

Abstract

Three remains of historical pharmaceuticals from 18th century containing juniper (*Rob juniperi*, *Lignum juniperi*) or liquorice (*Pulvis radices liquiritiae*) were analyzed by HPLC-MS method and their authenticity was verified using a chemotaxonomic approach. Current reference material was the source of chemotaxonomic markers and also a raw material for replication of *Rob juniperi* according to two period recepies. HPLC-MS method provided good results but was insufficient to analyze *Lignum juniperi*. Therefore, GC-MS method was also used to analyze the juniper samples and it provided sufficient results to prove the authenticity of both juniper samples. HPLC-MS method identified viridiflorin heptoside for the first time in juniper material, for which as well as for five liquorice markers ESI fragmentation spectra were measured and their possible fragmentation mechanism was proposed. Based on the obtained results, the preparation of historical samples from the mentioned plants can be confirmed.

Key words: HPLC-MS, GC-MS, Chemotaxonomy, Juniper, Liquorice, Tandem mass spectrometry, Viridiflorin