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Assessment of phenolic content and antioxidant activity of four Algerian dates cultivars

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Polyphenols is a group of secondary metabolites present in many different vegetables and fruits. There is an increasing interest in polyphenols because of their biological and pharmacological properties, such as anti-inflammatory, antioxidant and chemo-preventive activities. The objective of this study was to assess the phenolic content of four dates cultivars sampled in the various south-western Algerian Sahara oases (i.e. Mes'udia, Hmira, Takarbucht and Deglet Talmine). The polyphenols were extracted from the biological material by maceration in mixture of methanol/acetone/water (7/7/6: V/ V/V). The total phenolic content was estimated using Folin-Ciocalteu method. The antioxidant activity was evaluated by the DPPH method. Total polyphenols are 121,67; 144,15; 136,46 and 173,81 mg GAE/100 g DM, respectively. Out of the four cultivars, the Takarbucht and Deglet Talmine exhibited the highest antioxidant activity, with EC50 values: 0.21 mg/ml and 0.25 mg/ml, respectively. These values seem to be comparable to the used reference antioxidant, vitamin C.

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