

## Screening of radical scavenging activity and polyphenol content of Bulgarian plant species

Milena Nikolova

Department of Applied Botany, Institute of Biodiversity and Ecosystem Research Bulgarian Academy of Sciences 23, Acad. G. Bonchev Str. 1113 Sofia, Bulgaria

### ABSTRACT

**Background** Discovery of new plant species with antioxidant properties is a priority of many research teams. Most of the species included in this study are unstudied for antioxidant properties, but they are taxonomically related to reference plants with well-documented antioxidant activity. **Materials and Methods** Free radical scavenging activity of plant extracts was evaluated using a 1,1-diphenyl-2-picrylhydrazyl (DPPH) assay. An aluminum chloride colorimetric method was used for flavonoid determination. The amount of phenolic compounds in the extracts was estimated by using the Folin-Ciocalteu reagent. **Results** As a result of screening, it was found that the significant antioxidant properties possess several unstudied until now plant species (*Veronica bellidioides* L., *V. kellereri* Deg. et Urm, *V. vindobonensis* (M. Fisher) M. Fisher, *V. beccabunga* L., *V. rhodopaea* L., *V. austriaca* (Velen.) Degen., *Clinopodium vulgare* L., *Stachys recta* L., *Clematis vitalba* L., and *Xeranthemum annuum* L.). The antioxidant potential of the new species is comparable to that of reference medicinal plants. **Conclusions** The existing data presented here provide new information for antioxidant potential of plant species that have not been traditionally used as medicinal plants.

### KEYWORDS

Asteraceae . DPPH . flavonoids . phenols . Salvia . Veronica

### REFERENCES

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