Liquid Chromatography-Mass Spectroscopy and Liquid Chromatography-Ultraviolet/Visible Photodiode Array Analysis of Selected *Colchicum* Species

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An in-house strategy to dereplicate colchicinoid alkaloids was recently developed by our team. It aimed at quickly identifying *Colchicum* constituents using LC-MS (liquid chromatography-mass spectroscopy) and LC-UV/Vis PDA (liquid chromatography-ultraviolet/ visible photodiode array) techniques. In this project, our goal was to validate the developed method through analysing the alkaloid-rich fractions of three *Colchicum* species that had been previously studied phytochemically using the traditional bioactivity-guided fractionation methodology. The analysed species were *Colchicum tauri* Siehe ex Stefanoff, *Colchicum stevenii* Kunth, and *Colchicum tunicatum* Feinbr., all belonging to the family Colchicaceae. In addition to identifying the compounds previously isolated and characterized by the traditional methodology, but new to the species.

Key words: Dereplication, Colchicinoids, LC-APCI-MS