

## A rich fading biocultural diversity? A review of traditional herbal teas used by minorities in the Balkans

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**Abstract:** Ethnobotanical studies focusing on medicinal plant ingredients have always been conducted with the aim of protecting the local ecological knowledge (LEK) of these natural resources. In the globalized world, the rapid loss of biodiversity and cultural and linguistic homogenization have threatened the survival of the planet, together with leading us towards an extinction crisis. In this extreme situation, LEK is also facing serious challenges, especially that of minorities where the pressure is manifold. A number of studies have been carried out among minority groups in recent times, and scientists are attempting to devise solid policy recommendations to celebrate their LEK in future development programs. In this regard, the current review was planned to explore the diversity of LEK on herbal teas held by minority groups in the Balkans to mobilize policymakers to help foster cultural resilience in the region. We reviewed eleven different ethnobotanical studies conducted in the Balkan region, which recorded 162 plants used in herbal teas for medicinal and recreational purposes. The dominant botanical families, represented by a large number of taxa, were Lamiaceae, Rosaceae, and Asteraceae. The highest number of use reports was recorded for the Rosaceae family. Most of these herbal ingredients were used to treat digestive problems. Traditional ethnobotanical knowledge is highly vulnerable to change, and, therefore, cultural heritage should be reinforced through future educational programs. Considering the diversity of the gathered data on herbal teas, we argue that local wisdom on natural resources should be exploited in future conservation strategies. It is worth mentioning that the folk therapeutic uses of the quoted medicinal plants are very sensitive to change when exposed to scholarly or written knowledge, sometimes also osmotically mixing with that. The article is a useful compendium for medical plant scholars to tackle the issue of biodiversity loss and promote environmental and social sustainability in the region.

**Key words:** Balkans, medicinal plants, wild herbal teas, ethnic minorities, biocultural diversity

### 1. Introduction

Plant ingredients play an important role in culinary practices and may have potential therapeutic value to treat a number of health issues and diseases. Every culture around the world has its own views on nature and has experienced the surrounding biological world in a variety of ways. The local experiences of communities regarding nature, including plants, have resulted in the retention of an accumulating body of knowledge generally known as local ecological knowledge (LEK). In the era of globalization, societal transitions due to cross-cultural interactions, and the subsequent remarkable social changes, have greatly influenced LEK and have put pressure on the biocultural heritage of local communities in different parts of the world (Aziz et al., 2020a; Aziz et al., 2021a; Aswani et al., 2018).

More particularly, minority cultures are experiencing huge challenges in retaining their own identity and keeping alive their LEK for a variety of reasons (Aziz et al., 2021b; Pieroni et al., 2014). Since humans and nature have an inextricable relationship, the three diversities of life, i.e. biodiversity, cultural diversity, and linguistic diversity, which are collectively known as biocultural diversity, and are facing similar challenges (Maffi, 2005) coming from both considerable environmental and social changes.

It has been estimated that 11,000–36,000 species may go extinct each year on this planet (Mora et al., 2013). Cultures and languages are being homogenized rapidly due to enormous transmigration and subsequent cross-cultural interactions in the globalized world. It is predicted that, by the end of this century, if the current

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extinction rate continues, we will lose half of all spoken languages (Harrison, 2007). In the early nineteen-nineties, a debate within the scientific community took place on the crucial relationships between biodiversity, cultural diversity, and linguistic diversity. In fact, the worldwide loss of biodiversity provoked the scientific community to rethink the upcoming challenges being faced by the three diversities, which collectively are leading the planet towards an *extinction crisis* (Krauss, 1992; Harmon, 1996, 2002; Nabhan, 1997; Posey, 1999). One of the crucial points of the debate concerned the protection of local cultures, languages, and the attached LEK to reduce the possible negative impacts of the upcoming crisis through a holistic approach, as endorsed by the Convention on Biological Diversity (CBD, 1992). In the aftermath of this debate, many attempts have been made to document LEK through a number of ethnobiological studies. In more recent times, an important trajectory of cross-cultural studies in ethnobiology has also emerged, and a variety of ethnobiologists have attempted to research LEK regarding medicinal plants and to discern the sociocultural adaptations and historical stratifications of different cultural groups (Pieroni et al., 2018; Söukand, 2019; Abbas et al., 2020; Aziz et al., 2020a, b; Aziz et al., 2021, and references therein). Newly emerged ethnobotanical literature has also closely focused on documenting the plant-centered LEK of minority groups, as they are a frequently marginalized and neglected sector within multicultural societies, and their LEK has rarely been part of scientific debate. It is worth mentioning that the LEK embedded in minority cultures is often vulnerable to change or erosion because these groups not only experience constant pressure from the remarkable social changes taking place but also are suppressed by dominant neighbouring cultures (Aziz et al., 2020a, b; 2021b). Therefore, minority groups always tend to adapt to the dominant way of thinking and behaviour, trying to integrate into mainstream society, which in turn affects the core body of their cultural knowledge, and plant-centered LEK is no exception. In the ongoing context, scientists are trying to put forward strong narratives to celebrate biocultural diversity, mainly focusing on minority groups to achieve future cultural resilience and promote useful conservation strategies for countering the dreadful consequences of the forthcoming socio-environmental catastrophes. Different conservation strategies have been presented by scientists to address the issue of the extinction crisis in a holistic way (Folke, 2006; Hanspach et al., 2020), and, among them, the idea of biocultural approaches has gained considerable attention from the scientific community (Gavin et al., 2018). In this regard, biocultural community protocols (BCPs) also take their place in scientific debates, as they describe: “the holistic interconnectedness of humanity with ecosystems and

obligations and responsibilities of indigenous and local communities, to preserve and maintain their traditional role as traditional guardians and custodians of these ecosystems through the maintenance of their cultures, spiritual beliefs and customary practices” (CBD, 2011).

In this article, we have attempted to review the diversity of plant-centered LEK among a few of the minority groups in the Balkan region, through the lens of the importance of their herbal teas, to develop policy incentives for protecting minority heritage and for devising conservation strategies based on their local wisdom and mutual partnerships. This will not only produce useful outcomes for promoting cultural resilience in the region but also help policymakers to formulate partnership-based conservation programs to protect biodiversity. We suggest it is necessary to revitalize the LEK on medicinal plants among minority groups through the process of developing BCPs, which should be more precisely devoted to encouraging the promotion of minority groups given that their local plant knowledge may present some original elements as compared to their dominant cultural counterparts.

The objectives of the study were:

- a) to analyse field ethnobotanical data on herbal teas among the various ethnic minorities in the Balkans,
- b) to assess the medicinal significance of herbal teas and present recommendations for celebrating the biocultural diversity in the region.

## 2. Materials and methods

### 2.1. Selection of ethnobotanical literature

For this review, we considered eleven ethnobotanical field studies carried out in the whole Balkan region, which included cross-cultural comparisons on medicinal and food plant traditional knowledge of the following countries and ethnic groups: Albania (Macedonians), Kosovo (Albanians, Bosniaks, Gorani, Serbians and Turks), North Macedonia (Albanians and Yörüks), Serbia (Albanians), and Romania (Tatars). In addition, we present unpublished data from field research on the Tatars in Bulgaria. The reviewed research articles were published in various peer reviewed scientific journals. We readily extracted all the relevant information and reviewed the research articles from various scientific databases, as our research group has mostly done their research among minority groups in the region. The main focus of the review was to analyse the local medicinal knowledge on herbal teas, and, therefore, we only extracted the data on this specific use. All the ethnobotanical information obtained from the reviewed studies was gathered through semi-structured interviews.

### 2.2. Data analysis

Data were compiled using an MS Excel spreadsheet, and the plants for all the researched groups were presented along with their botanical names and families, parts used,

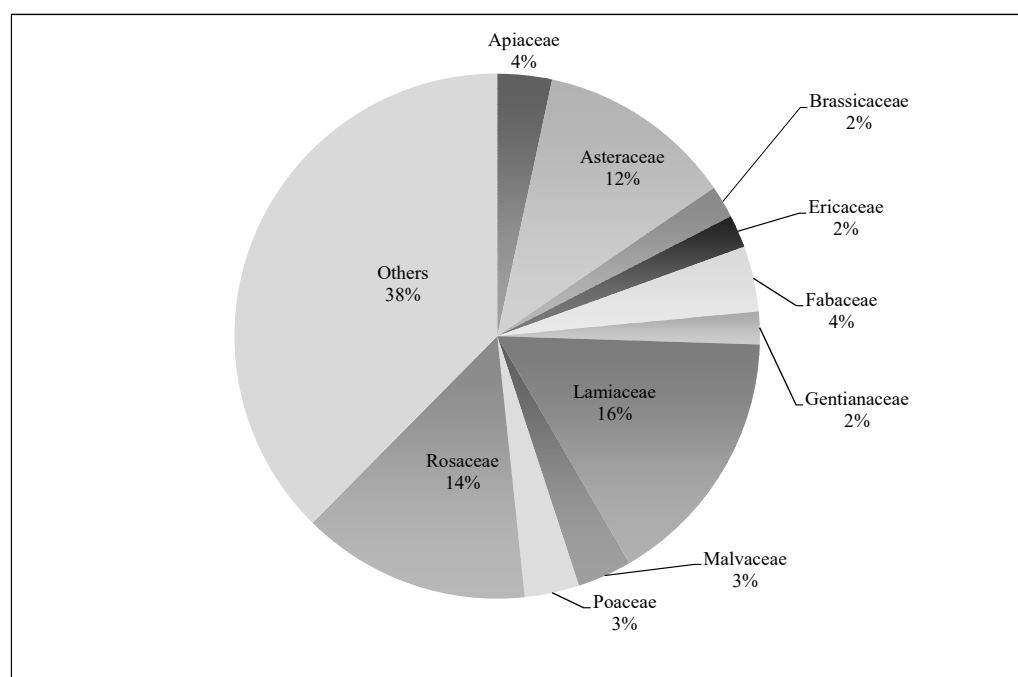
and medicinal uses. We created proportional pie charts to present the different sets of quantitative data, which are shown as percentages. The following studies were included in the review: Pieroni et al., 2011, 2013, 2014, 2017, Rexhepi et al., 2013, Mustafa et al., 2015, Pieroni et al., 2015, Quave and Pieroni, 2015, Nedelcheva et al., 2017, Mustafa et al., 2020, and Mullalija et al., 2021.

The current review also analyses unpublished data from a field study conducted in four villages in northeastern Bulgaria, which focused on the Tatars in southern Dobrudja, for comparison to the one already conducted in Romania (Pieroni et al., 2015). This study (\*\*) was conducted in May–July 2015 and comprised 28 key informants, all the Crimean Tatars, who ranged between 40 and 82 years of age. The Tatar informants were bilingual in Bulgarian and Crimean Tatar (which belongs to the Turkic language group), and, therefore, the semi-structured interviews were conducted in both Bulgarian and Turkish. Details regarding local names, ecology, part(s) used, transformations/processes, and local medicinal uses of all recorded teas mentioned by the informants were recorded. Prior informed consent was always verbally obtained before conducting the interviews, and the researchers adhered to the ethical guidelines of the International Society of Ethnobiology (ISE 2008) and the American Anthropological Association (AAA 2012). This study followed the main approaches and methods of the published studies were reviewed here. This allowed the authors to analyse and compare all the data.

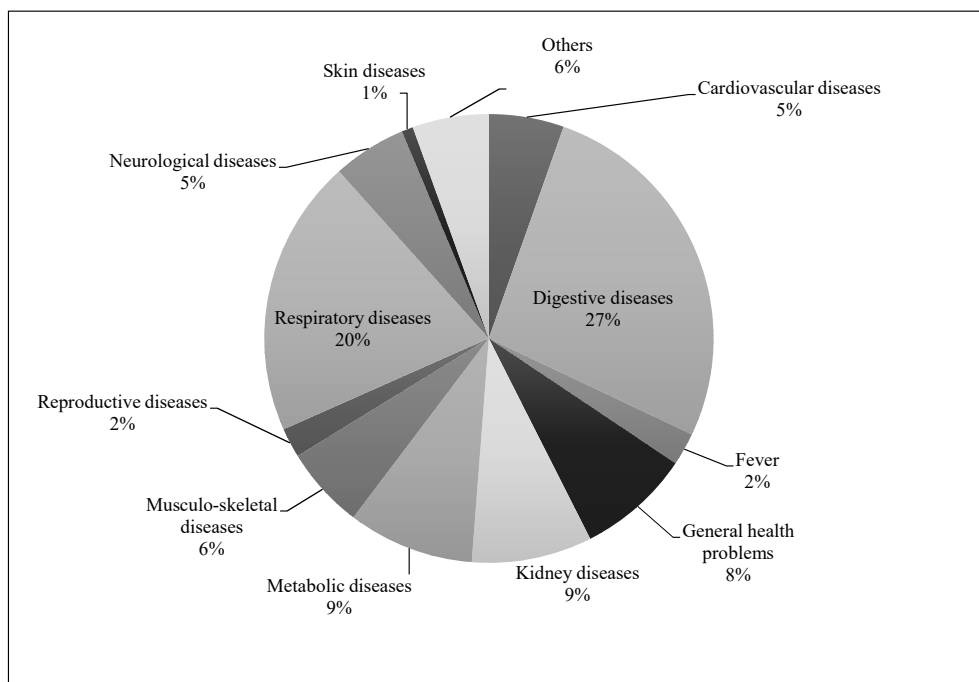
### 3. Results and discussion

#### 3.1. Medicinal uses of herbal teas

In this review, we found 162 plant taxa belonging to 54 botanical families that were used in herbal teas in the Balkan region (Table). The different minority groups that were considered and reported herbal teas included Albanians, Bosniaks, Gorani, Macedonians, Serbians, Tatars, Turks, and Yörüks. The herbal teas were used by these minority communities for treating various health complaints and diseases. Quantitative data revealed a total of 994 use reports for the recorded herbal teas in which only 24 use reports were solely quoted for improving general health. A large number of these plants used in herbal teas belonged to the families Lamiaceae, Rosaceae, and Asteraceae (Figure 1), and the main category of disease treated by these herbal teas was gastrointestinal problems (Figure 2). The quoted plants are equally used for culinary and medicinal purposes and, therefore, the wider cultural acceptance of these botanical families may be attributed to their special aromatic characteristics, which give them unique flavours and make them favourable for consumption as food or medicine. For instance, scientific evidence has confirmed that the Lamiaceae family has strong antioxidant potential (Michel et al., 2020) and its broad cultural acceptance could also be related to the long-time exposure and experience of local cultures to their curative and health improving effects. It has been stated that in general people do not select medicinal plants randomly (Daniela et al., 2020). In a recent study by Gras et al. (2021), who studied



**Figure 1.** Proportion of botanical families used in wild herbal teas for medicinal purposes by the studied groups.



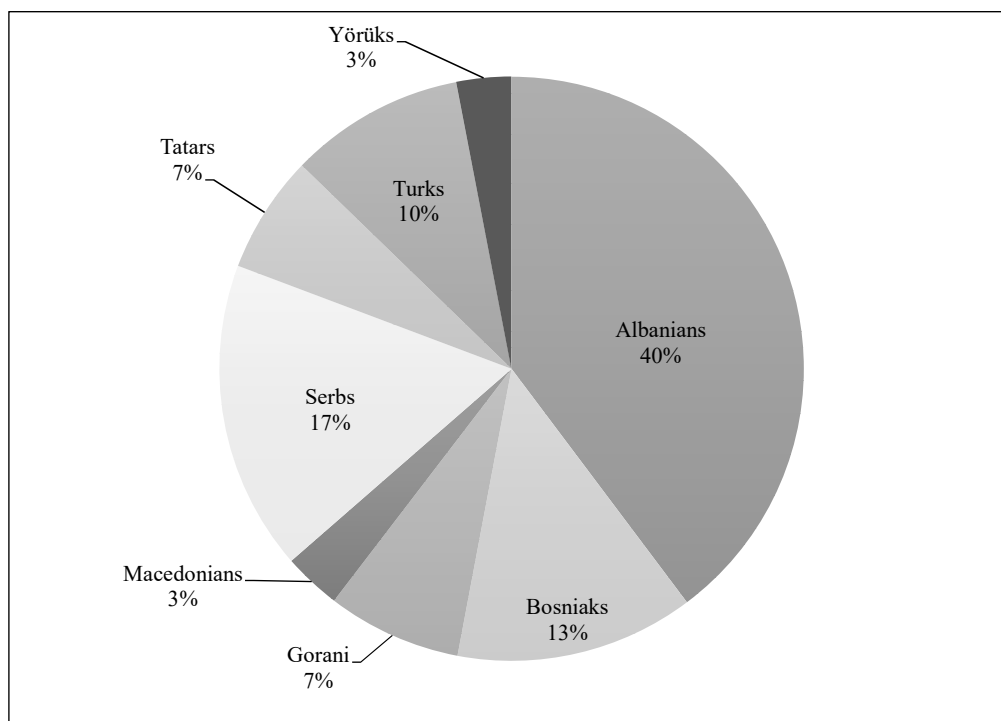
**Figure 2.** Showing the proportion of humans' health complications and diseases treated with the wild herbal teas.

the medicinal importance of botanical families from a phylogenetic perspective, the most reported families were Lamiaceae and Asteraceae, and the most reported health issues were nutritional and digestive system disorders. The literature has frequently reported the use of these three botanical families in various field ethnobotanical studies in the Mediterranean region. The frequent use of these families could also be explained by the fact that they are cosmopolitan and are well represented in these regions. In ethno-floristic studies from Mediterranean regions, these families always predominate (Gras et al., 2019, 2020; Pieroni et al., 2002; Pieroni & Quave, 2004; Scherrer et al., 2005; Akerreta et al., 2007; Maxia et al., 2007; Guarrera et al., 2005; Guarrera et al., 2008; González-Tejero et al., 2008; Carrió & Vallès, 2012; Menale et al., 2016; Rigat et al., 2017). We can conclude that people use those plant taxa, which are easily accessible to them and not far from their homes or workplaces, as Johns et al. (1990) and Bonet et al. (1999) demonstrated.

It is worth mentioning that a large number of medicinal taxa within a botanical family does not confirm the latter's medicinal potential; for instance, the Lamiaceae family was represented by a large number of taxa, but Rosaceae was at the top of the list in treating various health complaints and diseases. According to Moerman (1996), in a random universe, the size of a botanical family in terms of the number of taxa would be the best parameter of its medicinal potential; however, the Asteraceae family contains more medicinal plants than randomness would

indicate, and, therefore, the size of a botanical family cannot be the only condition for its success. Moerman et al. (1999) found, through a comparative analysis of several geographically distant medicinal floras, that the five most important medicinal plant families in four very distinct regions (North America, Korea, Kashmir, the Chiapas Highlands) were delineated by only nine plant families (Araceae, Bignoniaceae, Ericaceae, Euphorbiaceae, Fabaceae, Loganiaceae, Malvaceae, Rosaceae, Solanaceae), accounting for the existence of a global pattern of human knowledge. Indeed, to include a fifth area (Ecuador), only three more families were necessary (Apiaceae, Asteraceae, Lamiaceae).

Among the study groups, most of the plants used in herbal teas were quoted by Albanians, while the fewest taxa were used by Yörüks (Figure 3). It is important to note that the cultural acceptance of botanical taxa is also affected by certain socio-ecological conditions. Albanians are the most well represented group in the reviewed studies. Albanians in the Balkans, in response to very complex historical trajectories of linguistic and religious isolation, showed specific herbal tea uses of taxa different from the other groups. These differences confirm the importance of cultural, religious, and ethnic divisions in shaping divergent traditional uses of natural resources (Pieroni et al., 2011, 2013, Rexhepi et al., 2013; Mustafa et al., 2015; Quave and Pieroni, 2015; Mustafa et al., 2020; Mullalija et al., 2021). Yörüks differ from the other ethnic groups in their "nomadic roots" and can be considered a remarkable



**Figure 3.** Wild herbal teas reported by the different ethnic groups from the Balkans region.

cultural phenomenon in a multicultural and complex environment in the Balkans. Their traditional knowledge is stored within a well-defined cultural boundary involving the local dialect, endogamy and specific casual clothing. The characteristics of this community include elements that can be seen as permanent, and independent of a changing external environmental, and characteristic of a former nomadic way of life, namely the use of dried plants and the lack of plant-based remedies (including herbal teas) (Nedelcheva et al., 2017). Our findings indicate that minorities use a variety of teas because they express their social identities through these beverages, which represent a crucial part of the local food heritage. More specifically, herbal teas were possible very important in the Ottoman Balkans since poor mountain people had no money to buy black tea, which was an important Turkish beverage, and, therefore, they likely started using wild plants as a substitute for preparing homemade teas.

In this review, we found a few taxa that were frequently used in herbal teas by the studied minority groups, and these included *Althaea officinalis*, *Cornus mas*, *Crataegus monogyna*, *Crataegus pentagyna*, *Hypericum perforatum*, and *Sambucus nigra*. The common use of such taxa could be the result of cross-cultural interactions, which may have created an ideal setting for the exchange of LEK on these medicinal plants on a spatio-temporal basis. We also found that most of the plants were used to treat digestive problems; this finding could be linked to the fact

homemade teas were considered an integral part of the domestic food care and complement heavy meals, while sometimes they could be considered as an adaptive answer to poor hygiene conditions, limited access to clean food and water, and the lack of basic health care services. It is also important to note that ready access to these plant taxa in anthropogenic environments may have provided a sound backdrop for long-term ecological experiences for local communities. The therapeutic efficiency of herbal teas that were used for digestive issues may also explain the fact that these plant ingredients are sometimes also used in culinary practices, and locals are more familiar with these plant-based ingredients, having experienced their health-promoting effects on a daily basis.

### 3.2. Re-discovery of the LEK of minorities: the central point of discussion

One of the important aims of ethnobiological studies among minorities is to rediscover, celebrate, and keep intact their local biocultural heritage and attached knowledge and protect it for their social sustainability in particular and for environmental sustainability in general. We believe that mainstream ethnobotanical knowledge has the possibility to be affected by scholarly/written ethnobotanical knowledge as it is subject to daily use and is frequently renegotiated among individuals or groups of individuals within a given society, which is influenced by certain exotic factors. In this regard, the ethnobotanical knowledge of minority groups may represent to a greater



extent the original folk phytotherapy than does the widely recognized ethnobotanical knowledge. We propose that research investigations utilize strategies that are more inclusive of local minority groups as this is important from a perspective of fair and just research and decision-making (Agrawal, 1995). As Simpson (2004) indicated, colonial invasions have marginalized many communities and their worldviews in the decision-making process. Therefore, fair and just research investigations would not marginalize the worldviews or epistemologies of certain groups in the research and its synthesis. Fair and just decision-making similarly would ensure that multiple worldviews contribute to informed decision-making. Collaboration with minority groups in research and decision-making in ways that are agreeable to communities can help counter disparities in the power and influence of different worldviews or knowledge systems (Behe & Daniel, 2018). The historical contexts and identities of indigenous peoples and local communities vary, and therefore so do the approaches and reasons for collaboration and participation with them. These range from collaborating with Indigenous and local communities in the hope of acting ethically to maintain good relationships with local collaborators, colleagues, and communities, to working with people and knowledge systems that have been marginalized, with the hope of building local capacity, advancing human rights and reducing inequalities (Wheeler & Root-Bernstein, 2020). Consequently, this will not only produce economic venues for the promotion of cultural knowledge of the given minority societies, but it will also help the pharmacopoeias to define new lines of research in the field of drug discovery.

Looking at the tremendous diversity of LEK on medicinal plants used in herbal teas among the studied minority groups, it is highly advisable to promote ecotourism and traditional gastronomy to help eliminate the socioeconomic marginalization of these groups and celebrate their cultural heritage. In recent times, researchers have worked on the premise that ecotourism could represent an element for bringing about positive economic change in many underprivileged human societies (Richardson, 2010; Boonsiritomachai & Phonthanukitithaworn, 2019; Binns & Nel, 2002; Hall, 2007; Li et al., 2018; Liu & Wu, 2019; Wen et al., 2021). The subject has also gained increasing attention from policymakers and other international organizations working in the food sector. Ecotourism and gastronomy in this context could incentivize minority groups to rediscover their biocultural heritage, including plant-centered local knowledge, and keep it intact. The less popular cultural and gastronomic knowledge of minority groups could be at the centre of future policy frameworks, and the relevant authorities need to pay attention to the demise of this heritage to guarantee any future sustainable development goals. It is also worth mentioning that the

promotion of local plant-centred gastronomy should incorporate conservation strategies for the local flora in this regard. Knowing the importance of the local flora, local inhabitants will tend to protect it and willingly participate in conservation efforts, perhaps becoming a crucial part of partnership-based strategies.

**3.3. Conservation strategies: a triple wellbeing is crucial** Remarkable environmental change has greatly threatened biodiversity around the globe. Many scientists have endeavoured to formulate and put forward certain conservation strategies to prevent the global loss of biodiversity. We have also seen several policy frameworks for establishing solid foundations for protecting biodiversity, in which three of the main conservation approaches are frequently discussed among researchers, i.e. New Conservation Science Approach (Marvier & Kareiva, 2014), Half Earth Approach (Wilson, 2016), and the Biocultural Approach (Gavin et al., 2018). It is unfair to impose restrictions on their applicability, but, in fact, certain limitations have emerged for the two former conservation strategies, and critics have expressed some reservations regarding their applicability in broader perspectives. The biocultural approach has been highly valued among conservation scientists, as the approach takes on board the views of different stakeholders to proceed towards a conservation goal (Gavin et al., 2018).

One important feature of the approach is the involvement of local communities who have traditional knowledge on natural resources, including medicinal plants, and vast knowledge on ecosystem management. Looking at the issue of conservation, scientists have emphasized this model as it ensures the inclusion of local wisdom in formulating policy frameworks, and it proceeds without underestimating the rights of local communities. In the current context, it is very important to seriously consider the cultural knowledge of minorities, who are unheard voices in pluralistic societies in many parts of the world. We affirm that culture and language are inextricably linked, and therefore a culture cannot be understood without considering its way of communicating, i.e., language. We must endorse the importance of language in understanding the cultural interpretation of nature and the environment, crucially embedded within a given society. Looking at the speed of loss of local minority languages, we need to pay serious attention to the issue of *linguicide*, the death of a language, as languages retain a wealth of information regarding nature and ecosystem management. Humans and nature are closely interlinked, and, therefore, the depletion of cultures and languages also leads to serious concerns for the sustainable goals aimed at biodiversity protection. Our narrative is also strongly supported by the work of Maffi (2001), who stated that the three diversities of life are progressing in parallel, and,

therefore, we should examine the issue of sustainability through a holistic approach. For instance, ecosystems are being depleted, which, in turn, threatens the social and economic existence of local communities. As proposed by Musson (2020), the concept of triple wellbeing stresses the idea that humans have evolved to extraordinary levels of interconnectivity in the globalised world, and yet, in this moment of ultra-connectivity, we find ourselves suffering from chronic disconnection, i.e. the disconnection from ourselves, from nature and from society.

We have seen a variety of conflicts in regard to the rights of minority groups, and we argue that, without going into these conflicts which would further blur the perspective, policymakers should pay serious attention to the local biocultural heritage of these groups, which is eroding at the same speed as their languages, and their cultural values, which are changing and passing through transition states in many parts of the world. Bioconservation experts should focus more on the issue of linguistic and religious diversities and LEK should be included in policy frameworks to incorporate sound measures for protecting the cultural heritage of local communities linked to the biological world.

#### 4. Conclusion

The current review summarizes the great diversity of LEK on wild herbal teas used for medicinal and recreational

purposes recorded among cultural minorities in the Balkan region. Local ecological knowledge is an important asset to these local minority cultures and is closely linked to daily life. It is unfortunate that the LEK of these minorities is facing certain challenges that are driving this knowledge towards extinction. Keeping the cultural knowledge of these groups, instead, could foster original elements of folk phytotherapy, which are possibly less influenced by external factors including written or scholarly knowledge. In our globalized world, minority cultures are rapidly homogenizing, languages are declining, and we are losing biodiversity, which, in turn, has a substantial impact on the traditional/cultural lifestyle and attached (esp. wild) plant-centered practices of the local communities. In the current threatening situation for minority groups, we would need to propose and implement a bioconservation framework that ensures also the sustainability of the whole socio-ecological system, and, therefore, the celebration of biocultural diversity, in order to revitalize local cultural customs. This will not only guarantee future food and herbal sustainability but will also help policymakers to plan partnership-based approaches for countering the negative impacts of environmental catastrophe and cultural decline of minorities in the near future.

#### Conflicts of interest

The authors declare that they have no conflict of interest.

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**Table 1.** Herbal teas used by minorities recorded in the Balkans.

Taxon and family	Recorded local name(s)	Status	Plant part(s) used	Recorded tea and folk medical use or treated pathologies	T A / R O	T A / B G	Y O / M K	A L / S R	A L / M K	A L / M K	G O / M K	M K / A L	A L / K S	B O / K S	T U / K S	G O / K S	A L / K S	S R / K S	A L / K S	S R / K S
<i>Achillea millefolium</i> L. Asteraceae	Coada șoriceluli <sup>TA</sup> Бял равнец <sup>TA</sup>	W	FL	Tea (respiratory ailments)	+	+										+				+
				Tea (internal cleansing)			+										+			
				Tea (stomach pain)			+											+	+	+
	Lule e bardhë <sup>AL</sup> Lule miu <sup>AL</sup>		FAP	Tea (stomach-ache and liver problems)				+										+		
	Barpezmi <sup>AL</sup> Petorka <sup>GO</sup>			Tea (haemorrhoids)					+	+										
	Barëpezmatimi <sup>A</sup> Hajdutska trava <sup>BO,GO</sup> Hajdut oti <sup>TU</sup>		FAP	Infusion (orexigenic, anti-microbial, carminative and spasmolytic, influenza, stomach-ache)									+	+	+					
				Infusion (anti-cholesterolemic, antacid, menstrual pains)		+								+						
				Infusion (anti-diabetic)										+	+			+		
				Infusion (antiemetic)								+								
				Infusion (anti-rheumatic)															+	+
				Infusion (urinary system)																
				Tea (against diarrhoea)														+	+	
<i>Aesculus hippocastanum</i> L. Sapindaceae		W	SE	Tea (respiratory ailments)															+	







			AP	Tea (against gastritis)																+	
<i>Asplenium trichomanes</i> L. Aspleniaceae		W	LE	Tea (diuretic)								+									
<i>Avena sativa</i> L. Poaceae	Thekna <sup>AL</sup> Jullaf <sup>TU</sup>	C	AP	Infusion (skeletal system enhancement)								+		+							
<i>Ballota nigra</i> L. Lamiaceae		W	LE	Tea (vomiting and digestive problems, gastritis)							+										
<i>Bellis perennis</i> L. Asteraceae	Lulebardha <sup>AL</sup>	W	FL	Tea (diarrhoea, respiratory disease)													+				
<i>Betula pubescens</i> L. Betulaceae	Mështekna <sup>AL</sup> Plep i bardhë <sup>AL</sup> Breza <sup>BO,GO</sup> Hush agagji <sup>TU</sup>	W	LE	Infusion (oedema)									+	+	+						
	Bello breza <sup>SR</sup> Breza <sup>SR</sup> Fshisa <sup>AL</sup>		FR	Infusion (urinary disorders)										+	+				+		
<i>Calamintha grandiflora</i> Pursh Lamiaceae	Kalaminta lulemadhe, c, aj mali <sup>AL</sup>	W	LE	Tea (cough, fever)							+										
<i>Calendula officinalis</i> L. Asteraceae	Nergizçiçek <sup>TA</sup>	C	FL	Tea (digestive, respiratory ailments)	+																
	Neven <sup>SR</sup>		LE	Tea (improve blood circulation, cancer, stomach ulcers)																+	
			FL	Decoction (asthma)																+	
<i>Camellia sinensis</i> (L.) Kuntze Theaceae	Çay <sup>TA</sup>		LE	Dried, fermented - one spoonful of tea, ingested (diarrhoea)	+																
<i>Capsella bursa-pastoris</i> (L.) Medik. Brassicaceae	Bisht mace <sup>AL</sup> Strajçeçobani <sup>AL</sup> Lule kam skam <sup>AL</sup> Ovçarska torba <sup>GO</sup>	W	FAP	Tea (cough, influenza, hypertension)									+	+							
	Mëdos' më			Tea (anti-																+	+

	don <sup>AL</sup> Tarqushak <sup>BO,GO</sup> Hoqunequ <sup>BO,GO</sup>			coagulant)															
<i>Capsicum annuum</i> L. Solanaceae	Divlji papric <sup>SR</sup>		LE	Tea (against gastritis)															+
<i>Castanea sativa</i> Mill. Fagaceae	Gështenjë <sup>AL</sup>	W	KE	Tea (sore throat)				+											
	Gështenja <sup>AL</sup> Kështaja <sup>AL</sup> Cesten <sup>GO</sup>		LE/KE	Tea (cough)						+	+								
	Gështaja <sup>AL</sup>		FL	Infusion (anti-anemic, bronchitis, anti-tussive)									+						
			BR	Infusion (anti-tussive)										+					
<i>Centaurea cyanus</i> L. Asteraceae	Kokoçeli <sup>AL</sup> Kicica <sup>BO,GO</sup>	W	FL	Infusion (respiratory disorders)										+	+				
<i>Centaurium erythraea</i> Rafn Gentianaceae	Kantarioni I kuq <sup>AL</sup> Bari i etheve <sup>AL</sup> Kicica <sup>BO,GO</sup>	W	FAP	Infusion (anti-pyretic, anti-malaria)										+	+	+			+
				Infusion (orexigenic)										+	+				
				Infusion (anti-anemic)											+				
				Infusion (antacid)												+			
				Infusion (immunostimulant )										+		+			
	Kitica <sup>SR</sup> Kiçica <sup>SR</sup> Crveni kantarion <sup>SR</sup>		AP	Tea (stomach-ache, diarrhoea, vomit, antipyretic)															+
<i>Centaurium umbellatum</i> Gilib. Gentianaceae	Lulegiakëkuqe <sup>AL</sup> Njëmijfletëshai <sup>A</sup> L Kantarioni i kuq <sup>AL</sup>	W	FAP	Tea (digestive system problems and to treat anaemia)							+								
<i>Ceterach officinarum</i> Willd. Aspleniaceae	Fieri i eger <sup>AL</sup> Fieri i gurit <sup>AL</sup>	W	AP	Tea (kidney problems)															+
			AP	Decoction															+

				(anticancer)															
			RO	Tea (prostate)															+
<i>Chenopodium album</i> L. Amaranthaceae	Liboda <sup>AL</sup> Therbcok <sup>AL</sup> Divla lloboda <sup>SR</sup>	W	LE	Decoction (increase immunity)															+
<i>Cichorium intybus</i> L. Asteraceae		W	AP	Tea (“Good for the bones”)				+											
	Çikore, ujthithse <sup>AL</sup>			Tea (stomach- ache)						+									
	Vodopija <sup>SR</sup>			Tea (gastritis, urinary system stones)															+
<i>Cirsium vulgare</i> (Savi) Ten. Asteraceae	Therra <sup>AL</sup>	W	FL	Tea (backache, haemorrhoids)				+											
<i>Convolvulus arvensis</i> L. Convolvulaceae	Dredhja e arave <sup>AL</sup>	W	AP	Tea (hypertension and to strengthen immunity)						+									
<i>Cornus mas</i> L. Cornaceae		W	FR	Infusion (anti- anemic, anti- hypertensive)									+	+	+		+	+	
				Infusion (anti- diarrheal, anti- malarial, antiemetic in early stage of pregnancy (for morning sickness), anti-hemorrhoidal)			+										+	+	
				Infusion (improve immunity)									+						+
<i>Cornus sanguinea</i> L. Cornaceae		W	LE/FR	Tea (stomach- ache)						+									
<i>Corylus avellana</i> L. Betulaceae	Pandak <sup>YO</sup> Findik <sup>TU</sup>	W	LE	Tea (throat pain)				+											
	Lejthia <sup>AL</sup>		KE	Tea (sore throat)															
	Lajthia <sup>AL</sup> Lethia <sup>AL</sup>		LE/KE	Tea (strong tea, reduce menstrual pain)								+	+						
	Lejthi <sup>AL</sup> Adi findik <sup>TU</sup>		LE	Infusion (anti- tussive, antacid, hepatic disorders)											+	+			
	Лешник <sup>TA</sup>		LE	Decoction (kidney)			+												

				disorders)															
<i>Cotinus coggygia</i> Scop. Anacardiaceae	Ruj <sup>TU</sup> Boyaci sumak <sup>TU</sup>	W	LE	Infusion (stomach disorders, kidney disorders, anti-diarrheal)															
			FR	Infusion (anti-diarrheal)															
<i>Crataegus monogyna</i> Jacq. and <i>C. pentagyna</i> Waldst. & Kit. ex Willd. Rosaceae		W	FL	Tea (sore throat, "good for the heart", hypertension, diuretic)															
	Murrizi <sup>AL</sup> Glog <sup>BO,GO</sup> Adi aliç <sup>TU</sup> Glog <sup>SR</sup>		FR	Infusion (improve blood circulation, anti-hypertensive, neurorelaxant)															
			LE/FL	Infusion (anti-hypertensive, anti-diabetic, anti-cholesterolemic)															
	Glog <sup>SR</sup> Kozina pogača <sup>SR</sup>		FR	Tea (respiratory disorders, insomnia)															
				Tea (hypertension)															
				Decoction (heart disease for people over 40 years)															
			FL/FR	Tea (blood circulation, flu, hypertension)															
			FR	Tea (headache)															
			LE	Tea (for lungs, respiratory complaints)															
<i>Crataegus sericeus</i> Dzekov Rosaceae		W	LE/FL	Tea (headaches, insomnia, hypertension, anti-rheumatic, anti-cancer)															
			FR	Decoction (cardiotonic, stomach-ache,															

				anti-fever, anti-rheumatic)															
	Murrisi <sup>AL</sup>			Tea (anti-hypertensive)					+										
<i>Cydonia oblonga</i> L. Rosaceae	Aiva <sup>YO</sup> Ayva <sup>TU</sup> Dunja <sup>SR</sup>	SD/W	LE	Tea (throat pain)					+									+	+
		C	LE	Tea (stomach-ache)									+						
	Ftua <sup>AL</sup> Dunja <sup>BO,GO</sup>		LE	Infusion (anti-diarrheal)										+	+				
	Ftoni <sup>AL</sup> Ftoi <sup>AL</sup> Dunja <sup>SR</sup>		LE	Tea (cough, respiratory system)														+	
<i>Cynara cardunculus</i> L. Asteraceae	Ingjinare <sup>AL</sup> hinardh <sup>AL</sup> Artiçok <sup>AL</sup> argjinaria e rrekuallt <sup>AL</sup>	C	AP	Tea (to treat anaemia, and to improve appetite)															
<i>Daucus carota</i> L. Apiaceae		W	RO/FAP	Tea (to treat gastric ulcers and dysentery)															
<i>Dryopteris filix-mas</i> (L.) Schott Dryopteridaceae		W	LE	Infusion (anti-parasitic)															
<i>Equisetum arvense</i> L. Equisetaceae	Konksi rep <sup>BO,GO</sup>	W	AP	Infusion (hepatic disorders, kidney infections and pain, prostatitis)															
	Rastavic <sup>SR</sup>			Tea (urinary system infections)															
				Decoction mixed with <i>Betula</i> sp. (urinary system infections)															
	Bishti i kalit <sup>AL</sup> Konjurep <sup>SR</sup>			Tea (urinary system)															
<i>Foeniculum vulgare</i> Mill. Apiaceae	Kopër <sup>AL</sup> Rezene <sup>BO,GO</sup> Anason <sup>TU</sup>	W	FR	Infusion (spasmolytic, galactagogue)															
<i>Fragaria vesca</i> L.		W	LE	Tea (cold, female															



<i>Rosaceae</i>				sterility, fertility aid)															
	Dredhëza e malit <sup>AL</sup> Lagoda <sup>AL</sup>		LE/FR	Tea (digestive problems, gastritis)						+								+	
	Dredhza <sup>AL</sup> Divlja jagoda <sup>BO,GO</sup>		FR	Infusion (digestive, spasmolytic)								+		+					
	Šumska jagoda <sup>SR</sup>		LE	Tea (sclerosis)															+
	Divlja jagoda <sup>SR</sup> Dredhza e eger <sup>AL</sup>		LE	Tea mixed with <i>Thymus vulgaris</i> (diabetes, internal cleaning of body, nervous system, insomnia, stomach-ache)															+
			FR	Tea (hypertension)															+
<i>Euphorbia cyparissias</i> L. Euphorbiaceae	Sitna mlječika <sup>SR</sup>	W	AP	Tea (prostate)														+	
<i>Fraxinus excelsior</i> L. Oleaceae	Јасика <sup>MK</sup>	W	LE	Tea (diuretic)							+								
			Ash	Tea (drunk for relieving skin burns)															+
<i>Fumaria officinalis</i> L. Papaveraceae	Shatere <sup>TU</sup>	W	AP	Infusion (diuretic, relaxant)										+	+				
				Infusion (anti-hypertensive)										+					
<i>Galega officinalis</i> L. Fabaceae	Lule bricjapi <sup>AL</sup>	W	FL	Tea (diabetes)						+									
<i>Galium verum</i> L. Rubiaceae	Lule ivanike <sup>AL</sup>	W	FAP	Tea (kidney and urinary problems)						+									
			AP	Infusion (kidney disorders)															+
<i>Gentiana lutea</i> L. Gentianaceae		W	RO	Tea (digestive troubles, stomach-ache, diarrhoea)															+
	Gentian <sup>AL</sup> Sanëz <sup>AL</sup> Lincur <sup>AL</sup> Goreç <sup>AL</sup>		RO/FAP	Tea (influenza, cough, fever)															+

	Bar zemre <sup>AL</sup> Lincura <sup>GO</sup>																		
	Geciana <sup>AL</sup> Lincura <sup>BOG</sup>		RO	Infusion (digestive disorders)															
	Bari i zemres <sup>AL</sup> Ravanj <sup>SR</sup> Lincura <sup>SR</sup>		AP/LE	Tea (blood, ulcers, stomach)															
			RO	Tea (hearth disorders)															
<i>Geranium sanguineum</i> L. Geraniaceae	Zdrvac <sup>BO,GO</sup>		AP	Infusion (respiratory disorders, laryngitis)															
<i>Helichrysum</i> spp. Asteraceae	Свилен <sup>MK</sup>	W	FAP	Infusion (orexigenic, stomach-ache, as a digestive, anti-diarrheal, cardiostimulant, diuretic)															
<i>Hordeum vulgare</i> L. Poaceae	Arpa <sup>TA</sup>	C	GR	Tea (worms)	+														
			GR	Tea (recreational)															
<i>Humulus lupulus</i> L. Cannabaceae	Bari sherbetit <sup>AL</sup> Amel brumit <sup>TU</sup> Amel <sup>TU</sup>	W	AP	Infusion (insomnia, neurorelaxant, orexigenic)															
			FR	Infusion (insomnia)															
			FR	Infusion (diuretic)															
				Infusion (prostate disorders)															
	Hmejl <sup>SR</sup>		AP	Decoction: mixed with <i>M. piperita</i> and <i>Ocimum basilicum</i> (insomnia)															
<i>Hypericum perforatum</i> L. Hypericaceae		W	FL	Tea (digestive, stomach-ache, sedative, panacea, hypertension, cough)	+														

	Sara chai <sup>YO</sup> Sarı çay <sup>TU</sup>			Tea (cough, diarrhoea, stomach pain)		+	+											+	+			
	Katrion <sup>AL</sup> Kantarion <sup>AL</sup> Çaj bistrë <sup>AL</sup> Lule e verdhë <sup>AL</sup>		FAP	Tea (for treating kidney stones, cold, stomach-ache, rheumatisms (used every day for at least a few months) or simply drunk as a “healthy” beverage)															+	+		
	Lulegjak <sup>AL</sup> Lulebasani <sup>AL</sup> Kantarion <sup>AL</sup> Kantarion <sup>GO</sup>			Tea (general kidney pains and to remove kidney stones)																		
	Балсам <sup>MK</sup>		FAP	Infusion (stomach-ache)																		
	Kantarioni <sup>AL</sup> Kantarion <sup>BO,GO</sup>		AP	Infusion (anti-anemic, anti-coagulant, neurorelaxant, antacid)																		
	Kantarion <sup>SR</sup>		AP	Tea (gastritis)																		
				Tea (stomach-ache, haemorrhoids)																		
				Decoction: mixed with <i>A. millefolium</i> & <i>Artemisa absinthum</i> (increase appetite)																		
	Lule e sarit <sup>AL</sup> Kantarion <sup>AL</sup> Kantarijon <sup>SR</sup> Zuti čaj <sup>SR</sup>	AP		Tea (gastritis, warts, headache, internal inflammation)																		
				Tea (anaemia, for better digestion,																		

				diarrhoea)															
<i>Hypericum montanum</i> L. Hypericaceae		W	AP	Tea (stomach-ache, digestive troubles, prostatitis)				+											
<i>Juglans regia</i> L. Juglandaceae		SD	LE, FPR	Tea, sometimes with onions (cough)	+													+	
	Arra e butë <sup>AL</sup> Arra <sup>AL</sup>			Tea (anti-anemic, digestive system problems, constipation)						+	+								
			UFR	Infusion (for treating hyperthyroidism)								+							
	Arah <sup>SR</sup>		LE	Tea (anaemia, improve digestion)															+
			UFR	Tea (anti- cholesterolemic)															+
	Arra <sup>AL</sup> Orahovoulje <sup>SR</sup> Oraho <sup>SR</sup>		FR	Tea (cough)														+	
<i>Juncus effusus</i> L. Juncaceae	Xuklla <sup>TU</sup>	W	AP	Infusion (urinary tract disorders)											+				
<i>Juniperus communis</i> L. Cupressaceae		W	LE+GA	Tea (blood cleansing, diuretic, kidney stones, fever)				+											+
	Dëllinia <sup>AL</sup>		GA	Tea (for treating cough, rheumatism and “good for the blood”)															
			GA	Infusion (diuretic, stomach-ache, anti-cold, cough)								+						+	+
	Gëllija <sup>AL</sup> Kleka <sup>BO,GO</sup> Ardeq <sup>TU</sup>		GA	Infusion (tuberculosis, anti- rheumatic, lithontriptic)									+	+	+				





				anaemia)															
<i>Malva sylvestris</i> L. Malvaceae	Slez <sup>YO</sup>	W	LE	Tea (swelling in the arms from a lot of work)			+												
	Mëllaga e eger <sup>AL</sup> Slez <sup>GO</sup>			Tea (bronchitis, asthma, emphysema)						+	+								
	Mullaga <sup>AL</sup> Mali slez <sup>BO,GO</sup> Ebe gumeci <sup>TU</sup>		FL	Infusion (anti-tussive, bronchitis, antimicrobial)								+	+	+					
<i>Malus sylvestris</i> (L.) Mill Rosaceae	Divle jaboke <sup>SR</sup> Molla të egra <sup>AL</sup> Uflaqqat <sup>AL</sup>		LE	Tea (hypertension)															+
				Tea (respiratory disorders, haemorrhoids)															+
	Divla jabuka <sup>SR</sup> olla e eger <sup>AL</sup>		FR	Tea (increase general health especially for blood)												+	+		
<i>Marrubium vulgare</i> L. Lamiaceae	Buzorja <sup>AL</sup>			Tea (appetite stimulant)						+									
<i>Matricaria chamomilla</i> L. Asteraceae	Лайка <sup>TA</sup>	W	FL	Tea (stomach-ache, digestive, constipation, cough)	+														
	Рарадия <sup>YO</sup> Раратя <sup>TU</sup> Попадија <sup>MK</sup>			Tea (flu, cough, general strengthening)				+											
				Tea (blood disinfectant)				+											
			FAP	Tea (cough, digestive, diarrhoea)					+										
	Камомила <sup>AL</sup>		FAP	Tea (toothache, stomach-ache and belly pains (especially in babies))							+								
	Lule qeni <sup>AL</sup> Камомил <sup>AL</sup>		FAP	Infusion (anti-tussive, anti-									+	+	+				

	Kamilica <sup>BO</sup> Babunec <sup>BO</sup> Papatja <sup>TU</sup> Sari çiçek <sup>TU</sup>			bacterial, influenza, oral cavity infections, anti- hemorrhoidal, relaxant)																
	Kamelica <sup>GO</sup> Kamilica <sup>GO</sup>		FAP	Tea (recreational, panacea, stomach- ache especially those affecting children)												+	+	+		
	Mačkino čvece <sup>SR</sup>		FL	Tea (constipation, haemorrhoids, insomnia, rheumatism)															+	
				Tea (constipation, flu)															+	+
				Tea (stomach- ache)															+	+
	Divlja kamilica <sup>SR</sup> Kamilica <sup>SR</sup> Kamomili <sup>AL</sup> Kamelica <sup>AL</sup>		FL	Tea (diarrhoea)												+				
				Tea (good for general health especially for cold and flu)															+	
				Tea (relaxing, headache, stomach-ache, urinary system)												+	+			
<i>Medicago sativa</i> L. Fabaceae	Jonxhe <sup>AL</sup>	C	LE	Tea (galactagogue)						+										
<i>Melissa officinalis</i> L. Lamiaceae		C	FAP	Tea (stomach-ache, nausea/vomiting, nervous disturbances)												+				
	Lule limoni <sup>AL</sup> Bar pselik <sup>AL</sup> Bar i bletës <sup>AL</sup>			Tea (heart problems, headaches)												+				
			FAP	Infusion (headaches)												+				
	Bari i bletës <sup>AL</sup>		AP	Infusion													+	+	+	

	Matoqina <sup>BO,GO</sup> Molshvatrava <sup>BO,GO</sup>			(neurorelaxant, headache, anti-anemic, anti-hallucinogenic, respiratory disorders)															
	Matorka <sup>GO</sup>		AP	Infusion (anti-hypertensive, orexigenic, improve blood circulation, bronchitis)								+		+					
			AP	Tea (recreational/panacea, cough, digestive discomforts, mild tranquillizer, emmenagogue)		+									+				
	Bari i bletës <sup>AL</sup> Matičnjak <sup>SR</sup>		LE	Tea (heart disease, nervous system)												+	+		
<i>Mentha longifolia</i> (L.) Huds. Lamiaceae	Nagjas i egër <sup>AL</sup>	W	FAP	Tea (stimulant, considered poisonous if drunk in large amounts)		+			+										
	Nane <sup>AL</sup>			Tea (to strengthen immunity and “health” in general, especially in children and for respiratory problems, cold)						+	+					+	+		
	Çaj nana <sup>AL</sup> Nana <sup>BO,GO</sup>		AP	Infusion (stomach disorders, carminative, influenza, respiratory system infections, anti-tussive, expectorant)									+	+					
	Bosilëk <sup>SR</sup>			Tea (stomach disorders,														+	

				respiratory system infections)																
				Tea (nervous system, headache, constipation, abdominal pains)															+	
	Konjski bosiljak <sup>SR</sup>		LE	Tea (against bronchitis, headache, for lung Inflammation)														+		
<i>Mentha longifolia</i> (L.) Huds. and <i>M. spicata</i> L. Lamiaceae		W/C	FAP	Tea (stomach-ache, digestive troubles, nausea/vomiting in pregnant women, panacea)				+											+	
				Tea (blood cleansing)				+												
<i>Mentha x piperita</i> L. Lamiaceae	Nana e butë <sup>AL</sup>	C	LE/FR	Tea (digestive problems, gastritis and gastric ulcers, respiratory problems, cough)						+	+					+				
	Nana <sup>SR</sup>		AP	Tea (improve general health, better Breathing)													+	+		
				Tea (stomach-ache, relaxing)															+	
<i>Mentha x piperita</i> L. and <i>M. spicata</i> L. Lamiaceae	Karanane <sup>TA</sup> Izma <sup>TA</sup>	W/SD/C	LE	Tea (stomach-ache, cold, panacea)	+															
<i>Mentha pulegium</i> L. Lamiaceae	Divla menta <sup>BO,GO</sup>	W	AP	Infusion (neurorelaxant, improve blood circulation, respiratory system infections, anti-tussive)															+	
	Divla menta <sup>SR</sup> Lule menta <sup>AL</sup>		AP	Tea (respiratory system infections)															+	+
<i>Mentha spicata</i> L.	Nane <sup>VO</sup>	W/SD/C	LE	Tea (stomach-				+												

Lamiaceae	Nane <sup>TU</sup> Menta <sup>MK</sup>			ache, diarrhoea, cold, cough, headache, panacea; refreshment)			+													
				Tea (stomach and intestinal pains, especially in children, or as an anti-diarrheal)					+											
<i>Mespilus germanica</i> L. Rosaceae	Mushmolla <sup>AL</sup>	C	LE	Infuse (anti-diarrheal, anti-diabetic)									+							
				Tea (diarrhoea, good for general health)													+			
<i>Morus alba</i> L. Moraceae		SD	LE	Tea (diabetes)	+															
	Mani i bardhë <sup>AL</sup> Dud <sup>AL</sup>	C	FR	Tea (cough, headache, fever, hypertension)							+	+								
	Mani i bardhë <sup>AL</sup>		LE	Infusion (anti-diabetic)												+			+	
<i>Morus nigra</i> L. Moraceae	Mani i zi <sup>AL</sup>	C	LE/FR	Tea (anaemia, constipation, appetite stimulant)								+	+							
	Mani i zi <sup>AL</sup> Dut <sup>TU</sup> Karadut <sup>TU</sup>		LE	Infusion (anti-pyretic, diuretic)												+		+		
<i>Nepeta cataria</i> L. Lamiaceae	Bari maçe <sup>AL</sup> Lule e maçe <sup>AL</sup>	W	FAP	Tea (sterility, for women to be drunk for 40 days, never in the presence of another women)																
				Tea (stomach-ache)																
	Mačkina trava <sup>GO</sup> Strašnica <sup>GO</sup>			Tea (stress, fears, digestive discomforts)															+	
<i>Ocimum basilicum</i> L. Lamiaceae	Lul'bosojlek <sup>AL</sup> Bosulek <sup>AL</sup>			Tea (strengthen immunity,															+	+

	Borzulek <sup>AL</sup>			especially during pregnancy)																	
	Bosiljak <sup>BO,GO</sup>	C	AP	Infusion (carminative, kidney infections, tuberculosis)																	
			LE	Tea (cold/flu)																	
<i>Olea europaea</i> L. Oleaceae	Ullini <sup>AL</sup> Maslina <sup>BO,GO</sup> Zejtn tanesi <sup>TU</sup>	C	LE	Infusion (improve blood circulation, anti-diabetic, anti-hypertensive)																	
<i>Ononis spinosa</i> L. Fabaceae		W	FAP	Tea (to treat female sterility, fertility aid)																	
	Gjuhë nusja <sup>AL</sup>		FL	Tea (abdominal pain, gastritis and gastric ulcers)																	
<i>Orchis morio</i> L. Orchidaceae	Salep <sup>BO,GO</sup> Sahlep <sup>TU</sup>	W	TU	Infusion (influenza, stomach disorders)																	
<i>Origanum vulgare</i> L. Lamiaceae	Kara chai <sup>YO</sup> Karaçay <sup>TU</sup>	W	FAP	Tea (tranquilizer, anti-fatigue, weakness)																	
	Çaj malit <sup>AL</sup> Çaj bieshke <sup>AL</sup>			Tea (stomach-ache, digestive, vaginitis, panacea)																	
				Tea (sore throat)																	
	Çaj <sup>AL</sup> Çaj i malit <sup>AL</sup> Çaj i livadhi <sup>AL</sup>			Tea (sore throat, cough, heart problems, intestinal discomforts, recreational beverage)																	
	Rigon <sup>AL</sup> Çaj mali <sup>AL</sup> Origano <sup>AL</sup>			Tea (cough and bronchitis, to strengthen the appetite)																	
	Планински чај <sup>MK</sup>			Infusion (recreational, anti-flu, cough)																	

	Çaj mali <sup>AL</sup> Origano <sup>BO,GO</sup> Toqilla <sup>TU</sup>			Infusion (anti-tussive, influenza, respiratory system infections)										+	+	+	+				
	Shumski čaj <sup>SR</sup>			Tea (respiratory disorders, improve general health)																+	
				Tea (recreational tea)																+	+
	Planinska čaj <sup>SR</sup> Vranilova trava <sup>SR</sup>		FL	Tea (kidney, diuretic, general health, cold, flu)														+	+		
			AP	Tea (improve general health, flu, respiratory system, urinary system, relaxing, nervous disorders, hypertension, internal cleansing of body)															+	+	
<i>Papaver rhoeas</i> L. Papaveraceae	Lulebozhuri <sup>AL</sup>		SE	Tea (given to young children for sleeping)															+		
<i>Parietaria officinalis</i> L. Urticaceae	Karafilagen <sup>AL</sup>	W	LE	Tea (urinary tract problems, kidney inflammations)																	
<i>Petroselinum crispum</i> (Mill.) Fuss Apiaceae	Pershu magdanoz <sup>SR</sup>	C	AP	Tea (urinary tract inflammations, diuretic)																	+
	Majdanoz <sup>AL</sup> Magdenoz <sup>TU</sup>	C	AP	Infusion (anti-cholesterolemic, anti-diabetic, galactagogue, anti-coagulant)																	
<i>Phaseolus vulgaris</i> L. Fabaceae	Pasul <sup>AL</sup> Jer pasul <sup>TU</sup>	C	AP	Infusion (anti-diabetic)																	
<i>Pinus sylvestris</i> L. Pinaceae	Bredhi i bardhë <sup>AL</sup> Pisha e bardhë <sup>AL</sup>	W	LE	Tea (chronic bronchitis)																	+
<i>Pimpinella anisum</i> L.	Bati i gjinit <sup>AL</sup>	C	AP	Infusion																	

Apiaceae	Anason <sup>TU</sup>			(spasmodic, carminative, anti- ageing, galactagogue)															
<i>Plantago lanceolata</i> L. Plantaginaceae	Gjethe dielli mashkull <sup>AL</sup> Tegavec <sup>GO</sup>	W	AP	Tea (-ache)						+	+								
<i>Plantago major</i> L. Plantaginaceae	Lule deli <sup>AL</sup>	W	LE	Tea (kidney stones)						+									
	Gjethe dielli femër <sup>AL</sup> Tegavec <sup>GO</sup>			Tea (stomach- ache)							+	+	+						
	Živolak <sup>SR</sup>			Infusion (antipyretic)															+
	Dejzi <sup>AL</sup> Bokvica <sup>BO,GO</sup> Zenska bokvica <sup>BO,GO</sup>		FL	Infusion (digestive, urinary disorders)											+				
	Bokica <sup>SR</sup>		LE	Tea (respiratory disorders coughing, tuberculosis)															+
<i>Polygonum aviculare</i> L. Polygonaceae	Barthek <sup>AL</sup> Kusekmezi <sup>TU</sup> Troket <sup>TU</sup>	W	AP	Infusion (urinary system disorders, anti-coagulant)										+			+		
<i>Populus alba</i> L. Salicaceae	Plepi <sup>AL</sup> Ak kavak <sup>TU</sup> Beyaz kavak <sup>TU</sup>	W	LE	Infusion (urinary tract disorders)															+
<i>Poterium sanguisorba</i> L. Rosaceae	Sallat burneti <sup>AL</sup>	W	LE	Tea (improve appetite)							+								
<i>Primula veris</i> L. Primulaceae	Горощеке <sup>MK</sup>	W	FAP	Infusion (panacea, cough, intestinal troubles in children)									+					+	+
	Myzhdja e pranverës <sup>AL</sup> Jaglika <sup>BO,GO</sup> Zuti vet <sup>BO,GO</sup> Jagorcevina <sup>BO,GO</sup>	W	FL	Infusion (headache, anti- tussive, respiratory system disorders, improve blood circulation)											+	+	+	+	
			AP	Infusion (anti- tussive,										+	+	+			



				expectorant, bronchitis)															
	Jagorčevina <sup>SR</sup>			Tea (stomach ulcers, increase appetite)															+
	Agulija <sup>AL</sup> Lule me gishta <sup>AL</sup> Jagliče <sup>SR</sup>		FL	Tea (respiratory disease, cough, asthma, sore throat, improve general health, hypertension)													+	+	
<i>Primula vulgaris</i> Huds. Primulaceae	Jagorčevina <sup>SR</sup>		AP	Tea (bronchitis, cough in children, bronchitis, kidney stones, liver)													+	+	
<i>Prunus avium</i> L. Rosaceae	Qershia <sup>AL</sup>	C	FR	Decoction (anti- hypertensive, improve blood circulation, anti- bacterial, digestive disorders)															
<i>Prunus domestica</i> L. Rosaceae	Sljiva <sup>BO,GO</sup>	C	FR	Decoction (hepatic disorders, anti- hemorrhoidal, anti-parasitic, constipation)															
<i>Prunus cerasus</i> L. Rosaceae		SD	FP	Tea (diuretic, cold)	+														
<i>Prunus spinosa</i> L. Rosaceae	Giuven <sup>YO</sup> Güvem <sup>TU</sup>	W	FR	Tea (general strengthening)				+											
				Infusion (anti- rheumatic and anti-fever)															
	Kulumrija <sup>AL</sup> Ternina <sup>BO,GO</sup> Kurumlia <sup>TU</sup>		FL	Infusion (constipation)															
			FR	Infusion (anti- diabetic, hepatic disorders)															
			LE	Infusion (improve digestion, orexigenic)															

			FR	Tea (headache, hypertension)																+		
<i>Pulmonaria officinalis</i> L. Boraginaceae	Bar 1 mushkerive <sup>AL</sup> Pluqnjak <sup>BO,GO</sup>	W	AP	Infusion (anti-tussive, bronchitis)																	+	
<i>Pyrus communis</i> L. Rosaceae	Dardha <sup>AL</sup> Dardha eger <sup>AL</sup> Armut <sup>TU</sup>	W	FR	Infusion (cardiotonic, hepatic disorders)																	+	
	Divle slive <sup>SR</sup>		LE	Tea mixed with <i>A. absinthium</i> (intestinal infections (anti-parasitic))																	+	
<i>Pyrus pyraaster</i> (L.) Burgsd. Rosaceae		W	FR	Decoction of the dried fruits with sugar (stomach-ache)																	+	
<i>Raphanus sativus</i> L. Brassicaceae	Rotkva <sup>BO,GO</sup> Cvekla <sup>BO,GO</sup>	C	RO	Infusion (digestive system infections, bronchitis, anti-anemic, anti-rheumatic)																	+	
<i>Ribes rubrum</i> L. Grossulariaceae	Ribizla <sup>BO,GO</sup>	C	FR	Infusion (anti-rheumatic, anti-malaria, anti-allergic, heart disorders)																	+	
<i>Robinia pseudoacacia</i> L. Fabaceae	Salkim <sup>TA</sup> Акация <sup>TA</sup>	W	FL	Tea (cough)	+	+																
<i>Rosa canina</i> L. Rosaceae	Karamlik <sup>YO</sup>	W	FR	Tea (general strengthening)			+	+													+	+
	Каҗа <sup>AL</sup>			Tea (anti-nausea/vomiting, fever, sore throat, cough, cold)							+											
	Каҗа <sup>AL</sup> Shipinka <sup>AL</sup>			Tea (cold, fever, cough)							+											
	Trendafil i egër <sup>AL</sup> Каҗа <sup>AL</sup> Каҗа <sup>GO</sup>		FL/FR	Tea (cough, bronchitis, cold)							+	+									+	
	Шипинка <sup>МК</sup>		FR	Infusion (anti-																	+	+

				diarrheal, stomach-ache, sore throats bechic, flu, to treat “seven diseases”, blood depurative, diuretic, cardiotonic, anti- fever, panacea)																
	Kaç <sup>AL</sup> Shipak <sup>BO,GO</sup> Sipurak <sup>BO,GO</sup>		FR	Infusion (improve immunity, hepatic disorders, anti- anaemic, influenza, digestive tract disorders)																
			FR	Tea (hypertension)																
	Shipurak <sup>SR</sup> Trëndafil I egër <sup>AL</sup> Čaj te kaqave <sup>AL</sup>		LE	Tea (diabetes, respiratory disorders)																
				Tea (increase immunity)																
	Bagremit <sup>AL</sup> Šipurak <sup>SR</sup> Šipkinje <sup>SR</sup>		FR	Tea (flu, immunity, cold)																
			RO	Decoction (kidney stones)																
<i>Rosa ulmifolius</i> Schott. Rosaceae	Manafera <sup>AL</sup>	W	LE/FR	Tea (as a substitute for <i>Camellia sinensis</i> ) Tea (cough and cold, to strengthen the appetite)																
<i>Rosmarinus officinalis</i> L. Lamiaceae		C	LE	Tea (heart disease, urinary system)																
<i>Rubia tinctorum</i> L. Rubiaceae	Crvenka <sup>BO,GO</sup>	W	AP	Infusion (kidney disorders, skeletal disorders, tuberculosis, “Saraxha” (cutaneous tuberculosis))																

<i>Rubus fruticosus</i> L. Rosaceae	Mana <sup>AL</sup> Kupina <sup>BO,GO</sup>	W	AP	Infusion (anti-anemic, improve blood circulation, anti-hypertensive, wound healing, anti-diabetic, antimycotic)											+				+					
			FR	Infusion (anti-anemic, anti-diarrhoea, kidney infections, oral cavity infections, anti-hypertensive, anti-parasitic, anti-tussive)											+									
	Kapina <sup>GO</sup> Kupina <sup>GO</sup>		LE	Tea (sore throat, cough)															+					
	Kupina <sup>SR</sup> Manza <sup>AL</sup>		LE	Tea (good for kidneys)																+				
<i>Rubus idaeus</i> L. Rosaceae	Mjedra <sup>AL</sup> Malina <sup>BO,GO</sup>	W	LE	Infusion (improve blood circulation, anti-hypertensive, anti-diarrheal, anti-tussive, antipyretic, oral cavity infections)												+				+				
	Malina <sup>GO</sup>		LE/FR	Tea (recreational/panacea)															+	+				
			RO	Infusion (anti-hypertensive)												+								
			FR	Infusion (dysentery, tonsillitis, digestive disorders)												+								
			LE	Decoction boiled with 1 L water (let sit for 1 hour) (mouth inflammations)																				+
	Malina <sup>SR</sup>		FR	Tea (general)																				+

				health, strengthening)																		
<i>Rubus vestitus</i> Weihe Rosaceae	Kupina <sup>SR</sup> Manaferra <sup>AL</sup>	W	LE	Tea (tonsil inflammation)																+		
<i>Rumex patientia</i> L. Polygonaceae	Lepjeta <sup>AL</sup> Lepjetra <sup>AL</sup> Rraj kuqe <sup>AL</sup> Lepedra <sup>AL</sup> Štaviļjak <sup>SR</sup> Štavinjak <sup>SR</sup>	C	LE	Tea (kidney problems)																+		
<i>Salix alba</i> L. Salicaceae	Vrba <sup>BO,GO</sup>	W	LE	Infusion (hepatic disorders)																+		
			BA	Infusion (antipyretic, analgesic)																+		
<i>Salvia officinalis</i> L. Lamiaceae	Zalfija <sup>BO,GO</sup>	C	AP	Infusion (tonsillitis and other infections of the respiratory system, anti-diabetic, antiperspirant)																+		
	Žalfia <sup>SR</sup>		AP	Tea (mouth inflammations, prevent sweating)																+		
<i>Sambucus ebulus</i> L. Adoxaceae	Kingle <sup>AL</sup> Bozokva zova <sup>SR</sup>		LE	Tea (constipation, respiratory disorders)																+	+	
<i>Sambucus nigra</i> L. Adoxaceae	Milver <sup>YO</sup> Mürver <sup>TU</sup>	W	FL	Tea (refreshment)		+	+															
	Бъз <sup>TA</sup>			Tea (bronchitis, cold)		+		+												+	+	+
	Shtog <sup>AL</sup> Bozovina <sup>GO</sup>			Tea mixed with Chamomile (bronchitis and cold)																		
	Shtogu <sup>AL</sup> Zova <sup>BO,GO</sup> Bos zova <sup>BO,GO</sup> Murver <sup>TU</sup> Forboz <sup>TU</sup>			Infusion (bronchitis, anti-tussive, expectorant, antiperspirant, anti-halitoses, influenza, anti-																		

				asthmatic, stomach disorders, urinary tract disorders)															
	Shtogu <sup>AL</sup> Boza <sup>SR</sup> Zova <sup>SR</sup> Rrushqeni <sup>AL</sup>		LE	Tea (headache, anti-rheumatic)													+	+	
			FL	Tea (anti-asthmatic, general health, bronchitis)													+	+	
<i>Saponaria officinalis</i> L. Caryophyllaceae	Lule sapuni <sup>AL</sup> Sapuniqe <sup>AL</sup>	W/SC	AP	Tea (bronchitis, cough, digestive problems (gastritis) and urinary tract infections (cystitis))						+	+								
<i>Satureja</i> spp. Lamiaceae	Çimbru <sup>TA</sup>	C	AP	Tea (anti-hypertensive)	+														
	Cubar <sup>TU</sup> Curbice <sup>BO,GO</sup>			Infusion (spasmolytic, anti-diabetic, anti-parasitic, respiratory tract infections, anti-tussive, expectorant)															
<i>Sempervivum tectorum</i> L. Crassulaceae	Čuvarkuce <sup>GO</sup> Grčke piliča <sup>GO</sup> Kačel <sup>GO</sup> Simičika <sup>GO</sup> Smil <sup>GO</sup>	W	FL	Tea (cough)															+
<i>Sideritis</i> spp. Lamiaceae	Çaj malit <sup>AL</sup>	W	FAP	Tea (treating colds)						+									+
<i>Sideritis scardica</i> Griseb. Lamiaceae	ÇajiMalitSharr <sup>A</sup> L	W/C	FAP	Tea (stomach-ache) and against sore throat, viral infection)							+								
	Livacki čaj <sup>GO</sup> Šarplaninski čaj <sup>GO</sup>		FAP	Tea (recreational/panacea, cardiotonic,															+

	Planinski čaj <sup>GO</sup>			stomach-ache)															
	Qaj bjeshke <sup>AL</sup>		AP	Tea (bronchitis)															+
<i>Sisymbrium officinale</i> (L.) Scop. Brassicaceae	Lule sisimbre <sup>AL</sup>	W	LE/FR	Tea (mostly to protect from tuberculosis, cough and asthma)															
<i>Sorbus domestica</i> L. Rosaceae	Vojsa <sup>AL</sup>	C	LE	Decoction (urinary system stones, diarrhoea, headache)															+
<i>Tanacetum parthenium</i> (L.) Sch.Bip. Asteraceae	Попадџа <sup>MK</sup>	W	FAP	Tea (sedative, stomach pain)															
<i>Tanacetum vulgare</i> L. Asteraceae	Vratik <sup>AL</sup>	W	FAP	Tea (digestive), decoction (in the past children affected by rubella or people affected by hepatitis)															
	Lulja e artë <sup>AL</sup>			Tea (to treat rheumatism)															+
	Pire otu <sup>TU</sup>		FR	Infusion (anti-parasitic (intestinal parasites), anti-rheumatic)															+
			AP	Infusion (digestive tract disorders, anti-hemorrhoidal)															+
	Kallumper <sup>SR</sup> Kallamfer <sup>AL</sup>		LE	Tea (against, diabetes, hypertension)															
<i>Taraxacum officinale</i> (L.) Weber ex F.H. Wigg. s.l. Asteraceae		W	FL	Tea (liver diseases, digestive, stomach-ache, diuretic) Tea (cough)	+														+
	Lule verdha <sup>AL</sup>		LE	Tea (to regulate hypertension during															+

				pregnancy)															
	Tamëlçak i livadhit <sup>AL</sup> Maslacak <sup>BO,GO</sup> Karamdiba <sup>TU</sup>		FL	Infusion (hepatitis)															
			AP	Infusion (improve blood circulation, digestive tract disorders, urinary tract disorders, anti-anemic)															
	Lule grejza <sup>AL</sup> Llule mjAti <sup>AL</sup> lule verdhe <sup>AL</sup> Lule e sarit <sup>AL</sup> Maslačak <sup>SR</sup> Lule verdha <sup>AL</sup> Lule verdha <sup>AL</sup> Maslačak <sup>SR</sup> Pipilia <sup>AL</sup>		FL	Tea (respiratory disease, anti-cancer)															
				Decoction (anti-cancer, asthma, respiratory problems, blood)															
<i>Taraxacum campylodes</i> G.E.Haglund Asteraceae			FL	Tea (bronchitis, fever, asthma, cancer)															
<i>Teucrium chamaedrys</i> L. Lamiaceae	Dalak otu <sup>TU</sup>	W	AP	Tea (childlessness)															
	Podubica <sup>SR</sup> Golla baba <sup>SR</sup>		LE	Tea (stomach-ache)															
	Mamudia <sup>BO,GO</sup>	W	AP	Infusion (orexigenic, stomach-ache, anti-diarrheal, anti-hemorrhoidal)															
			LE	Tea (diuretic) Syrup (panacea)															
	Plavo cveta <sup>SR</sup>		LE	Tea (stomach-ache)															
<i>Teucrium montanum</i> L. Lamiaceae	Trava iva <sup>SR</sup>		LE	Tea (stomach-ache)															



<i>Teucrium polium</i> L. Lamiaceae		W	AP	Infusion (anti-hemorrhoidal, digestive tract disorders, stomach-ache)										+	+				+	
<i>Thymus</i> spp. Lamiaceae	Keklik otu <sup>YO</sup> Keklik otu <sup>TU</sup> Мажчина душица <sup>MK</sup>	W/C	AP	Tea (tranquillizing, bladder)			+													
	Мащерка <sup>TA</sup>			Tea (nervous system problems, panacea)		+		+												
				Tea (fever, influenza, cold)							+									
	Lis Majčina dushnica <sup>AL</sup>			Tea (for treating cold and cough)						+										
	Majčina dusica <sup>BO,GO</sup> Qeklik otu <sup>TU</sup>			Infusion (improve blood circulation, anti-cholesterolemic, respiratory inflammations, neurorelaxant, carminative, spasmolytic, bronchitis, anti-asthmatic)									+	+	+	+				
	Majčina dušica <sup>SR</sup>			Tea (stomach-ache, improve digestion, sedative)																+
	Çaj mali <sup>AL</sup> Majčina dušica <sup>SR</sup>			Tea (improve general health, respiratory system, stomach, nervous system, calming, anti-diabetic)													+	+		
<i>Thymus longicaulis</i> C.Presl. Lamiaceae	Полски чай <sup>MK</sup>	W	AP	Infusion (panacea)							+									
<i>Typha latifolia</i> L. Typhaceae	Shavar <sup>AL</sup> Hubabo <sup>TU</sup>		FR	Infusion (respiratory system inflammations)													+			

<i>Tilia cordata</i> Mill. and <i>Tilia tomentosa</i> Moench Malvaceae	Ihlamur <sup>TA</sup>	SD	FL	Tea (sedative, stomach-ache, anti-hypertensive, cough, tiredness – prolonged use considered good for women, but not for men, who would lose their virility)	+														
				Tea (cardiotonic)	+														
	Lipa <sup>YO</sup> Липа <sup>MK</sup>			Tea (tranquillizing)			+												
	Lipa <sup>AL</sup>			Tea (cold)					+										
	Blini <sup>AL</sup> Lipi <sup>AL</sup>			Tea (insomnia, stomach-ache, cough, fever)						+	+								
	Lipa <sup>SR</sup>			Tea (improve general health)														+	
				Tea (stomach- ache)															+
<i>Tilia platyphyllos</i> Scop. Malvaceae	Пушала <sup>MK</sup>	W	FL	Infusion (recreational, flu, panacea)								+							
	Blini <sup>AL</sup> Lipa <sup>BO,GO</sup> Flamur <sup>TU</sup> Ilhamur <sup>TU</sup>		FL	Infusion (anti- anemic, stomach infections, anti- tussive, expectorant)									+	+	+				
			LE/FL	Infusion (respiratory system inflammations)									+	+	+				
	Lipa <sup>GO</sup>		FL	Tea (recreational/panac ea)												+			
	Lipa <sup>SR</sup> Blini <sup>AL</sup>		FL	Tea (kidneys, bronchitis, nervous system, flu, improve general health)													+	+	
<i>Trifolium</i> spp.	Luleqeni <sup>AL</sup>	W	AP	Tea (problems						+									

Fabaceae				related to blood pressure)															
	Tërfoja <sup>AL</sup> Deklina <sup>BO,GO</sup>			Infusion (anti-rheumatic)															
<i>Tussilago farfara</i> L. Asteraceae	Thundërmushka <sup>AL</sup>	W	LE	Tea (disambiguation (ulcers), and cardiovascular problems (to treat open veins)															
	Potbel <sup>BO,GO</sup>		AP	Infusion (expectorant, anti-tussive)															
<i>Urtica dioica</i> L. Urticaceae	Isirgan <sup>TA</sup>	W	LE	Tea (diuretic, blood cleansing, stomach-ache)	+														
			FR	Tea (stomach-ache, rheumatism)	+														
	Hitha <sup>AL</sup> Hintha <sup>AL</sup>		LE	Tea (blood cleansing)		+		+											
	Kopresh <sup>YO</sup> Koprish <sup>YO</sup>		LE	Tea (general strengthening)		+	+												
	Kapriva <sup>AL</sup>		RO/LE	Decoction (considered able to treat cancer and especially to relieve liver problems, decoction of the leaves and roots together)															
	Hithra <sup>AL</sup> Koprajva <sup>AL</sup>		AP	Tea (to regulate menstrual cycle, help people with diabetes)															
			LE	Infusion (anti-rheumatic)															
	Hithi <sup>AL</sup> Kopriva <sup>BO,GO</sup>		AP	Infusion (anti-hemorrhoidal,															

	Yakici <sup>TU</sup>			anti-anemic, influenza, anti-cancer, bronchitis, headache, anti-rheumatic, anti-bacterial, digestive disorders, urinary disorders)																
	Kopriva <sup>SR</sup>		LE	Tea (improve general health, improve digestion, stomach-ache, rheumatism)															+	+
				Tea (haemorrhoids, diabetes, improve breast milk, gastritis, remove toxins from body)															+	
	Hithi <sup>AL</sup> Kopriva <sup>SR</sup>		LE	Tea (cough, blood and heart, stomach, headache)															+	+
<i>Vaccinium myrtillus</i> L. Ericaceae		W	FR	Tea (good for the circulation, haemorrhoids, galactagogue)				+												
	Shurshia të egra <sup>AL</sup> Baruk <sup>AL</sup> Borovnica <sup>AL</sup>		LE	Tea (heart problems)																
	Boronica <sup>AL</sup> Gjershika <sup>AL</sup>		LE/FR	Tea (to regulate menstrual cycle, stomach-ache, diarrhoea)																
				Infusion (anti-fever)																
	Boronica <sup>AL</sup> Borovnica <sup>AL</sup>		LE/FR	Infusion (lithonriptic, respiratory inflammations,																

				anti-anemic)															
	Borovnica <sup>SR</sup>		LE	Tea (improve general health)															+
			FR	Tea (recreational tea)															+
	Boronica <sup>AL</sup> Borovnica <sup>SR</sup>		FR	Tea (improve general health, blood)												+	+		
			LE	Tea (diabetes)												+	+		
<i>Vaccinium uliginosum</i> L. Ericaceae	Gjershika qensh <sup>AL</sup>	W	LE/FR	Tea (stomach-ache, food poisoning (diarrhoea), to regulate menstrual cycle)							+	+							
<i>Vaccinium vitis-idaea</i> L. Ericaceae	Brusnica <sup>BO,GO</sup>		LE	Infusion (urinary inflammations, anti-rheumatic)															+
			FR	Infusion (urinary tract infections, lithontriptic)															+
			LE/FR	Infusion (diuretic, anti-rheumatic, antipyretic, anti-diabetic, anticonvulsant)															+
	Brusnica <sup>SR</sup>		LE	Tea (improve general health)															+
<i>Veratrum album</i> L. Melanthiaceae	Shtara <sup>AL</sup> Cemenika <sup>BO,GO</sup>	W	AP	Infusion (anti-hypertensive)															+



