

Analysis of Steviol Glycosides using HILIC columns

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Stevia rebaudiana Bertoni contains several steviol glycosides with sweet flavour (up to factor 450 sweeter than sucrose). The purified extracts of *S. rebaudiana* are expected to be legalized in the European market within 2011. The extracts are specified to contain at least 75% stevioside and/or rebaudioside A and a total of 95% steviol glycosides.

To control these specifications, high-performance liquid chromatography (HPLC) is the most used method for separation of steviol glycosides. The selectivity of reversed-phase (RP) columns is poor with regard to the separation of the two most abundant compounds stevioside and rebaudioside A. In this poster is shown, how hydrophilic liquid interaction chromatography (HILIC) can solve this problem.

Different types of HILIC columns are compared. The main factors to be optimized in method development are aqueous percentage and ion strength of the eluent. A method for the separation (HPLC), quantitation (UV), and identification (MS²) of steviol glycosides is described.