Plants used in traditional handicrafts in several Balkan countries

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The aim of the study is to show some of the most common and popular plants used as raw in some traditional handicrafts in Balkan countries, in relation to the natural plant resources and national traditions. The information is gathered largely from literature, analyzing the findings in the existing ethnographic collections as well as field collected data and interviewed during field survey conducted during 2006-2007 more than 50 local informants using non-structured interviews. *Arundo donax*, *Cannabis sativa*, *Corylus avellana*, *Fagus sylvatica*, *Fagus orientalis*, *Morus alba*, *Phragmites australis*, *Salix* spp., *Typha angustifolia*, *Urtica dioica*, *Vitex agnus-castus* were found to be commonly used in the manufacturing of wood articles, mats & rugs making, basketry and fibers producing.

Keywords: Balkan countries, Traditional handicrafts

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The traditional handicrafts and the home grown activities use frequently local raw materials and they are related largely with the base, the food, the clothing and the settlement structure. To make plant based articles requires knowledge about species determination, plant morphology, phenology, ecology, etc. The aim of the study is to show some of the most common and popular plants used as raw materials in some traditional handicrafts in Balkan countries, in relation to the natural plant resources and national traditions. The data received up to date are from an ethnographic and anthropological viewpoint and only partially ethnobotanical studies1-13. The study area is characterized by the abundance, heterogeneity and diversity of plant species. Romania has 3,700 higher plant species of which 57 are endemic, 171 sub-endemic and 1,253 rare; of these, 39 species are considered endangered and 171 vulnerable14. The flora of Serbia consists about 4,182 plant taxa and about 150 endemic, relict and international significant species15-16. Currently, the Bulgarian flora comprises 159 families, 906 genera and 3,900 species, 12.8 % are endemics17. In terms of its flora, Turkey, with its 10,000 species, is one of the richest countries in Europe and the Middle East due to its climate and geographical position18.

Methodology

The study area region, Balkans is a part of South-eastern Europe and consists of countries, Romania (Rm), Serbia (Se), Bulgaria (Bu) and Turkey (Western Anatolia) (Tu). The territory of study area covers the highest diversity of European biogeographic regions: continental, pannonic, alpine, pontic and steppic, Sub-Mediterranean and Mediterranean. The information is gathered largely from literature, analyzing the findings in the existing ethnographic collections as well as field collected data and more than 50 local informants using non-structured interviews. The field survey was conducted during 2006-2007. The plant nomenclature is given according to Flora Europaea19.

Results and discussion

A high plant species diversity of more than 120 taxa of vascular plants in the study area is known, as a raw used for traditional handicrafts. The predominant number of species is from families Poaceae, Salicaceae, Aceraceae, Cyperaceae, Betulaceae, Caprifoliaceae, Pinaceae, Fabaceae, Rosaceae, Fagaceae, Typhaceae, etc. Most of them are trees (45 %), shrubs (30 %) and herbs (25 %). As some of the most common used are determinate 11 species—distributed in the most part of the study area and wide used (Table 1). A large number of plant species

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<table>
<thead>
<tr>
<th>Plant name, Family, English name</th>
<th>Local name</th>
<th>Parts used</th>
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| **Arundo donax** L. Poaceae Giant reed | Bu: Palestinska trastika  
Rm: Trestie italiană  
Tu: Kargi | Stem | Bu: Fishing rods; walking sticks; woodwind instruments  
Rm: Stiff stems are also used as support for climbing plants or for apartment plants; fishing poles for kids  
Tu: Basket, beach umbrella |
| **Cannabis sativa** L. Cannabaceae Hemp, Neck weed | Bu: Konop  
Rm: Cânepă  
Se: Konoplja  
Tu: Kendir, kenevir | Stem, Fiber | Bu: Rough textiles, strings  
Rm: Mat, Mattress  
Se: Knitting and weaving, linen making  
Tu: Fibers for carpets, sack, rope, string, seat base, drying substrate for fruits |
| **Corylus avellana** L. Corylaceae Common hazel, hazelnut | Bu: Leska  
Rm: Alan  
Tu: Findik | Wood, shoots | Bu: Cask’s hoops, walking sticks, cigarette holders, baskets  
Rm: Baskets, foot stool, armchair, couch, table, animal cage, natural charcoal sticks for drawing  
Tu: Basket |
| **Fagus sylvatica** L. Fagaceae Beech | Bu: Buk  
Se: Bukva | Wood | Bu: Furniture, casks, home goods, wood articles  
Se: Furniture |
| **Fagus orientalis** L. Fagaceae Oriental beech | Tu: Dogu kayını | Wood | Tu: Large and long container |
| **Morus alba** L. Moraceae Mulberry | Bu: Chernitsa  
Rm: Duh  
Se: Duh  
Tu: Dut | Wood, bark, fresh shoot peel | Bu: Casks, furniture, wood articles  
Rm: Wood articles  
Se: Furniture, wheel making, cask  
Tu: String for grafting |
| **Phragmites australis** (Cav.) Trin. ex Steud. Common reed | Bu: Trastika  
Rm: Stuf  
Se: Trska  
Tu: Kamis | Vegetative organs (leaf, stem) | Bu: Tube for musical instruments, furniture, mats for wall - upholstery, baskets  
Rm: Boater, straw hat, door mat  
Se: House  
Tu: Boater or straw hat, door mat, barrier for yards, basket |
| **Salix spp.** Salicaceae Willow | Bu: Varba  
Rm: Răchită  
Se: Bela vrba  
Tu: Sogut | Fresh and long shoot, Wood | Bu: Basket, cask’s hoops  
Rm: Basket, rustic chair, table, jewellery box, outdoor broom  
Se: Furniture, toothpick, paper, veneer, match  
Tu: Basket |
| **Typha angustifolia** L. Typhaceae Narrow-leaved cattail, Typha | Bu: Papur  
Rm: Papură  
Se: Muški rogož  
Tu: Hasirotu | Leaf | Bu: Basket, pressboard  
Rm: Mat, basket, door mat  
Se: Cask, basket  
Tu: Mat, back pillow, basket, for burying dead person, packsaddle for donkey, horse and mule |
| **Urtica dioica** L. Urticaceae Stinging nettle | Bu: Kopriva  
Rm: Uržică  
Se: Kopriva | Stem, fiber | Bu: Cloth, sack, cord, net  
Rm: Nettle fiber as substitutes for cotton, for fishing net or paper  
Se: Spinning material (textile fibre) |
| **Vitex agnus-castus** L. Verbenaceae Chaste tree | Tu: Hayit | Fresh and long shoots | Tu: Small and big basket, pannier, beach umbrella |
(species of *Acer, Tilia, Fraxinus & Juglans, Corylus avellana* L., etc.) due to the hardness and strength of the wood as well as flexibility are used for making a small household objects. *Fagus sylvatica* L. (Bu, Rm, Se) and *Fagus orientalis* L. (Tu) are some of the most frequently used wood for manufacturing the various wood articles and furniture, wine vessels, wooden bowls, spoons, mixing spoons, chopping boards, distaffs, spindles, etc. The common types of forest in most of the study area are oak, beech and spruce forests. Nowadays, casks’ producing is very common handicap. Hand-made casks, hoops for casks, with traditional way of wood treatment contribute to the better taste of the alcohol drinks. The most frequently used wood for this purpose is *Abies alba* Mill., *Fagus silvatica*, *Picea abies* (L.) H. Karst., *Typha angustifolia* L., *T. latifolia* L., etc. (Serbia) and wood of *Fagus sylvatica*, *Morus alba* L. and *Robinia pseudacacia* L. One of the most ancient handicrafts is a knitting of mats and rugs (Fig. 2). The plants parts (leaves, roots or young shoots and twigs), which are flexible, strong as well stable to wearing out are used. Commonly, it is a rough material from plants belonging to families Poaceae, Cyperaceae, Juncaceae, Typhaceae, etc. (*Typha latifolia*, *Secale cereale* L., *Sorghum halepense* L., etc.) due to the hardness and strength of a knitting handicrafts—baskets (Fig. 5), door and beach mats (Fig. 7). In later periods, glass vessels are covered with plant knitted materials (vessels for alcohol, liquids, pickles, compotes, etc.). The plant cover increase strength of vessel and at same time is a good insulator. For rope (cord) making, fibre plants such as *Spartium junceum*, *Tilia* spp., *Althaea cannabina*, *Carex* spp., *Urtica dioica* L., *Cannabis sativa* L. and *Juncus effusus* are used (Fig. 6). With *Cannabis sativa* and *Linum usitatissimum* L. traditional clothes, national garbs, are manufactured often with embroidery. Commercialization of these products leads to the creation of new products with some old techniques. From *Cannabis sativa*, the spinning hemp bundle is uses to obtain different woven materials for bags, sacks, tarpaulins, coverlets, table cloth, napkins, sail crafts, trawls, strings, driving belts, fire hose, explosive slow match and haversacks life belts, handbags (Fig. 4), wall straw knitting (Fig. 3), tow and tow ropes; *Linum usitatissimum* fibers are used to manufacture bed, table and body clothes, summer clothes, canvases, sacking linen, parachutes, thread for manual and machine sewing; the tow linen are used like rough woven materials for sacks, tarpaulins, cloth package or wrapping papers for cigarettes. *Linum sp.*, *Urtica dioica* is used to producing rough materials for nettle sacks.

**Conclusion**

The established high plant diversity and most common species as a materials for traditional handicrafts are expected according to species richness, flora and plant resource characteristic of the study area. Most of the species are common and widespread. The plants from family Poaceae, Linaceae, Cannabaceae or Urticaceae are cultivated for caryopsis production, seeds and textile fibers not especially for craft producing. Nowadays, these plants are cultivated indirectly for domestic handicrafts only in rural localities. In study area, most of the plant based crafts are practiced by women. Preserved typical man practiced crafts are cooperage and ropery. Some of the preserved handicrafts as coopering, basket making, broom making and weaving have limit economical significance till now. Other handicrafts are extinct in most parts of the study area. Only in some small villages, shepherd poker-work, distaff and spindle making, matting, basketry, belt and hat producing as well decoration continue producing of articles. At the same time, in some settlements or some ethnical groups (gypsies) have preserved handicrafts about home goods without high decorative value and very old techniques such as basketry, tobacco-pipes and walking stick making, etc. Traditional handicrafts are still transmitted from
generation to generation. Today, there is a need for special protection, largely the workmanship and artistry, preservation of old and unique techniques and manual procedures that have their modern technology versions. Ethnobotanical knowledge of Balkan countries is a part of a world traditional cultural treasure of great importance both in understanding folk culture and the study of ethno-genesis of local people.

References
1 Stojanov N & Kitanov B, Wild useful plants in Bulgaria, (Bulgarian Academy of Science, Sofia), 1960 (in Bulgarian).
4 Vladić-Krstić B, Textile crafts in the Krnjačevac region in the past up to the present day, Bull Ethnographic Mus Belgrade, 61 (1997) 112-123.
13 Nedelcheva AM, Dogan Y & Guerrera PM, Plants traditionally used to make brooms in several European countries, J Ethnobiol Ethnomed, 3 (2007) 20.
15 Gajić M, Vegetation of Serbia, (Serbian Academy of Science, Belgrade), 1984.
16 Stevanović V & Vasić V, Biodiversity of Yugoslavia, (Faculty of Biology, Ecolibri, Belgrade), 1995.
20 cherrer AM, Motti R & Weckerle CS, Traditional plant use in the areas of Monte Vesole and Ascea, Cilento National Park (Campania, Southern Italy), J Ethnopharmacol, 97 (2005) 129-143.