

Traditional knowledge on use of medicinal plants in Central Balkans for treating eczema

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Introduction

People use medicinal and aromatic plants in traditional medicine since ancient times, and there has been a modern revival of medicinal plant use (Kiringe, 2006). This knowledge is preserved in rural areas among the elder population and it needs to be noted for future records. A great number of plant species has a healing potential and is used to treat many different skin diseases (Tucakov, 1997).

Atopic dermatitis or eczema is a skin disorder affecting up to 20% of children and up to 3% of adults people of all the age groups (Asher et al., 2006) and it is characterized by chronic inflammatory, pruritic, relapsing skin condition evidenced by the appearance of dry patches on skin that may turn red and itchy with the passage of time (Poonam et al., 2022). Eczema is a complex genetic disease arising from several gene-gene and gene-environment interactions (Thomsen, 2014). Standard medical treatment of eczema includes topical medication, mostly used are topical glucocorticoids and topical calcineurin inhibitors, then, antihistamines, anti-infection agents, phototherapy, etc. (Lee et al., 2016).

There has been no cure for the disease so in addition to official pharmaceutical treatment, a great number of plants with abundance of bioactive compounds, homeopathic medicines, special diets and herbal treatments can be applied (Jong et al., 2013), although no clinical trial has completely established the efficacy of the herbal preparations.

The aim of this paper is to give an overview of medicinal plant species used to treat eczema by the people of central and western Balkans.

Materials and methods

The literature research was performed using Scopus and Google Academic sources.

Results and discussion

In the last decade, the entire Balkan region has become the focus of numerous ethnobotanical studies. A large number of medicinal plant species is used in all countries of Central and Western Balkans, and the whole region is rich in plant biodiversity. For example in Serbia around 700 species are used, which represents 10.7% of total plant taxa and in Croatia 21% of total of 5000 taxa is used (Džamić and Matejić, 2017; Mustafa et al., 2012; Menković et al., 2011). Many of the Balkans species are used for treatment of different dermatological conditions. A study of traditional use of medicinal plants in Zlatibor district (South-western Serbia) showed that 29.6% of species used are for dermatologic diseases (Šavikin et al., 2013). Other studies recorded traditional use of medicinal plants especially for treatment of eczema in central and western Balkans (Janačković et al., 2019; Savić et al., 2019; Varga et al., 2019; Hajdari et al., 2018; Popović et al., 2014; Rexhepi et al., 2007). A total of 31 plant species was recorded. The most often used family of plants for eczema treatment is Asteraceae (25.81%), followed by Pinaceae, Rosaceae and Fabaceae (6.45% each) and other families with 3.23% each (Araliaceae, Aristolochiaceae, Brassicaceae, Caprifoliaceae, Cornaceae, Fagaceae, Geraniaceae, Hypericaceae, Juglandaceae, Melanthiaceae, Papaveraceae, Plantaginaceae, Ranunculaceae,

Rhamnaceae, Scrophulariaceae, Urticaceae and Violaceae). Ethnobotanical study in Güce district reported that 128 plant taxa are used to treat a total of 101 different ailment categories, and 6 taxa are used to treat eczema (Karakose, In Press).

Considering plant parts that are used, most used are aerial parts, followed by underground parts and flowers, while fruits, bark, saps and resin are used from smaller number of species. A study carried in Rif region of Morocco showed that most used plant parts for treatment of skin diseases are leaves, followed by whole plant, bark, fruit and flower, respectively (Chaachouay et al., 2022).

Conclusion

Many plant species around the World are used to treat eczema. However, although, many of them showed excellent results, insufficient number of clinical studies was carried to investigate real effect of such treatments. Additional effort should be put towards better understanding of plant compounds that affect eczema and further ethnobotanical studies should be carried to document even more plant species with these properties.

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