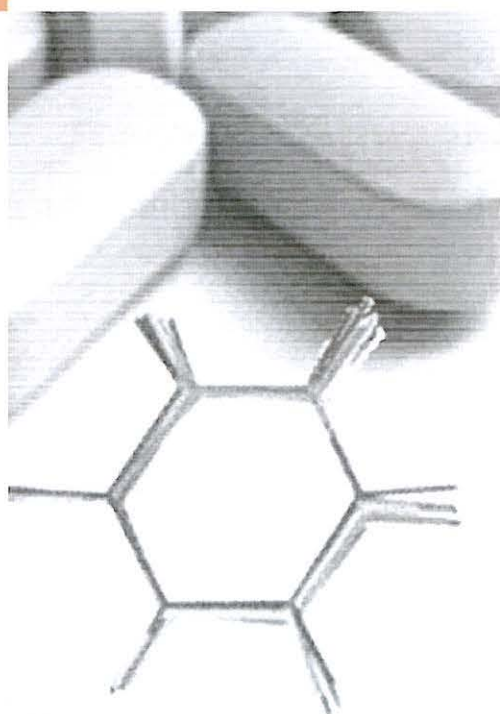


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**Characterization of phenolic compounds and antioxidant potential of
infusion and decoction of the wild medicinal plant *Tuberaria lignosa* (Sweet)
Samp.**

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Many herbal beverages, frequently used in folk medicine, have pharmacological properties connected with the presence of antioxidants such as phenolic compounds. *Tuberaria lignosa* (Sweet) Samp. (Fam. Cistaceae) is one of the most popular medicinal plants in several regions of the Iberian Peninsula used to prepare herbal infusions or decoctions [1]. In the present work, the antioxidant activity of wild *T. lignosa* infusion and decoction was evaluated by four different methodologies (free radical scavenging activity, reducing power and lipid peroxidation inhibition) and the phenolic composition was determined by HPLC-DAD-ESI/MS.

Ellagitannins and flavonoids were the main phenolic compounds found, being punicalagin and punicalagin gallate the most abundant compounds (~123 and 98 mg/g of infusion and decoction, respectively). The infusion and decoction presented very similar results in the amounts of phenolic compounds, but the antioxidant potential was slightly higher in the decoction preparation. Both samples revealed high antioxidant activity (EC₅₀ values lower than 57.3 µg/mL), even higher, in some cases, than the standard trolox.

This work gives scientific evidences to the traditional medicinal uses of wild *Tuberaria lignosa*, highlighting the interest of its decoction and infusion as sources of bioactive compounds (e.g. phenolic compounds) that could be used as functional beverages.

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