Chapter 12
Ethnobotanical Knowledge and Traditional Use of Plants in Serbia in Relation to Sustainable Rural Development

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12.1 Introduction

12.1.1 General Data on Serbian History and Tradition

Although Serbia is now a diverse multiethnic country with a dominant ethnic Serb population, the notions of the Serbian state (identity and territory) and of Serb ethnicity remain questioned. Byzantine sources report that part of the White Serbs, led by the unknown Archont, migrated southward from their Slavic homeland of White Serbia (Lusatia) in the late sixth century and eventually settled the "Serbian lands" known at present as Serbia, Montenegro, Bosnia, Herzegovina, and Dalmatia. After settling in the Balkans, Serbs mixed with other Slavic tribes and with descendants of the indigenous people of the Balkans: Illyrians, Thracians, Dacians, Celts, Greeks, and Romans (Sedov 1995). Early on, Serbian culture may have been influenced by the Paleo-Balkan people. Conversion of the South Slavs from Paganism to Christianity began in the early seventh century, long before the Great Schism. The Serbian Orthodox Church gained autocephaly from Constantinople in 1219. The Ottoman Empire conquered Serbia in 1459 and placed the country under a state of occupation which lasted for four centuries, the consequences of which suppressed Serbian culture (Zirojević 2007). Serbs speak the Serbian language, a member of the South Slavic group of languages, specifically in the Southwestern Slavic group with the Southeastern Slavic languages, including Macedonian and

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Bulgarian. The Serbian language comprises several dialects. Serbian is the only European language with active digraphia, using both Cyrillic and Latin alphabets. The Serbian Cyrillic alphabet was devised in 1814 by Vuk Karadžić, who created the alphabet on phonemic principles; Cyrillic itself has its origins in Cyril and Methodius (Byzantine Christian missionaries—saints 860–870, during Basil I) transformation from the Greek script. Loanwords in the Serbian language have come mostly from Turkish, German, and Italian; words of Hungarian origin are present mostly in the North, and Greek words mostly in the liturgy (Deretić 2011). Two Serbian words that are used in many of the world's languages are vampire ("vampir") and paprika ("paprika").

The development of the modern Serbian state started in the early nineteenth century on the territory of today's central Serbia, after becoming independent for the first time in the modern era—Principality/Kingdom, 1817–1918 (Jelavić 1983a, b; Glenny 1999).

Modern Serbia is still a rural country, where rural regions occupy about 85% of its territory and 41.8% of the total inhabitants living in 3904 settlements out of the total of 4715 noted for Serbia (http://webrzs.stat.gov.rs/axd/stanovnistvo/izbor.htm). Rural economy to a high extent relies on agriculture, which is the one among few sectors able to generate surplus of more than US$ 1 billion as achieved in 2012 (Group of authors 2013). Despite often being treated as a problem for faster prosperity of the national economy, Serbian rural areas actually represent a huge potential, namely in richness of natural resources out of (agro)biodiversity, cultural and traditional heritage, and ethnobotanical knowledge. In spite of the general globalization trends that strongly jeopardize the agrobiodiversity and the state of genetic resources in Serbia, there is still awareness about the necessity for conservation of indigenous (traditional) knowledge about the uses of plants and preservation of autochthonous and/or old plant varieties, as well as biodiversity in general.

12.2 Traditional Food and Domestic Plant Genetic Resources

In Serbian folk traditions, hundreds of plants were used for ages as foods, beverages, medicines, natural dyes, natural additives, and food preservatives, for textile and fibers, shelter and fuel, as well as for traditional customs, religious purposes, and magical rites. With regards to food, the great variety in Serbia's cuisine originates from its geographical, national, and cultural diversity, and the jigsaw of centuries of population changes. Influences on Serbian cuisine have been rich and varied—it first began as a mixture of Greek, Bulgarian, Turkish, and Hungarian cooking. Historians say that medieval Serbian cuisine mainly consisted of milk, dairy products, and vegetables. Not a lot of bread was eaten, but when it was, the rich ate wheat bread, while the poor ate bread made from oats and rye. The only meat consumed was wild game, with cattle kept for agricultural and dairy use. Beef prosciutto, "kajmak" (traditionally prepared creamy fat cheese), "ajvar" (traditional starter

made from old landraces of paprika, tomato, and eggplant), "cicvara" (a type of polenta made from flour of old corn varieties, eggs, butter, and cheese), rose-petal "slatko" (a sweet preserve), and other specialties made with dried plums are considered as native Serbian foods (http://www.fizio.org.rs/wp-content/uploads/2012/05/Food.pdf, Zagorac 2010).

The considerable genetic diversity of traditional varieties of crops is the most immediately useful and economically valuable part of global biodiversity. Although traditional farming systems are considered as an important part of indigenous rural culture and agrobiodiversity (e.g., Rhoades 1984), many indigenous local populations of agricultural plants have been replaced by high-yielding varieties and hybrids. This has had a direct deleterious effect on genetic variability and led to the erosion of biodiversity, which was also the case in many Balkan countries where a number of old landraces and the local crop's populations disappeared (Lazić and Babović 2008).

Several crop species in Serbia are autochthonous, such as certain cereals, forage grasses, legumes, and some vegetables. Old Slavs had grown a number of agricultural plants, while many more were being domesticated, some of them centuries ago, and the others during recent decades (e.g., soybean and rapeseed). The origin of introduced plant material was mainly related to Turkey, Greece, Germany, Austro-Hungary, Russia, as well as Venice and Dubrovnik. Often, the same species arrived to Serbia from different directions, as indicated by different names for the same species. Frequently, traditional/autochthonous landraces in Serbia were named in accordance with their traits. For example, wheat populations with awns were named "Brkulja" ("Whisker") and without awns "Šišulja" ("Trimmed"). On the other hand, many local populations emphasize its domestic origin ("Domaća raž"—"Domestic rye," "Domaća slačica"—"Domestic mustard," "Domaći kim"—"Domestic caraway"), mainly to highlight the differences from foreign plant material. In many cases, names of local Serbian populations indicate their geographical origin or the area in which they have been grown for a long time (e.g., "Rumski," "Šidski," "Novosadski," "Banatski," "Moravac," "Resavac," "Mačvanski," "Pećanac," "Futoški," "Srpski melez," "Taraški," "Čuruški," etc.). Farmers have different approaches in the naming of local plants. In some cases, they emphasize morphological characteristic of the taxa, while in other cases, they emphasize the country of origin or domesticated name. In practice, farmers combine these terms and give complex names (folk taxa) to the plant populations, such as "Domestic large fruit's gourd" ("Domaća krupnoplodna tikva") or "Nunhems early white cabbage" ("Nunhemski rani beli kupus"), as indicated in the National Program for PGR in Serbia (2012).

12.2.1 Cereals and Vegetables

Today, old/primitive varieties and local/autochthonous populations (landraces) of cereals and maize could be found only on the farmer's fields in marginal agricultural regions and/or in mountain regions. According to recent estimates, no more than

130 of such landraces still exist. One of the most interesting autochthonous wheat landraces is the "spelta," or the "krupnik." "Spelta" (*Triticum spelta* L., syn. *Triticum aestivum* ssp.*spelta* (L.) Thell), representing a husk form of wheat, has been growing in the Balkans and Serbia since ancient times (Prodanović and Šurlan-Momirović 2006). This species is known for its high nutritive value, especially with regards to its high protein and high essential amino acid content, as well as for high concentrations of cellulose, mineral elements (including selenium), and carbohydrates. In addition, grain is appreciated in child nutrition, as well as for the elderly and for those recovering from illness. There are some notes on the use of fresh spelt juice against some forms of cancer, and about its effects in cases of kidney illnesses and different metabolic disorders (Drobnjak 2012). Besides wheat, there are reports on the long tradition of rye, barley, and oat cultivation in Serbia. Barley was used for the production of homemade beer and yeast, while its straw has been appreciated for feeding the livestock. Rye was used (apart from flavor as the other cereals) for making spirits ("rakija") and beer and feeding the poultry, while its straw was used as roof and ground cover. The flavor and texture of oats were known to be very sticky and of bad quality, and its grains and hay were used mainly as horse food. In addition, buckwheat, which was grown in hilly parts of the country, was also appreciated and used as flour, mash, for feeding the poultry, and as an excellent melliferous plant (Radić 1870). Among old and autochthonous maize landraces, the "krivak" (which means crooked, curved), also "osmak" (which means with eight grain rows), and "tvrdunac" (which means hard, solid) might be among the most interesting. It is assumed that it came from Greek merchants (or also from Turks and from Dalmatia) in 1576, being first grown in gardens and later on in the fields (Babić et al. 2012). This variety was namely sown in the hilly and mountainous part of Serbia and was also used as fodder, fuel, shelter, and as an antitussive remedy (using the water in which it was cooked), diuretic, and for wound healing (flour) (Radić 1870).

Concerning genetic resources of vegetables (Vasić et al. 2006; Ćupina et al. 2006), there are regions such as Banat, Bačka, Negotinska Krajina, Pomoravlje, Zapadno-moravski, district Aleksinački, Southern Serbia, and Metohija, where valuable domestic populations of onion ("Kupusinski jabučar," "Kupusinski crni/crveni") can still be found. Domestic populations of leek were found in the South of country. Several local populations of cabbage are well known in Serbia: "Futoški," "Srpski melez," "Varaždinski," "Golubarac," "Kačar," "Katunski," etc. Old local cultivars of pepper are grown in Banat, Bačka, Podrinje, Posavina, Pomoravlje, Eastern Serbia, Negotinska Krajina, Aleksinac District, Southern Serbia, and Metohija and include the "Belopalanačka vrtka," "Venčara," "Niška šipka," "Rutevka," "Strižanka," "Severija," "Turšijara," "Makedonka," etc. Old tomato cultivars and populations are still grown in gardens and farmsteads due to their specific characteristics, most notably, the fruit taste and shape. Old local tomato cultivars (e.g., "Trešnjar," "Pećki jabučar," and "Zlatni plod Timoka") were well recognized in the past, but are now very poorly known, with the exception of the beef heart-type tomato ("Volovsko srce"). Many domestic populations of common bean ("Žutotrban" and "Zeka") are grown on farms in Serbian fields, while landraces,

"Tetovac" and "Gradištanac" (originating from the region along the Danube River in Eastern Serbia) today represent high market classes from Serbia. Domestic populations of lentil are grown in Eastern Serbia (Homolje, Stara Planina, and Suva Planina), Southwestern Serbia (around the Studenica Monastery), Western Serbia (around Požega), and Bačka region. Faba bean landraces ("Krupnozrni" and "Sitnozrni") can be found in the mountains. The most important domestic populations and ecotypes of the Cucurbitaceae family grown in Serbia include "Mramorka" of watermelon, "Cerovača" of the melon "Bundeva," and "Bundevka," "Bela bundeva," "Belokorka," "Bela ludaja," "Bela tikva," "Tikva," "Žuta tikva," "Dulek," "Dudanja," "Ludaja," "Buca," and "Budimka," all from pumpkin species.

12.2.2 Fruits

Fruit species are very widely used by Serbs and in very different ways; this includes consumption of fresh fruits, compote, juices and syrups, fruit tee, "slatko," jam, marmalade, etc. Some popular wild species include different berries (blueberry, blackberry, strawberry, raspberry, etc.), rosehip, hawthorn, dogberry, and some others, which are all readily used as traditional food and/or medicine (Bošnjaković et al. 2012). The most appreciated and consumed fruits in Serbia are apple, plum, and pear (most of the following below was compiled upon review of Savić (2013), Ognjanov et al. (2009), and Keserović et al. (2007)).

12.2.2.1 Apples

Apples have been present in our region since ancient times, and Old Slavs found them already established in the Balkan Peninsula. In the Middle Ages, apples were farmed in river valleys, particularly on monastery and manor grounds. The Balkan region, including the territory of Serbia, is an important gene pool source for autochthonous apple genotypes, which are very important for further diversification of domestic apples (Mratinić and Kojić 1998). Apples are traditionally used as a health food, as medicine and refreshment, and their use is exceptionally important for modern humans. In Serbian tradition, the apple fruit is a symbol of good health, fertility, happiness, prosperity, and good wishes. It is widely used in wedding, engagement, proposal, and birth ceremonies. The most valued old apple varieties are "Petrovača" (The St. Peter's Crown), "Pamuklija" (The Cotton Ball), "Ružica" (The Rosebud), Šarunka (The Motley), "Belojabuka" (The White Bite), "Funtača" (The One-Pounder), "Devojačka crvenka" (The Maiden Blush), "Masnjača" (The Grease Ball), "Krstovača" (The Holy Rod), "Šimširka" (The Hedgehog), "Ovčiji nos" (The Lamb's Snout), "Slatkara" (The Sugar Spice), "Prespanka" (The Prespa), "Kožara" (The Thick-Skin), "Zelenika" (The Greenhorn), "Budimka" (The Budim), "Kablarka" (The Kablar), "Rebrača" (The Frenched Cutlet), and "Senabija" (Oriental Princess).

12.2.2.2 Pears

For many centuries, pears have reached Europe and other continents via Iran and Asia Minor. During the age of feudalism (ninth and tenth centuries AD), pears rapidly spread throughout Europe. Clement of Ohrid (ninth century) and his 3000 students disseminated knowledge on fruit grafting, mostly of apples and pears, throughout the Balkans, and therefore contributed to an increase in the range of many pear varieties in our region (Savić 2013). Just like the apple, during the Middle Ages, the pear was farmed in Serbia only in manor and monastery estates (methos), and only later did they appear on farmers' lands. One of the oldest naturalized varieties of pear, originating from Asia Minor in the Karaman area, is known as "Karamanka" (The Karaman). Until the Second World War, this was the most common pear variety in the region of Serbia, Bosnia, and Macedonia. Presently, it is rare, but it still may be found in the catchment valley of Zapadna Morava region, in Vranje Valley, Toplica, Raška, and Metohija. The fruit is medium sized, pear shaped, and asymmetrical with characteristic pronounced bumps. The flesh of the fruit is yellowish, melting, juicy, and sweet, with a characteristic musky smell. It is suitable for fresh consumption and also for making jam. Apart from this variety, there are also older ones, such as "Jagodarka" (The Strobery Crush), "Vidovača" (The St. Vid's Day), "Ječmenjača" (The Barley-Ripe), "Petrovka" (The St. Peter's Day), "Mirisavka" (The Fragrant Vagrant), "Lubeničarka" (The Watermelon Squirt), "Medunak" (The Honey Pot), "Stambolka" (The Istambul), "Okruglica" (The Belly Ball), "Mesnjača" (The Fleshy Bite), "Jarac" (The He-Goat), "Kaludjerka" (The Monk's Find), "Miholjača" (The Harvest Moon), and "Lončara" (The Pot Belly).

12.2.2.3 Plums

The Slavs have farmed plums on the Balkan Peninsula since their arrival. In the early Middle Ages, plums were first farmed in Serbia as individual trees in monasteries and feudal estates and later also on farmers' land. The Dušan's law from 1349 has, among other aspects of society, regulated fruit farming in the territory of Serbian Empire, particularly in valleys of Zapadna Morava, Ibar, and Lim (Savić 2013). At that time, the most common fruit trees were apples, pears, walnut, mulberry, and sweet chestnut, while intensive farming of plums in Serbia started only in late eighteenth and early nineteenth centuries. Plums are presently the leading fruit crop in Serbia, thanks to suitable climate and soil. Plum is a traditional Serbian fruit, connected to the house and yard. Almost every village house in our region has a plum in the yard or in the orchard. Many settlements in Serbia were named after plum (e.g., Šljivovo, Šljivovik, Šljivovice, Šljivar, Šljivovac, Šljivik, etc., as plum = "šljiva" in Serbian), while many last names (surnames) in the Serbian population were also inspired by this plant (Šljivanac, Šljivar, Šljivić, Šljivo, etc.). The well-known spirit "šljivovica" (slivovitz brandy) that has its origins in Serbia is made from plum and is still traditionally produced in most rural households in Serbia today. Plums are used in their fresh or processed forms (prunes, juice, smooth

Fig. 12.1 Traditional ethnofood from central-west Serbia: homemade bread of buckwheat, "spelta" and domestic rye varieties, apple jam of old "Budimka" variety, and sweet liqueur of wild strawberry. (Original photograph by M. Petrović)

or chunky jam, preserves, in various dishes and sweets). The most pronounced autochthonous varieties of plum are "Ranka" (The Early Bird), "Požegača" (The Pozega), "Belica" (The Whitey Bitey), "Metlaš" (The Belly Ball Plum), "Gorčivka" (The Bitter Truth), "Turgulija," "Govedjača" (The Bovine Gnash), "Moravka" (The Morava), "Magareša" (The Black Donkey), "Bardaklija," and "Pandara."

12.2.2.4 Food Preservation for the Winter

Among the old traditional recipes for special winter fruit preserves ("zimnica") is the sweet drink "Vodnjika," which is prepared from pears (variety "Takiš") and wild apples. After washing and cutting, fruits are dried in the sun and put into the barrels filled with water for some period of time. Thanks to weak fermentation, a mildly (naturally) carbonated sweet drink was made to be consumed in wintertime. Other special foods include sweet cookies made from the "Madzarka" plum and jams made from cooking unpeeled fruits, which were then put onto the cabbage leaves and sun dried for later consumption in wintertime (Savić 2013; Zagorac 2010).

Traditional ethnofood from central-west Serbia is presented in Fig. 12.1.

12.3 History of Ethnomedicine and Medicinal Plants in Serbian Tradition

The history of health culture of the Balkan nations is very complex and interesting, considering the rich cultural and historical past, especially with regard to the strong influences of the Oriental East as well as those of the developed West. As early as the second half of the eleventh century, the Serbs started creating the national culture in the monastery of Studenica, and this process continued and was given

shape in the monastery of Hilandar. This particular period is associated with the beginnings of contemporary European medicine. Having arranged the monastery of Hilandar on the pattern of the hospitals in Constantinople, great Serbian enlightener, Saint Sava began his work of copying medical and biological papers. After he had founded a hospital in the Hilandar Monastery, Saint Sava established the first Serbian hospital in the monastery of Studenica, as the first such institution in the medieval Serbia. One of the most important documents that is kept safe and bear witness to the beginnings of medicine is "The Proceedings of Hodoš," the oldest Serbian codex of secular medicine from the fourteenth century (Katić 1990a). Apart from other things, it mentions the use of various domestic and foreign herbal drugs (most often caraway—*Carum carvi,* aloe—*Aloe vera,* thyme—*Thymus vulgaris,* flax seeds—*Linum usitatissimum,* and coriander—*Coriandrum sativum*). Another important document is "The Hilandar Medical Codex 517 (Anonymous 1989)," which speaks of the use of the camphor tree, iris, hellebore, and many other plants (Tucakov 1997). Other medieval papers on Serbian medicine that should be mentioned include: The Sorcery Book from Dečani, the notes on therapy from the Typikon of the Spellbook No. 54, Bosnian Proceedings, and many others. These proceedings are not the papers on traditional medicine (ethnomedicine). They were written under the influence of European scientific medicine, although up to the Second World War, our scientists adopted the stance that in the Middle Ages, the Serbs had healed themselves by fortune telling and sorcery (Katić 1990b). In the era of the Nemanjić rulers at the beginning of the fourteenth century, the first pharmacy was founded in the most important Serbian port of Kotor. This led to the expanded use of expensive imported drugs and spices from the tropical and subtropical parts of Asia and Africa. Until the downfall of the Serbian medieval countries, Serbian medicine was not very different from the French and Italian medicine, because it was under the mixed influences of both the Mediterranean writers of medicine and physicians from abroad, as well as of the medically illiterate surgeons, warriors, and shepherds. The art of healing, cultivating medicinal herbs, and making remedies was connected to medieval monasteries. The basis of the therapy consisted of 16 holy medicinal herbs that were unfailingly grown in monasteries by monks-physicians: lily—*Lilium* spp., sage—*Salvia officinalis*, rose—*Rosa* spp., fennel—*Foeniculum vulgare*, mint—*Mentha* x *piperita*, fenugreek—*Trigonella foenum-graecum*, savory—*Satureja* spp., rue—*Ruta graveolens*, tansy—*Tanacetum vulgare*, etc. The value of a drug did not depend on its healing properties but on the fact whether the plant had been picked by the left hand, at midnight, on a particular date, whether the person picking it had been silent or singing a special song, yawning, or going backward, etc. (Tucakov 1997). The science of medicinal herbs is not recent, but it is deeply rooted and has a long and continuous tradition in our nation's past.

According to traditional ideas, which often turn into beliefs and superstition, the healing properties and also the poisonous nature of some herbs were the themes of numerous traditional poems (Parojčić and Stupar 2003). The extremely long tradition of the curative and prophylactic use of medicinal herbs with our people is mentioned in the folk medical books of known and unknown authors. These books were written in the period of the Ottoman Turk occupation, when domestic herbal drugs

were the only available raw material for making medicines. The Turkish arrival in the fifteenth century prompted a retreat of the local people into the mountains and monasteries, which contributed to the further development of medicine based on healing herbs and skills related to making curative preparations. Drudgery, poverty, and continuous changes of residence in wartime made herbs exceptionally significant in those days. The enlighteners of the second half of the seventeenth century also wrote about the importance of herbs, their healing power, and dominant use in our tradition. Zaharije Stefanović Orfelin (1726–1785) was one of the first enlighteners from this area who revealed the notions about nature to Serbian people and in his book, *The Big Serbian Book of Herbs*, he described around 500 sorts of plants, giving them both a Latin name and a common name, as well as some valuable information about their use. Apart from this, in his book, *The Experienced Winemaker*, Orfelin offered recipes for preparing herbal wines and other alcoholic and nonalcoholic potions and remedies.

The Old Serbs had a very developed cult of trees and plants. The Serbs were not an exception when compared to other nations, but it is important to say that a lot has been saved until modern times through Orthodox Christianity, stories about folk beliefs, and a practice several centuries long.

12.3.1 Review of the Most Used Medicinal Plants by Serbs

The Old Slavs were familiar with numerous plants, including those they used for healing. They used wormwood (*Artemisia absinthium*) and common centaury (*Centaurium erythraea*) to heal fever, garlic (*Allium sativum*) as an anthelmintic, the castor oil plant (*Ricinus communis*) and devil's turnip (*Bryonia alba*) were used for cleansing, while hellebore (*Helleborus odorus*) and European wild ginger (*Asarum europaeum*) were used as emetics. Sea squill (*Urginea maritime*), asparagus (*Asparagus officinalis*), parsley (*Petroselinum crispum*), and celery (*Apium graveolens*) were used as diuretics, while oak (*Quercus* spp.) and pomegranate (*Punica granatum*) were used as astringents.

As the most widely available and important medicines, herbs played a big role during the Ottoman rule, which is highlighted in the epic poetry of Kosovo and post-Kosovo cycles. Herbs were attributed miraculous and healing properties. Traditional poems show that people were aware of the physiology of plants and their healing and poisonous properties. Numerous lines point out that people knew that poppy (*Papaver* spp.) was an opium used for easing pain, cramps, and other illnesses.

In northern Serbia, people added some plants to wine in order to add hallucinogenic effects. These were plants such as deadly nightshade (*Atropa belladonna*), henbane (*Hyoscyamus niger*), absinthe (wormword)—*Artemisia absinthium*, and American Pokeweed seed (*Phytolacca americana*). Among the poisonous plants mentioned in traditional poems, wormwood had a special place, not only because of its bitterness, but also because of its lethal effects if taken in large quantities ("I plant basil but wormwood grows" are well-known verses from a Serbian

traditional poem). Corn cockle (*Agrostemma githago*) and corn lily (*Veratrum* spp.) are also described as two extremely poisonous plants known to the Serbian people (Čajkanović 1994).

The medicinal plants that are most eagerly celebrated in folk poems are, first, rose as a symbol of beauty, youth, love, and health, then apple as a medicine and raw material. An old Serbian legend says, "Take this pretty red apple, stick four nails in it in the form of a cross and walk to the cross in the village centre while reading The Lord's Prayer three times ten." Some folk poems show the great protective power of valerian (*Valeriana officinalis*), and it was believed that this plant could resist everything. A few drops of the ethereal tincture of valerian put on a lump of sugar or in a glass of water soothed anxiety (Tucakov 1997). Rosemary (*Rosmarinus officinalis*) is a very important plant in the Serbian tradition because it is connected to weddings, and for a long time has been a folk remedy, especially for women. Under the five-century-long Ottoman rule, people did not have their doctors and apothecaries, schools of pharmacy and medicine, and so they passed their knowledge about healing plants from generation to generation through oral poetry. This is the reason why the traditional epic poetry represents an insufficiently revealed treasure that can tell us not only about the medicinal plants that were used but also about the circumstances and illnesses of the time (Spasić 2001).

12.3.1.1 Garlic

Garlic (*Allium sativum*) was one of the most significant folk prophylactics, spices, and also the food of the poor in the history of Serbia. Garlic was trusted more than any other plant. Primordial believing in the healing, protective, and spiritual powers of garlic left an indelible impression on the life of our people. During Lent, garlic was an obligatory side dish, and during the epidemics of typhoid fever, cholera, plague, or dysentery, it was used as a preventive and curative. Serbian people thought that there was no illness that could not be cured by garlic. Thus, it was used in combination with oak bark to cure diarrhea. It was used for contagious diseases, healing the respiratory organs, against coughing, and for troubles with the heart and blood vessels, arteriosclerosis, anxiety, headache, insomnia, and digestive tract. Garlic was used together with pumpkin seeds or combined with thyme, summer savory, and horsemint to fight intestinal parasites. It was often used as a remedy for hair loss, skin diseases, and dental diseases (Pelagić 1974). Although oral, illiterate, and without scientific pretensions, folk medicine has never abandoned garlic and has continually cherished it and passed it on across generations for centuries.

12.3.1.2 Peony

According to the Serbian national tradition, peony (*Paeonia officinalis*) has a special place. Its bright red flowers recall the Battle of Kosovo and the blood of the heroes who perished in the battle, so it has a special meaning to Serbian people,

probably more for its symbolic meaning than for its real healing properties. This flower appears in many epic poems, and ethnomedicine mentions it as a remedy for epilepsy and hysteria, and for whooping cough and hemorrhoids (http://opusteno.rs/lekovito-bilje-f154/lekovito-bilje-bozur-t20192.html).

12.3.1.3 Basil

The leading holy and miraculous plant in Serbian ethnopharmacological tradition used to be basil, and it has remained so today, being cultivated not only in monasteries but also in gardens and pots. This plant was mostly used as a fresh raw material or as a base for making various skin preparations. Some basil-based ointments and balms have been known since ancient times, and it is interesting that particular preparations, such as *Unguentum basilicum*, were called royal balms due to their exceptional importance. Numerous plants taken from Slavic ethnomedicine and ethnopharmacology became part of the scholastic and scientific pharmacotherapy of the Middle Ages through the aforementioned papers in the Serbian language, which appeared in the monastery hospitals of Hilandar, Constantinople, and Studenica (Parojčić and Stupar 2003). Basil tea was used to cure colds, sneezing, bites from snakes and poisonous insects, and plague. From the distant past, people have used it as a sedative and against intestinal gas, flatulence, and digestive problems. Due to its powerful spiritual, magical, and healing properties, this plant has been deeply trusted and loved by Serbian people for centuries (Jacanović and Jacanović 2002).

12.3.1.4 Sweet Flag

An important domestic, medicinal, and aromatic plant, especially in the history of the people from northern Serbia, is sweet flag (*Acorus calamus*). In wartime, it was an important aromatic spice and usually mixed with coriander to make "wartime pepper." Sweet flag is one of the best aromatic and hot plants for stomach and intestines. It is also used as a diuretic, for improving digestion and coughing aide (Tucakov 1997).

12.3.1.5 Yarrow

Our best-known and most widely used traditional remedy is yarrow (*Achillea millefolium*). It is used in folk medicine as a cure for the most diverse illnesses—from healing wounds to problems with the stomach and intestines, and problems with the kidneys and liver. It has often been used for improving appetite, and against asthma and kidney stones (Tasić 2012).

A lot of herbal drugs are used today primarily as raw materials for extracting healing properties (opium poppy, digitalis, ergot fungi, cinchona, ipecacuanha, rauvolfia, etc.). Since the extraction of the first alkaloids up until today, in the period

of almost 200 years, numerous plants have been studied and millions of active components have been extracted, including as many as a few thousands of different alkaloids, although not all of them are used in the modern pharmacotherapy (Parojčić and Stupar 2003).

A review of the most used medicinal plants in Serbian tradition is presented in Table 12.1.

12.3.2 Main Magical Plants in Serbian Tradition

Since ancient times, people worldwide have believed that demons can dwell in plants, animals, rocks, and people. This is why the first days of spring were particularly important to them. Tradition says that spring is the right time to eliminate or at least mollify some of the enemies, such as the demons bringing illnesses, dangers, and possible tragedies to people. Plants have always had a special place in the ritual magic, especially owing to the belief that young, just sprung plants can oppose the evil.

In the past, the Serbs respected the natural surroundings they lived in and believed in the divine power of a number of plants. One of the most important cults that were developed with Serbs was tree worship, which was also dominant with other European nations. Such a relationship with nature, as well as the feeling of reverence for it, is closely related to the natural environment of the European people of the time, whose places of living were encircled by deep forests. Believing in the immortality and eternal life of trees was connected to their appearance and ability to regenerate every year. The property of a tree to enter the earth deep with its root and to seek heights with its aboveground parts represented the axis where the divine world encountered the earthly world and the underworld, the world of the dead. The Old Slavs believed that a tree is the place where the supreme deity, the god of thunder and lightning, Perun (the Thunderer), dwelled. According to some sources, the very name of this highest god means "the forested mountain" or an oak, since the name of Perun originates from Perkwunos (*Perkūnas*) and *perk(w)u* means oak (lat. quercus). Owing to its height, oak (*Quercus* spp.) was often the target of thunders and so was thought to be Perun's dwelling place. Namely, people interpreted the thunder as the coming of gods to the ground. Anyway, in the difficult times that did not miss Serbia, when there were no churches, prayers took place in the open spaces. In these situations, people often looked for protection under the strong branches and a huge crown of an oak tree, into whose bark they would carve a cross. The tradition of old oaks—called the "zapis"—which can be as old as 600 years, has remained until today, and those trunks are considered to be absolutely sacred. Apart from oaks, divine properties were assigned to other deciduous trees: hazel tree, mulberry tree, apple, pear, and especially linden (Fig. 12.2; Radenković 1996).

Table 12.1 Review of the most used medicinal plants in Serbian tradition. (Adapted from Tucakov 1997, Pelagić 1974, and Tasić 2012)

Latin binomial and family	Folk name in Serbian/English	Traditional use—folk use
Agrimonia eupatoria L. Rosaceae	Petrovac/common agrimony	For diarrhea, inflammation of kidneys and bladder
Alchemilla vulgaris L. Rosaceae	Virak/lady's mantle	For mild and nonspecific diarrhea, ulcers, menopausal complaints, dysmenorrheal, eczema, and skin rashes
Anagallis arvensis L. Primulaceae	Vidova trava/scarlet pimpernel	Folk medicine for curing eye diseases
Angelica archangelica L. Apiaceae	Angelika/garden angelica	Has a positive effect on digestive tract, digestion, better appetite
Anthyllis vulneraria L. Fabaceae	Ranjenik/kidneyvetch	Flowers as a diuretic, for blood purifying, ulcers, and wounds
Arnica montana L. Asteraceae	Brdjanka/leopard's bane	Against skin irritation, rheumatism, washing mouth, and as a cure for fever in the seventeenth century
Asarum europaeum L. Aristolochiaceae	Kopitnjak/European wild ginger	Roots as an emetic in the treatment of alcoholism
Galium odoratum (L.) Scop. Rubiaceae	Lazarkinja/woodruff	Aerial parts as a mild sedative, gall and liver disorders, expectorants
Betula pendula Roth Betulaceae	Breza/silver birch	Leaves for bacterial and inflammatory diseases of the urinary tract, and for kidney stones
Calendula officinalis L. Asteraceae	Neven/marigold	Used externally and internally, as an antiseptic and for healing skin diseases
Carum carvi L. Apiaceae	Kim/caraway	Used as a diuretic and a digestive, but often as a spice
Capsella bursa-pastoris (L.) Medik. Brassicaceae	Hoću neću/shepherd's purse	Aerial parts for premenstrual syndrome and mild menstrual disorders. Externally for nose bleeds and superficial skin bleedings, wounds, and burns
Centaurium erythraea Rafn Gentianceae	Kičica/European centaury	Aerial parts for dyspeptic complaints, loss of appetite, and for diabetes
Cichorium intybus L. Asteraceae	Plavocvet/chicory	Aerial parts and roots for loss of appetite, dyspeptic complaints, and as a diuretic
Cornus mas L. Cornaceae	Dren/cornelian cherry	Fruit as a tonic, for mild diarrhea
Crataegus monogyna Jacq. (Rosaceae)	Glog/hawthorn	Leaves with flowers and fruit for senile heart, ischemia of the heart, mild forms of cardiac arrhythmias, as a cardiotonic, sedative, and for hypertension

Table 12.1 (continued)

Latin binomial and family	Folk name in Serbian/English	Traditional use—folk use
Equisetum arvense L. Equisetaceae	Rastavić/field horsetail	Aerial parts as a diuretic and spasmolytic for infections of the urinary tract, kidney, and bladder stones
Filipendula vulgaris Moench Rosaceae	Suručica/meadowsweet	Flowers for cough, bronchitis, fever and cold, for rheumatism of the joints and muscles
Gentiana asclepiadea L. Gentianaceae	Svećica/willow gentian	Roots for loss of appetite, as a stomachic, gall, and liver diseases
Gentiana lutea L. Gentianaceae	Lincura/great yellow gentian	Root for loss of appetite, as a stomachic, as well as a component in homemade preparations showing beneficial effects in gall and liver diseases
Geranium macrorrhizum L. Geraniaceae	Zdravac/big-root geranium	Aerial parts, externally for inflammation of the skin and mucous membranes
Heracleum sphondylium L. Apiaceae	Hogweed	Root and aerial parts for stomach disorders, digestion problems, diarrhea
Hypericum perforatum L. Hypericaceae	Kantarion/tipton's weed	Aerial parts for inflammation of the skin, blunt injuries, wounds, for anxiety, depressive moods, and gastritis
Juniperus communis L. Cupressaceae	Kleka/common juniper	Fruit for inflammatory diseases of the lower urinary tract
Matricaria recutita L. Asteraceae	Kamilica/chamomile	Flowers for inflammatory diseases of gastrointestinal tract, gastrointestinal spasms, cough, bronchitis, fever, and colds. Externally for inflammation of the skin, mouth, and pharynx, wounds, and burns
Ononis spinosa L. Fabaceae	Zečiji trn/restharrow	Roots for inflammation of the urinary tract, kidney and bladder stone, gout, rheumatic complaints
Origanum vulgare L. Lamiaceae	Vranilova trava/oregano	Aerial parts for inflammation of the urinary tract, respiratory disorders, and digestive disorders
Plantago lanceolata L. Plantaginaceae	Bokvica/ribwort plantain	Leaves for common cold, cough, bronchitis, and fever. Externally for inflammation of the mouth, pharynx, and skin

Table 12.1 (continued)

Latin binomial and family	Folk name in Serbian/English	Traditional use—folk use
Plantago major L. Plantaginaceae	Bokvica/broadleaf plantain	Leaves for respiratory and digestive disorders. Externally for hemorrhoids and inflammation of the skin
Polygonum bistorta L. Polygonaceae	Srčanik/bistort	Rhizomes and roots for diarrhea and hemorrhoids. Externally for inflammation of the skin and mucous membrane
Potentilla erecta (L.) Raeusch. Rosaceae	Trava od srdobolje/tormentil	Rhizomes for diarrhea. Externally for inflammation of the mouth and pharynx and for poorly healing wounds
Primula veris L. Primulaceae	Jagorčevina/cowslip	Root and flowers for cough and bronchitis, as an expectorant, insomnia, and anxiety
Prunus spinosa L. Rosaceae	Trnjina/Blackthorn	Flowers and fruit for common colds, diseases of the respiratory tract, and obstipation. Externally for inflammation of the mouth and pharynx
Rosa canina L. Rosaceae	Šipak/dog rose	Fruit for colds, disorders of the urinary tract, and kidney stones
Rosmarinus officinalis L. Lamiaceae	Ruzmarin/rosemary	For strengthening hair root, for skin inflammations
Rubus fruticosus L. Rosaceae	Kupina/blackberry	Leaves for diarrhea. Externally for inflammation of the mouth and pharynx
Salix alba L. Salicaceae	Vrba/willow	Bark for fever, rheumatism, headaches, and pain caused by inflammation
Sambucus ebulus L. Adoxaceae	Burjan/danewort	For rheumatism, used internally and externally
Sambucus nigra L. Adoxaceae	Zova/elderberry	Flowers and fruits for colds, influenza, as a diuretic
Stachys officinalis (L.) Trevis. ex Briq. Lamiaceae	Betony	For healing wounds, burns, for the gastrointestinal tract
Taraxacum officinale F.H. Wigg Asteraceae	Maslačak/dandelion	Leaves and roots for the lack of appetite, dyspeptic complaints, gall bladder, and gout. Externally for eczema and acne
Teucrium chamaedrys L. Lamiaceae	Podubica/wall germander	For digestive organs, gall, vaginal infections, hemorrhoids, and injuries
Teucrium montanum L. Lamiaceae	Trava iva/germander	Aerial parts for respiratory and gastrointestinal disorders
Thymus serpyllum L. Lamiaceae	Majčina dušica/wild thyme	Aerial parts for gastrointestinal and respiratory disorders, spasmodic cough

Table 12.1 (continued)

Latin binomial and family	Folk name in Serbian/English	Traditional use—folk use
Tussilago farfara L. Asteraceae	Podbel/coltsfoot	Leaves and flowers for catarrh of the respiratory tract with cough
Urtica dioica L. Urticaceae	Kopriva/nettle	Roots and leaves as a cleansing tonic and blood purifier, fever, arthritis, anemia, inflammatory diseases of the urinary tract, and enlarged prostate glands (root). Externally for skin complaints, neuralgia, hemorrhoids, and hair problems
Vaccinium myrtillus L. Ericaceae	Borovnica/blueberry	Fruits for unspecific acute diarrhea, as a blood purifier, for inflammation of the mouth and throat, and leaves for hyperglycemia
Valeriana officinalis L. Caprifoliaceae	Odoljen/valerian	Roots and rhizome for nervousness, anxiety, restlessness, sleeping problems, irritable bowel syndrome, and menstrual problems
Verbascum phlomoides L. Scrophulariaceae	Divizma/mullein	Flowers for catarrh of the respiratory tract, cough, and bronchitis
Veronica officinalis L. Plantaginaceae	Razgon/speedwell	Aerial parts for bronchitis and rheumatic complaints. Externally for healing skin diseases and wounds
Viola odorata L. Violaceae	Ljubičica/violet	Roots for unspecific cough, bronchitis
Viola tricolor L. Violaceae	Poljska ljubičica/heartsease	Aerial parts for bronchitis, whooping cough, rheumatism, cystitis, seborrheic skin, eczema, and psoriasis

12.3.2.1 Apple

A very important woody tree in the Serbian folk tradition is the apple tree (*Malus domestica*). An apple is often given as a present or a proof of love and friendship ("You give basil because of its scent, you give an apple because of benevolence," Karadžić 1824). In short stories, a mother, sister, or wife pretends to be sick and wants the hero to fetch them an apple that is hard or impossible to reach, as if it were a completely natural demand. These are mostly mythical apples that grow on trees they do not belong to or that are in the mountains or in the lake guarded by a dragon or some other monster (Čajkanović 1994).

Fig. 12.2 Oak tree "zapis" with herb wreath, recorded in the village Rača, near Kragujevac. (Original photograph by M. Petrović)

According to Serbian tradition, apple trunks are in Paradise, and the first fruits are to be eaten only after St. Peter's Day because on that day, "Saint Peter shook the apples in Paradise." It is believed that if someone ate an apple or played with them prior to that day, hail would fall and destroy crops (Karadžić 1867). As an apple is a symbol of fertility, it appears in many customs related to marriage proposals and weddings. According to the motifs from folk stories, when a young man proposes to a girl, the girl throws apples at her husband-to-be. On the wedding day, wedding guests are not allowed into the girl's house until they shoot an apple stuck on a spear lifted as high above the house as possible.

12.3.2.2 Linden

The Old Slavs considered linden (*Tilia* spp.) to be a holy tree and performed rituals and offered sacrifice to it as if it had been a deity. The Old Slavs gathered honey and wax in linden forests. They also used the nectar from linden trunks for various needs, and built houses and house furnishings from linden wood. Linden is also used for making icons and crosses in churches. According to folk tradition and beliefs, it was the tree of destiny, and so it used to be planted on the day of a male heir's birth (Šulek 1878). Wreaths were made for rituals using leafy branches of linden, oak, and hazel trees. Wreaths were believed to have some magical strength owing to their round shape and the properties of the plants woven into them. They were usually put on doors, thresholds, windows, or the house icon, as well as in gardens, vineyards, stables, and beehives in order to protect the house, cattle, and crops from evil demons (Radenković 1996).

12.3.2.3 Hazel

There are a lot of folk beliefs concerning the hazel tree (*Corylus colurna*) in Serbian tradition. Hazel tree is considered to have extraordinary magical powers and its magic branch can fulfill all our wishes. Hazel tree is also believed to be able to kill the devil, turn a man into an animal, and sometimes even resurrect the dead. Also, the twigs of the hazel tree are used to decorate doors, windows, or cattle pens, and sticks are driven into the earth and left in fields and gardens. There is a custom where a pregnant woman carries a hazelnut in her bosom and, after she gives birth,

puts it in the water where the child has its first bath in order to give him the strength that hazel trees have (Čajkanović 1994). Hazel tree is also a tree of knowledge. In old Serbian schools, the children who did not know the lesson were flogged with a hazel tree rod, certainly in order to make them learn the lesson. Similar to linden, hazel tree has a big importance in the cult, and since it is considered to be a blessed tree, it is used as the living fire to light the first blaze in a new house (Trojanović 1898).

12.3.2.4 Walnut

According to folk beliefs, walnut (*Juglans regia*) is the tree of the underworld, of witches, and evil spirits. This is why people think it is not good to sleep under a walnut tree because one could fall into the eternal sleep. This belief stems from the fact that no plant grows under a walnut tree. If the master of the house cut a walnut tree in front of the house, he would die. In order to prevent illnesses, the sick people would sometimes crawl under the walnut roots saying incantations (Karadžić 1867). There is a custom on Christmas Eve for the master of the house to throw a walnut into each corner of the house (and the household members are not to touch them) as a sacrifice to the deceased.

The tradition says that those who suffer from hemorrhoids should bathe in water full of walnuts and hazelnuts. In eastern Serbia, people use walnut to make amulets believed to protect from evil people, mostly by carving a horn-shaped walnut branch (Jojić Pavlovski 2010). Since early Christianity, icons have been made of walnut wood. In monasteries, walnut leaves are used for dying linen, and such clothes are considered to be blessed and protect the body. The Serbs have a famous remedy for improving male potency; it is made by keeping walnuts in honey for 10 days and then eating them (Đorđević 1958).

12.3.2.5 Basil

Even the well-known Serbian botanist Josif Pančić (1878) noticed that basil (*Ocimum basilicum*) was the plant that the Serbs liked best, even among numerous other prettier and more scented plants, and that it followed people from their birth, when a bunch of basil was put on the pillow of the newborn baby, until their death, when it was planted on the gravesite. As Čajkanović (1994) pointed out, basil had an extraordinarily significant role in not only magic, religion, and cult, but also in the medicine and poetry of the Serbian people. At Epiphany, a dried basil twig is put into the water brought from a spring in the morning. Basil and its pleasant perfume symbolize the benediction of the Holy Spirit. The guests who come to wish Merry Christmas are adorned with basil. A lot of customs are connected to the cult of the dead, so when somebody dies, a bunch of basil is put into their hands, and when going to the graveyard, a bunch of basil is put on the cross. It is believed that the Serbian people managed to avoid the epidemic of plague that devastated Europe in the late Middle Ages because basil twigs were put on tables with food and on wells.

According to Milićević (1894), basil was used to cast spells on the ill part of the body and to purify the water used in doing sorcery, while in eastern Serbia, basil twigs were used for making balms and amulets for scattering evil spirits or for casting spells. In the Serbian language, there is a saying describing a good and pious man: "His soul smells of basil."

One of the most famous basil amulets is made by using a spoon to fill a densely woven linen bag with crushed basil leaves mixed with honey that has previously simmered until the boiling point. While it is heated, the honey is stirred by a basil twig and these words are said: "Sweet honey, give me your sweetness for angels to notice me and bring me all my happiness" (Jojić Pavlovski 2010).

12.3.2.6 Garlic

Since ancient times, garlic (*Allium sativum*) has been thought to be the best means for fighting demons, devils, and spells. The history of this plant is as old as humankind, and it is much respected in ethnomedicine and magic. As Čajkanović (1994) pointed out, witches were frightened of garlic and the people who did not eat garlic were thought to be witches. The advice was to put a wreath of garlic around your neck or on the pillow before going to sleep, and to carry it around your waist during the day because it would stop evil powers (Milićević 1894). Even today, people in eastern and southern Serbia think that wreaths of garlic can protect the home, and so they string garlic bulbs up a red rope and hang them to the right or left of the doorpost.

12.3.2.7 Hawthorn

Apart from other magical characteristics, hawthorn (*Crataegus* spp.) was extremely important as a cosmic tree. According to Čajkanović (1994), hawthorn is a popular weapon when fighting vampires, witches, and evil demons (they mostly represented illness). When vampires are dug up from their graves, as a rule, they are "killed" by piercing a hawthorn stake through them. Incantations and sorcery connected to hawthorn clearly show that a hawthorn tree is the residence of the demons that are capable of sending illness. If there is an epidemic of a disease, a hawthorn stake is stuck in front of the house and all the household members repeat the incantation: "(Of a disease) Come to the stake but do not go further" (Karadžić 1824). Parts of this tree are sewn into clothes or put in a child's cradle and thought to be a reliable protection from witches, vampires, and spells.

12.3.2.8 Wormwood

In religious and magical books, wormwood (*Artemisia absinthium*) is the wizard among the herbs. People in ancient times believed in the power of wormwood and the proof is the name given to it. The old Greek and Latin names are the same and

have the symbolic meaning, "artemisia," after the Greek goddess Artemis, and "absinthe," meaning bitter. There is a Serbian proverb used to describe bad life—"as bitter as wormwood." At the end of the nineteenth century, there were rituals of drinking absinthe, a spirit made from wormwood, in Europe, while in Serbia, there is a tradition of making "pelinkovac," a bitter liquor based on wormwood (Serbian: *pelen* or *pelin*) containing numerous other healing plants. In eastern Serbia, this plant is used for making the amulet for curing migraine.

12.3.2.9 Nettle

The tradition says that nettle (*Urtica dioica*) protects from superior forces and cosmic radiation. There is a familiar ironic saying in Serbian: "The thunder won't strike the nettle" (Karadžić 1867). Also, when the first thunder strikes in spring, people adorn themselves and their houses with nettle to distract the thunder (Čajkanović 1994). In eastern Serbia, nettle is used for removing spells. A nettle stem is put into a bottle of water, and while stirring it, these words are said: "Let this nettle spring he who cast the spell on me." Then the stem is be taken out and put under the pillow to sleep better. In order to be more magical and more feminine, women should wash their faces with the water where nettle has been boiled and repeat: "I stung my face with nettle to get rid of all the rivals" (Jojić Pavlovski 2010).

12.3.2.10 Marigold

Since the time of Egyptian pharaohs until today, marigold *(Calendula officinalis*) has been used not only as an exceptional healing plant but also in various magical rituals. In Serbian folk tradition, marigold is often mentioned in women's traditional love songs. Marigold is picked on the eve of St. George's Day, and along with the Easter egg, it is put in the water that is used for face washing on St. George's Day (Sofrić 1912). It is also used in love magic. A bride brings a bunch of marigold to her husband for him to pine away for her. (In the Serbian language, marigold is called *neven,* and to pine away is *venuti*. This is a pun.) If a marigold grows up for a girl, she will pine away for her sweetheart (Karadžić 1867).

12.3.2.11 Laserwort

"Raskovnik," laserwort (*Laserpitium trilobum*, *Laserpitium siler*), is a plant with many magical properties attributed to it. Its very name shows that this is a plant that can heal (Serbian "*raskiva*") numerous diseases. In addition, raskovnik is thought to be able to unlock (Serbian "*raskiva*") all padlocks and everything closed or locked (a door, a chest, or a fence) and treasure hunters need it to open the treasures (Stefanović 1818). According to Tucakov (1997), the plant's root had anthropomorphic characteristics, and that a head, neck, arms, legs, and eyes could be recognized.

It is used in folk medicine to heal female infertility believed to have been caused by spells. For example, it is thought to be able to remove the magic and spells cast at the wedding (Petrović 1900). According to folk beliefs, the plant "raskovnik" frees trapped and cursed souls (Biljan 1907). In eastern Serbia, "raskovnik" is considered to be the most powerful magical plant that reveals and removes sorceries, protects the house and household members from any kind of evil, helps in settling disputes, brings success in business, happiness in love, and well-being. There is also a legend that the mythical treasure of Tsar Radovan can be reached only with the help of this plant.

12.3.2.12 St. George's Day

One of the most important Serbian holidays is St. George's Day, which represents the holiday of revived nature, when various customs try to transfer its power, mostly the power of the new vegetation, to people, animals, crops, and vineyards. On the eve of the holiday, the mistress of the house takes the Easter egg and puts it in a pot. Around it, she puts different plants: big-root geranium (the symbol of health), cornel (for toughness), and ivy (for daughters-in-law to be devoted to the house). The pot is then filled with water and put under a rose. Immediately after getting up the next morning, the members of the household wash their faces with it.

The Old Serbs had an exceptionally developed cult dedicated to plants and trees. A lot of nations believe in the power of plants, but our people still cherish many of these beliefs today. There is a belief that plants can be put into two groups: good and evil or lucky or unlucky; various sorts: holy, shady, daemonic, godly, and mythical. The cult of plants has an important role in a lot of occasions in our tradition, from birth till death, in numerous jobs (female and male), on working days and holidays, and in different parts of day and night (Kazimirović 1939). It is equally important for celebrations and mourning, love and hate, caring about health and treating illnesses. Our ancestors took care of plants, and in this way, they saved a lot of wisdom.

12.4 Conclusion

Southeast European (SEE) countries located in the Balkans, as one of the world's most biodiverse centers, are known for high floristic diversity, including richness of medicinal plants that have been traditionally utilized by local population for long time in folk and veterinary medicine, as well as in different local products. The number of vascular species of the SEE (Balkan) region could be estimated as about 8000, with very high proportions of endemic plants (more than 2000). The total number of vascular plants growing in Serbia is about 4000, of which 1000–1500 are used as food, medicinal plants, spices, natural dyes, food preservatives, etc. In Serbia, there is a strong and long tradition of plants use for various purposes

originating from ancient times. Nevertheless, traditional use and knowledge about old and autochthonous crop varieties, medicinal plants in folk medicine, and plenty of other economic plants (edible, toxic, natural dyes, natural preservatives and additives, etc.) have not been comprehensively studied and elaborated. Moreover, transitions in Serbian politics and the economy strongly jeopardize the stability and existence of rural livelihoods, especially in the hilly and mountainous regions, where traditional practices and traditional agriculture still exist. Collapse of former cooperatives, lack of crop subsidies and credit access, and destroyed infrastructure provoked a much higher rate of migration towards urban centers beginning in the 1960s, which was also caused by industry expansion under the socialist regime. The consequence is a current and alarming situation that impacts the poorest rural areas that are faced with dramatic aging and depopulation. This may be illustrated by the fact that in Serbia nearly 1200 villages are in the process of vanishing (http://www.politika.rs/rubrike/Sta-da-se-radi/U-nestajanju-je-vise-od-1_200-sela.lt.html). Together with a definite loss of experienced herb collectors and traditional phytotherapists, the ethnobotanical knowledge, old recipes, and many of local brands containing herbs, berries, or mushrooms have been irreversibly lost.

There is an urgent need to preserve the ethnobotanical and ethnopharmacological knowledge of this region because of the permanent drop in the number of herb collectors and diminishing of rural inhabitants in general. Due to the general devastation of rural areas, particularly in hilly and mountainous regions of Serbia (and the Balkans), aging and depopulation processes naturally resulted in loss of substantial data on traditional uses and practices related to useful plants, including old and autochthonous crop varieties (of cereals, vegetables, and fruit) as well as the medicinal and aromatic plants. A comprehensive survey of ethnobotanical knowledge in Serbia and the whole Balkan region is urgently needed to preserve these ancient traditions, which are rapidly disappearing during this period of socioeconomic transition.

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