

## Chapter 10

# Wild Food and Medicinal Plants Used in the Mountainous Albanian North, Northeast, and East: A Comparison

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### 10.1 Introduction

Albania, the small mountainous country located in the southwest Balkan Peninsula, has represented—and still represents today—a fascinating place for travelers and scholars to visit. Although the current borders of Albania were delineated in 1912, a number of Western European explorers and ethnographers traveled across the Albanian-speaking areas of the Balkans well before this date, invariably seduced by the overwhelming hospitality and austere characters of the Northern Albanians. A few of them also described the local folk-medical and food customs, providing a historic record of such practices in this region (Cozzi 1909, 1914; Durham 1923; Doda 2007).

The preservation of the Albanian identity, forged via the linguistic and cultural customs, has represented, in turn, a crucial constant of Albanian history, which underwent the establishment of Greek colonies, centuries of Roman rule, the Byzantine Empire, successive migrations of Slavic and Germanic groups from the North, five centuries of Ottoman domination, and, in the last century, the Italian fascist occupation during the Second World War, four decades (1945–1991) of the most tough communist dictatorship Europe had and the subsequent isolation of the country from the rest of the world. Perhaps due in part to this unique history of the past decades, Albania seems to uniquely offer ethnobiologists what they would probably call a “paradise”: Hundreds of kilometers of untouched nature, a largely (still) traditional agricultural and especially pastoral lifestyle in the mountainous and rural

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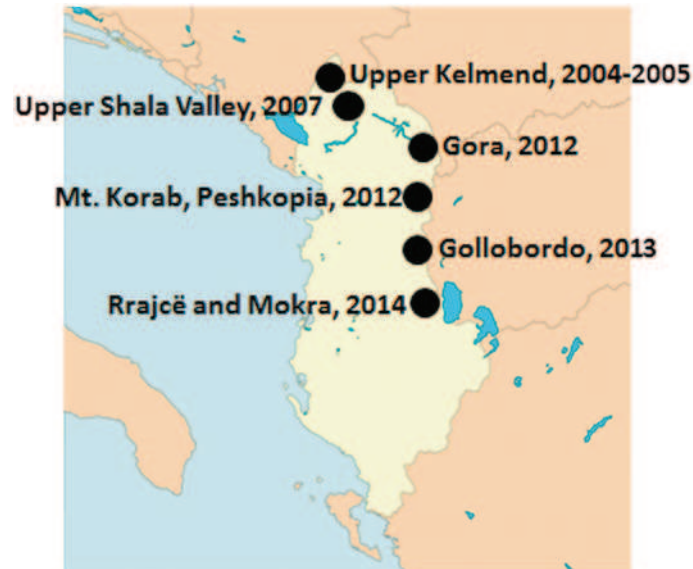
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A. Pieroni, C. L. Quave (eds.), *Ethnobotany and Biocultural Diversities in the Balkans*,  
DOI 10.1007/978-1-4939-1492-0\_10

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**Fig. 10.1** Study areas in Albania, 2004–2014

areas, amazing natural arenas and views, and folkloric treasures to discover in remote places, which can be often accessed only using rough terrain vehicles.

Moreover, the Albanian mountains also represent a promising hotspot of biological diversity and local customs, as well as a rich repository of living—and yet not heavily studied—traditional botanical knowledge. These factors could play, in turn, a central role in the development of community-based management strategies for local natural resources, as well as sustainable ecotourism, small-scale herbal trade, and high-quality niche foods. Today, Albania already provides a large portion of the medicinal and aromatic herbs marketed in Europe, also due to an established “tradition,” which was heavily reinforced during the communist period of gathering, drying, and trading wild medicinal plants (Kathe et al. 2003; Londoño 2008; Pieroni et al. 2014a, b).

## 10.2 Field Studies

Over the past decade (2004–2014), several villages of the Albanian North, Northeast and East were visited (Fig. 10.1) during a series of ethnobotanical field studies. Specifically, communities in the upper Shala Valley, upper Kelmend (Fig. 10.2), Mt. Korab (Fig. 10.3), and Gollobordo participated in these studies. In-depth open and semistructured interviews were conducted with elderly members of these communities, and informants were selected using snowball-sampling techniques. Informants were asked about traditional uses of food and medicinal plants



**Fig. 10.2** Summer settlements in the pastures of upper Kelmend

(in use until a few decades ago or still in use today). Specifically, study participants were questioned about the local name(s) of each quoted taxon, the plant part(s) used, in-depth details about its/their manipulation/preparation, and actual medicinal or food use(s).

Interviews were conducted in Albanian, sometimes with the help of a simultaneous translator. Prior informed consent was always verbally obtained prior to conducting interviews and researchers adhered to the ethical guidelines of the American Anthropological Association (AAA 2012). During the interviews, informants were always asked to show the quoted plants. Taxonomic identification was conducted according to all the published volumes of the *Flora of Albania* (Paparisto et al. 1988; Qosia et al. 1992; Qosia et al. 1996; Vangjeli et al. 2000). Local names were transcribed following the rules of Ghegh Albanian standard language, which is the Albanian spoken in Kosovo and North (and Northeast) Albania.

**Fig. 10.3** Landscape of the Albanian side of Mt. Korab



### 10.3 Results

In the following tables, we present the most commonly quoted and used wild (folk) taxa for the upper Shala Valley of northern Albania (Table 10.1), upper Kelmend of northern Albania (Table 10.2), Mt. Korab of Northeast Albania (Table 10.3), and Gollobordo of eastern Albania (Table 10.4). Genera or species that were among the top ten of cited botanic taxa in at least two of the study sites are underlined.

### 10.4 Discussion

#### 10.4.1 *The Pastoralist Nature of the Albanian Ethnobotany*

The most commonly quoted and used wild food plants in the four considered areas are *Urtica dioica*, *Chenopodium bonus-henricus*, and *Rumex* spp., which are used as vegetables mainly cooked with dairy products and rice or, more often, as filling for homemade savory pies, traditionally made using flour created from local varieties of white maize. These plants represent the most common taxa to be found in the proximity of the houses and summer settlements in the mountainous ecosystems. Importantly, these species represent the vegetables of the Albanian pastoralist cuisine, which is characterized by a regular and large consumption of several dairy products, staples derived from the introduced maize and potato crops, occasionally beef, goat, pork (only among the Catholic Albanians of the north) and lamb meat, beans, and a few cultivated (onions, garlic, cabbage, and peppers) and wild plants.

It is interesting to note that while *Chenopodium bonus-henricus* is more commonly used in the north, *Rumex* spp. (mainly *Rumex patientia*) dominates in the northeast and east, while nettle is definitely *the* wild vegetable of all Albanian cuisines. With regard to the most important medicinal plants, in all northern,

**Table 10.1** Most commonly quoted used wild food and medicinal plants in the upper Shala Valley, northern Albania (Pieroni 2008)

Botanical taxa	Part(s) used	Traditional food or medicinal uses
<i>Chenopodium bonus-henricus</i> L., Amaranthaceae	Leaves	Boiled and used with cream and/or butter as stuffing for <i>byrek</i> and <i>laknur</i> (savory pies)
<i>Cornus mas</i> L., Cornaceae	Fruit	Eaten raw, also as a food medicine to relieve intestinal troubles in children . It is macerated in barrels for 1–2 months, and then distilled to produce <i>raki</i> ( <i>raki thanit</i> ). This is considered the best <i>raki</i> . It is also used medicinally to relieve rheumatism (both drunk and rubbed on externally). Fruits are also boiled for 30 min in water and macerated to produce vinegar
<i>Gentiana lutea</i> L., Gentianaceae	Roots	Macerated in <i>raki</i> and drunk as a treatment for heart diseases. Gathered, dried, and sold in the city markets, especially in the past
<i>Hypericum</i> spp., Hypericaceae	Flowering aerial parts	Infusion ( <i>caj</i> ) of the dried aerial parts is used to treat abdominal pains, especially in children Applied with salt and tobacco leaves to heal wounds
<i>Origanum vulgare</i> L., Lamiaceae	Flowering aerial parts	Infusion ( <i>caj</i> ): drunk regularly throughout the year as a “social beverage” and also specifically for treating sore throats and colds (especially in children)
<i>Plantago major</i> L., Plantaginaceae	Leaves	Used externally as a hemostatic on wounds. In infusions for treating abdominal pains. In the past, it is gathered, dried and sold in the city markets
<i>Rumex</i> spp., Polygonaceae	Leaves	Boiled and used with cream and/or butter as a stuffing for pies ( <i>byrek</i> and <i>laknur</i> )
<i>Tilia cordata</i> Mill., Malvaceae	Flowers	Infusion ( <i>caj</i> ) used to heal coughs, colds, and sore throats
<i>Urtica dioica</i> L., Urticaceae	Leaves	Boiled and used as filling for savory pies ( <i>byrek</i> and <i>laknur</i> ) with fresh butter ( <i>burro-fresko</i> ) or clarified butter ( <i>tëlynë</i> ) Rubbed on externally to treat arthritis
<i>Vaccinium myrtillus</i> L., Ericaceae	Fruit	Eaten raw or in infusions ( <i>caj</i> ). Also as eaten as a dried fruit for treating sore throats or for relieving digestive troubles

**Table 10.2** Most commonly quoted and used wild food and medicinal plants in the upper Kelmend, northern Albania (Pieroni et al. 2005; Pieroni 2010)

Botanical taxa	Parts used	Traditional food or medicinal uses
<i>Chenopodium bonus-henricus</i> L., Amaranthaceae	Leaves	Eaten cooked, as filling for savory pies ( <i>byrek</i> ), generally adding various dairy products, especially cream and preserved butter
<i>Fragaria vesca</i> L., Rosaceae	Fruits	Eaten raw or in jams
<i>Gentiana lutea</i> L., Gentianaceae	Roots	Macerated in plum distillate ( <i>raki</i> ) for 1–2 days in cold water and drunk for the prevention of heart disease
<i>Hypericum maculatum</i> Crantz, Hypericaceae	Flowering aerial parts	Decoction, to treat digestive troubles and antidiarrhea (also used as a veterinary preparation, especially for sheep); to treat stomachache; as a tranquillizer; drunk every morning as a diuretic; to treat flu, sore throat, coughs, and bronchitis; and as an anthelmintic (used as a veterinary preparation for calves)
<i>Lilium martagon</i> L., Liliaceae	Tubers, dried	Decoction, to treat liver diseases (also as a veterinary preparation)
<i>Origanum vulgare</i> L., Lamiaceae	Aerial parts	Infusion, originally used to treat coughs; today drunk as a recreational beverage, and also as diuretic and digestive
<i>Phyllitis scolopendrium</i> (L.) Newman, Aspleniaceae	Leaves	Tea: to treat every respiratory and lung affliction
<i>Tussilago farfara</i> L., Asteraceae	Leaves	Externally used for treating wounds and as an anti-rheumatic; tea for treating respiratory diseases
<i>Urtica dioica</i> L., Urticaceae	Leaves	Boiled with flour and milk and eaten as a soup Boiled and used with cream ( <i>masa</i> ) as filling for savory pie ( <i>byrek</i> )
<i>Vaccinium myrtillus</i> L., Ericaceae	Fruits	Decoction, to treat intestinal troubles; antidiarrheal; “to strengthen the stomach” and the eyes (especially in children); “blood cleansing”; also macerated in wild cherry-plum distillate ( <i>raki</i> )

**Table 10.3** Most commonly quoted and used wild food and medicinal plants in the Mt. Korab villages surrounding Peshkopia, northeast Albania (Pieroni et al. 2014)

Botanical taxa	Parts used	Traditional food or medicinal uses
<i>Cornus mas</i> L., Cornaceae	Fruits	Eaten raw or, more often, dried and consumed during the winter after boiling them ( <i>ashaf</i> ), also for treating diarrhea or stomachache. Used to make homemade preserves or syrups, which are also mixed with hot water and drunk as a healthy beverage and for treating stomachache. Fermented to make vinegar, which is considered healthy, especially against fever (topically applied on the forehead), or drunk with sugar as a healthy beverage. Mixed with bran and applied topically to treat mastitis in livestock. Distilled to create an alcoholic <i>raki</i> , which is considered very healthy and especially good for the heart (one small glass drunk daily)
	Flowering branches	Ritually used during the <i>lule ditvere</i> (literally meaning “flower of the summer”) festival days. On the afternoon/evening of March 12th, a bouquet (also called <i>lule ditvere</i> ) is arranged with the stems and flowers of <i>Helleborus</i> spp., aerial parts of <i>Hedera helix</i> and <i>Arum maculatum</i> , flowering <i>Cornus mas</i> , <i>Quercus</i> spp., <i>Corylus avellana</i> branches, <i>Evernia prunastri</i> , and another unidentified lichen. The bouquet is kept on the kneading trough for one day (13th March), and also (with breadcrumbs) on the churn. Both practices are seen as good omens for a prosperous food year (in the same day villagers distribute/offer each other boiled eggs and children burn aerial parts of <i>Juniperus communis</i> in the evening). On March 14th, the bouquet is then kept and hung at the entrance of the house, as a good omen (when it falls down, weeks later, has to be thrown in the river)
<i>Hypericum perforatum</i> L., Hypericaceae	Leaves and stems	Tea: stomachache, diarrhea, and diuretic
	Flowering aerial parts	Dried and used in homemade tea to treat stomach and digestive disorders, and, to a lesser extent, sore throat and as a diuretic. The infusion (sometimes prepared together with <i>Origanum vulgare</i> ), because of its red color, is considered very healthy for the circulation of blood and for anemia. Decoction: topically applied to skin inflammations
<i>Origanum vulgare</i> L., Lamiaceae	Flowering aerial parts	Dried and used in homemade teas: very regularly drunk over the year as a healthy/preventive beverage. This tea is reputed to be especially beneficial for sore throats, cough, and flu/fever/headaches. Sometime in the past, bread was dipped into the tea, adding sugar, and the resulting preparation was consumed as a healthy food

**Table 10.3** (continued)

Botanical taxa	Parts used	Traditional food or medicinal uses
<i>Salvia verticillata</i> L., Lamiaceae	Aerial parts	Used fresh, crushed, or the fresh juice is used as a cicatrizant, directly applied to wounds (humans), snake bites, and skin inflammations (animals)
<i>Stachys tymphaea</i> Hausskn., Lamiaceae	Flowering aerial parts	Dried and used to make teas for panacea, and especially for cold and flu
<i>Rumex patientia</i> L., Polygonaceae	Leaves	Used fresh as vegetables for homemade pies ( <i>peta</i> ). Crushed and mixed with animal fat for topical treatment of wounds
<i>Rubus ulmifolius</i> Schott., Rosaceae	Fruits	Consumed raw or in jams. Fermented to make <i>raki</i> (rare)
	Aerial parts	Crushed and mixed with clarified butter ( <i>tělyně</i> ), topically applied to skin infections and wounds
<i>Malus sylvestris</i> (L.) Mill., Rosaceae	Fruits	Dried ( <i>ashaf</i> ) and consumed in winter after boiling them; considered healthy for persons affected by diabetes
<i>Urtica dioica</i> L., Urticaceae	Young aerial parts	Used as filling for homemade savory pies ( <i>peta</i> ) or mixed with rice and eggs ( <i>burania</i> ); rarely used as wrapping for <i>sarma</i> . They are also minced and preserved dried over the year and then blanched before the use
	Leaves	Rubbed onto the skin to treat rheumatic pains
	Roots	Dried: used to make a decoction used in external washes for treating rheumatism or drunk for the same purpose (sometimes the decoction includes roots and leaves), or as a diuretic



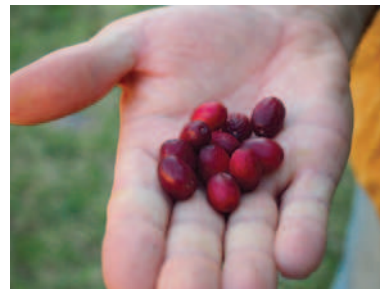
**Table 10.4** Most commonly quoted and used wild food and medicinal plants in Gollobordo, eastern Albania (Pieroni 2014)

Botanical taxa	Parts used	Traditional food or medicinal uses
<i>Cornus mas</i> L., Cornaceae	Fruits	Fermented and distilled into <i>raki</i> ; syrup and compote (dried fruits boiled with water and sugar), concentrated syrup/soft jam ( <i>pek-mez</i> ); fermented into vinegar; all these preparations are considered very healthy
<i>Orchis</i> spp., Orchidaceae	Tubers	Dried, powdered, then prepared in decoction, drunk as a reconstituent (often consumed with bread) to improve fertility in men; panacea
<i>Origanum vulgare</i> L., Lamiaceae	Flowering aerial parts	Infusion: recreational, antflu, bechic, anti-hepatitis, for treating stomachaches, panacea
<i>Plantago lanceolata</i> L. and <i>P. major</i> L., Plantaginaceae	Leaves	Crushed and topically applied on wounds: hemostatic
<i>Pyrus pyraster</i> (L.) Du Roi and <i>P. amygdaliformis</i> Vill., Rosaceae	Fruits	Gathered after the frost, ripened on straw, and consumed dried or in compote
<i>Rosa canina</i> L., Rosaceae	Fruits	Infusion: sore throats, bechic, flu, panacea
<i>Rubus</i> spp., Rosaceae	Fruits	Consumed raw and jams
<i>Rumex patientia</i> L., Polygonaceae	Leaves	Boiled, and then used filling for pies or as vegetables cooked with dairy products
<i>Tilia platyphyllos</i> Scop., Malvaceae	Flowers	Infusion: panacea
<i>Urtica dioica</i> L., Urticaceae	Leaves	Boiled, and then used in filling for pies or cooked with rice and dairy products; traditionally dried and then used during the winter

**Fig. 10.4** Trading collected and dried wild oregano (*Origanum vulgare*)



**Fig. 10.5** The fruits of *Cornus mas* are highly valued as useful for medicinal and food applications



northeastern, and eastern sites, the flowering aerial parts of wild oregano (*Origanum vulgare*) tea dominate as the most frequently used *caj* (traditional tea) of the Albanians, mostly drunk for treating respiratory diseases, but more often considered a panacea, a healthy beverage and recreational tea (Fig. 10.4).

The flowering aerial parts of *Hypericum* spp. are also frequently used, but to a lesser extent than that of oregano, mainly for treating diseases of the gastrointestinal tract. The wild fruits of *Cornus mas* (Fig. 10.5), on the other hand, are consumed raw, or, more often, processed in a number of ways (including as preserves and fermented products). All of these preparations are considered healthy, placing these fruits as the most beloved of folk nutraceuticals among Albanians, and indeed, perhaps even among the entire Balkans. Lastly, with regard to skin diseases, *Plantago* spp. are instead the most commonly used taxa, which follow the same patterns of folk medicine in much of western Europe.

#### **10.4.2 Resilience of Traditional Plant Knowledge in Albania**

Resilience has been defined as the capability of socioecological systems to absorb disturbances and to retain their basic structures and functions. This principle is

founded on four pillars in particular: (1) the capability of systems of learning to live with change and absorb it, (2) of nurturing diversity for reorganization and renewal, (3) of combining different kinds of knowledge for learning, and (4) of creating opportunities for self organization (Berkes 2003; Folke et al. 2003; Berkes and Turner 2006).

The resilience of plant knowledge systems in the Albanian mountains, which at the moment seem to be largely in the hands of the elderly and mid-aged population, will surely depend upon the capability of the local populations to adapt to the major socioeconomic turmoils that are ongoing in these areas since the end of the communism in the 1990s. The Albanian mountains have, in fact, faced immense changes in the past two decades including road collapses and, sometimes, communication infrastructures. This has been compounded by huge migration waves of young labor forces to western Europe and the USA in the 1990s and the daily battle in struggling for survival during the successive decade. The transition underway today is one of a timid start on some ecotouristic activities, which have been made possible in many cases due to new investments by Albanians who have migrated back home, or, as in the case of the upper Shala Valley, the explosion of a massive touristic development, which has brought the system to a state of collapse in terms of sustainability.

## 10.5 Conclusion

Local environmental resources derived from plants continue to play an important role in the provision of dietary and medical care for both humans and their livestock in the northern, northeastern, and eastern mountainous regions of Albania. Plant knowledge in the Albanian mountains is deeply embedded with pastoralist activities, which have represented for centuries, and possibly millennia, the cornerstone of local sociocultural and environmental frameworks. A major requirement for resilience of the whole system is the ability of all of the actors involved in the development of the rural and mountainous areas in Albania (local populations, NGOs, and institutions) to work together to foster trajectories for the truly sustainable management of natural resources. One potential path forward could, for example, be exemplified through the development of traditional animal breeding activities and ecotourism. This could perhaps even be enhanced with the help of new technologies, such as social media, which the youngest generations in the mountains are already heavily dependent upon. The sustainable development of local small-scale economies will invariably be strengthened through a merging of elements of the past and future, with the legacy of traditional environmental knowledge of local resources being placed at its core.

**Acknowledgments** Special thanks are due to all of the Albanian study participants who have generously shared their knowledge regarding local plants over the years.

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# Ethnobotany and Biocultural Diversities in the Balkans

Perspectives on Sustainable Rural  
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ISBN 978-1-4939-1491-3      ISBN 978-1-4939-1492-0 (eBook)  
DOI 10.1007/978-1-4939-1492-0  
Springer New York Heidelberg Dordrecht London

Library of Congress Control Number: 2014946597

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