Characterization of the Polyphenolic Composition of Purple Loosestrife (*Lythrum salicaria*)

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**Lythrum salicaria**, Flavonoids, Phenolic Acids, Tannins

Phenolic compounds of purple loosestrife (*Lythrum salicaria* L.) were analysed by the use of liquid chromatography – mass spectrometry (LC/MS) equipped with atmospheric pressure chemical ionisation (APCI) and electrospray ionisation (ESI). The presence of vitexin and orientin as well as their isomers, isovitexin and isoorientin, were confirmed using ion trap multiple stage LC/MS\(^3\) analysis. Several phenolic acids and tannins were also detected. Ellagitannins, vescalagin and pedunculagin, are reported from the plant for the first time.