2nd International Scientific Conference

2017

1-3 June, 2017
Vrnjačka Banja, Serbia

TOURISM IN FUNCTION OF DEVELOPMENT OF THE REPUBLIC OF SERBIA

Tourism product as a factor of competitiveness of the Serbian economy and experiences of other countries

THEMATIC PROCEEDINGS II

UNIVERSITY OF KRAGUJEVAC
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TRADITIONAL ETHNOBOTANICAL KNOWLEDGE IN 21TH CENTURY AS AN IMPORTANT ELEMENT OF SUSTAINABLE TOURISM

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Abstract

The concept of ethnobotany represents the study of plants used, conserved and managed by the local people. It deals with local people knowledge of a particular use of plants in gastronomical, medical, religious, and other purposes. In this paper, special attention will be paid to the use of traditional ethnobotany knowledge in local gastronomy and its effect to tourism development.

In the last 10 years, different studies were conducted in terms of collecting as much information as possible about the relationship between traditional use of plants with gastronomic offer and the increase of tourism development. The idea of this study is to record the traditional food and local plant resources of a particular interest for sustainable small-scale eco- or rural tourism activities.

Ethnobotany is a rapidly growing scientific topic and it is predominantly linked to economic botany: on the one hand to determine the potential economic value of various plants and, on the other, to make a link with a relatively new aspect of eco-tourism market.

Key words: *ethnobotany, gastronomy, ecotourism, sustainable development*

JEL casification: *Q57*

Introduction

Ethnobotany is scientific discipline which describes dynamic relationship between people and plants in terms of wild or semi-wild plant used,

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conservation, management and local people. Ethnobotanists aim at documenting, describing and explaining complex correlation between cultures and plants, focusing primarily on the way plants are used, perceived and managed by human societies. This includes the use of plants for food, clothing, currency, rituals, medicines, dyes, construction and cosmetics. Moreover, it emphasizes the links between conservation and management, thus bringing about the human role of biodiversity (Hanazaki et al., 2013).

There has been a long tradition in plant use since the beginning of the emergence of human civilization till now. Also, there are numerous reasons for studying this discipline. Nowadays, ethnobotany is becoming a scientific discipline in a rising (Prospecting ethnobotany in tourism industry, 2008). The possible reasons for that concern the threat to traditional cultures and their knowledge of plant uses and relationships. On the international scale, over the last three decades of the past century, researches were focused on the need to catalogue knowledge of plants in a race with the fast disappearing natural resources. Reviewing scientific articles, it is evident now that there is a close correlation between the destruction of ecosystems and the decrease of biological diversity as well as cultural loss with indigenous knowledge at the global plan. Maybe specific reasons of this phenomenon vary from the country to country, but, in general, traditional knowledge is being lost throughout the world. Nevertheless, there are similar trends that follow this issue regarding the gap between traditional knowledge transfer among generations, depopulation of rural areas, urbanization and modern life-style. Many ethnobotanists ventured to faraway places to catalogue all the plants and indigenous knowledge (Lanier, 2013).

Today's tourism is broad and, if properly managed, it can have positive effects on local communities. We have seen many good examples of ecotourism and its benefits (Kostic & Lukovic, 2016). Tourism could be driving force for local communities, especially ecotourism activities based on botany tours, ethnobotany applied knowledge in preparing traditional food, medicine, artifact, fodder or other useful concepts. The lack of knowledge and little or no input in its implementation could cause bad management of both environment and biocultural diversity (Prospecting ethnobotany in tourism industry, 2008).

Following world trends in this issue, we conducted a research on ethnobotanical knowledge in several villages in Golija Mountain, with

special attention to the use of plants in local gastronomy. The study was segmented and it also included the activity of investigating the village ID card.

Plant resources and their traditional use

Taking into account the Republic of Serbia as multiethnic country, with diverse nationality impacts and long historical influence of different conquerors, it can be said to have established very interesting culture and tradition in plant use. In general, Serbian culture may have been influenced by the Paleo-Balkan people. Modern Serbia is a rural country, where rural areas cover about 85% of the territory with 41% of the total population (Dajić et al., 2014). Rural area represents one of great potentials in natural resources richness (biodiversity, cultural 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 (Dajić et al., 2014).

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. The most intrigue plants are the ones used in folk medicine or superstition rituals (Čajkanović, 1994). 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. The beginnings of using plants for medical purposes officially started in old medieval Serbia related to the Monasteries of Studenica and Chilandar and the first several scriptures (Dajić et al. 2014). One of the most important documents that is kept safe and bears witness to the beginnings of medicine at the territory of Serbia is "The Proceedings of Hodoš," the oldest Serbian codex of secular medicine from the fourteenth century which notified the use of various herbs such as (caraway - *Carum carvi*, aloe - *Aloe vera*, thyme - *Thymus vulgaris*, flax seeds - *Linum usitatissimum*, and coriander - *Coriandrum sativum*) (Katić, 1990a). Another medieval paper on Serbian medicine that should be mentioned includes The Sorcery Book from Dečani. In the era of the Nemanjić rulers at the beginning of the

fourteenth century, the first pharmacy was founded. 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 (Katić, 1990b).

Old Serbian people were familiar with numerous plant species. 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 (Parojčić & Stupar, 2003). Herbs were attributed miraculous and healing properties. The most used or mentioned species are 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 (Tucakov, 1997).

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 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, many indigenous local populations of agricultural plants have been replaced by high-yielding varieties and hybrids. Several crop species in Serbia are autochthonous, such as certain cereals, forage grasses, legumes, and some vegetables (Dajić et al., 2014) 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. 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). 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 yeas. Besides wheat, vegetable are also great autochthon potential with several authentic representatives such as valuable domestic populations of onion ("Kupusinski jabučar," "Kupusinski crni/crveni") that can still be found, or local populations of cabbage are well known in Serbia: "Futoški," "Srpski melez," "Varaždinski," "Golubarac," "Kačar," "Katunski," etc. Old local growers of pepper, tomato cultivars (e.g., "Trešnjar," "Pećki jabučar," and "Zlatni plod Timoka"). 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. 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 (Zagorac, 2010).

The research of the relationship of ethnobotany and tourism development

Tourism as one of leading economy activities is continually developing and achieves significant economy effects. The existing analysis and predictions of tourism development indicate that, as opposed to mass tourism, there is a demand for rural area what gives reasons for rural tourism development and more specific types such as eco-tourism (Štetić, 2009). The recent survey in tourism shows that involving local communities with their attributes is important, and significantly it becomes the crucial issue in sustainable tourism agenda. Local people should receive the impact from tourism business, and their environment can be conserved in order to enhance the destination competitiveness. It is relevant with global mandates to implement sustainable tourism. The sustainable tourism argues that tourism development should involve three balanced aspects, i.e. economic, environmental and social. Sustainable tourism has been tested in numerous countries in numerous sites, including rural areas, as well. In rural areas, the attempt to implement sustainable tourism has been done through optimizing human and its surrounding resources into tourism planning and development (Bjeljac, 2004).

Optimization of rural resources is the crucial key for sustainable tourism destination. Natural resources as one of the principal component of rural landscapes have significant value in tourism destination sustainability. The use of natural resources is a traditional system where local people collect crops meadow - woody plant species for their own purpose. Plant collecting is manifestation from indigenous knowledge in managing daily activities (Ramirez, 2007). Plant resources have many functions such as source of food, fodder, medicaments, etc. Sustainable use is also important in biodiversity conservation (Kostić & Petrović, 2015). Ethnobotanical survey is widely applied to understanding plant diversity, especially plant diversity and structure in perspectives of human culture. Ethnobotany provides significant tools to describe the unique characteristics of local landscapes, known as cultural landscapes, which area important in tourism. Ethnobotanical studies of traditional plant use have been conducted in many developing countries in order to collect the basic data for rural development. The uses of ethnobotanical survey for tourism destination sustainability, however, are rarely implemented (*Getachew, 2013).*

As sustainable development represents one of the basic principles of social development, sustainable tourism development of Golija-Studenica Biosphere Reserve makes possible the development of the concept which includes a balanced economic, social and cultural development without compromising the environment. In such a way, we enable future generations to use resources in the same or even higher degree compared to the existing one.

Case study: plants in gastronomy of Golija-Studenica Biosphere Reserve

Tourism, as one of leading economy branches is developing from day to day achieving thus significant economic results. In recent times, this development has led to new forms of tourism, adjusted to the needs and wishes of each and every tourist. The existing analysis and predictions of tourism development indicate that as opposed to mass tourism, there is an increasing demand directed towards untouched areas which give the reasons for the development of rural and eco-tourism (Agenda 21, poglavlje 14., održiva poljoprivreda i ruralni razvoj (SARD).

The development and promotion of rural tourism to generate multiple benefits for both a rural area and tourism in Serbia in general. The

development of tourism in rural areas positively affects the nature conservation and protection, as well as the protection from degradation of rural houses and farms and finally that of culture (Putri et al., 2016). As sustainable development is one of the basic principles of social development, the sustainable development of tourism at Golija-Studenica Biosphere Reserve enables the only possible development of the concept which includes an equal economic, social and cultural development. Generally speaking, the main principle of Biosphere Reserves operation is balanced economy, social, cultural, which are pillars of sustainable developement with an active participation of local community without degradating the environment, with special attention to the possibility of natural resources use at the same level now as that in the future.

Ethnobotanical studies reveal, document and assess the value and the unique importance of traditional knowledge and the high number of varieties maintained by small-scale farmers, as is shared in a case study from the villages in Golija-Studenica Biosphere Reserve, conducted an ethnobotanical assessment of the inter- and intraspecific diversity of plants managed by traditional people in several villages in the municipality of Rudno. They revealed traditional plant collecting for more than 100 species, and estimated that more than 20% of total species are noted in this region. Local farmers were able to point out several factors that contribute to a reduction in plant diversity, including restrictive environmental laws, rural exodus, an increase in unsustainable tourism, and the overall change of livelihood activities of traditional people. Interdisciplinary techniques, including methods that combine the areas of geography, biology and anthropology, are useful for learning about the local management of plant resources. Qualitative research methods have a wide use in ethnobotany, including semi-structured interviews, participant observation and a variety of participatory tools. Participatory tools of visualization and triangulation are used to increase the reliability of the study being conducted, and to enhance the active role of traditional people and their partner communities in the research process. If applied in an appropriate manner, and if the ethnobotanists are professional in their facilitation, the tools can enhance the knowledge of both the scientists and traditional people. The knowledge and experience of local people are not only documented, but are also discussed and included in joint plans concerning the management and conservation of local resources. The research now serves to increase awareness of traditional knowledge and biodiversity; to foster an understanding of the local situation and the need for joint actions; and to define strategies for

the development of community-based institutions for managing biological resources and associated traditional knowledge. In this context, participatory learning and action research (PLAR) is a prominent methodology that can help to meet this challenge. In PLAR, researchers and communities drive the research in a participatory way, while being guided by the initial demands of the communities. It is valued because of its reiterative structure, which involves several learning cycles, and works with stratified groups of stakeholders in an effort to link scientific and local knowledge systems. In addition, it is valued for its long record in supporting natural resource management. A key factor concerning participation in the research is the way in which the tools are applied. However, the most important factor is the relationship between researcher, community and stakeholders in the design, implementation and evaluation of the research; and this is relevant not only to ethnobotany, but to any other study in which scientists work with local and traditional communities (Hanazaki et al., 2013).

By using the basic principles of (PLAR / PRA) methodology, a systematic and extensive analysis of the situation of the village was established. The analysis of the economic, agricultural and socio-cultural aspects of the local community provided the basis for the creation of options for improving the situation and pointed to possible measures that should be taken regarding this issue. In the preparation of *ID cards* of Rudno village, PLAR methodology was used which considered the analysis of the situation of the village, an active evaluation and participatory rural assessment (Vukadinović, 2009).

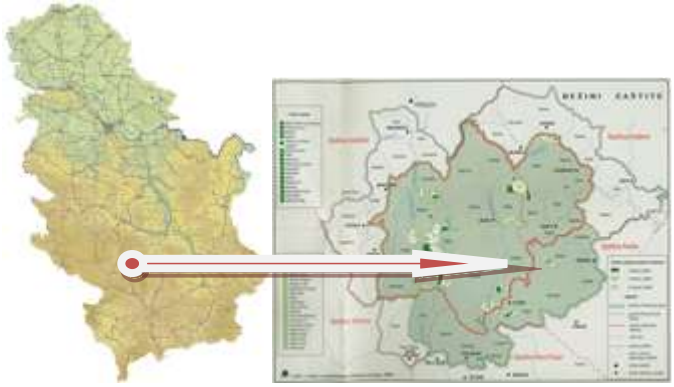
The application of the map of resources provided an insight into the natural potential for the existence and development of certain branches of economy that the village has and the attitude of locals towards that. The map reflects the spatial structure of a typical Golija mountain village in which households are spread throughout the territory. Rudno is at the crossroads of regional roads: Usce - Studenica - Rudno, Brvenik - Gradac - Mineral and Mineral - Virgo - Ivanjica. All parts of the village and surrounding hamlets are connected by unpaved roads, the only regional road covered in asphalt being the one from the direction of Brvenik to the village center. 15 km to north of the village there is the monastery of Studenica; the village is located 13 km northeast of Ušće, and 100 km north-east the regional center of Kraljevo and 34 km southeast of Raska. On the western side, the Village borders Devići (the village of Ivanjica municipality), on the south side it borders Binići and Gradac (the villages

of Raska Municipality), while the rest of the villages belong to the Municipality of Kraljevo. Near the railway station Brvenik (24 km). The local community Rudno is divided into three hamlets: Bzovik, Reka and Dražinićе. In the northwest under Radocelo springs Brevina river which flows through the village and into the River of Studenica. In the southern part of the village there is the spring of the Vrelo River which flows into the Gradačka River, and then in the Ibar. Throughout the western part of the village passes the river of Izubra which runs into the Studenica River. On the territory of the Village there are about 50 springs of drinking water (Petrović & Milutinović, 2012).

Households inhabiting large part of the village are located mainly on larger plots area. The yards mainly consist of the area covered in gardens, pastures and fields. The central part of the village is enclosed by conifer forests with very small belt of deciduous forests. Marginal parts of the village are also surrounded by dense conifer with what the northwestern part of the border village towards Radočelo belted by beech forest that crossing the meadows, pastures and fields. The village has significant resources of natural meadows and pastures (V, VI and VII-class of soil quality). This data refers to the potential for the development of mountain cattle and sheep, by which inhabitants of the Rudno were aware in the past, as evidenced by the data obtained by other PRA methods (time line).

If we look back only on the floristic features of this area, the presence of more than 700 plant species is evident. Special importance in the flora is endemic and relict species and species of importance in everyday use (medicines and aromatic plants). Among the preserved natural values of the area, special attention should be paid to the rare stands of mountain maple (*Acer Heldreichii*). According to the Regulation on the protection of natural rarities, many plant species are under protection. There is a list of plans whose collecting is allowed on limited or sustainable way. These characteristics represent strengths for eco-tourism development (traditional gastronomy based on plants, herbal tours, etc.).

Figure 1 and 2: *Map of the Republic of Serbia and Golija-Studenica Biosphere Reserve*



Source: *https://www.381info.com/autokartasrbije.php; www.ivanjica.rs*

As a contribution to the first survey conducted during 2010-2011, we conducted classical ethnobotanical research in 2013-2014 as added value to this research. The latter research was conducted in the area of the mentioned villages of Rudno Municipality. The questionnaire contained 7 groups of questions related to general information about the local community, collecting natural resources, medicinal plants and their uses, nutrition and treatment, the use of plant resources for other purposes, forest fruits and berries and mushrooms in the local gastronomy.

Table 1: *Review of the most used medicinal plants in Serbian tradition (Adapted from Dajic et al., 2014)*

Latin binomial and family	**Folk name in Serbian/English**	**Traditional use - folk use in food products**
Alchemilla vulgaris L. Rosaceae	Virak/lady's mantle	Mixed with honey for different diseases or prepared as tea
Angelica archangelica L. Apiaceae	Angelika/garden angelica	Has a positive effect on digestive tract, digestion, better appetite
Asarum europaeum L. Aristolochiaceae	Kopitnjak/European wild ginger	Roots prepared as beverage in the treatment of alcoholism
Betula pendula Roth. Betulaceae	Breza/silver birch	Prepared as juice/siryp or tea
Carum carvi L. Apiaceae	Kim/caraway	The most used spice for food preparation
Cichorium intybus L. Asteraceae	Plavocvet/chicory	Used instead of coffee, today used as tea
Cornus mas	Dren/cornelian cherry	Used for juice, tea, cookies,

L. Cornaceae		jam, sauce, etc.
Crataegus monogyna Jacq. (Rosaceae)	Glog/hawthorn	Usually used as spice
Gentiana lutea L. Gentianaceae	Lincura/great yellow gentian	Addition to traditional brandy (rakija)
Hypericum perforatum L. Hypericaceae	Kantarion/tipton's weed	Most used for tea, oil
Juniperus communis L. Cupressaceae	Kleka/common juniper	Rakija, dry fruits for tea or addition to meat, sauce
Ononis spinosa L. Fabaceae	Zečiji trn/rest harrow	Used as addition to the so called "green" bread or other dough
Origanum vulgare L. Lamiaceae	Vranilova trava/oregano	
Plantago lanceolata L. Plantaginaceae	Bokvica/ribwort plantain	
Plantago major L. Plantaginaceae	Bokvica/broadleaf plantai	
Prunus spinosa L. Rosaceae	Trnjina/Blackthorn	Most used for preparing jam, juice, tea or addition to different souces
Rosa canina L. Rosaceae	Šipak/dog rose	Health beverage as tea, juice or prepared as jam or souce
Rosmarinus officinalis L. Lamiaceae	Ruzmarin/rosemary	Used as spice
Rubus fruticosus L. Rosaceae	Kupina/blackberry	Used for juice, syrup, jam, slatko, souce, addition to cakes
Sambucus nigra L. Adoxaceae	Zova/elderberry	Delicious syrup
Taraxacum officinale F.H. Wigg Asteraceae	Maslačak/dandelion	Used fresh as salad, or as jam, honey
Teucrium chamaedrys L. Lamiaceae	Podubica/wall germander	Spice in "green bread", tea
Teucrium montanum L. Lamiaceae	Trava iva/germander	
Thymus serpyllum L. Lamiaceae	Majčina dušica/wild thym	
Urtica dioica L. Urticaceae	Kopriva/nettle	Used in dough, tea, syrup, "gibanica"
Vaccinium myrtillus L. Ericaceae	Borovnica/blueberry	The most used for syrup, jam, slatko, sauce, addition to different types of food

Source: *(Dajic et al. 2015)*

Besides meadows plants used for cooking and preparing traditional food, we know that different types of autochthones species of fruit, vegetables or cereals are used in daily Golija kitchens. Due to the fact that the area is mostly mountainous in character and traditionally is a livestock place, the most known products are made of milk or meat, where the highlight of gastronomic offer is considered to be prosciutto and kajmak with different herbal spices. It is also worth to mention dough products made of buckwheat such as bread *(Serb.* pogača), pancakes *(Serb.* uštipci), and pie (*Serb.* gibanica) (Zagorac, 2010). Buckwheat is the seed of the plant *Fagopyrum esculentum*, which belongs to the family Polygonaceae. Although one might think that buckwheat is grains, it is not so. While the cuisine considered buckwheat as cereal because of its nutritional value, botanically it belongs to the category of green leafy vegetables, and it is sometimes included into fruit. Buckwheat flowers are highly aromatic, which attracts bees that use them to make a special type of honey, which has a dark color, strong aroma and special healing properties. Buckwheat is often used as a substitute for rice, prepared as porridge or used as flour.

Table 2: *As very authentic food and beverage of this area, subjects listed several interesting gastronomic specialties which contain local plants*

Food/beverage	**Used plant**
Serb. Slatko (sweet fruit syrup similar to jam)	Prepared with cold well water saved from various tame and wild fruit (plum, grape, quince, wild and tame, strawberries, cherries, blackberries, etc.)
Coffee	Made of roasted barley
Rakija	Plums, apples, pears, quinces, apricots, grapes, brandy (brandy angry), cooked brandy, honey brandy, gentian
Wine	Made of grape, raspberry, sometimes with the addition of danewort, caraway, cloves
Serb. vodnjika	Fermented various fruits, or medicinal plants tea, or beverage made of honey).
Bread	Made of wheat flour: saved for fire: cake in the ashes (*serb.* Crepulja, sac)
Serb. Uštipci	Prepared of rye, barley, buckwheat and wheat flour.
Pone	Made of corn flour with the addition of wild herbs, nettle, and other herbal spices
Pies (*serb.* gibanica)	Sweet pies, fruit and other: *serb*. Jabučara- apple pie, prunes pie, cucurbits, plum jam, pancakes, donuts, compote made of various kinds of dried fruit (prunes, pears, apples)
Thick soups	With nettles, cabbage and nettle, potato soup, with onions, leeks, turnips, etc.

Source: *Original by authors*

The strong link between biodiversity and tradition related to the gastronomy represents the very foundation of the human experience and contributes in a variety of ways to the well-being of humans and their surroundings. The study of the complex interactions between human societies, food, and their environment is defined as gastronomic ethnobiology and in recent times it is considered as important pillar for fostering food security and especially food sovereignty. In the ethnobiological approach linked to food, in order to consider the entire dimension of socio-ecological systems, the focus must be not only on "natural" environments, but also on place-related history, culture, and philosophy, as well as the spiritual aspect, which occurs behind this diversity. Simply, the *holistic* nature of food socio-ecological systems shape what we nowadays call gastronomy (Pieroni et al., 2016). On the other hand, folk/traditional knowledge systems are reemerging as a priority concern at the global level, as they are increasingly being recognized as constituting not only the tangible but especially the intangible heritage. Local communities are experiencing a loss of folk/traditional knowledge and values, which goes hand in hand with a decline in cultural diversity and the dilution of a true sense of community. This process of impoverishment of the social dimension of diversity and social cohesion is reflected in the present global food system which, based on the idea that local, small-scale agriculture must also serve the global market, transforms food into a mere commodity and compels people to conform to a single way of producing and consuming it (Pieroni & Giusti, 2009).

Conclusion

Ethnobotanical research studies carried out in response to specific requests from traditional people seeking the support of scientists create opportunities for ethnobotanists to embed their research within the larger context of conservation and development. In this sense, researchers can contribute vital elements in the design of community-based management plans required for the establishment of sustainable development reserves. Those following more constructive or participatory paradigms in ethnobotany seek and develop expertise that contributes to the emancipation and empowerment of traditional people in a larger context of biodiversity conservation.

The tradition plants which grown in this area in mountainous landscapes improve visual appearance, and therefore have the ability of improving

people psychology and mentality. It is especially important in tourism destination planning. The abundance of fruit plant and vegetable provides opportunities for gastronomy products to sell, especially to the visitor who comes to a rural area as a tourist. Throughout the world, it is common to sell traditional gastronomy products to tourist. Tourists are also interested in buying handmade products. Some rural communities in Golija-Studenica Biosphere Reserve still practice the gathering of wild herbs, which was and partially their daily diet for seasonal months each year. Future studies could not only confirm the vast richness and complexity of this food biodiversity, but they can also propose gastronomic and educational frameworks for re-instilling traditional knowledge on wild food plants as well as sustaining small-scale (famers) offer, through which the neglected wild herbs of mountain cuisines can continue to be sustainably gathered and traded (such as *Teucrium montanum, Vaccinium myrtillus Urtica dioica, Teucrium chamaedrys, Sambucus nigra, Rosa canina, Origanum vulgare,, Cornus mas, Carum carvi).*

The awareness of the need for developing and preserving gastronomic culture is not sufficient or at least not equally developed in all parts of Serbia. Tourism, environment and gastronomy cannot be separated. As a traditional element of cultural heritage, gastronomy is a major tourism activity in the sense that food contributes to the quality of rest and the overall tourism experience. Gastronomy certainly holds a favorable position in the tourism demand.

Traditional food and medical herbs from local sites were recorded in the upper part of Golija Mountain. Analytical comparisons with other ethnobotanical studies previously carried out in other parts of the Republic of Serbia help improve questionnaire and contribute to the local tradition knowledge to be saved because traditional knowledge has been heavily degraded. We hope that this relatively young scientific discipline will be widely spread and that it would contribute to the protection of our cultural or natural heritage for future generations.

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