

Polypodium leucotomos

Brown powder in poly bag

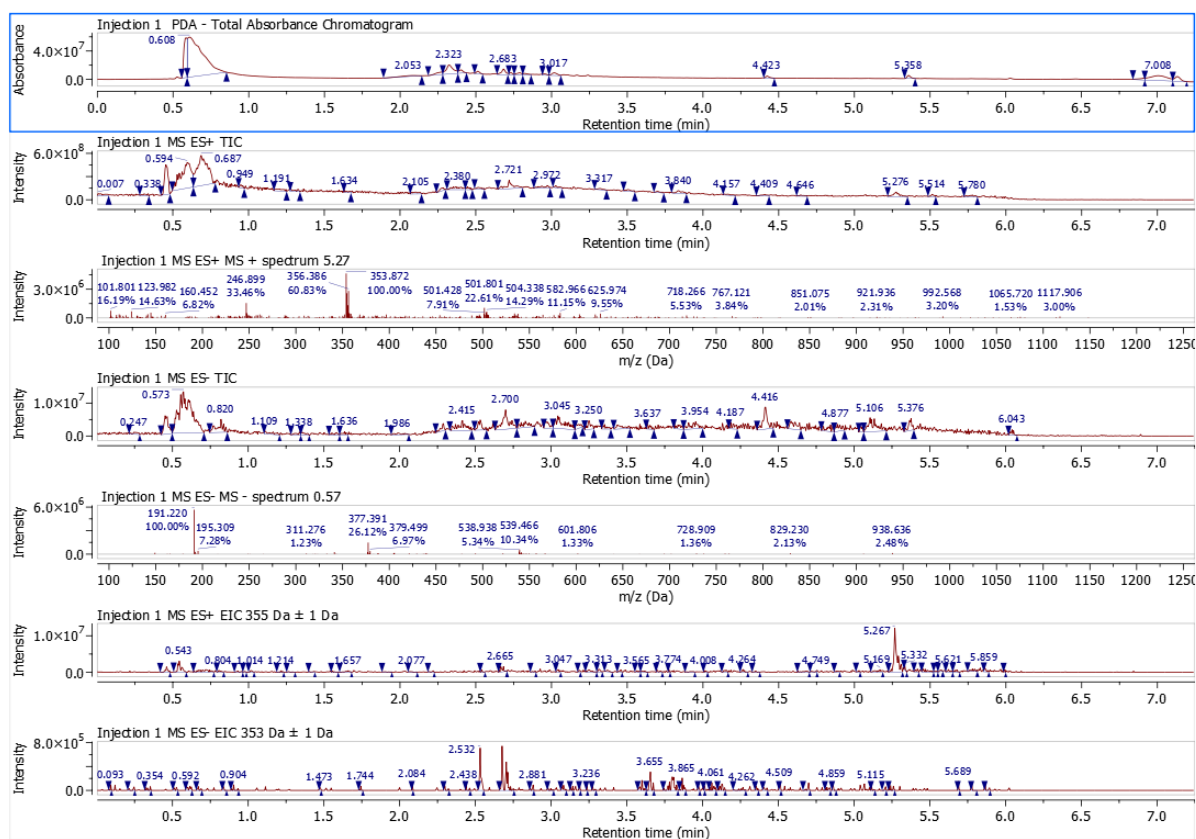
Expected MW: several e.g. 194.18 Ferulic acid, 354.31 Chlorogenic acid, 192.17 Quinic acid

Found: 355.75 (MH⁺) for Chlorogenic acid at RT 5.358 (trailing peak) and 191.22 (M-H⁺) for Quinic acid or suspected oxidized Ferulic acid

¹H NMR: spectrum does not contain aromatic peak band, which rules out Chlorogenic acid and Ferulic acid (or other possible components like flavonoids and other aromatic acids) as dominant components – these might be visible due to their higher UV absorption in LC. Deconvoluted spectrum matches Quinic acid as a major constituent

Quinic acids is possible elevated due to acidic extraction conditions – this may liberate it from various chlorogenic acid isomers (esters of quinic acid)

qNMR: Dry sample contains 9.5% quinic acid by weight



^1H NMR, $\text{d}_6\text{-DMSO}$:

