Phytochemical traits of some traditional medicinal plants

Dario Kremer¹, Iztok Jože Košir², Valerija Dunkić³, Marko Randić⁴, Ivan Kosalec¹, Siniša Srečec*

¹University of Zagreb, Faculty of Pharmacology & Biochemistry, HR-10000 Zagreb, Croatia

²Slovenian Institute for Hop Research and Brewing, SI-3310, Slovenia

³University of Split, Faculty of Science & Mathematics, HR-21000 Split, Croatia

⁴Public institution 'Priroda', HR-51000 Rijeka, Croatia

*Križevci College of Agriculture, HR-48260 Križevci, Croatia, ssrecec@vguk

The aim of this work is to define the importance of Illyric-Balcanic plant species of spontaneous vegetation, which are distributed along the Adriatic Coast and Dinaric Alps of Croatia, Bosnia and Herzegovina, Montenegro, Albania, and Greece. Most of them are overspread in Mediterranean and sub-Mediterranean regions. They are mostly endemic lithophytic and xerothermic medicinal plant species. Some of the plant species are natural source of polyphenolic and other antioxidants with radical-scavenging and even chelating properties. The extracts of their essential oils showed broad spectrum of antimicrobial activity with on Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli, Candida albicans and Aspergillus niger. Most of the wild plant species such as: Micromeria croatica, Satureja subspicata, Satureja montana, Teucrium arduini and even Moltika petraea are not important only because of their medical effects but they are also decorative plants, collected very often by the tourists and visitors. So, they are definitely natural resources which might have important role in sustainable development of economically underdeveloped areas of the Adriatic coast, islands and hinterland. In spite of their decorative characteristics, there is no interest for their production (i.e. using the tissue culture and other propagation techniques) in controlled conditions and protected areas. This is possible to achieve only by interdisciplinary approach, which implies engagement of experts from different branches such as: botanists, touristic workers, experts for marketing, landscape architects, and entrepreneurs.

Keywords: endemic plants, essential oils, medicinal plant species, natural resources, sustainable development

Poster presentation