

Pharma Middle East

November 02-04, 2015 Dubai, UAE

Evaluation of phenolic content and antioxidant activity of a traditional medicinal drink consisting of ginger (*Zingiber officinalis*) and peel of pomegranate (*Punica granatum*)

Sabrina Hamri-Zeghichi, Wassila Beder and Mohamed Chibane
University of Bejaia, Algeria

Objectives: Because of their ability to damage biological molecules, free radicals may affect several biological processes and lead to many diseases. Ginger (*Zingiber officinalis*) and peel of pomegranate (*Punica granatum*) used by human for thousands of years as therapy, are both medicinal plants that has many biological properties that are attributed to their wealth in phenolic compounds.

Material & Methods: The influence of extraction methods on the content of these substances (method, temperature and extraction time) and consequently on their antioxidant properties were investigated. Three aqueous extraction methods were used: infusion, decoction and maceration.

Results: The results indicated that maceration is the best extraction method of polyphenols (113.54 mg EGA/g of extract, 532.22 mg EGA/g of extract for ginger and pomegranate peel, respectively). The mixture of the two plants gave the highest phenolic content (888.52 mg EGA/ g of extract) and showed a great antioxidant activity (68.12%). According to these results, we conclude that this traditional therapeutic drink consisting of ginger and pomegranate peel has significant antioxidant activity using maceration as extraction method ($p < 0.05$).

zeghichi@yahoo.fr

Notes: