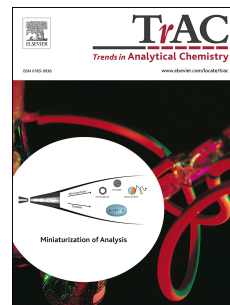


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Recent achievements in element analysis of bee honeys by atomic and mass spectrometry methods

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Abstract

Consumption of honey cannot raise any concern about its wholesomeness, safety and quality in reference to the content of different contaminants, particularly including trace and hazardous elements. Element analysis of honey by atomic and mass spectrometry methods is important part of its quality and safety. The present paper comprehensively reviews recent achievements in element analysis of honey that have been reported since 2012. The survey is focused on different research aspects of such analysis, including assessment of biological and geographical origin of honey by using chemometric methods, quality and safety of honey, and sample preparation of honey prior to element analysis by atomic and mass spectrometry methods. Calibration strategies and ways of quality assurance and control of the results are surveyed as well.

Keywords: Elements, Honey, Botanical origin, Geographical origin, Chemometrics, Sample preparation, Atomic spectrometry, Mass spectrometry

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