

Validation of a Spectrometric Method Based on Prussian Blue Reaction Used for the Determination of Ascorbic Acid from Honey and Propolis

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Abstract The objective of the present work was to validate and to apply a spectrometric method based on Prussian Blue reaction for the determination of ascorbic acid from different types of honey and propolis. The formation of Prussian Blue is the base of the qualitative determination of Fe(II) using hexacianoferrate as reagent. A molecular absorption spectrometer, with double beam optical system was used. In order to validate the spectrometric method the following performance parameters were tested: working range, linearity, detection and quantitation limits, method precision (repeatability, intermediate precision) and accuracy. The proposed spectrometric method was successfully applied for the determination of ascorbic acid from honey and propolis, from different rural and urban areas of Dobrogea.

Keywords: acid ascorbic, honey, propolis, Prussian Blue reaction, spectrometry.
