This is postprint version of the article:
Mattalia, G., Sõukand, R., Corvo, P., & Pieroni, A. (2019). Blended divergences: local food and medicinal plant uses among Arbëreshë, Occitans, and autochthonous Calabrians living in Calabria, Southern Italy. Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology, 1-12.

Blended divergences: local food and medicinal plant uses among Arbëreshë, Occitans, and autochthonous Calabrians living in Calabria, southern Italy

Giulia Mattalia[ab]*, Renata Sõukand[b], Paolo Corvo[a] and Andrea Pieroni[a]

[a]*University of Gastronomic Sciences, Pollenzo, Bra (CN), Italy;* [b]*Department of Environmental Sciences, Informatics and Statistics, University Ca' Foscari of Venice, Venezia, Italy*

giulia.mattalia@unive.it *corresponding author

A study focusing on traditional uses of wild plants for gastronomic and medicinal purposes was carried out among three linguistic communities in Calabria, southern Italy. Ninety interviews with local elderly informants were conducted among Occitans and Arbëreshë, two linguistic minorities, and the dominant culture of autochthonous Calabrians. We recorded 85 taxa belonging to 39 botanical families and 66 different detailed use-reports including 35 culinary and 31 medicinal uses. Our overall data show the permanence of traditional ecological knowledge related to wild and semi-domesticated food and medicinal plants; however, high similarity indices among the three communities demonstrates that traditional ecological knowledge is following the pathway of homogenization and standardization toward the dominant culture, facilitated by a context of linguistic erosion, limited intergenerational transmission, and a centuries-old diffusion with Calabrian culture. Moreover, our study calls for further field surveys in isolated areas of Calabria to analyze how traditional ecological practices can be key tools in the development of local small-scale economies through the promotion of artisanal food entrepreneurship of wild food plant transformation.

Keywords: Calabria; Arbëreshë; Occitans; Guardia Piemontese; ethnobotany; Waldensians; minorities

Introduction

Calabria, the southernmost region of peninsular Italy, is an interesting region from an anthropological and ethnobotanical point of view as it was settled by many populations over the centuries (Greeks, Romans, Byzantines, Arabs, Normans and Spanish). In addition to this anthropological, historical and social complexity, Calabria lies between two seas (Tyrrhenian and Ionian) and the Apennine Mountains reach 2267 m above sea level which turns each village into "an island" and the entire region into an area notably rich in biodiversity within the context of the Mediterranean Basin (Marziliano et al. 2016).

Calabria is home to three linguistic minorities: the Arbëreshë (about 40 communities of people from Albania who settled in this area beginning in the 15th century), Graecanics (a few communities in southern Calabria characterized by their Greek-speaking) and Occitans (the one surviving village, and five others now extinct, were founded by migrations of Piedmontese Waldensians that occurred during medieval times).

Calabria has been little investigated from an ethnobotanical perspective. Barone (1963), Leporatti and Pavesi (1989), Lupia (2004), Passalacqua et al. (2006, 2007), Leporatti and Impieri (2007), Tagarelli et al. (2010), and Lupia et al. (2018) are the few available publications. More studies have been published on Arbëreshë ethnobotany and ethnopharmacology (Pieroni et al., 2002a, 2002b; Pieroni, 2003) as well as on Graecanics (Nebel et al. 2006). To date, no ethnobotanical studies have been conducted among Occitans of Guardia Piemontese. However, in the last ten years a few studies regarding the Occitan minority in Piedmont have been published (Pieroni and Giusti, 2009; Mattalia et al. 2013; Bellia and Pieroni, 2015).

The objective of this study is to compare possible effects of language divides on the local use of wild and semi-domesticated plants for culinary and medicinal purposes in Calabria (southern Italy) among the Arbëreshë, Occitans and Calabrians.

Specific objectives are:

1) to record the local names and specific culinary and medicinal uses of local wild and semi-domesticated plants that are gathered in the study area;

2) to compare the data collected among the three linguistic communities; and

3) to compare the data with the available ethnobotanical literature in order to identify commonalities and differences in specific uses that could be linked to historical and/or socio- ecological dynamics.

In particular, the comparison was planned in three sections:

- with previous ethnobotanical studies conducted among the Arbëreshë living in the surrounding region of Basilicata, southern Italy;
- with the previous ethnobotanical studies conducted among Occitans and Waldensians in Piedmont, NW Italy, the region from which the Occitans of Calabria originally migrated; and
- with pre-existing studies on traditional plant uses recorded in other Calabrian communities.

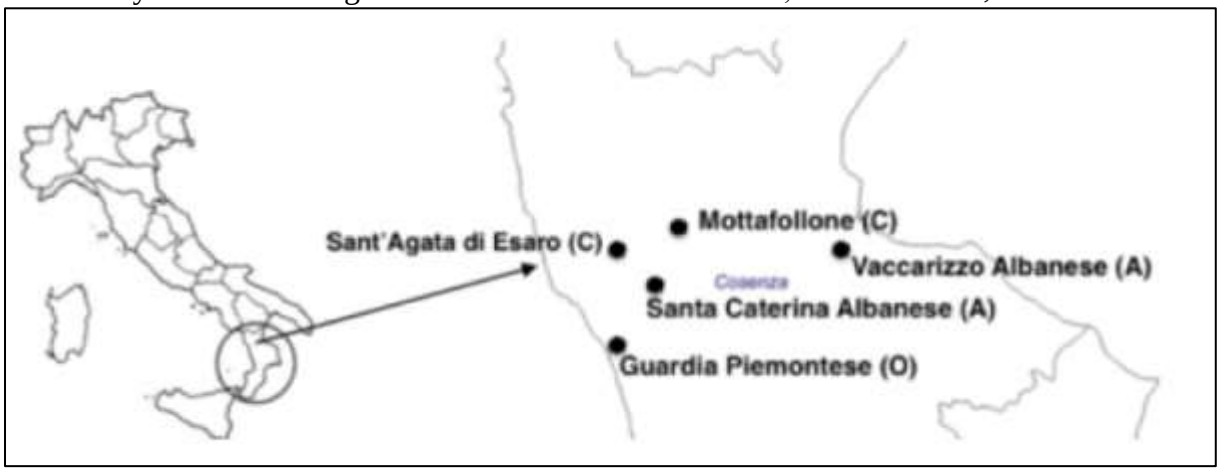
Materials and methods

The study area

The field study was conducted in the Province of Cosenza (northern Calabria, southern Italy) between December 2017 and February 2018. We visited five municipalities including Santa Caterina Albanese (Arbëreshë), Vaccarizzo Albanese (Arbëreshë), Sant'Agata di Esaro (Calabrian), Mottafollone (Calabrian) and Guardia Piemontese (Occitan). All these communities have less than 1000 effective inhabitants within their main centers (thus excluding peripheral and rural areas of these municipalities from our research). The five centers are classified as peripheral by the "Italian strategy for inland areas" (Barca et al. 2014) and are located between 350 m and 550 m a.s.l.

Calabria is mainly mountainous and hilly (42% and 49% of its territory, respectively). The climate is Mediterranean, with maximum precipitation during wintertime. Average temperature ranges between 8.3°C (January) and 24.4°C (August), with an annual average of 15.8°C.

Figure 1 The study site and the linguistic communities A=Arbëreshë, C= Calabrians, O=Occitans



Calabria is home to three linguistic minorities, namely the Arbëreshë, Occitans and Graecanics. The Arbëreshë are descendants of Albanians who emigrated during the 15th and 16th centuries to areas scattered throughout central and southern Italy (Altimari et al. 1986). Currently, the Arbëreshë minority is spread out among 50 communities in seven regions of southern Italy (Abruzzo, Campania, Molise, Basilicata, Apulia,

Calabria, and Sicily). The majority of Arbëreshë communities are located in Calabria (approximately 30 mainly in the Province of Cosenza). Calabria represents the region with the highest number of Arbëreshë communities. Most of these preserve their traditional language and culture thanks in part to Greek-Byzantine Religious rites which take place mostly in Arbëreshë (Bolognari 2001)

Guardia Piemontese is linguistically and ethnically Occitan, and the inhabitants used to follow the Waldensian faith (thus, a religious minority). Currently it is the only Occitan isle in southern Italy and it has a Waldensian presidium to underline the importance this faith has played throughout their history. Waldensians are a Protestant Christian minority that originated in France during the 12th century. Due to the persecution they suffered through the centuries, they were often forced to migrate all over Europe (Bellia and Pieroni 2015). There is no precise data available regarding the year in which the first Piedmontese Waldensians settled in Calabria. Probably the first inhabitants of Guardia Piemontese moved from Pellice Valley to get to Calabria during the second half of the 13th century (Quattrone and Pisano 2012). Five other villages were subsequently founded by Occitan Waldensian migrants: Montalto Uffugo, Vaccarizzo, San Vincenzo La Costa e San Sisto dei Valdesi. The only surviving Occitan Waldensian village is Guardia Piemontese (Stancati 2008).

The villages considered for this study are mainly inhabited by elderly individuals and provide a few essential services (e.g. Post office, small markets, and cafes). In each of the considered villages (as well as in Calabria in general) a wave of emigration occurred after WWII mainly to the principal cities of northern Italy such as Milan and Turin or to other European countries (Fofi 1964; Colucci 2008). Emigration is still a common occurrence, as people pursue academic studies or job opportunities in the larger cities of central and northern Italy (Viesti 2005).

Data collection

Ninety elderly and middle-aged informants were interviewed: 30 Arbëreshë (15 in Santa Caterina Albanese and 15 in Vaccarizzo Albanese), 30 Calabrians (15 in Mottafollone and 15 in Sant'Agata di Esaro), and 30 Occitans (in Guardia Piemontese).

Informants were selected on a random basis (mainly interviewing people walking on the street or talking in local cafes) and sometimes using a snowball method. We followed ethical guidelines prescribed by the International Society of Ethnobiology (ISE, 2006). The free-listing method was used to elicit local knowledge on wild and semi-domesticated species utilized for culinary purposes. To obtain data on taxa used for medicinal purposes, we listed each part of the body one by one.

Data analysis

Data collected included the local name, part of the plant used, and process for culinary and/or medicinal use. The mentioned species were collected, when available, identified according to "Flora d'Italia" (Pignatti 1982), and then stored at the Herbarium of the University of Gastronomic Sciences of Pollenzo. Botanical nomenclature followed Bartolucci et al. 2018 and Galasso et al. 2018.

Data were compiled into an Excel database and sorted into culinary and medicinal purposes. We also calculated the total number of gastronomic and medicinal uses for comparison. Following González-Tejero et al. (2008), we calculated Jaccard Similarity Indices as follows:

$JI = (C/(A+B-C)) \times 100$

where A represents the number of taxa/Use Instances in sample A, B is the number of taxa/Use Instances in sample B and C is the number of taxa/Use Instances common to A and B.

Following Sõukand et al. (2013), we considered the detailed use-reports, employing emic categories for both medicinal and food uses of plants.

Results

Diversity of wild and semi-domesticated food and medicinal species

We recorded a total of 85 taxa belonging to 39 families. Fifty-one taxa were used for gastronomic purposes only, while 9 were only used medicinally, and 25 were used both for healing and cooking. Arbëreshë informants reported the use of 67 taxa (42 for culinary purposes, 10 for medicinal purposes, and 15 for both), Calabrians mentioned 68 taxa (44 for culinary purposes, 6 for medicinal purposes, and 18 for both), while Occitans listed 61 taxa (45 for culinary purposes, 5 for medicinal purposes, and 11 for both).

The most well represented families were Rosaceae (n=12), Asteraceae (n=10), Lamiaceae (n=7) and Apiaceae (n=5). Six taxa were mentioned in each community for both medicinal and gastronomic uses. These included *Ficus carica* (dried, baked, boiled, raw syconia), *Foeniculum vulgare* (both fresh aerial parts and dried seeds), *Laurus nobilis* (mainly as seasoning and in infusions), *Muscari comosum* (once harvested during springtime, they are now often bought at local markets), *Malus* sp. pl. (both eaten as a fruit or boiled in decoctions), *Urtica dioica* (mainly used for medicinal purposes) and *cicoria* (F.H.Wigg. sect. *Taraxacum* and *Cichorium intybus*). The most quoted taxa for medicinal purposes included *Matricaria chamomilla* and *Malva* sp. pl. which are often used in decoctions and were considered as mild panaceas.

Medicinal plants were administered in different forms such as infusions, decoctions, poultices, and fomentations. In particular, decoctions were often used as panaceas. Some elderly individuals reported recipes of *decottu* (decoction) which were used as medicine for most minor ailments such as cough, flu, and mild abdominal pain. The *decottu* was often made from Malus, *Ficus carica*, *Malva sylvestris* and sometimes other species such as *Laurus nobilis*, *Prunus dulcis*, *Juglans regia*, *Glycirrhyza glabra*, and *Matricaria chamomilla*. Various ingredients are mixed and boiled together and the resultant decoction is considered a panacea. In some cases, it was prepared in the evening and then left outside the window to be exposed to the night-time humidity (*sereno*).

In the past, anti-helminthic plants were important medicines, especially among children. Even though there is no longer a need, elderly individuals often reported the use of *Ruta graveolens*, *Clinopodium nepeta*, *Matricaria chamomilla*, *Mentha* sp. pl. and garlic administered in infusions or juices. In Sant'Agata di Esaro (Calabrians), some informants mentioned the use of the algae *simentella* (*Corallina officinalis*), that came from the village of Diamante on the coast, as a strong anti-helminthic agent which was administered to children until several decades ago. Indeed, Marmocchi (1844) reported the common use of *Corallina* as a powerful anti-helminthic.

We found 66 different detailed use-reports including 35 culinary and 31 medicinal uses. However, we did not find significant differences among the three groups. Detailed food use-reports included 27 among Occitans, 29 among Arbëreshë, and 31 among Calabrians. In each group, the most common use-reports were 'eaten raw' (as a snack), 'cooked in mixed soups', 'prepared in liquor', or 'used for seasoning'.

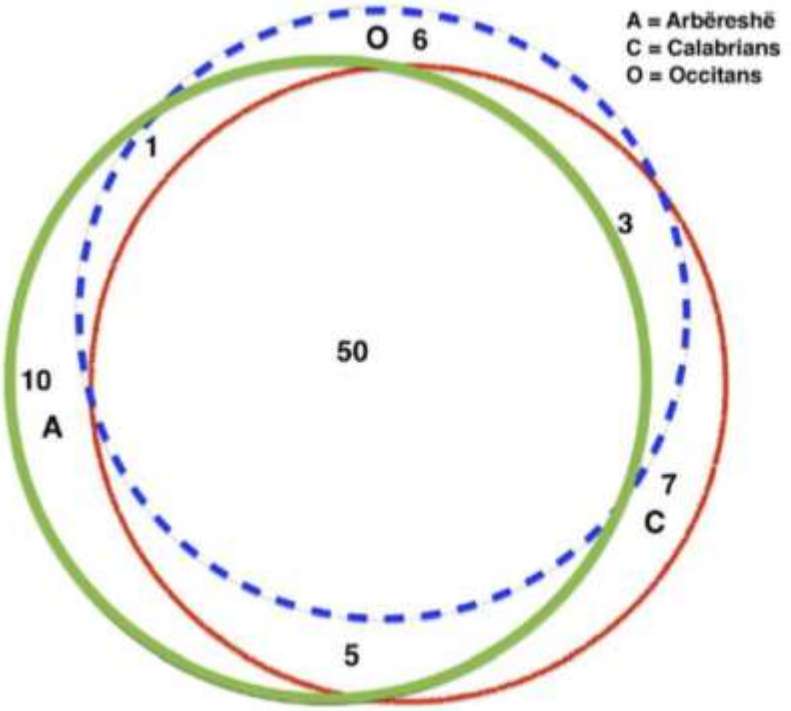
Regarding detailed medicinal use-reports, we found 22 uses among both the Arbëreshë and Occitans and 25 among Calabrians. The most common uses were decoctions shared by the three groups, and infusions to treat abdominal pain as well as to treat cough. Wild vegetables gathered and consumed by Arbëreshë (A), Calabrians (C) and Occitans (O) in the Province of Cosenza (Calabria, southern Italy) are included in the table provided.

Comparison among the three groups

The Venn diagram (Figure 2) shows a large number of species common to all three linguistic groups (n=50), a variable number of taxa common to two groups (between n=1 and n=6) and some taxa mentioned only within a single linguistic group.

Figure 2. Proportional Venn diagram: number of taxa mentioned for each linguistic group

This is postprint version of the article:
Mattalia, G., Sõukand, R., Corvo, P., & Pieroni, A. (2019). Blended divergences: local food and medicinal plant uses among Arbëreshë, Occitans, and autochthonous Calabrians living in Calabria, Southern Italy. Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology, 1-12.



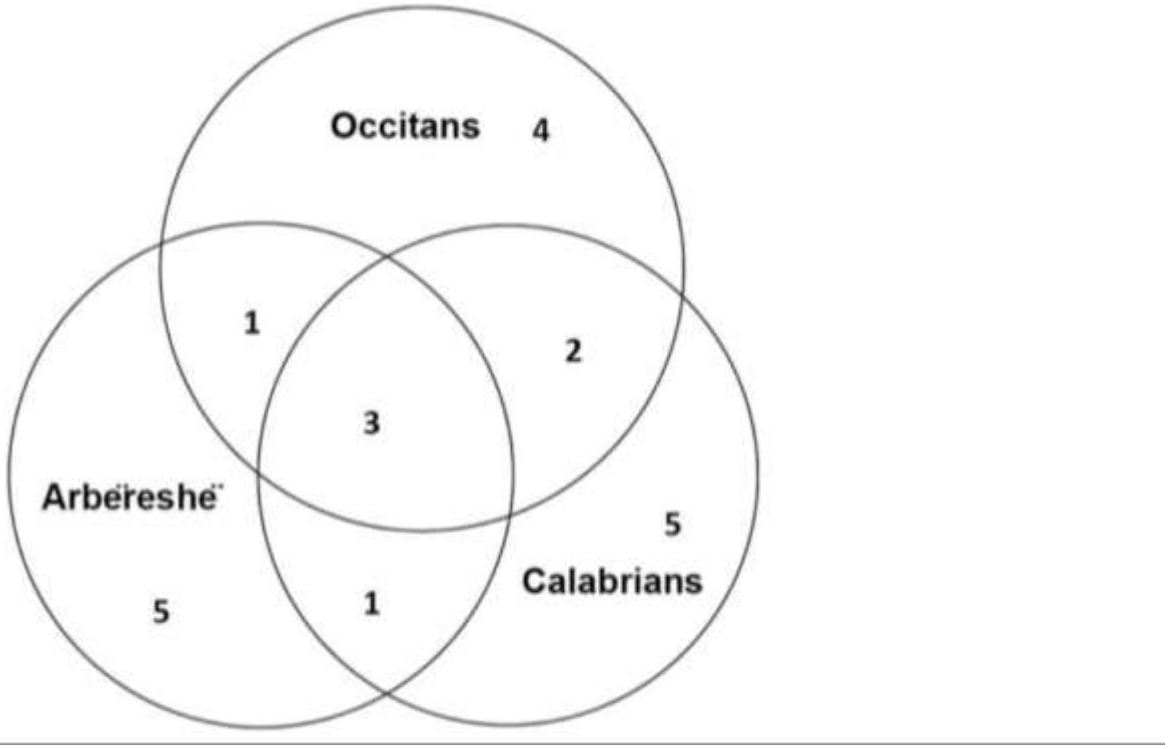
When calculating similarity among medicinal taxa, lower Jaccard indices are observed, yet they are quite similar among the three groups. Gastronomic taxa among the three groups are homogenous. The Jaccard similarity indices indicate a lower degree of similarity of the plants used for medicinal purposes (Table 1).

Table 1 Jaccard similarity indices for the compared groups for all currently used taxa, taxa only used for food preparations, and taxa only used for medicinal preparations.

Compared groups	**JI$_{taxa}$**	**JIfood$_{taxa}$**	**JImedicinal$_{taxa}$**
Arbëreshë & Calabrians	72.36	69.11	41.93
Arbëreshë & Occitans	68.00	73.84	44.44
Calabrians & Occitans	73.61	67.16	45.83

A diagram of the top 10 plants used highlights three species relevant to all three communities (*Asparagus acutifolius*, *Ficus carica* and *Foeniculum vulgare*), another two common to Calabrians and Occitans (*Origanum vulgare* and *Castanea sativa*), while *Laurus nobilis* is common to the Arbëreshë and Calabrians and *Muscari comosum* is common to both the Arbëreshë and Occitans (Figure 3).

Figure 3. Proportional Venn diagram: distribution of the 10 top used taxa for each linguistic group



Comparison with the Arbëreshë of Vulture (Basilicata)

A considerable portion of the recorded species taxa in this study had previously been documented in another area inhabited by the Arbëreshë, the Vulture region (Basilicata). We found 6 medicinal taxa earlier reported by Pieroni et al. (2002a, 2002b) and Pieroni and Quaeve (2005), including *Cynara cardunculus*, *Ficus carica*, *Laurus nobilis*, *Malus* sp. pl., *Malva sylvestris*, and *Prunus dulcis*. These plants are mainly administered as decoctions. Five other taxa mentioned in Pieroni et al. 2002b and Pieroni and Quaeve 2005 include remedies such as *Glycyrrhiza glabra* and *Sambucus nigra* to treat cough and sore throat, but they are mentioned only by a few people. *Papaver somniferum* is no longer used as a sedative in either Calabria or Basilicata. On the other hand, *Muscari comosum* and *Matricaria chamomilla* are very common and can also be found in local markets.

Regarding food species, we found 44 taxa earlier reported by Pieroni et al. (2002) and an additional 13 when also including Giusti and Pieroni (2002). Taxa common to the three studies include *Borago officinalis*, *Foeniculum vulgare*, *Papaver rhoeas*, and *Sonchus* sp. pl. which were also observed in other Mediterranean areas such as Spain and Greece (Leonti et al. 2016). *Amaranthus retroflexus* was only recorded among the Arbëreshë (yet was also found in Apulia by Biscotti and Pieroni 2015), while other taxa such as, *Clematis vitalba*, *Nasturtium officinale*, *Origanum vulgare*, and *Portulaca oleracea* were recorded in different areas of Italy (e.g. Apulia (Biscotti and Pieroni 2015), or Campania (De Natale et al. 2009)). Specifically, Ghirardini et al. (2007) found *Asparagus acutifolius* and *Urtica dioica* to be common to several areas of Italy.

Comparison with other Calabrian communities

In 2007, Leporatti and Impieri (2007) published research on medicinal plants used in 11 villages located in northern Calabria. We found 19 genera in common with our findings. Particularly, 9 genera and taxa were mentioned by all three groups: *Ficus carica* (commonly used as a co-adjuvant in therapies for treating cold, flu, and cough), *Malus*, *Malva sylvestris* (commonly used in lenitive infusions or decoctions), *Matricaria* (to treat abdominal pain and as a mild sedative, also in Passalacqua et al. 2007), *Tilia cordata*, *Urtica dioica* (local washing), and *Ziziphus jujuba* (to treat cough). In addition, other common uses reported in Leporatti

and Impieri (2007) include: *Clinopodium nepeta* used to treat bee and insect stings, *Cynodon dactylon* as a diuretic (also in Passalacqua et al. 2007), *Juglans regia* against excessive foot perspiration, *Sambucus nigra* in a decoction as an external wash for an affected body part (also in Passalacqua et al. 2007) and *Ruta graveolens* as an anti-helminthic. Moreover, Passalacqua et al. (2007) describe the use of *Parietaria* (the infusion is a diuretic and effective in cases of renal and kidney stones) as in Sant'Agata di Esaro.

Comparison with Piedmontese Waldensians and Occitans

In comparing our results with the research conducted by Bellia and Pieroni (2015) among the Waldensians in Piedmont, we found 18 shared taxa (including *Asparugus* which is called *acutifolius* in Guardia Piemontese and *tenuifolius* in Piedmont). Occitans mentioned none of them exclusively and thus we suppose that the relevant diversity in terms of geography and climate may have induced Occitans to adapt their original cuisine to the new environment.

In Guardia Piemontese there are two main identitarian recipes. One is *Pallod*, a soup made from several wild plants including *Borago officinalis, Raphanus raphanistrum, Daucus carota, Clematis vitalba, Foeniculum vulgare, Papaver rhoeas, Portulaca oleracea, Tolpis umbellata, Helminthotheca echioides, Knautia integrifola,* and *cicoira* (F.H.Wigg. sect. *Taraxacum* and *Cichorium intybus*). All those plants are boiled together and served with broth, potatoes and some pasta. The second recipe is a peculiar use of polenta among the inhabitants of Guardia Piemontese. In fact, in this region polenta is cooked with *Foeniculum vulgare* or other food plants (e.g. *Cichorium intybus*), while in northern Italy (which is home to this dish) it is only cooked with (game) meat or cheese. Indeed, there is also a southern recipe of polenta cooked with broccoli called *fhriscatula* (or *frascatula*) which is widespread in Sicily, Calabria and Basilicata. The use of polenta in Guardia might have its roots in either the northern or southern version.

Discussion

Overall the data showed that there are no significant differences among the three linguistic communities in Calabria. We observed good persistence of traditional ecological knowledge related, in particular, to culinary uses. However, we also observed the concurrence of other phenomena striving to the erosion of traditional ecological knowledge, such as limited intergenerational transmission

As pointed out by Gómez-Baggethun et al. (2010), traditional ecological knowledge is mainly held by community elders and intergenerational transmission is quite limited because of the low number of young people living in these villages. Traditional knowledge is often seen by young villagers as something "old and useless", often requiring "too much time". Indeed, wild food and medicinal plant gathering is a knowledge intensive practice, requiring specific ecological knowledge. Kalle and Sõukand (2016) proposed the term "unlearning debt" to describe this phenomenon in which specific knowledge on local practices is still alive in the memory of the older generation, but it is no longer transferred to younger generations and thus it is destined to be forgotten. The unlearning debt is a common occurrence in this study area, and the lack of interest among minority youths may also be due to the influence of the dominant culture (Tang and Gavin 2016).

The dismantling of the traditional rural way of life resulted in a high rate of the abandonment of farming and a shift toward a landscape characterized by forest expansion. This and an ageing population, no longer able or interested in accessing areas far from villages, resulted in more limited exposure to the ecosystem and the subsequent change in ecological knowledge (Benz et al. 2000; Reyes-Garcia et al. 2007). Yet, in our study area, small family farming systems such as home-gardens and the breeding of pigs and chickens are common and often the basis of many social activities. For instance, slaughtering pigs is still a once-a-year event that has to be celebrated with family, friends and neighbors. Additional evidence of the relevancy of small-scale farming activities includes the importance of locally produced food to the household economy, as often most daily food is grown by the family or obtained through exchanges with other villagers.

However, this form of autarchy does not apply to medicaments, which may be due to a predominance of "formal" knowledge regarding traditional practices in the medicinal domain. During our study in Guardia Piemontese we found a small piece of unpublished research carried out thirty years ago among the elderly individuals of the village by some local young people. In the premise of the report, the anonymous authors stated "Guardia's inhabitants figured out natural remedies because of both their pride in folk knowledge and the scarcity of economic resources". The increase in economic resources, which allowed people to buy medicines, and the simultaneous introduction of free medical advice provided by the Italian health-care system that often prescribes "formal" medicaments far removed from local ecosystems have caused the greater erosion of traditional medicinal knowledge.

Despite the persistence of traditional ecological knowledge in rural Calabria, similarity indices among the three communities of this study show that ecological knowledge is following the pathway of homogenization and standardization toward the dominant model, which in this case is the Calabrian one. This phenomenon may occur because plant gathering is not perceived as being identitarian, and the people preserving such knowledge are not regarded as being guardians of the endangered Arbëreshë or Occitan culture. Indeed, Italian legislation on the protection of linguistic minorities (Act 482, 1999 "*Norme in materia di tutela delle minoranze linguistiche storiche*") focuses on linguistic preservation only, and does not consider other aspects of the minority culture such as traditions or local knowledge. Therefore, identity is mainly expressed only through language and sometimes religion as well. In fact, Arbëreshë is best preserved were Greek-Byzantine Religious rites are still widely practiced. In Guardia Piemontese there are no longer any people who follow the Waldensian faith, yet being Waldensian is still a crucial aspect of their identity. Culinary and medicinal uses of wild and semi-domesticated plants are not considered to be "special" or "different" from that of their neighbors, and thus not worthy of being preserved. This process, also observed by Menendez-Baceta et al. 2015, leads to the degradation of traditional knowledge without any social force to mitigate it.

The weakening of the importance of religion over the last several decades has brought about inter-marriages among the three communities, which has resulted in a homogenization of kinship relations and - attached to them - the oral transmission of traditional knowledge within these kinship networks. Homogenization of ethno-biological knowledge has been observed in other case studies (Zent and Zent 2004; Pieroni and Sõukand 2017) and may lead to a degradation of overall biocultural diversity. Homogenization of knowledge may be facilitated by the weakening of religious faith regulating kinship, but also by linguistic erosion and therefore vernacular mnemonics in the local language (McCarter 2012). Indeed, the centuries-old diffusion with Calabrian communities has influenced the language of the two minority groups we examined (Micali 2016). In line with Micali (2016), we found that many middle-aged individuals have undergone a process of the "calabrization" of plant names and no longer even recall Occitan folk names for well-known local species.

Our overall data show the permanence of traditional ecological knowledge related to wild and semi-domesticated food and medicinal plants. However, we have highlighted a process of homogenization among the three studied communities.

Italian Act 482 on the protection of linguistic historical minorities has provided communities with some services in order to maintain their linguistic identity (e.g. some linguistic offices have been opened in each municipality). However, linguistic diversity is only one aspect of the complexity of biocultural diversity. Data presented in this study should find application in promoting the biocultural diversity, history and identity of Italian minorities. Moreover, our study calls for further field surveys in other isolated areas of Calabria to analyze how traditional ecological practices can be key tools in the development of local virtuous small-scale economies through initiatives such as eco-tourism, and the artisanal food entrepreneurship of wild food plant transformation. Indeed, the important role of wild food plants in the Mediterranean Diet is often neglected (Biscotti and Pieroni 2015; Leonti et al. 2006), even though they can be a crucial issue for promoting the dynamic conservation of the natural landscape, local resources and cultural customs.

Acknowledgments

Special thanks to all the informants who share their folk plant knowledge and especially to Gaetano Cristiano for his help during fieldwork in Santa Caterina Albanese and the Tavola Valdese for its assistance during fieldwork in Guardia Piemontese.

Declaration of Interest Statement

The authors declare that they have no conflict of interest.

References

Altimari F, Bolognari M, Carrozza P. 1986. L'esilio della parola: la minoranza linguistica albanese in Italia: profili storico-letterari, antropologici e giuridico-istituzionali. [The exile of the word: the Albanian linguistic minority in Italy: historical, literal, anthropological, legal and institutional perspectives]. Pisa: ETS. Italian.

Barca F, Casavola P, Lucatelli S. 2014. Strategia nazionale per le aree interne: definizione, obiettivi, strumenti e governance. [National strategy for inland areas: definition, objectives, tools and governance]. Ministero dello Sviluppo Economico, Dipartimento per lo Sviluppo e la Coesione Economica, Unità di Valutazione degli Investimenti Pubblici. Italian.

Barone R. 1963. Le piante della medicina popolare nel territorio di Falconara e San Lucido: Calabria. [The plants of folk medicine in the area of Falconara and San Lucido: Calabria]Webbia, 17(2): 329-357. Italian

Bartolucci F, Peruzzi L, Galasso G, Albano A, Alessandrini A, Ardenghi NMG, Astuti G, Bacchetta S, Ballelli E, Banfi G. et al. 2018. An updated checklist of the vascular flora native to Italy. Plant Biosystems, 152(2): 179-303.

Bellia G, Pieroni A. 2015. Isolated, but transnational: the glocal nature of Waldensian ethnobotany, Western Alps, NW Italy. Journal of ethnobiology and ethnomedicine, 11(1): 37.

Benz BF, Cevallos J, Santana F, Rosales J. 2000. Losing knowledge about plant use in the Sierra de Manantlan biosphere reserve, Mexico. Economic Botany, 54(2): 183-191

Berkes F, Colding J, Folke C. 2000. Rediscovery of traditional ecological knowledge as adaptive management. Ecological applications, 10(5): 1251-1262.

Biscotti N, Pieroni A. 2015. The hidden Mediterranean diet: wild vegetables traditionally gathered and consumed in the Gargano area, Apulia, SE Italy. Acta Societatis Botanicorum Poloniae, 84(3): 327

Bolognari M. 2001. Il banchetto degli invisibili: la festa dei morti nei rituali di una comunità del Sud. [The banquet of the invisibles: the celebration of deaths in the rituals of a community of Southern Italy]Catanzaro: Abramo. Italian.

Colucci M. 2008. Forza lavoro in movimento. L'Italia e l'emigrazione in Europa, 1945-1957. shrimp [Manpower on-the-go. Italy and the emigration to Europe, 1945-1957]. [dissertation]. Università della Tuscia. Italian.

De Natale A, Pezzatti GB, Pollio A. 2009. Extending the temporal context of ethnobotanical databases: the case study of the Campania region (southern Italy). Journal of Ethnobiology and Ethnomedicine, 5(1): 7.

Fofi G. 1964. L'immigrazione meridionale a Torino. [The immigration from Southern Italy to Turin]. Torino: Nino Aragno Editore. Italian.

Galasso G, Conti F, Peruzzi L, Ardenghi NMG, Banfi E, Celesti-Grapow L, Albano A , Alessandrini G, Bacchetta S, Ballelli M et al. 2018. An updated checklist of the vascular flora alien to Italy. Plant Biosystems, 152(3): 556-592.

Ghirardini MP, Carli M, del Vecchio N, Rovati A, Cova O, Valigi F, Agnetti G, Macconi M, Adamo D, Traina M et al. 2007. The importance of a taste. A comparative study on wild food plant consumption in twenty-one local communities in Italy. Journal of Ethnobiology and Ethnomedicine 2 (3):22

Gómez-Baggethun E, Mingorria S, Reyes-García V, Calvet L, Montes C. 2010. Traditional ecological knowledge trends in the transition to a market economy: empirical study in the Doñana natural areas. Conservation Biology, 24(3): 721-729.

González-Tejero MR, Casares-Porcel M, Sánchez-Rojas CP, Ramiro-Gutiérrez JM, Molero-Mesa J, Pieroni A, Giusti ME, Censorii E, De Pasquale C, Della A, et al. 2008. Medicinal plants in the Mediterranean area: synthesis of the results of the project Rubia. Journal of Ethnopharmacology, 116(2): 341-357.

Gorenflo LJ, Romaine S, Mittermeier RA, & Walker-Painemilla K. 2012. Co-occurrence of linguistic and biological diversity in biodiversity hotspots and high biodiversity wilderness areas. Proceedings of the National Academy of Sciences, 109(21): 8032-8037

Kunert HP. 2005. *Vocabolario dell'occitano di Guardia Piemontese*. [Dictionary of the Occitans of Guardia Piemontese]. Comune di Guardia Piemontese. Italian.

ISE International Society of Ethnobiology 2006. International Society of Ethnobiology Code of Ethics (with 2008 additions). http://ethnobiology.net/code-of-ethics/

Italian legislation, Act 482 promulgated on 15.12.1999 on "Norme in materia di tutela delle minoranze linguistiche storiche" [Regulations on protection of linguistic historical minorities].Italian.

Johns T, Chan HM, Receveur O, Kuhnlein HV. 1994. Nutrition and the environment of indigenous peoples. Ecology of food and nutrition, 32(1-2): 81-87.

Kalle R, Sõukand R. 2016. Current and remembered past uses of wild food plants in Saaremaa, Estonia: changes in the context of unlearning debt. Economic botany, 70(3): 235-253.

Leonti M, Nebel S, Rivera D, Heinrich M. 2006. Wild gathered food plants in the European Mediterranean: a comparative analysis. Economic botany, 60(2): 130-142.

Leporatti ML, Pavesi A. 1989. Usi nuovi, rari o interessanti di piante officinali di alcune zone della Calabria. [New, rare or interesting uses of officinal plants in some areas of Calabria] Webbia, 43(2): 269-289.Italian.

Leporatti ML, Impieri M. 2007. Ethnobotanical notes about some uses of medicinal plants in Alto Tirreno Cosentino area (Calabria, Southern Italy). Journal of Ethnobiology and Ethnomedicine, 3(1): 34

Lupia C. 2004. Etnobotanica: le piante e i frutti spontanei della Sila piccola catanzarese. [Ethnobotany: plants and wild fruits of the small Sila of Catanzaro]. Catanzaro: Abramo. Italian.

Lupia A, Lupia C, Lupia R. 2018. Etnobotanica in Calabria. Viaggio alla scoperta di antichi saperi intorno al mondo delle piante. [Ethnobotany of Calabria. A journey of discovery of ancient plant knowledge]. Soveria Mannelli: Rubbettino Editore. Italian

Marmocchi FC. 1844. Prodromo della storia naturale, generale e comparata, d'Italia. [Prodrome of general and compared natural history of Italy]. Firenze: Società editrice fiorentina. Italian.

Marziliano P, Lombardi F, Menguzzato G, Scuderi A, Altieri V, Coletta V, Marcianò C. 2017. Biodiversity conservation in Calabria region (southern Italy): perspectives of management in the sites of the "Natura 2000" network. In: I International Conference on Research for Sustainable Development in Mountain Regions Book of abstracts; Oct3-7 2016; Bragança, Portugal. p. 29

Mattalia G, Quave CL, Pieroni A. 2013. Traditional uses of wild food and medicinal plants among Brigasc, Kyé, and Provençal communities on the Western Italian Alps. Genetic resources and crop evolution, 60(2): 587-603.

McCarter J. 2012 Variation, Transmission, And Maintenance of Traditional Ecological Knowledge on Malekula Island, Vanuatu [dissertation]. Victoria University of Wellington.

Menendez-Baceta G, Aceituno-Mata L, Reyes-García V, Tardío J, Salpeteur M, Pardo-de-Santayana, M. 2015. The importance of cultural factors in the distribution of medicinal plant knowledge: a case study in four Basque regions. Journal of Ethnopharmacology, 161: 116-127.
Micali I. 2016. L'occitano di Guardia Piemontese tra conservazione, innovazione e mutamento: analisi di un corpus. [The Occitan of Guardia Piemontese: conservation, innovation and mutation. Analysis of a corpus]. Quaderni di Linguistica e Studi Orientali, 2: 175-207.Italian.
Nebel S, Pieroni A, Heinrich M. 2006. Ta chòrta: wild edible greens used in the Graecanic area in Calabria, Southern Italy. Appetite, 47(3): 333-342.
Passalacqua NG, De Fine G, Guarrera PM. 2006. Contribution to the knowledge of the veterinary science and of the ethnobotany in Calabria region (Southern Italy). Journal of Ethnobiology and Ethnomedicine, 2(1): 52.
Passalacqua, NG, Guarrera PM, De Fine G. 2007. Contribution to the knowledge of the folk plant medicine in Calabria region (Southern Italy). Fitoterapia, 78(1): 52-68
Pieroni A, Nebel S, Quave C, Münz H, Heinrich M. 2002. Ethnopharmacology of liakra: traditional weedy vegetables of the Arbëreshë of the Vulture area in southern Italy. Journal of ethnopharmacology, 81(2): 165-185.
Pieroni A, Quave C, Nebel S, Heinrich M. 2002. Ethnopharmacy of the ethnic Albanians (Arbëreshë) of northern Basilicata, Italy. Fitoterapia, 73(3): 217-241
Pieroni A. 2003. Wild food plants and Arbëresh women in Lucania, Southern Italy. Women and Plants Case Studies on Gender Relations in Biodiversity Management and Conservation, 66-82
Pieroni A, Giusti ME. 2009. Alpine ethnobotany in Italy: traditional knowledge of gastronomic and medicinal plants among the Occitans of the upper Varaita valley, Piedmont. Journal of Ethnobiology and Ethnomedicine, 5(1): 32
Pieroni A, Sõukand R. 2017. Are Borders More Important than Geographical Distance? The Wild Food Ethnobotany of the Boykos and its Overlap with that of the Bukovinian Hutsuls in Western Ukraine. Journal of Ethnobiology, 37(2): 326-345.
Pignatti, S. (1982). Flora d'Italia. [Italian flora]. Bologna: Edagricole. Italian
Quattrone V, Pisano C. 2012. L'emigrazione valdese e l'arrivo a Guardia. [Waldensian emigration and the arrival to Guardia]. *La Voce di Guardia*. (3). Paola: Tipografia R. Gnisci & Figli.
Reyes-García V, Marti N, McDade T, Tanner S, Vadez V. 2007. Concepts and methods in studies measuring individual ethnobotanical knowledge. Journal of ethnobiology, 27(2): 182-203.
Salerno G, Stinca A, Giaccone M, Scognamiglio P, Basile B. 2015. Ethnobotanical use of fig (*Ficus carica* L.) in southern Italy. In Cirillo C, Caruso T, Basile B editors. Proceedings of the V International Symposium on Fig .Aug 31- Sept 3 2015; Napoli, Italy. p. 371-376.
Sõukand R, Quave CL, Pieroni A, Pardo-de-Santayana M, Tardío J, Kalle R, Łuczaj Ł, Svanberg I, Kolosova V, Aceituno-Mata L, et al. 2013. Plants used for making recreational tea in Europe: a review based on specific research sites. Journal of Ethnobiology and ethnomedicine, 9(1): 58.
Stancati E. 2008. Gli Ultramontani. Storia dei Valdesi di Calabria, [Ultramontani: History of Calabrian Waldensians]. Cosenza: Pellegrini. Italian.
Tagarelli G, Tagarelli A, & Piro A. 2010. Folk medicine used to heal malaria in Calabria (southern Italy). Journal of ethnobiology and ethnomedicine, 6(1): 27.
Tang R, Gavin MC. 2016. A classification of threats to traditional ecological knowledge and conservation responses. Conservation and Society, 14(1): 57.
Viesti G. 2005. Nuove migrazioni. Il "trasferimento" di forza lavoro giovane e qualificata dal Sud al Nord. [New migrations. The "transfer" of young and qualified manpower from Southern to northern Italy]. Il Mulino, 54(4): 678-688. Italian.
Zent S, Zent EL. 2004. Ethnobotanical convergence, divergence, and change among the Hoti of the Venezuelan Guyana. In Carlson JS, Maffi L, editors. Ethnobotany and the Conservation of Biocultural Diversity. New York: New York Botanical Garden Press.

This is postprint version of the article:
Mattalia, G., Sõukand, R., Corvo, P., & Pieroni, A. (2019). Blended divergences: local food and medicinal plant uses among Arbëreshë, Occitans, and autochthonous Calabrians living in Calabria, Southern Italy. Plant Biosystems-An International Journal Dealing with all Aspects of Plant Biology, 1-12.

Table 2. List of recorded taxa in Arbëreshë, Calabrian and Occitan communities in the Province of Cosenza. The symbol * represents a taxon or use of a taxon which is no longer practiced. Recorded local names were written following Italian phonology except for names in italics which indicate that Arbëreshë phonology was followed. A=Arbëreshë; C=Calabrians; O=Occitans. (M) indicates medicinal preparations while (F) food preparations.

Table 2 Recorded taxa

Botanical taxon/a and family	Recorded Local name	Parts used	Reported Food (F) or Medicinal (M) Use	A n=30	C n=30	O n=30
Allium sp. pl. (Amaryllidaceae) Including *Allium sativum* L. UNISGCAL005	Hudor (A)	Bulbs and Leaves	(F) Seasoning	1		
Allium ampeloprasum L. (Amaryllidaceae)	Porro selvatico (C)	Bulbs	(F) Preserved with vinegar		3	
			(F) Preserved with olive oil		2	
Amaranthus retroflexus L. (Amaranthaceae) UNISGCAL007	Vritta (A)	Leaves	(F) Mixed soups	4		
			(F) Ravioli filling	3		
			(F) On pizza	1		
Arbutus unedo L. (Ericaceae) UNISGCAL016	Aruamule (A), Cacungolo (A); Arrobete (C), Cacumpr (C); Gumnier (O)	Fruits	(F) Raw as a snack	5	9	14
			(F) Jam	5	4	1
			(F) Liquor		1	2
			(F) Mustard		1	
			(F) Dessert		1	

Asparagus acutifolius L. (Asparagaceae) UNISGCAL014	Sparaglio (A), Sparaini (A), Sparici (A); Asparago servaggio (C); Spangoli (O)	Stems	(F) Cooked with eggs or in omelettes	15	20	19
			(F) Boiled	13	5	3
			(F) Cooked with risotto or pasta	6	8	5
Atropa bella-donna L.* (Solanaceae)	Belladonna (A, C)	Fruits	(M) Jams to treat anxiety	1	1	
			(M) Jams to treat abdominal pain	1		
Beta vulgaris L. (Amaranthaceae) UNISGCAL020	Sescola (A), Bieta (A, C); Beta servag (O)	Aerial parts	(F) Mixed soups	3	8	6
			(F) Boiled	1		2
Borago officinalis L. (Boraginaceae) UNISGCAL006	Fraina (A); Vurraina (A, C); Burraina (O)	Aerial parts	(F) Mixed soups	5		3
			(F) Stir- fried	5		3
			(F) Raw in salads			3
			(F) Cooked with sanguinaccio			9
			(F) Boiled		2	1
			(M) Infusion as a diuretic		1	
Brassica fruticulosa Cirillo subsp. fruticulosa (Brassicaceae)	Rapanida (A), Rapa selvatica (A), Cavociell (O)	Aerial parts	(F) Mixed soups	6		2
			(F) Boiled and stir- fried	4		3
Capparis spinosa L. (Capparaceae)	Chiapparo (A)	Thallus	(F) Raw in salads	5		
			(F) Preserved with vinegar	14		

		Fruits	(F) Seasoning	12		
Castanea sativa Mill. (Fagaceae)	*Kështënjë* (A); Castagna (C); Cistagnier (O)	Fruits	(F) Boiled	8	17	18
			(F) Bread*	2	2	6
			(F) Baked	8	17	14
			(F) Jam	4	17	1
			(F) Dessert	3	8	4
			(F) Liquor		3	
Ceratonia siliqua L. (Fabaceae)	Sciuscedda (O)	Dried Fruits	(F) Raw as a snack			4
*Cercis siliquastrum*L. subsp. *siliquastrum* (Fabaceae)	Albero di Giuda (C)	Flowers	(F) Raw as a snack		2	
Chichorium intybus L. (Asteraceae) UNISGCAL008	Cicoria (A); Marella (C), Mareddi (C); Cicoira (O)	Aerial parts	(F) Preserved with olive oil	1		
			(F) Mixed soup	13	9	13
			(F) Preserved with vinegar	3		
			(F) Boiled and then stir-fried	13	20	11
			(F) Boiled and then in salads		9	13
Clematis vitalba L. (Ranunculaceae) UNISGCAL011	Curparo (A), Curpure (A); Vingiarra (C); Vttus (O)	Shoots	(F) Boiled and then stir-fried	20	9	9
			(F) Omelettes	9	8	4
			(F) Boiled and then in salads		3	10
Clinopodium nepeta (L.) Kuntze subsp. *nepeta* (Lamiaceae) UNISGCAL028	Anipeta (A); Aniepeta (O)	Aerial parts	(F) Seasoning			3
			(M) Infusion to treat abdominal pain			1

			(M) To treat bee stings	2		
			(M) Anti-helminthic*			2
Corallina officinalis L.* (Corallinaceae)	Simentella (C)	Aerial parts	(M) Anti-helminthic*		2	
Corylus avellana L. (Betulaceae) UNISGCAL023	Noccioline (A, C, O)	Fruits	(F) Baked	6	4	7
			(F) Filling for dried figs		1	
Crataegus monogyna Jacq. (Rosaceae) UNISGCAL027	Biancospino (A, C); Bossu (O)	Fruits	(F) Raw as a snack	1	3	1
		Flowers	(M) Infusion as a sleep-inducing agent	2		
			(M) Infusion as refresher			3
Cydonia oblonga Mill. (Rosaceae)	Pero cotogno (A); Mela cotogna (C; O)	Fruits	(F) Boiled	2	3	1
			(F) Jam		1	
Cynara cardunculus L. subsp. *cardunculus* (Asteraceae) UNISGCAL030	Carciofini servaggi (A, C O)	Buds	(F) Preserved with olive oil	7	6	1
			(F) Preserved with vinegar	9		
			(F) Stir-fried	3		2
Cynodon dactylon (L.) Pers. (Poaceae) UNISGCAL034	Gramigna (A)	Roots	(M) Infusion to treat the prostate	2		
Daucus carota L. (Apiaceae) UNISGCAL039	Ars (A), Pastinacchia (C) Pastinanagl (O)	Aerial parts	(F) Mixed soups	3	5	6
			(F) Boiled and stir-fried		1	
Diplotaxis tenuifolia (L.) DC. (Brassicaceae) UNISGCAL015	Rugola (A); Aruoc (O)	Leaves	(F) Seasoning	1		
			(F) Stir-fried	1		
			(F) Boiled	2		3

			(F) Raw in salads	2		4
Equisetum arvense L. (Equisetaceae) UNISGCAL018	Erba cavallina (A)	Aerial parts	(M) Decoction to treat the kidneys	1		
Euphorbia helioscopia L. subsp. *helioscopia* (Euphorbiaceae) UNISGCAL022	Euforbia (O)	Latex	(M) To treat (foot) warts			1
Fallopia dumetorum (L.) Holub (Polygonaceae) UNISGCAL024	Vitareddi (A), Curriolo (C)	Aerial parts	(F) Boiled	1		
			(F) Mixed Soup		1	
Ficus carica L. (Moraceae) UNISGCAL025	*Fik* (A); Fico (C); Fica (O)	Fruits	(F) Boiled	25	26	27
			(F) Raw	25	26	27
			(F) Dried	25	26	27
			(F) Fig honey	8	11	9
			(F) Jam		1	1
			(M) Infusion to treat cough	3	1	1
			(M) Decoction	10	8	8
Foeniculum vulgare Mill. subsp. *vulgare* (Apiaceae) UNISGCAL026	*Mëraj* (A); Finocc (C); Fneugl (O)	Seeds	(F) Seasoning	16	21	19
			(F) Liquor	8	9	2
			(M) Infusion to treat headache	1		
			(M) Infusion to treat cough	3		1
			(M) Infusion to treat abdominal pain	4	4	1

			(M) Infusion to lose weight	1		
			(M) Mouthwash			1
			(M) Fomentation to treat earache			1
		Fresh aerial parts	(F) Cooked with fava beans	9	4	
			(F) Seasoning	9	14	10
			(F) Mixed soups	9	5	6
			(F) Cooked with pasta	7	1	
			(F) Stir-fried		6	7
			(F) Boiled		1	8
			(F) Cooked with polenta		1	14
Fragaria vesca L. subsp. *vesca* (Rosaceae) UNISGCAL052	Fragoline, aula (A); Fragoline (C); Maius (O)	Fruits Fr	(F) Liquor	8	10	9
			(F) Jam	2	4	5
			(F) Raw	4	10	4
			(F) Preserved in alcohol	3		
			(F) Dessert		3	
			(F) Frozen		1	
			(F) Ice-cream or slush		4	
Glycyrrhiza glabra L. (Fabaceae) UNISGCAL035	Rigoliz (A), Argalizia (C)	Roots	(F) Raw	4	1	
			(F) Liquor	2		
			(M) Infusion to control blood pressure		2	
			(M) Decoction	3	2	
Helminthotheca echioides (L.) Holub (Asteraceae) UNISGCAL003-UNISGCAL004	Spraina (A); Scarola servaggia (C); Spiraina (O), Lactugag	Leaves	(F) Mixed soup	4	5	4
			(F) Boiled	3		

	(O)					
Helosciadium nodiflorum (L.) W.D.J.Koch subsp. *nodiflorum* (Apiaceae) UNISGCAL010	Scavun (O)	Aerial parts	(F) Raw in salads			6
Humulus lupulus L. (Cannabaceae)	Luppolo selvatico (A, O)	Shoots	(F) Boiled and in omelettes	1		1
Juglans regia L. (Juglandaceae)	*Arrë* (A); Noce (C); Nuis (fruit); Nuvier (tree) (O)	Fruits	(F) Raw	3	10	9
			(F) Filling for dried figs	9	16	11
			(F) Liquor	2	17	2
			(F) Cooked with pasta	1	1	
			(F) Cooked with sanguinaccio	2		1
			(F) Dessert	5	7	1
			(F) Omelettes	2		
			(M) Decoction	1	1	
		Dried leaves	(M) Powder to treat warts		4	
Juniperus communis L. (Cupressaceae)	Ginepro (C)	Berries	(F) Liquor		5	
			(F) Seasoning		4	
Knautia integrifolia (L.) Bertol. subsp. *integrifolia* (Asteraceae) UNISGCAL001 UNISGCAL002a/b	Chanaved d (O)	Aerial parts	(F) Mixed soup			8
Kundmannia sicula (L.) DC. (Apiaceae)	Piede di Nibbio (C)	Young leaves	(F) Mixed soup		1	
Laurus nobilis L. (Lauraceae) UNISGCAL038	Dafina (A); Lauro (A, C, O)	Berries	(F) Liquor	3	8	
		Leaves	(F) Seasoning	15	16	10
			(M) Decoction	3	1	5

			(M) Infusion to treat abdominal pain		7	5
			(M) Infusion to treat headache			1
			(M) Mouthwash			1
			(M) Fomentation to treat earache			1
Malus sp. pl. (Rosaceae)	Mola (A); Meli servaggi (C); Pummier (O)	Fruits	(F) Raw	12	12	10
			(F) Cooked in the ash	1		
			(F) Jam		1	
			(F) Boiled		1	
			(M) Infusion to treat cough	1		1
			(M) Decoction	2	5	2
Malva sylvestris L. (Malvaceae) UNISGCAL040	Malva (A); Marvn (C), Marva (C); Varmn (O)	Fresh or dried aerial parts; Roots	(M) Infusion to treat cough	4	3	4
			(F) Bread with lupins and rye			1
			(M) Poultice to treat the skin	4	5	2
			(M) Decoction	10	7	5
			(M) Infusion to treat abdominal pain	3	4	11
			(M) Infusion to treat the kidneys	1	1	

			(M) Infusion as a detox	3	1	
			(M) Poultice to treat toothache	2	5	
			(M) Mouthwash		1	1
			(M) Fomentation for earache			1
			(M) Infusion to treat headache			1
Matricaria chamomilla L. (Asteraceae) UNISGCAL043	Camomigl (A), Galumiggia (A); Camomill (C); Cacomill (O)	Aerial parts	(F) Liquor		3	
			(M) Infusion as a mild sedative	8	13	16
			(M) Infusion to treat cough	4	1	
			(M) Poultice to treat bee stings	1	2	1
			(M) Poultice to treat warts	1	1	
			(M) Decoction	5	5	3
			(M) Infusion to treat abdominal pain	7	4	8
			(M) Infusion to treat headache	1		1
			(M) Fomentation to treat earache			1
			(M) Anti-helminthic*			3
			(M) Infusion to treat the eyes	2	3	2
Mentha sp. pl. (Lamiaceae) Including *Mentha arvensis* L.	Mendre (A), Menta (A, C, O);	Leaves	(F) Seasoning	9	13	9
			(F) Liquor		4	

UNISGCAL046			(M) Infusion as anti-helminthic*			2
			(M) Infusion as a detox			3
			(M) Poultice to treat toothache		1	
Mentha pulegium L. subsp. *pulegium* (Lamiaceae) UNISGCAL047	Puliaiu (A)	Aerial parts	(F) Seasoning	2		
			(M) Fomentation to treat headache	2		
Mespilus germanica L. (Rosaceae)	Nespola (A, C)	Seeds	(F) Liquor	1	1	
		Fruits	(F) Raw	3		
Morus alba L. (Moraceae)	Amuricivice (A), Cerso (A); Cersa (O), Cersi (C), Murianchieri (O)	Fruits	(F) Raw	6	14	9
			(F) Liquor			1
Morus nigra L. (Moraceae)	Amuricivice (A), Cerso (A); Cersi (C); Cersa (O), Muricid(O)	Fruits	(F) Raw	6	10	6
			(F) Slush		2	
			(F) Jam		2	
Muscari comosum (L.) Mill. (Asparagaceae)	Cipugline (A), Cipollizze (A); Cipolline (C); Cipullett (O)	Bulbs	(F) Preserved with olive oil	6	5	2
			(F) Stir-fried	14	12	16
			(F) Preserved with vinegar	1	3	3
			(F) Omelette		4	
			(M) Juice applied on temples to treat headache*	6	3	5

			(M) Warm *Muscari* with bran to treat rheumatism		1	
Myrtus communis L. (Myrtaceae)	Mirtiddu/a (A, C); Murtidd (O)	Fruits	(F) Liquor	1	8	4
			(F) Seasoning	9	11	6
			(F) Raw as a snack			1
			(M) Powder of dry leaves to treat warts		1	
Nasturtium officinale R. Br. (Brassicaceae) UNISGCAL048	Crescione (A, C); Pisciariello (C)	Aerial parts	(F) Mixed soup	2	1	
			(F) Boiled and stir-fried		2	
			(F) Raw in salad		6	
Olea europaea L. (Oleaceae)	Ulivo (A, C)	Leaves	(F) Liquor		1	
			(M) Infusion as a sedative	2		
Opuntia ficus-indica (L.) Mill.(Cactaceae)	*Fik palet* (A); Fichia paletta (C); Fik de mori (O)	Leaves	(F) Peels sundried and then batter-fried *	4	15	3
			(F) Raw	5		14
			(F) Liquor	1		
			(M) Face lotions	3	2	
Origanum vulgare L. (Lamiaceae) UNISGCAL053	Rigat (A), Rigan (A); Arregano (C); Arringhian (O)	Aerial parts	(F) Seasoning	11	19	16
			(M) Infusion to treat abdominal pain		1	
			(M) Infusion to treat cough		1	
Orobanche crenata Forsk. (Orobanchaceae)	Spurchia (A)	Stems	(F) Boiled and then stir-fried	2		
Papaver rhoeas L. subsp. Rhoeas (Papaveraceae) UNISGCAL051	Paparine (A), Iuglicuche (A);	Aerial parts	(F) Boiled	8	11	2
			(F) Mixed soup	1	4	6

	Paparina (C); Cuccuved d (O)		(F) Stir-fried	1		1
Papaver somniferum L.* (Papaveraceae)		Seed pods	(M) Sleep inducing*		1	6
Parietaria officinalis L. (Urticaceae) UNISGCAL017	Erba du vient (C)	Aerial parts	(M) Poultice to treat stings		1	
			(M) Infusion to treat rheumatism		1	
			(M) Infusion to treat renal colic		1	
Pimpinella anisoides V.Brig (Apiaceae)	Ananzu (A, C), Anze (A), Anice (O)	Seeds	(F) Seasoning	1	16	12
Plantago sp. pl. (Plantaginaceae) Including *Plantago lanceolata* L. UNISGCAL009	Piantaggine (A)	Leaves	(M) To treat pain caused by vipers	1		
Portulaca oleracea L. (Portulacaceae) UNISGCAL012	Purchiacca (A, C), Andracchia (C); Purciacc, Gressun (O)	Aerial parts	(F) Raw in salads	19	15	10
			(F) Mixed soup			1
Prunus cerasus L. (Rosaceae)	*Gjershì* (A); Amarena servatica (C); Cerese (O)	Fruits	(F) Jam	14	10	4
			(F) Preserved with alcohol	5	3	
			(F) Liquor		1	
Prunus domestica L. (Rosaceae)	Prugna (A, O); Prugni (C)	Fruits	(F) Jam	6	3	8
			(F) Raw	4	5	

Prunus dulcis (Mill.) D.A.Webb (Rosaceae)	Mendole (A); Mandorle (C); Miendle (O)	Fruits	(F) Filling for figs	6	3	
			(F) Raw	2		3
		Peel	(M) Decoction	1		
Prunus spinosa L. subsp. *spinosa* (Rosaceae)	Prugnolo (A)	Fruits	(F) Raw	1		
Punica granatum L. (Lythraceae)	Shegga (A); Melograno (C, O)	Fruits	(F) Raw	2		5
			(F) Liquor	1	2	
			(M) Decoction	2		
Pyrus sp. pl. (Rosaceae)	Darda (A), Peri (A, C); Prussier (O)	Fruits	(F) Raw	11	13	9
			(F) Cooked in the ash	1		
			(F) Jam		2	2
Raphanus raphanistrum L. subsp. *raphanistrum* (Brassicaceae) UNISGCAL013	Laprista (A, C), Lapristi (A); Laprist (O)	Aerial parts	(F) Mixed soup	8	2	4
			(F) Boiled and then stir-fried	4	1	11
			(F) Boiled			12
Reichardia picroides (L.) Roth (Asteraceae) UNISGCAL019	Ricotteggia (A)		(F) Mixed soup	1		
Robinia pseudoacacia L. (Fabaceae)	Agaggia (C)	Flowers	(F) Batter-fried		4	
Rubus idaeus L. subsp. *idaeus* (Rosaceae)	Lamponi (C)	Fruits	(F) Raw		3	
			(F) Dessert		2	

			(F) Jam		1	
			(F) Frozen		1	
			(F) Liquor		1	
Rubus ulmifolius Schott (Rosaceae) UNISGCAL029	Menze (A); Muri (C); Runzieri (O)	Fruits	(F) Jam	13	13	16
			(F) Dessert	1	7	
			(F) Frozen	1	1	
			(F) Raw	4	6	3
			(F) Liquor	2	6	3
			(F) Slush		1	
Ruscus aculeatus L. (Asparagaceae) UNISGCAL033	Pungitopi (A); Pungisorci (C), Pungitopo (O)	Stems	(F) Omelettes	4	8	3
			(F) Cooked with pasta		1	
Ruta graveolens L. (Rutaceae)	Rutta (A); Ruta (C); Rud (O)	Leaves	(F) Liquor		1	
			(M) Anti-helminthic*	1	8	6
			(M) Infusion to treat abdominal pain			1
			(M) Infusion in alcohol to treat abdominal pain		1	
			(M) Poultice and infusion to treat toothache			1
			(M) Infusion as a panacea		2	
Salvia officinalis L. (Lamiaceae) UNISGCAL037	Salvia (A, C); Salvio (O)	Leaves	(F) Seasoning	2	7	3
			(F) Liquor		1	
			(M) Infusion to wash the eyes	2		
			(M) Infusion to treat		1	

			stomach pain			
			(M) Infusion to wash the teeth		1	
Salvia rosmarinus Schleid. (Lamiaceae) UNISGCAL021	Rosemarino (A, C); Rumarin (O)	Aerial parts	(F) Seasoning	3	4	9
			(F) Liquor		1	
			(M) Infusion to treat stomach pain		1	
			(M) Powder of dried leaves to treat warts		1	
Sambucus nigra L. (Viburnaceae)	*Shtogju* (A), Catamaiu (A); Sam'co (C); Mur de Reuz (O)	Flowers	(F) Batter-fried	2	13	1
			(F) Juice			1
			(M) Decoction	2		
			(M) Infusion to treat flu			1
			(M) Poultice to treat warts			2
Sinapis arvensis L. subsp. *arvensis* (Asteraceae) UNISGCAL041	Ravisol (O), Ricottella (O)	Aerial parts	(F) Boiled			8
Sonchus sp. pl. (Asteraceae) Including *Sonchus asper* (L.) Hill UNISGCAL031-UNISGCAL032 *Sonchus oleraceaus* (L.) L. UNISGCAL036	Cardun (A); Cardoni (C), Chardun (O)	Aerial parts	(F) Mixed soup	14	4	5
			(F) Boiled and stir-fried	11		2
			(F) Stems raw as a snack*			2
Sorbus domestica L. (Rosaceae)	Varzi (A) Sorbo (A, C); Zorbier (O)	Fruits	(F) Raw	5	10	14

F.H.Wigg. sect. *Taraxacum* (Asteraceae) UNISGCAL042	*Rrëshël* (A), Risceddi (A); Tarassico (C)	Aerial parts	(F) Mixed soup	4		
			(F) Boiled and then stir-fried	4	1	
			(F) Raw in salads		3	
	Cicoria (A); Marella (C), Mareddi (C); Cicoira (O)	Aerial parts	(F) Preserved with olive oil	1		
			(F) Mixed soup	13	9	13
			(F) Preserved with vinegar	3		
			(F) Boiled and then stir-fried	13	20	11
			(F) Boiled and then in salads		9	13
Thymus sp. pl. (Lamiaceae) and *Thymbra capitata* (L.) Cav.UNISGCAL044	Timo (C, O)	Aerial parts	(F) Seasoning		4	5
Tilia cordata Mill. (Malvaceae)	Tiglio (A, C, O)	Flowers	(M) Infusion as a sedative	3	2	1
Tolpis umbellata Bertol. (Asteraceae) UNISGCAL045	Yerva bianc (O)	Aerial parts	(F) Mixed soup			8
Urtica dioica L. (Urticaceae) UNISGCAL050	Ortica (A); Ardica (C); Iurtia (O)	Aerial parts	(F) Soup	1		2
			(F) Cooked in risotto		2	1
			(F) Ravioli filling		6	
			(M) Boiled to treat wounds	1		2
			(M) Poultice to wash the hair	3	3	8
			(M) Broth for fomentation as a panacea	2		
			(M) Poultice	1	1	

			to treat rheumatism			
			(M) Broth to treat the kidneys	1	2	
			(M) Infusion to treat abdominal pain		1	
			(M) Infusion as a laxative		1	
Ziziphus jujuba Mill. (Rhamnaceae)	Iuiule (A), Iuiuma (A, C); Iuiu (O)	(Dried) Fruits	(F) Raw	5	10	7
			(F) Liquor	2	1	
			(F) Jam		1	
			(M) Decoction	1	1	