

Preliminary characterization of a Moroccan honey with a predominance of *Bupleurum spinosum* pollen



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Abstract

This study aimed to characterize the pollen and physicochemical profiles, and to evaluate the antioxidant capacity of six samples of Moroccan honey. The pollen grains of *Eragrostis* spp. Were predominant in all samples (from a minimum of 46.5861.59% to 72.7262.43% as a maximum), exceeding the minimum (generally 45%) required for the monoflorality nomination of a honey sample, and suggestion a case of newly reported honey. The analyzed samples had low diastase activity and hydroxymethylfurfural (HMF) content. Potassium was the dominant element in practically all samples, except the sample with the highest *Eragrostis* spp. pollen percentage, which showed sodium predominance. The honey color ranged from water white to light amber, and positively correlated the concentrations of phenols, proline and the capacity for scavenging free radicals. However, great variability observed in all the analyzed parameters, and could not be explained by the variability of the *Eragrostis* spp. pollen percentage, which suggests a hypothesis of low concentrated nectar.

Keywords

food quality, melanoidins, natural antioxidants