

DETERMINATION OF SELECTED POLYPHENOLS BY RP-HPLC/MS/MS IN MEAD SAMPLES

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Resumen

The objective of this research was the determination of 23 polyphenols in 22 mead samples using reversed-phase high performance liquid chromatography coupled with tandem mass spectrometry. The final separation of polyphenols was performed on Ascentis Express C18 column (150 mm × 3.0 mm, 2.7 μm). Mobile phases were consisted of water acidified with 0.3% formic acid (A) and acetonitrile (B). The optimal elution of studied polyphenols was achieved using gradient elution program: 0 min - 10% B, 0.1 - 23% B, 3 min - 24% B, 4 min - 50% B, 5 min - 60% B, 6 min - 10% B. Among studied samples mead without any polyphenols was found, which can be probably caused by falsification. Therefore, the monitoring phenolic profile in mead could help to verify the quality of mead.