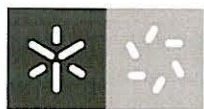
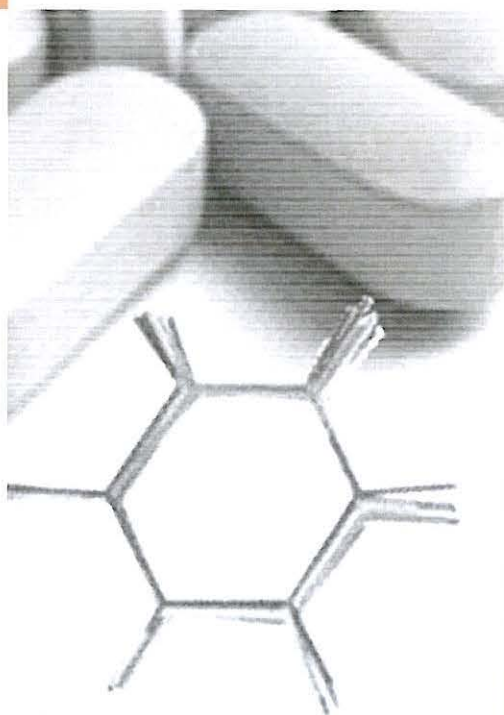


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**Antioxidant activity of decoctions of *Centaurea paniculata* L.
and *Helichrysum stoechas* L. Moench**

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Ethnobotanical surveys conducted in Northeastern Portugal have documented the use of decoctions prepared with flowering aerial parts of *Centaurea paniculata* L. (starthistles, knapweeds; port. escalabiosa) for inflammation and *Helichrysum stoechas* (L.) Moench (shrubby everlasting; port. douradinha) for the respiratory system and to reduce fever [1], from the Asteraceae botanical family. Although antioxidant properties of those plants have been investigated [2-4], there are no reports on its most used form, the decoction. Therefore, in the present work, decoctions of inflorescences and leafy flowering stems of the two mentioned species were prepared and submitted to evaluation of antioxidant potential. Four different *in vitro* assays were performed: scavenging effects on DPPH (2,2-diphenyl-1-picrylhydrazyl) radicals, reducing power (measured in Folin Ciocalteu and ferricyanide Prussian blue assays), inhibition of β -carotene bleaching and inhibition of lipid peroxidation in brain cell homogenates by TBARS (thiobarbituric acid reactive substances) assay.

The decoction of *H. stoechas* revealed higher antioxidant activity (lower EC₅₀ values) than *C. paniculata* in all the tested assays. Data obtained could provide scientific evidence for some folk uses in the treatment of diseases related to the production of reactive species and oxidative stress, but further experiments are required to explore the mechanisms of action.

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