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**Antioxidant activity of *Sideritis hyssopifolia* infusions**

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*Sideritis hyssopifolia*, also known as “rock tea” or “mountain tea”, is a plant belonging to the Labiatae family widely distributed in Central and Southern Europe. This medicinal plant is very popular in the Peaks of Europe and the Pyrenees, and it has been traditionally used due to its digestive properties and for the treatment of peptic ulcer.

Objective: to evaluate the antioxidant activity of *Sideritis hyssopifolia* infusions obtained after different infusion times.

Material and Methods: plant infusions were prepared according to Ivanova *et al.* (2005): 200 mL of deionised boiling water was added to 1 or 3 g of plant material. Infusions were maintained for 10 min under continuous stirring. Samples were then obtained at 3, 5 and 10 min. Antioxidant activity of aqueous extracts was measured using the 2,2'-azinobis-(3-ethylbenzthiazoline-6-sulfonic acid) diammonium salt) radical cation (ABTS<sup>+</sup>) decolorization method. Radical scavenging activity of aqueous extracts was expressed as ascorbic acid equivalent antioxidant capacity (AEAC) in mg ascorbic acid/100 g of plant.

Results and Discussion: Antioxidant activity of the assayed infusions was measured at 45 min, and it rises with increasing infusion times. With an infusion time of 10 min, samples at a concentration of 0.00005 g /mL give an inhibition percentage of the ABTS radical cation of 32.89%, whereas when a concentration of 0.00015 g/mL was used inhibition percentage increases to 81.97% for the same infusion time. AEAC values obtained were: 2419.35 (infusion time 10 min) > 2089.78 (infusion time 5 min) > 1808.03 mg ascorbic acid/100 g of plant (infusion time 3 min). Antioxidant properties of several temperate and tropical herbal teas were previously screened by Chan *et al.* (2010), with AEAC values of 13600; 7430; 3090; 4430 and 966 mg ascorbic acid/100 mg of plant for *Backhousia citrodora*, *P. guajaba*, *Rosmarinus officinalis*, *Mentha spicata* and *Matricaria recutita*, respectively.

References

Chan EWC, Lim YY, Chong KL, Tan JBL, Wong SK. Antioxidant properties of tropical and temperate herbal teas. *J Food Comp Anal* 2010;23:185-89.

Ivanova D, Gerova D, Chervenkov T, Yankova T. Polyphenols and antioxidant capacity of bulgarian medicinal plants. *J Ethnopharmacol* 2005;96:145-50.