)	A (40), Ab (2), Al (5), J (26), V (40)	Fruited aerial part, as herbal tea; stems and leaves for making liqueur (SP, SU)
Ruta chalepensis L.	ruda	BEVher (4), BEVliq (3), BEVoth (3), SEA (1)	B (9), B-Ge (11), Ge (11), Mu (31), O (32), O-Le-S (33)	Fruited aerial part, as herbal tea; stems and leaves for making liqueur or aromatizing chocolate beverage; as a condiment, added to vinegar and olive oil (SP, SU)
Ruta graveolens L.	ruda	BEVoth (2)	B (9), L-Ge (27)	Fruited aerial part, for aromatizing chocolate beverage (SP, SU)
Saxifragaceae				
Saxifraga aquatica Lapeyr.*	enciam de font[c]	VEG (1)	L-Ge (27)	Tender leaves and stems, raw in salads (SP)
Saxifraga vayredana Luizet*	herba de Sant Segimon[c]	BEVliq (1)	B (9)	Leaves, for making liqueur (ratafia) (SP)
Scrophulariaceae				
Bellardia trixago (L.) All.*	torta de pastor	SWEflw (1)	Ab (3)	Flowers, sucked (SP)
Digitalis thapsi L.*	chupador	SWEflw (1)	M (29)	Flowers, sucked (SP)
Linaria hirta (L.) Moench*	pan y queso	SWEflw (1)	Ab (3)	Flowers, eaten raw (SP)
Pedicularis schizocalyx (Lange) Steininger*	chupetes	SWEflw (1)	S (34)	Flowers, sucked (SP)
Veronica anagallis-aquatica L.	frailes	VEG (2)	Cu (42), Sg (36)	Tender leaves and stems, raw in salads (SP)
Smilacaceae				
Smilax aspera L.	zarzaparrilla, arítjol[c]	BEVoth (2), VEG (2)	A (40), J (24, 26), V (40)	Root, for making a beverage ('zarzaparrilla'); young shoots, raw as a snack (SP)
Solanaceae				
Lycium europaeum L.	arto, cambrón	VEG (2)	Hu (23), J (25)	Tender leaves and stems, raw in salads or stewed (WI, SP)
Taxaceae				
Taxus baccata L.	tejo, teix[c], texu[a]	FRU (4)	A (40), B (9), O (32), O-Le-S (33)	Arils of the seeds, eaten raw (SU, AU)
Tiliaceae				
Tilia cordata Mill.	til·ler[c]	BEVliq (1)	B-Ge (11)	Flowers and bracts, for making liqueur (SU)

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Tilia platyphyllos Scop.	tilo, til·ler[c]	BEVher (2), BEVliq (2), BEVoth (1)	B (9), B-Ge (11), L-Ge (27), O (32)	Flowers and bracts, as herbal tea and for making liqueur (SU)
Ulmaceae				
Celtis australis L.	almez, limonero	BEVliq (2), FRU (14)	A (40), Ab (1, 42, 46), B-Ge (11), Co (17, 18, 19), Hu (22, 23), J (24, 25, 26), Sa (35), V (40)	Fruits, eaten raw or for making liqueur (SU, AU)
Ulmus minor Mill.	alamo negro, olmo	VEG (2)	J (25), Za (41)	Immature seeds, raw as a snack (SP)
Urticaceae				
Urtica dioica L.	ortiga, ortigues[c]	VEG (13)	Ab (42), B (9, 10), Cs (13), Cu (42), Gu (21), Hu (22), J (24), L-Ge (27), Na (39), O (32), O-Le-S (33), S (34)	Tender leaves and stems, raw in salads or stewed in omelettes (SP)
Urtica membranacea Poir.	ortiga	VEG (1)	Co (19)	Tender leaves and stems, stewed in omelettes (SP)
Urtica urens L.	ortiga	VEG (8)	A (40), Ab (42), B (9), Co (19), Cs (13), Cu (42), J (24), L-Ge (27)	Tender leaves and stems, stewed in omelettes (SP)
Valerianaceae				
Valerianella carinata Loisel.	canónigos	VEG (1)	S (34)	Basal leaves, raw in salads (SP)
Valerianella locusta (L.) Laterr.	dolcetes[c]	VEG (1)	B (9)	Basal leaves, raw in salads (SP)
Violaceae				
Viola odorata L.	violeta	SWEflw (1)	M (29)	Flowers, sucked (SP)
Viscaceae				
Viscum album L.	muérdago	FRU (4)	Cu (42), J (24, 26), Sg (36)	Fruits, eaten raw (AU)
Vitaceae				
Vitis vinifera L. [ssp. *sylvestris* (C.C. Gmel.) Hegi]	parreña, parra soteña	BEVliq (1), FRU (6), OTHpic (1), SEA (1), VEG (1)	Ab (46), Ba (12), Co (17, 19), CR-To (15, 16), J (24)	Fruits, eaten raw, for making beverages (wine, liquor), or vinegar, as a condiment (AU, WI); young shoots, peeled, raw as a snack or prickled in brine

Local names: Spanish names do not include any key; [a]Asturian; [b]Basque; [c]Catalan-Valencian-Balear; [g]Galician. Categories: vegetables (VEG); fruits (FRU); beverages: liqueurs or other alcoholic drinks (BEVliq), herbal teas (BEVher), or other beverages (BEVoth); seasoning (SEA); preservatives (PRE), including curdling milk (PREcur); sweets: flowers (SWEflw), roots (SWEsub), or exudations (SWEexu); other food uses, such as oils (OTHoil), flours (OTHflo), and pickles (OTHpic). Collecting season: winter (WI), spring (SP), summer (SU), autumn (AU).

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