

Plants and herbs in traditional Serbian culture

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“For every disease, God has provided a cure.
For every disease, there is a medicinal herb,
but people do not know which
herb heals which disease.”
(Милићевић 1984: 56)

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CONTENTS

Zoja S. Karanović i Jasmina N. Dražić <i>In the beginning was the Word (nomination of plants in Karadžić's "Rječnik" 1852)</i>	7
Snežana D. Samardžija <i>The third day. The origin and features of plants in folk renditions</i>	21
Йоанна Ё. Ренкас (Joanna J. Rękas) <i>Христианская символика базилика в свете теории культурной памяти религиозных групп</i>	35
Sonja D. Petrović <i>The motive of difficult tasks and herbal code in Serbian and South Slavic folklore</i>	53
Ana V. Vukmanović <i>Marvellous Plants in Lyrical Folk Songs</i>	55
Biljana Lj. Sikimić <i>The Rootless Tree: Dendronyms in South Slavic Riddles</i>	67
Smiljana Ž. Đorđević <i>The motif of extinguishing fire with grass and water in one type of Serbian and South Slavic chanting</i>	69
Danijela M. Popović Nikolić <i>Fallen Pine – on researching the functions of plants and herbs in dirges</i>	85
Gordana R. Štasni <i>The linguistic picture of the world in the lexicon of Serbian floral anthroponyms</i>	95
Slavko V. Petaković <i>The Petrarchist Herbarium – a contribution to the study of Dubrovnik renaissance poetry</i>	107
Mirjana D. Stefanović <i>Pflanzen in der Serbischen Bürgerlichen Poesie</i>	115

Snežana M. Božanić	
<i>Vineyards as bordered areas and border entities in the system of medieval Serbian space</i>	<i>127</i>
Tatjana M. Katić	
<i>The ottoman ATTARS and herbal medicine in 16th century Balkan towns.....</i>	<i>141</i>
Nedeljko V. Radosavljević	
<i>Medicinal recipe book from monastery of Godovik.....</i>	<i>151</i>
Aleksandra R. Savić	
<i>The tradition of cultivating varieties of local fruits in Serbia: importance, heritage and biological diversity.....</i>	<i>153</i>

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THE OTTOMAN *ATTARS* AND HERBAL MEDICINE IN 16th CENTURY BALKAN TOWNS*

The *attars*, owners of specialised shops selling spices, herbs and other medicinal and cosmetic products, settled in Balkan towns in the second half of 15th and early 16th century. They brought with them the tradition of Anatolian phytomedicine and medicinal substances which were at the time widely unknown. Through *attar* shops, simple and compound remedies, prepared on the spot by the *attars*, became commonly available to townspeople and inhabitants of neighbouring villages. Information about the presence of *attars* in certain towns has been partly preserved in Ottoman census books (*defsters*). Our paper, based on these and other available sources, aims to shed light on the role which this trade had in spreading oriental culture in the fields of medicine and food.

Key terms: Ottoman Empire, the Balkans, *attar*, *macun*, pharmacy, herbs, spice.

The establishment of Ottoman rule in the Balkans in 14th and 15th century signifies, in many ways, a turning point in the social and political development of medieval societies in the region. However, radical changes, particularly in political and partly in social structures, as well as the introduction of a new state religion, did not notably affect a deeply rooted folk traditions and culture, which includes herbal medicine. With the arrival of the Ottoman Turks, Balkan phytomedicine was enriched with new oriental content, which has been preserved to this day in the areas where Ottoman rule lasted longer, whereas in other parts it has been almost forgotten.

The Ottoman Turks and the Balkan peoples inherited the same, ancient and early Byzantine medical traditions which stemmed from Asia Minor.¹ Experience and knowledge of the healing properties of herbs developed over centuries, being improved through constant mutual contacts and numerous intermediaries. Since the appearance of the first pharmacopoeia of the ancient world in 1.AD, written in Greek by Dioscorides, a physician in the Roman army, books on the same

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1 The father of medicine, Hippocrates (island of Kos 5th-4th century BC), Dioscorides (Anazarbus 1st century BC), the founder of pharmacy as a scientific discipline and Galen (Pergamon 2nd century BC), the biggest name in ancient medicine, were all from Asia Minor.

and similar topics continuously circulated throughout the Mediterranean.² Such manuals were also well known in Serbia, as well as in the Seljuk, later Ottoman Anatolia.³

Herbs used for healing were usually indigenous “domestic” species. However, “exotic” species, originating from eastern Mediterranean coasts, Arabian Peninsula, Persia and India which were brought to Europe since the Roman period, were not unknown. During the Byzantine era, thanks to increasingly intense spice and scented oil trade, new medicinal plants arrived to the Balkans.⁴ Initially they were available in coastal towns, where the first pharmacies had been opened, having been recorded in historical sources from the second half of 13th century.⁵ It is still unknown whether apothecaries existed in towns of medieval Serbia, with the exception of one in Kotor, which was first mentioned in 1326. (Катић Р. 1958: 175). Despite there being no written sources about this, it is reasonable to assume that places selling spices, oils, tea-mixtures, dyes and other medicinal, cosmetics or painting materials existed in large economic and trading centres within the Balkan Peninsula. However, whether these products were occasionally sold in markets or regularly in specialised shops, such as those in the Byzantine capital of Constantinople or towns in Seljuk Anatolia, remains an assumption. Nonetheless, it is a fact that imported medicinal substances were known to specific groups of people and used in practice by educated physicians.⁶ Empiric physicians, folk healers and herbalists were principally familiar only with herbs from their immediate surroundings. Their only encounters with educated medicine occurred in big towns, especially mining settlements like Srebrenica, which housed in 15th century educated physicians along with folk healers (Ковачевић-Којић 2007: 223).

The first direct testimonies on the presence of drugstores in Balkan towns date from the Turkish period. They come from Ottoman cadastral surveys, which, sadly, are only partial for the reason that registering the occupations of townsmen

2 Better known by Latin title *De Materia Medica*, this piece by Dioscorides was transcribed and expanded many times. This work and the work of Galen became available to the Islamic world in the mid 9th century, when the oldest known translation to Arabic was composed in Baghdad. Since then, several Arabic versions have been put together: one in Spain in the 10th century, numerous ones in Anatolia from the 11th till 13th century and others (Yildirim 2013: 2–4).

3 About research of written sources regarding Serbian medieval medicine see Bojanin 2012: 9–13, 16–20. About Anatolia in detail Baytop 1985: 56–58, 67–70.

4 The main spice trade port was Alexandria, from where St. Sava brought balm oil, agarwood and various other “mild-scented Indian aromatics” during his trip around the eastern Mediterranean in 1234–1235 (Бојанин 2012: 26). For the Byzantine spice trade see McCabe 2009.

5 In 1230s, the Ragusans concluded several trade agreements with Venice, that enabled them to buy spices in Mediterranean ports on their own, which had an influence on the increase of these products in the Balkan Peninsula. The perimeters of the Ragusa (Dubrovnik) trade spread east over time, only to reach Goa in India in the 16th century (Mirkovich 1943: 178–183).

6 The majority of physicians were foreigners who would supply themselves with medicine in Dubrovnik before arriving in Serbia (Катић Р. 1958: 175). As an example of knowledge and usage of relatively unusual medicines, such as the Egyptian mummy, in the fifteenth-century Belgrade, see Бојанин 2013.

was not the enumerator's duty; usually only personal and patronymic names were registered, and occupations were more often listed for Muslims, less frequently for Christians. This explains why no data about these shops, predecessors of today's pharmacies, exists for some large towns, yet does for substantially smaller ones.

Merchants selling herbs, spices and other medicinal substances were known as *attars*. The name derives from Arabic word "*itir*" meaning scented, aromatic plants. In Turkish, the word *attar* was modified into *aktar*, so it is found more often in this form today. The most comprehensive translation would be "druggist", but it can also be translated as: herbalist, spice vendor (regardless of whether it refers to a wholesaler or retailer), pharmacist, perfume vendor etc. The diversity of translations comes from the range of the assortment of goods the *attar* shops sold. Nonetheless, *attars* were not only merchants; they possessed expertise about the products they were selling meaning they would also recommend and create medicines for certain diseases. For that reason, they were of importance to the Ottoman army, thus being obligated to go to war, along with other craftsmen.⁷ The *attars* of Bursa, the old Ottoman capital, regularly took part in all Ottoman military campaigns (Düzbakar–Ercan 2006: 20).

The Ottoman druggist, in general, belonged to the most educated professional groups of the Empire. They had knowledge in many fields: medicine, chemistry⁸, botany and astrology.⁹ Some of them were famous calligraphers and poets (Düzbakar–Ercan 2006; Elazar 2010). Early on, differentiation among the *attars* began, for the reason that some specialised in the production of pastes and pastilles, named *macuns*, while others produced creams, opiates etc. Evliya Çelebi, a renowned Turkish traveller from the 17th century, wrote of numerous specialised *attar* groups in Istanbul, among which were sellers of medicinal pastes – *mâcuncıyan*, herbs – *attaryan*, tonics – *esnaf-ı meşrubât-ı devâ*, rose and other fragrant waters – *gülâbciyan*, creams for external uses – *esnaf-ı edhan-i edviye*, aloe and ambergris – *anberciyan*, opium, hashish and other narcotics – *afyonciyan* (IA 1958).

Attar shops supplied the townspeople with medicaments, while hospitals usually bought ingredients with which the hospital pharmacists made their own concoctions.¹⁰

7 Artisans, other than *attars*, that were recruited to serve in the Ottoman army were: bakers, cooks, barbers, grocers, blacksmiths, saddlers, boot makers, candle makers and others. They were commonly known as *orducus* (Tur. *ordu*, military, army), and they were chosen from members of guilds of Istanbul, Edirne, Bursa, and, if necessary, other cities.

8 Druggist Sani, born in Edirne, came from an *attar* family. He lived in Istanbul where he was known for being a good physician. He studied chemistry, both in theory and in practice. He lost his life whilst conducting an experiment in 1592 (Düzbakar–Ercan 2006: 24).

9 Astrology had a great influence in medieval and early modern medicine. Physicians of that time believed that internal organs and the balance of body fluids depended upon zodiac signs, so some *attars* created their own astrological calendars (Düzbakar–Ercan 2006: 21). Also, Balkan medical manuals, "lekaruše", written in Old Church Slavonic and Ladino i.e. Judeo-Spanish, contain numerous instructions of a similar nature (Божанин 2012; Elazar 2010).

10 Following Byzantine tradition Seljuk Turks opened numerous hospitals in Anatolia in

Not long after the Ottoman conquest, the first *attar* shops were opened in Balkan towns, especially in those that were seats of *sancaks* or *kazas*, or large mining centres. These places were inhabited by Turkish officials, merchants and artisans, who were already accustomed to using *attar* goods. The *attars* spread through the Balkans in pace with the Ottoman conquests, firstly appearing in towns in Thrace, Macedonia and Bulgaria, later on the territory of today's Serbia and Bosnia. The earliest data for Serbia dates from the 1490s, when a *macuncu* named Hamza was registered in the town of Niš (Bojanić 1983: 162). *Macuncus* were the makers of healing pastes (*macuns*) and bonbons, which were confectionery items. Pastes were usually made on a base of oil, honey, beeswax, olive oil or various resins. Besides this, plums, garlic, bread, cinnamon, sandalwood, musk and other things were used in the process of preparation, depending on the purpose. However, the structure was a secret. *Macuns* were used to relieve haemorrhoids, constipation, stomach gases, melancholy, paralysis, migraines and many other illnesses (Žunić–Mašić 2015: 63).

A considerably larger amount of data about the *attars* can be found in *defters* from the 16th century. For example, in Sofia in the 1540s, from a total of 1050 registered taxpayers, there were eleven *attars* and one *macuncu*, all of which were Muslims (BOA, *TD 236*, 6, 11-13, 17, 26). Given the large number of *attars*, we suppose this *macuncu* only made bonbons and sweets, not medicinal products.

In the 1560s censuses, many *attar* shops were registered in Skopje – thirteen (Соколовиќ 1984: 29–36, 40–43, 48, 53) and in Thessaloniki – fourteen (Стојановски 2002: 36–37, 40, 47, 77–79). Half of the total number of *attar* shops in Thessaloniki was owned by Muslims and the other half by Jews, which is understandable considering that 5154 Jewish taxpayers were registered in the town at the time. (Stojanovski 2002: 95). There were Jewish *attar* shops in Sarajevo also, from the second half of the 16th century right until 1941. The symbol of the Sarajevo herbalists was rue or herb-of-grace (lat. *Ruta graveolens*), which was believed to protect from spells and evil, as the shape of the leaves looks like a hand with five fingers, an old Semitic symbol. This medicinal, yet at the same time poisonous plant, was used as a sedative in case of hysteria, insomnia, mental illness, calming crying children in the night etc. (Žunić–Mašić 2015: 63).

There were herbalists in other towns in the mid-16th century, but they weren't documented because of the enumeration practice mentioned earlier on. For that reason, for example, there were no registered *attars* in the 1540s

the first half of the 13th century, which had separate dispensaries. The Ottomans founded their first hospital in Bursa in 1399. Judging by its *vakıfname*, it contained special rooms for production and storage of medicaments called “workshop for the production of *macuns*” - *Meâcin Kârhanesi* (Yıldırım 2010: 273). Experts on herbal medicine (*aşşabân*), makers of syrups, solutions and suspensions (*şerbetîyân*), as well as cream, pastille and tablet-makers (*saydalân*) all worked there (Baytop 1985: 66).

and 1560s in Prizren, a prominent town in Ottoman Rumelia and the seat of the *sancak* of the same name. Only in 1591 did an enumerator list that a certain Hasan from *mahalle* Old mosque (formerly church of Our Lady of Ljeviš), was an herbalist by occupation (Pulaha 1983: 510). In addition to that, according to the *defter* of the *sancak* of Selanik (Thessaloniki) dating from 1568/69, among 1070 taxpayers in Siderokapsa mine there were no *attars* (Стојановски 2002: 184–190), while in the smaller Kučajna mine in the Smederevo *sancak*, among 400 taxpayers in 1560 there was one *attar* (BOA, *TD 316*, 107). In the same year in the *sancak* of Smederevo another eight *attars* were listed, four in Belgrade and four in Smederevo (BOA, *TD 316*, 161, 162, 355, 356). All of the aforementioned druggists were Muslims; one of them emphasised to have arrived from Anatolia, which is an illustrative example of the direct contact of Anatolian and Balkan culture. *Attar* named Şuca lived in one of the *mahalles* in the Smederevo fortress (BOA, *TD 316*, 162), and owned a shop in the bazaar in the *varoş* of Smederevo.¹¹ The merchandise of his as well as other drugstores in Smederevo and Belgrade were certainly not completely unknown to the upper classes of the town's population, who, thanks to the merchants from Ragusa (Dubrovnik), had already had the chance to try oriental spices even before the arrival of the Turks.¹² However, the usage of imported herbs become more common in Balkan cuisine and folk medicine only after entering the Ottoman cultural sphere and the introduction of new foods, such as rice.¹³ A good example of this is saffron, an essential part of pilaf, steamed rice dish. There was no mention of saffron until 1485, when it was first found in Ragusan sources as a commercial item acquired in Kosovo, in the surrounding of Peć (*zafrano di Pecchio*). Ottoman law from the beginning of the 16th century stated the price of saffron, as well as the fact that tenth of the produced amount belonged to the state treasury (Зиројевић 1989: 79). As a medicine, saffron was used to promote eruption of measles, cause mild sweating, calm the nerves and lull to sleep (Катић Т. 2006: 266).

Attar shops sold hundreds of different products, mainly of plant origin – dried plant parts (leaf, root, flower, seed, fruit), essential oils, floral waters, vegetable fats, resins and gums. A smaller fraction of *attar* goods consisted of

11 For more details on the Smederevo bazaar, its crafts and shops see Катић С., Поповић 2013.

12 A Ragusan community in Smederevo, for example, existed before and after the Turkish conquest. From 1515 to 1519 merchants from Dubrovnik established fourteenth trade companies in Smederevo (Поповић 1970: 145–146).

13 As rice was one of the most important foodstuffs in the Ottoman Empire, its production was organised and supervised by the State. After the Ottoman conquest of Serbia, rice production started in the valleys of Nishava and Toplica (Амедоски 2007: 139–140), in the surroundings of Đakovica (Зиројевић 1989: 78), in the North Banat (Катић С. 2003: 159), and probably in some other areas.

substances of mineral and animal origin: clay, white lead¹⁴, alum¹⁵, sal ammoniac¹⁶, musk¹⁷, gelatin, ambergris¹⁸ and others.

Drugs of plant origin which could be acquired in *attar* shops were mostly well known in Balkan medical practice, at least in circles of educated physicians. This was documented in the Hilandar Medical Codex and preserved manuals.¹⁹ However, this knowledge only became available to a wider circle of townspeople through the *attars*, as is evident from taking Turkish names for some plants – pelin (wormwood) and salep.²⁰

Ottoman druggists brought new ways of using already known medicinal herbs, masterwort, liquorice, common agrimony, angelica and many more. Masterwort (*Peucedanum ostruthium*), known in Anatolia as Sultan grass (*sultan otu*), was considered, even in ancient times, a magical plant which cures all illnesses. In medieval monasteries it was used as a universal cure for open wounds, liver diseases, bladder stones, coughs etc and as a spice for food and drinks. It had a wide use in the Ottoman Empire too; from the name it is evident that this plant was extremely valued. Essential oil was used for external purposes in case of skin irritation, but decoctions and tinctures made from roots were taken orally in order to stimulate urination and menstrual bleeding, as well as against gas and asthmatic coughing. Liquorice or licorice (*Glycyrrhiza glabra*) was mostly used for expelling phlegm from the lungs and relieving gastritis. Even today in south-eastern Anatolia sherbet from the root of liquorice is made; it is used as a remedy for bronchitis or well chilled as a refreshing drink. A tonic made from the leaves and flowers of common agrimony (*Agrimonia eupatorium*) is recommended in case of diarrhoea, internal and external bleeding and leukorrhea. A greater concentration of the plant in tonic is used for clearing mucus and as a gargle in case of severe inflammation and aphthae. Warm decoction from angelica seeds (*Archangelica officinalis*) is considered a good remedy for the preservation of the placenta and to stop menstrual bleeding. A stronger decoction was used to stop shivering and chills and a tincture in case of a spasmodic cough (Катић Т. 2006).

14 A white powder used for making glue, face powder and dental fillings.

15 It was applied as an astringent in treatments for internal bleeding, chronic dysentery and diarrhoea; dissolved in water it was used for gargling in case of scarlet fever and other infections.

16 Ammonium chloride was used for making cough syrups.

17 A glandular secretion of male musk deer, having a strong odor and used in perfumery.

18 Undigested intestinal contents of the sperm whale with a pleasant scent, which was gathered on the coasts of China, Japan, Madagascar, Java and Sumatra. Widely used throughout the Ottoman Empire for strengthening the heart, appetite and in case of erectile dysfunction. It was taken as a pastille (*macun*), or as a beverage made by cooking a granule of ambergris the size of a lentil in coffee (Baytop 1985: 83).

19 In detail see Божанин 2012.

20 The leaves and flowers of wormwood (*Artemisia absinthium*) were used in the production of tonics which relieve stomach and gallbladder problems, improve the appetite, aid digestion, help expel worms, lower fever and induce menstruation. Powder from the root of salep (*Orchis mascula*) served, like today, in the preparation of a thick and sweet healthful beverage which beneficially affects the airways, soothes coughs, diarrhoea in children and also serves as an aphrodisiac.

After falling under Ottoman rule, other oriental herbs besides aforesaid saffron: sesame, black-cumin, cumin, coriander, mustard, nutmeg, anise, cardamom, rose and others quickly found their way into Balkan cuisine. Sesame (*Sesamum indicum*) was abundantly used in cuisine in the form of seed, oil and paste commonly known as tahini. Dried rose buds (*Flos Rosae*) and rose water were used in the preparation of cakes, sweet beverages and jams, while rose fat was utilized in cosmetics.²¹ Sesame also had a cosmetic use: tea made from sesame seeds was used to darken hair colour. The *attars*, however, prescribed the same tea for regulating menstrual cycles, whereas sesame oil, with added ginger, helped against arthritis and rheumatism. Orally, this oil worked as a laxative and against diabetes. Also, herbalists recommended rose fat as a remedy; due to its antiseptic properties it was used to cure inflammation of the eyes, throat and tonsils (Катић Т. 2006).

The price of oriental spices and herbal remedies, which was certainly lower than in earlier periods, undoubtedly had an influence on their greater use. The reason for this decrease in price is that the commercial trade for the most part took place inside the Ottoman Empire where internal customs were not implemented. The majority of herbal drugs in *attar* shops originated from Anatolia and the Levant, meaning they were not expensive imported products. For example, labdanum, an herbal resin, came from Crete, styrax from coastal regions of south-western Anatolia, tragacanth gum from the mountains of Anatolia, turpentine from the eastern coasts of the Mediterranean and scammony from around Izmir. Labdanum was used in the production of perfumes, as well as in medicine for making casts and for disinfection by fumigation. The gathering of labdanum was mainly done by Cretan monks, who would, during hot summer days, collect oily resin from the leaves of the shrub *Cistus creticus* using rakes with leather straps instead of teeth. Another method was to scrape resin from the fur of sheep and goats that grazed nearby. Turkmens produced styrax by peeling and pressing, or boiling the bark of the *Liquidambar orientalis* tree found wild in the Levant. The obtained half-liquid resin would be transported in barrels to Istanbul, Izmir, Damask and Alexandria. Styrax or Turkish sweetgum would later get exported to Italy, India and China. It was taken orally for expelling mucus, or externally, mixed with olive oil for curing scabies. Tragacanth gum, an excretion of the *Astragalus Tragacantha* shrub, was used to cure coughs, diarrhoea and burns and as an excipient to combine different ingredients into pastes and pastilles. Turpentine, resin from the *Pistacia terebinthus* tree, was used in a solid, gum like state in the shape of a grain, as well as a liquid oil. Turpentine tablets had a mild stimulatory effect on the function of the kidneys and uterus, while oil had a significantly stronger effect. As a result of its use, urine would smell of violets; it was given to children in order to get rid of intestinal worms. Scammony, a

21 Rose fat and rose water were obtained by distilling flowers through water vapour. Three to three and a half tons of flowers were needed to make one kilo of fat or half a kilo of water.

resinous excretion of the root of *Convolvulus scammonia*, also produced by Turkmens, was used to detoxify the body. Because of its potent effect, it was generally used in a combination with other purgatives, as emulsion with sugar or sweet almonds (Katić T. 2006).

Attar shops sold spices, herbal medicines, perfumes and cosmetic products. However, some of them served as a gathering place for the Muslim urban elite craving “forbidden” pleasures. The sixteenth-century Ottoman writers recorded that many *attars* secretly sold wine and narcotics and that many members of the upper class tended to gather there for learned conversation and “drowning in wine and opium” (Düzbakar–Ercan 2006: 22).

As predecessors of modern pharmacies, *attar* shops had a considerable influence in spreading health culture throughout the Balkans. Advice, given to the population by Muslim and Jewish herbalists, was based on religious hygiene rules, as well as centuries-old medical traditions of Anatolia and the Mediterranean.²² *Attar* shops also had a deep impact on Balkan cuisine that is most obvious in those regions which remained within the borders of the Ottoman Empire for the longest period of time.

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22 Bosnian Sephardic medical manuals offer a lot of advice in case of epidemic, for example to drink only boiled water in which a piece of hot iron has been cooled; to wash the hands and face with vinegar before going out into the streets, as well as to wipe hands with sponge drenched in vinegar after every contact with people or objects (Elazar 2010).

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