

P-026: UHPLC-HRMS profiling of *Clinopodium vulgare* extract

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Introduction: Wild basil (*Clinopodium vulgare* L.) (Lamiaceae) is a perennial herbaceous plant widespread in Bulgaria. Aerial parts are used in Bulgarian folk medicine for treatment of diabetes, gastric ulcers and cancer. The herbal drug alleviates symptoms associated with mastitis, prostatitis, skin irritation and swelling.

Materials and methods: Aqueous-methanol extract from *Clinopodium vulgare* was analyzed by ultra-high performance liquid chromatography (UHPLC) coupled to hybrid quadrupole-Orbitrap high resolution mass spectrometry with heated electrospray ionization (HESI) after classical reverse phase chromatographic separation. The identification of selected compounds was made by HRMS and MS/MS data, and some of them were confirmed by reference standards.

Results: More than twenty secondary metabolites were identified or tentatively elucidated in *Clinopodium vulgare* extract. Variety of phenolic (ferulic, coumaric), and mono- and di-caffeoylquinic acids were identified together with flavons O- and C- glycosides, flavonol and flavanon glycosides. Based on the MS and MS/MS spectra, comparison with reference standards and literature data, luteolin-7-glucoside, luteolin-O-neohesperidoside, luteolin-8C-glucoside, apigenin-7-glucoside, naringenin-O-hexuronide, isosacuranetin-7-neohesperidoside, together with neochlorogenic, 4-caffeoylquinic, 1,3- and 3,4-dicaffeoylquinic acids were reported in the species for the first time. Clinopodic acids A, B and C and their isobars were evidenced; rosmarinic acid was the major compound.

Conclusions: Using these methods we received information that *Clinopodium vulgare* is a valuable source of bioactive compounds. The results are very helpful for further analysis.