

Supporting Information

Comprehensive Analysis of Sulfated Flavonoids in *Eclipta prostrata* for Quality Evaluation

Ryunosuke Sato ¹, Yuto Nishidono ^{1,2} and Ken Tanaka ^{1,*}

1 College of Pharmaceutical Sciences, Ritsumeikan University, Kusatsu 525-8577, Shiga, Japan; ph0150vi@ed.ritsumei.ac.jp (R.S.); nisidono@fc.ritsumei.ac.jp (Y.N.)

2 Research Organization of Science and Technology, Ritsumeikan University, Kusatsu 525-8577, Shiga, Japan

* Correspondence: ktanaka@fc.ritsumei.ac.jp; Tel.: +81-77-561-5179

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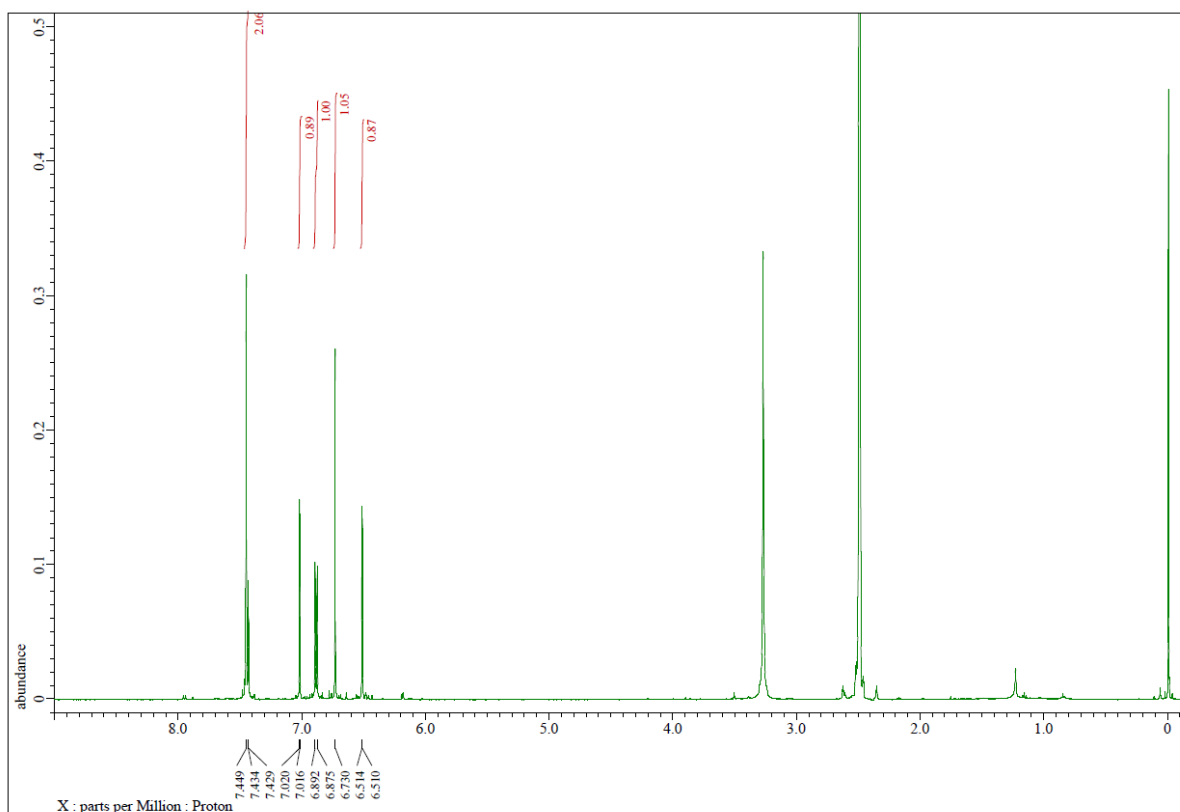


Figure S1. ^1H NMR Spectrum of Luteolin 7-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (500 MHz, 35 °C)

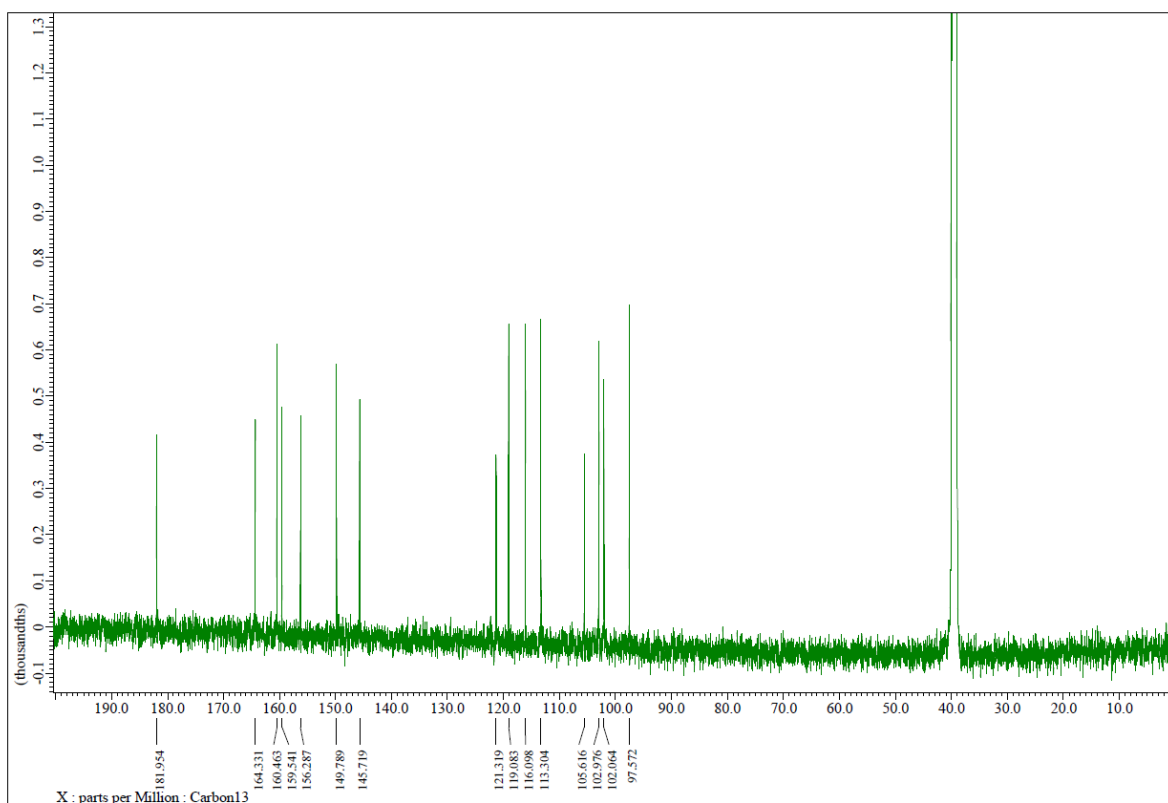


Figure S2. ^{13}C NMR Spectrum of Luteolin 7-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (125 MHz, 35 °C)

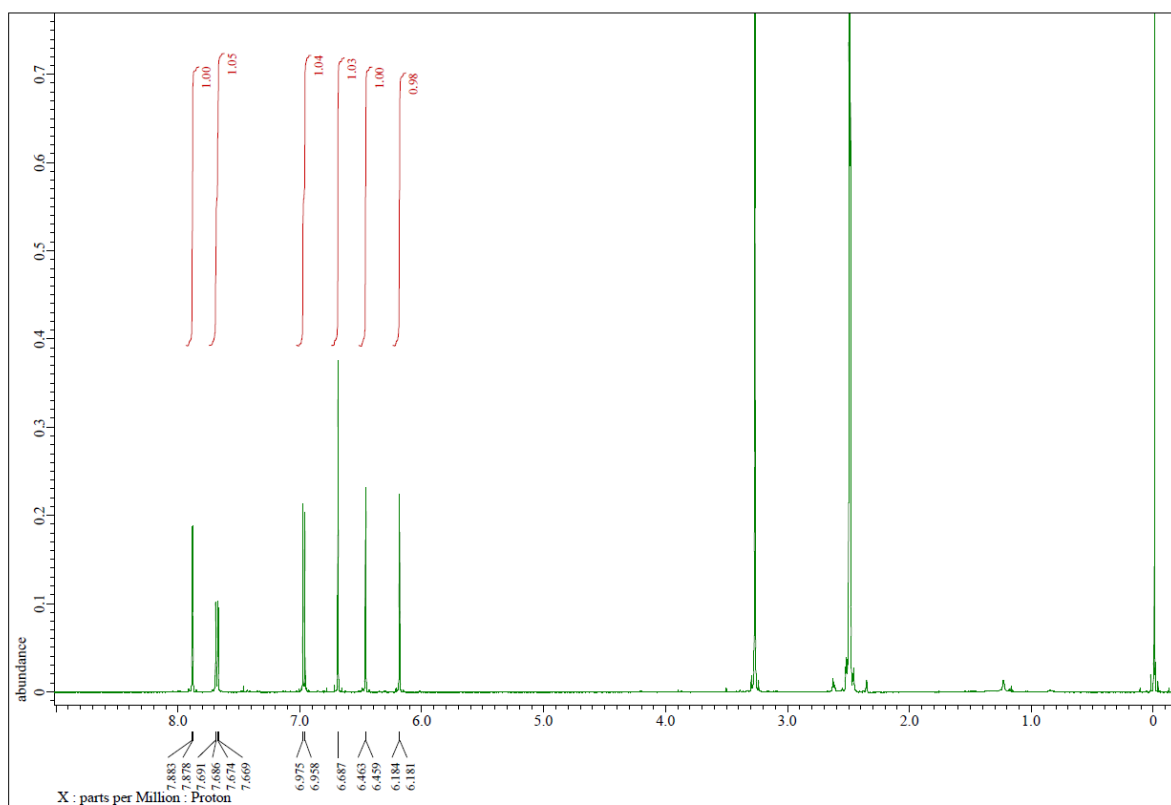


Figure S3. ^1H NMR Spectrum of Luteolin 3'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (500 MHz, 35 °C)

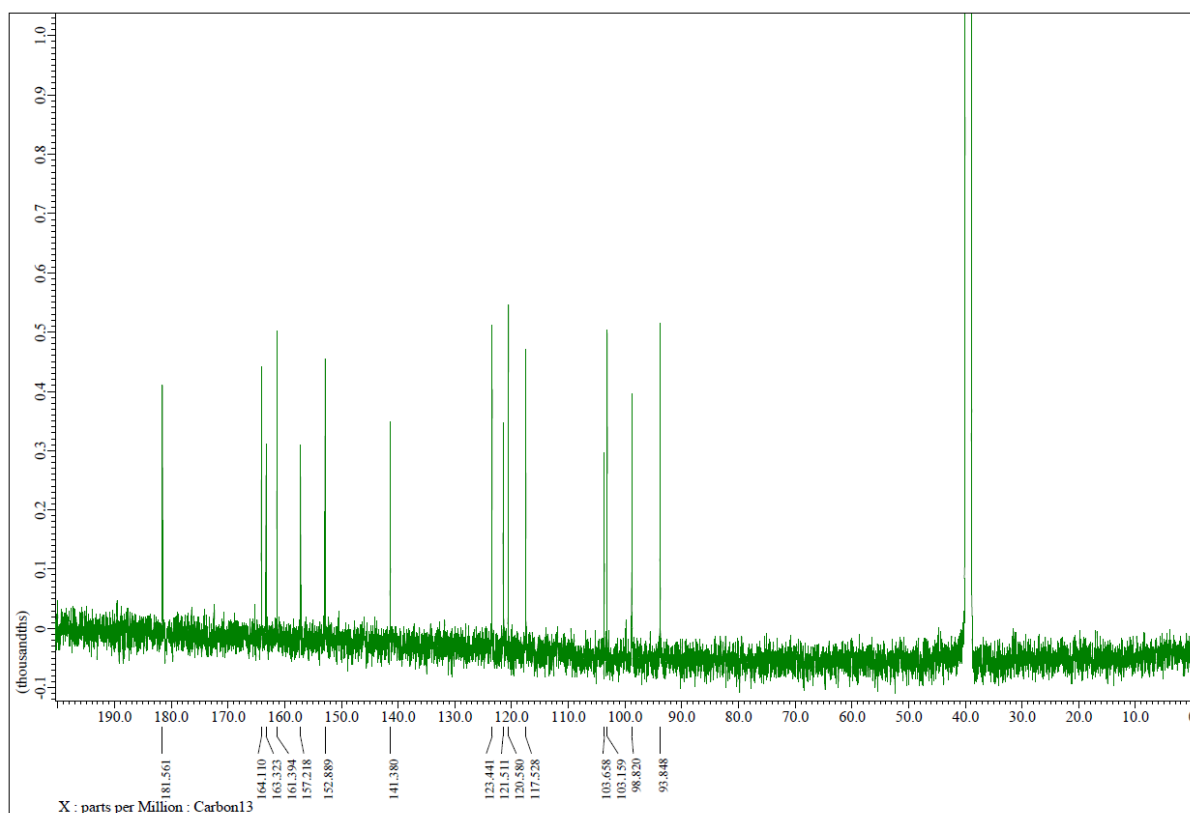


Figure S4. ^{13}C NMR Spectrum of Luteolin 3'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (125 MHz, 35 °C)

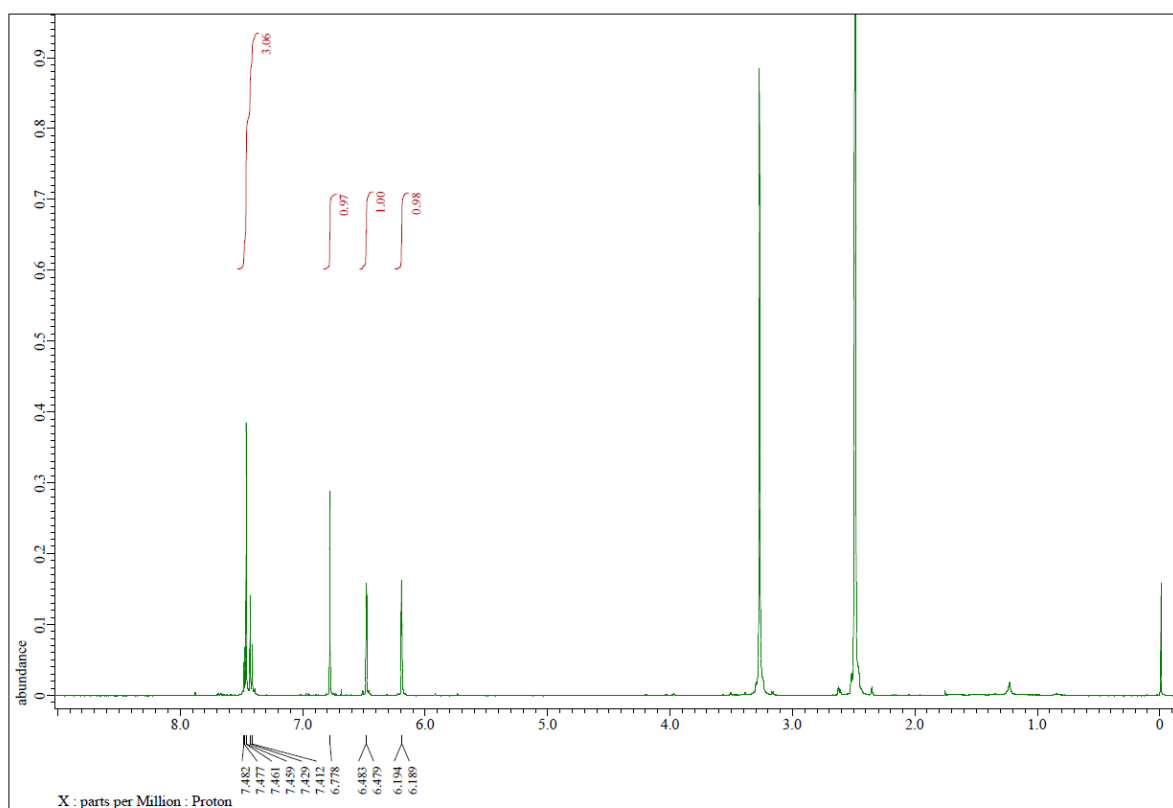


Figure S5. ^1H NMR Spectrum of Luteolin 4'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (500 MHz, 35 °C)

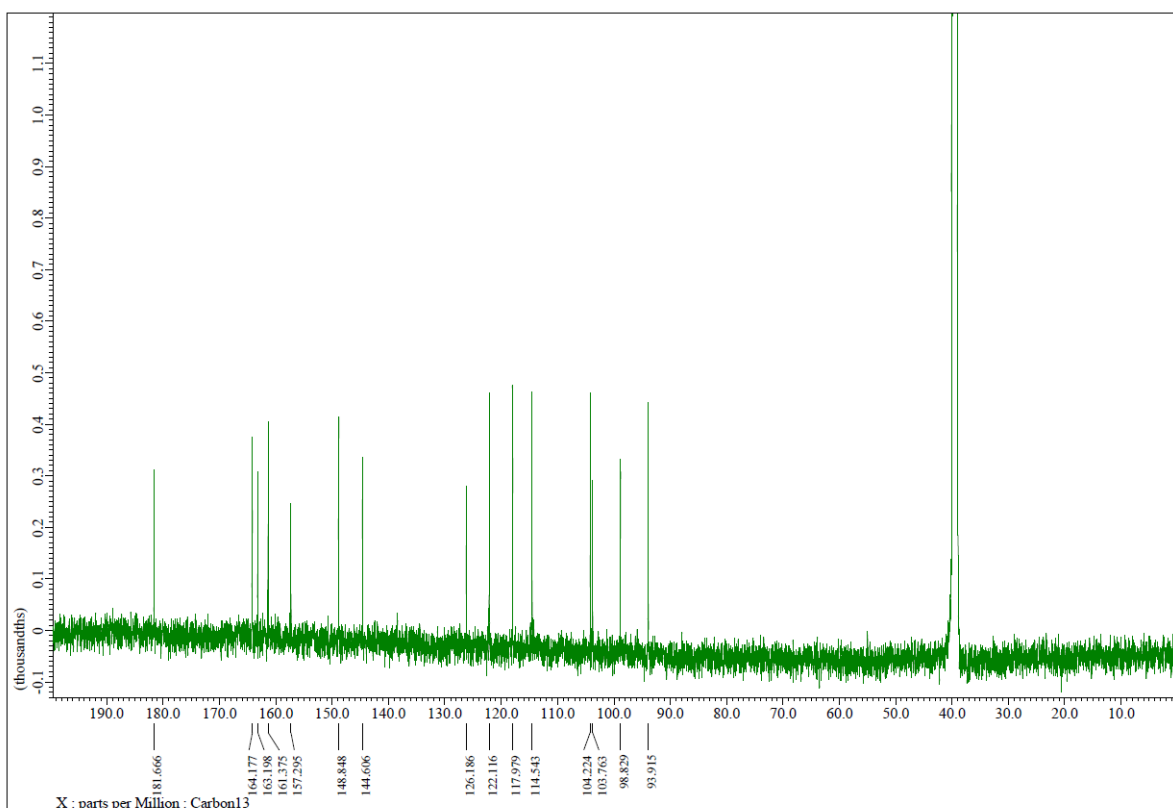
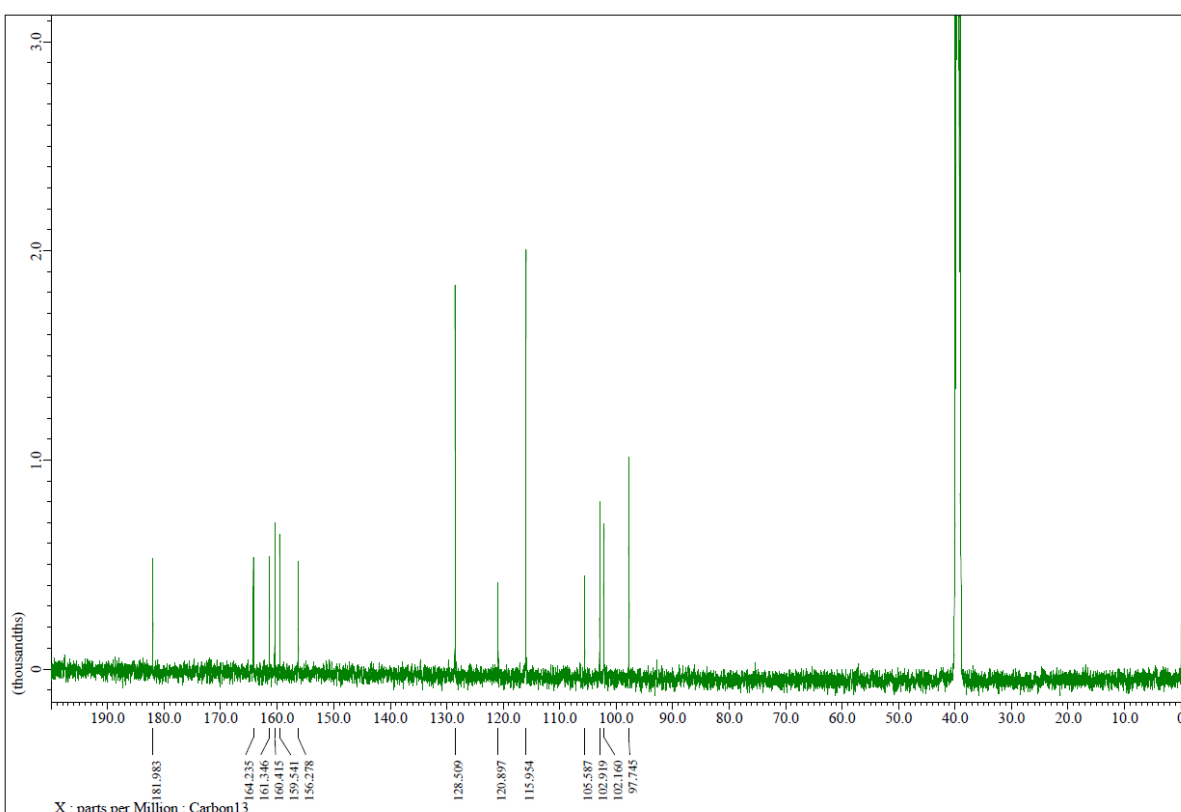
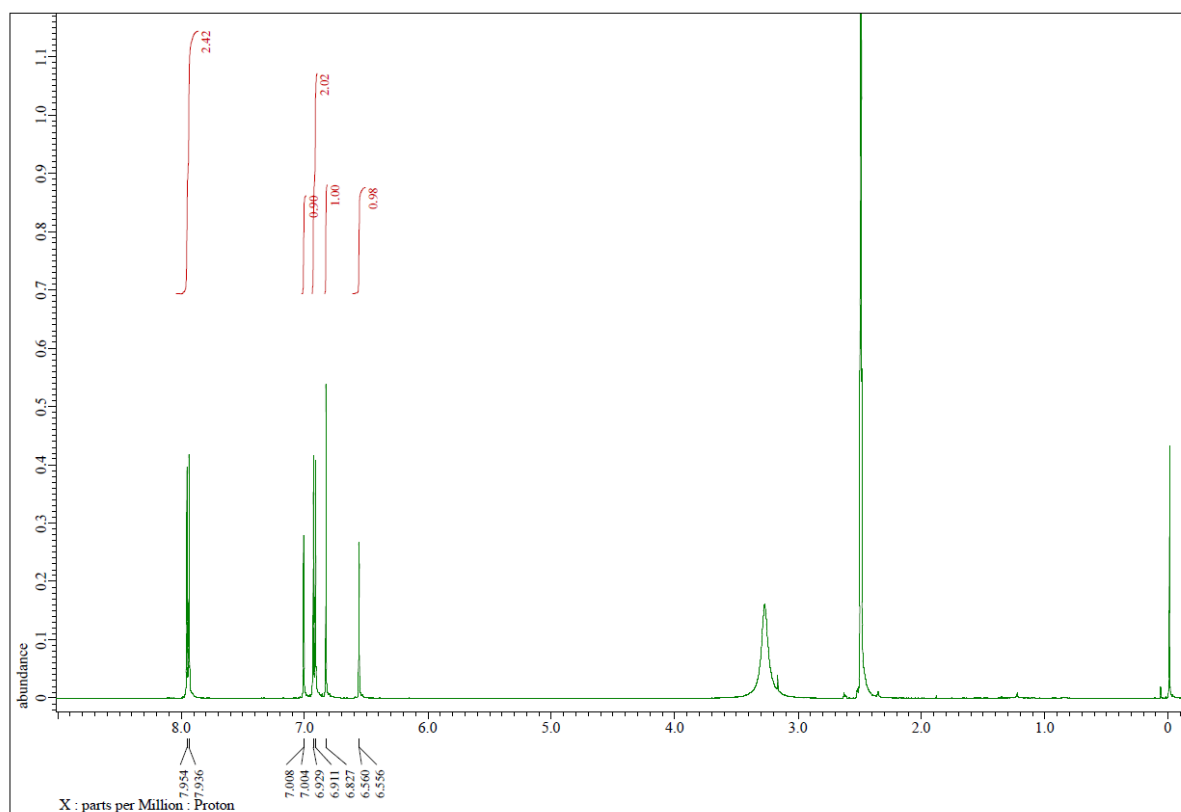


Figure S6. ^{13}C NMR Spectrum of Luteolin 4'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (125 MHz, 35 °C)



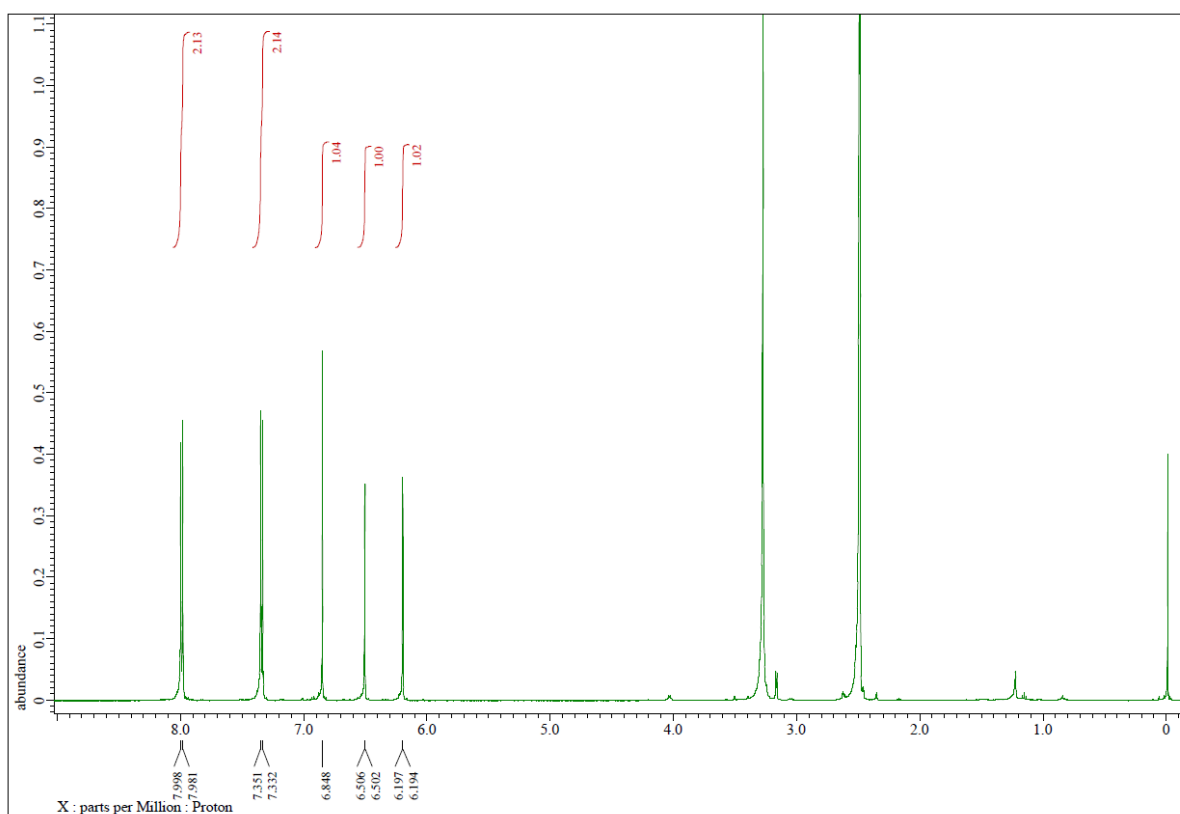


Figure S9. ^1H NMR Spectrum of Apigenin 4'-Sulfate Potassium Salt in $\text{DMSO-}d_6$ (500 MHz, 35 °C)

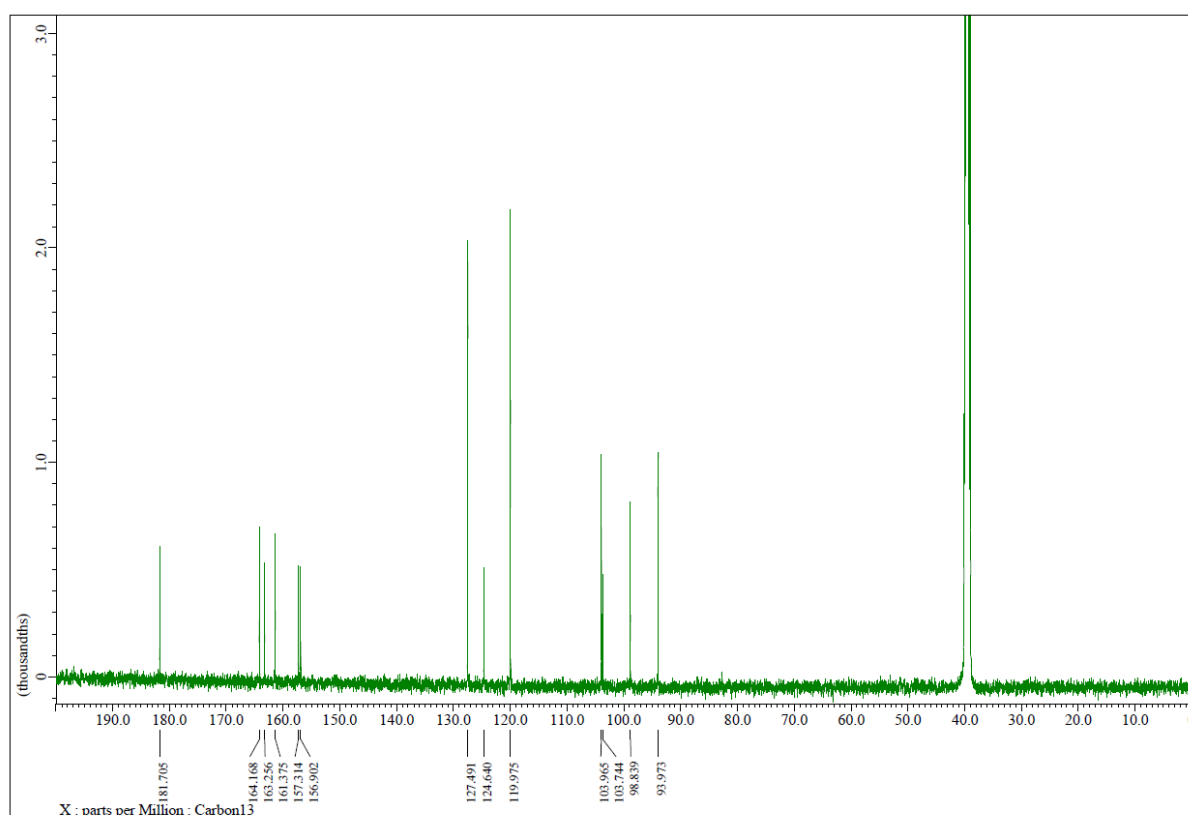


Figure S10. ^{13}C NMR Spectrum of Apigenin 4'-Sulfate Potassium Salt in $\text{DMSO-}d_6$ (125 MHz, 35 °C)

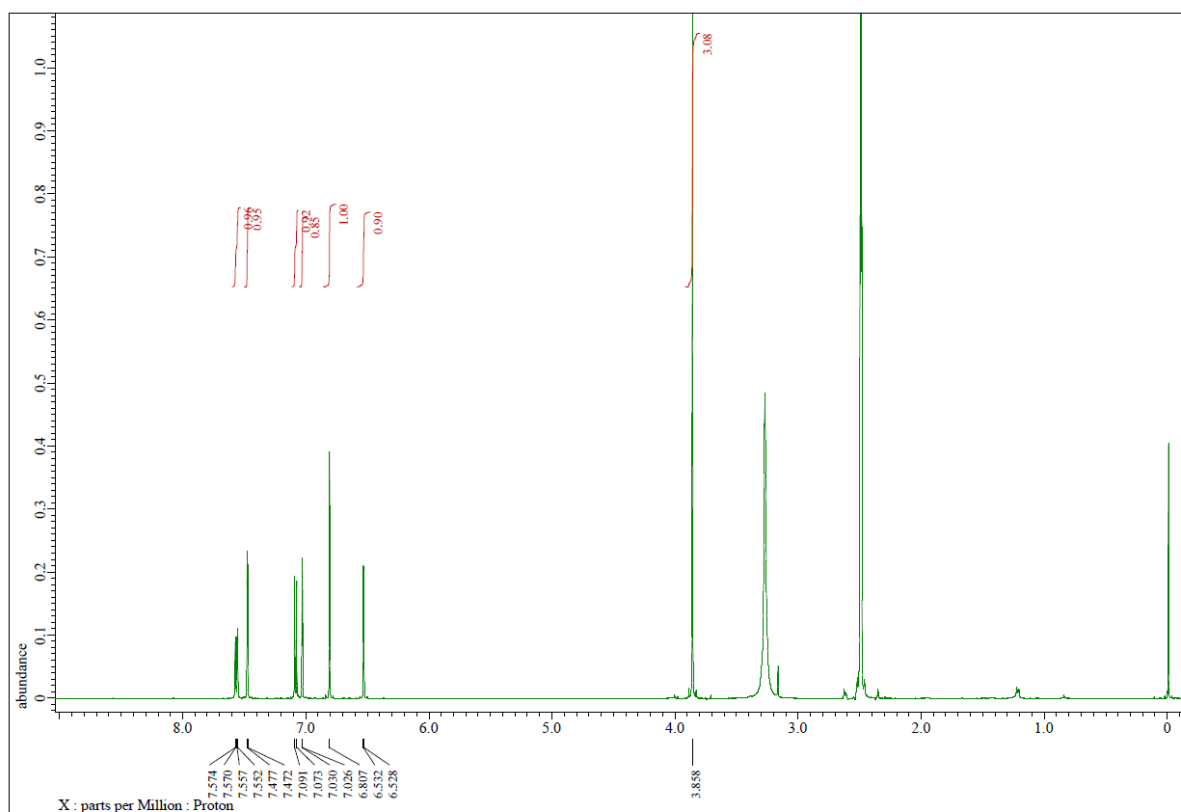


Figure S11. ^1H NMR Spectrum of Diosmetin 7-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (500 MHz, 35 °C)

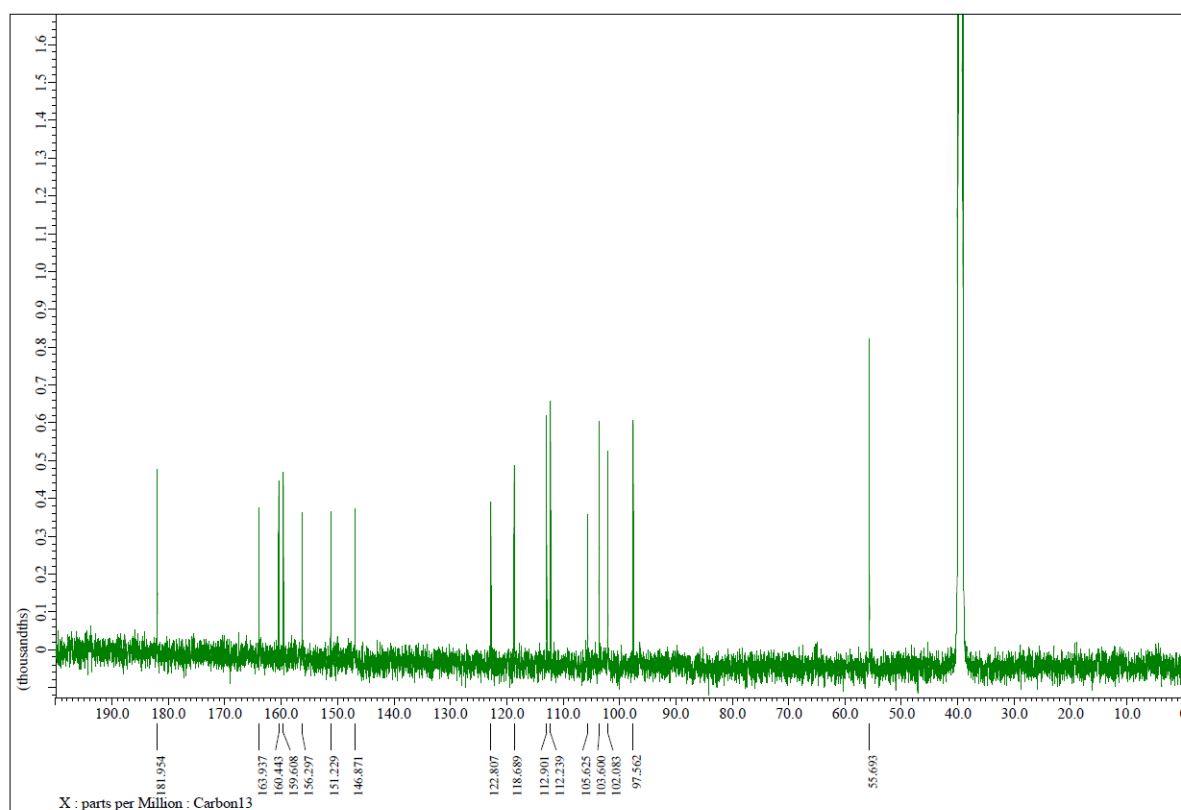


Figure S12. ^{13}C NMR Spectrum of Diosmetin 7-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (125 MHz, 35 °C)

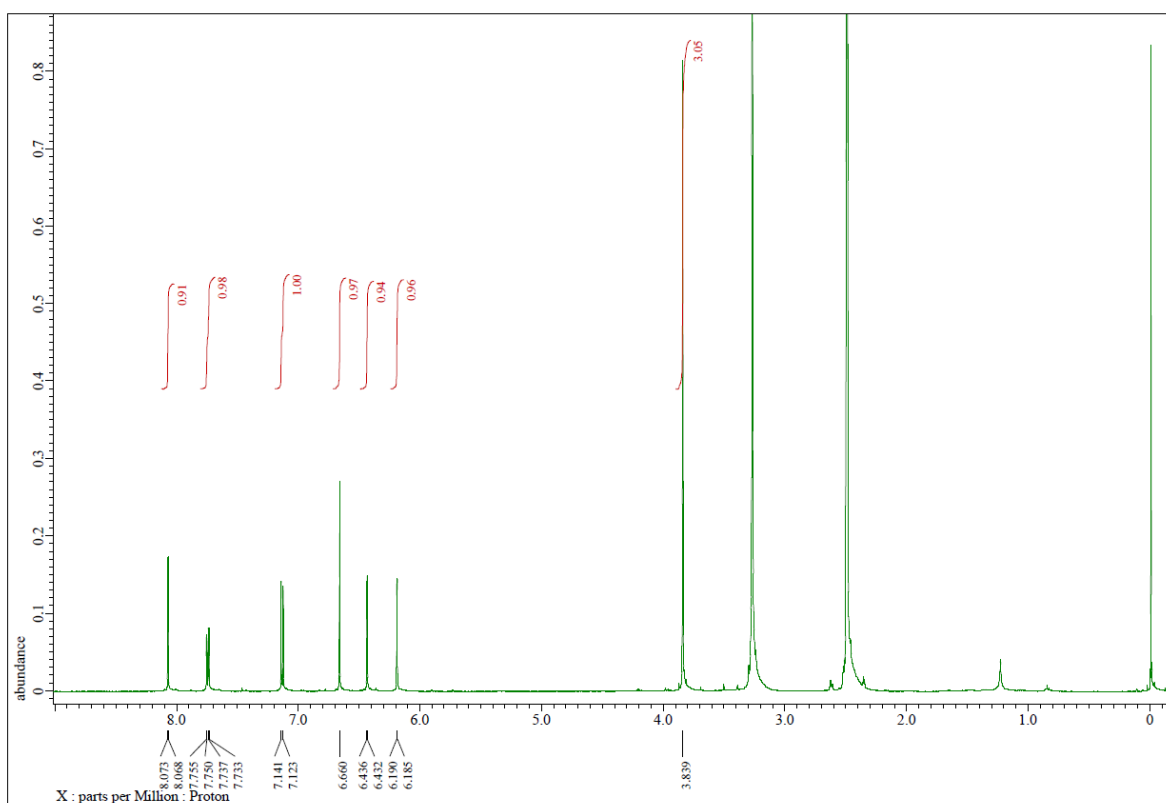


Figure S13. ^1H NMR Spectrum of Diosmetin 3'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (500 MHz, 35 °C)

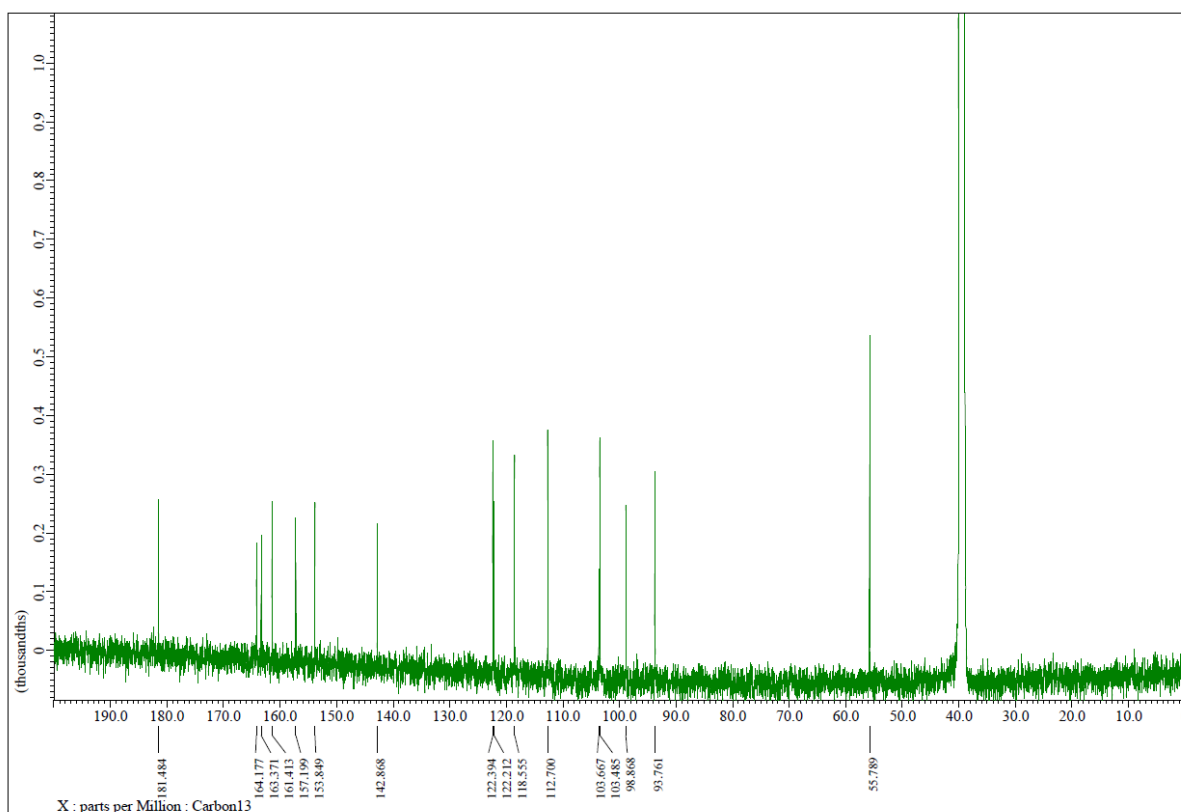


Figure S14. ^{13}C NMR Spectrum of Diosmetin 3'-Sulfate Potassium Salt in $\text{DMSO}-d_6$ (125 MHz, 35 °C)

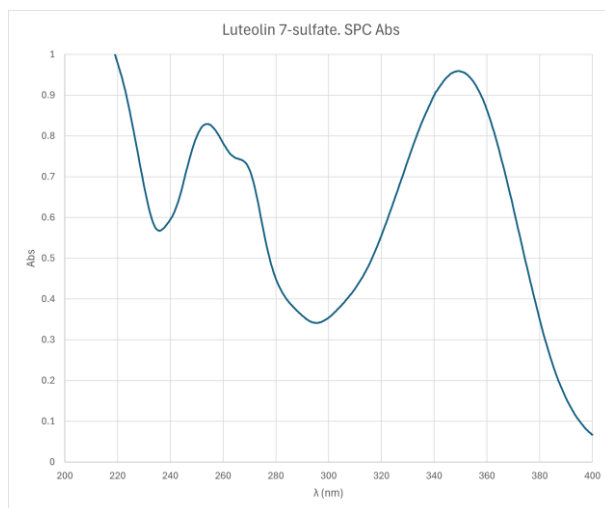


Figure S15. UV Spectrum of Luteolin 7-Sulfate Potassium Salt in MeOH

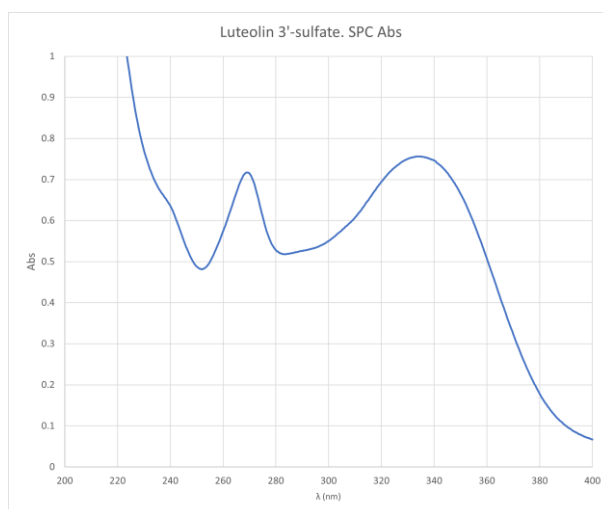


Figure S16. UV Spectrum of Luteolin 3'-Sulfate Potassium Salt in MeOH

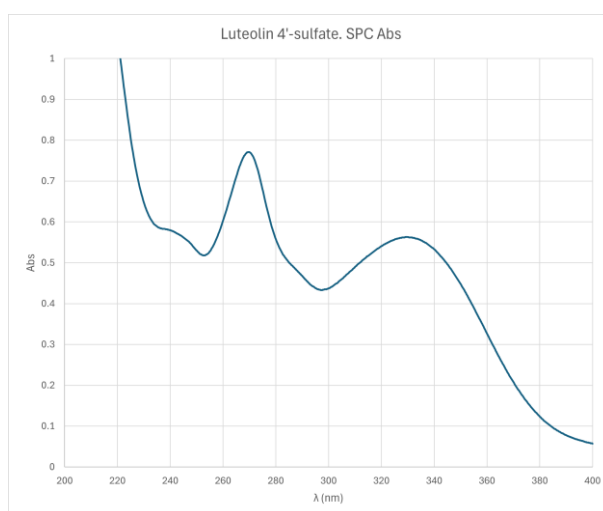


Figure S17. UV Spectrum of Luteolin 4'-Sulfate Potassium Salt in MeOH

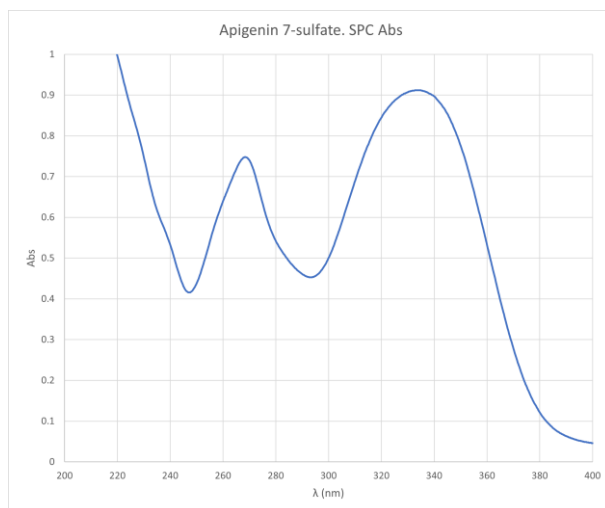


Figure S18. UV Spectrum of Apigenin 7-Sulfate Potassium Salt in MeOH

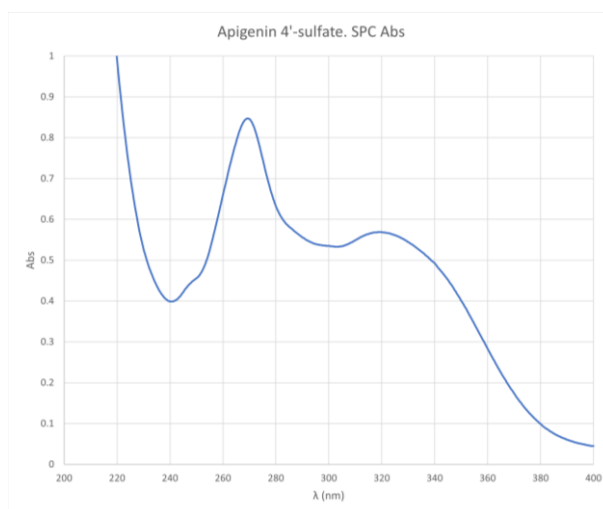


Figure S19. UV Spectrum of Apigenin 4'-Sulfate Potassium Salt in MeOH

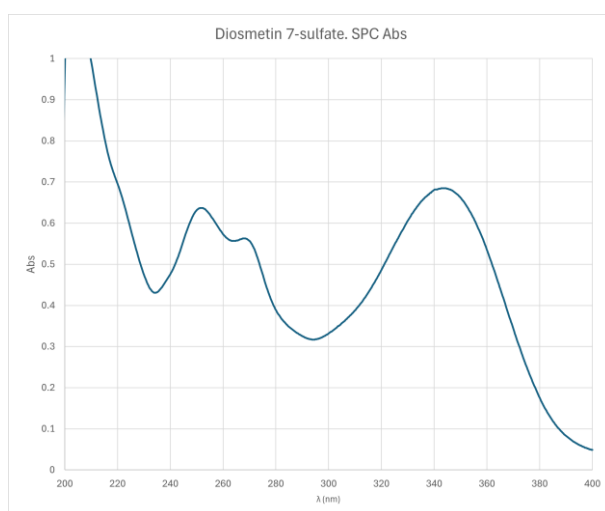


Figure S20. UV Spectrum of Diosmetin 7-Sulfate Potassium Salt in MeOH

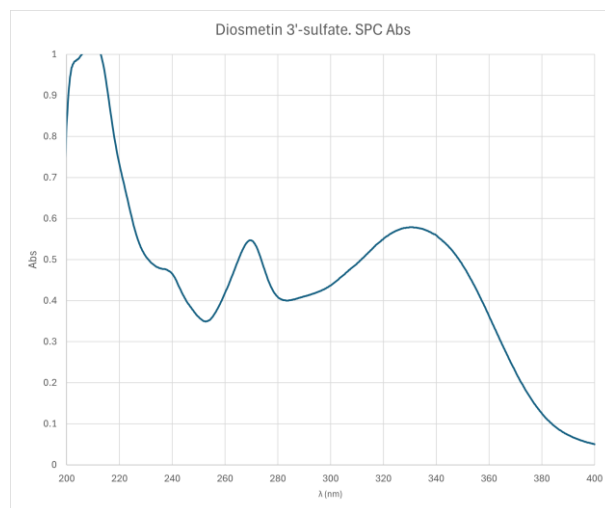


Figure S21. UV Spectrum of Diosmetin 3'-Sulfate Potassium Salt in MeOH

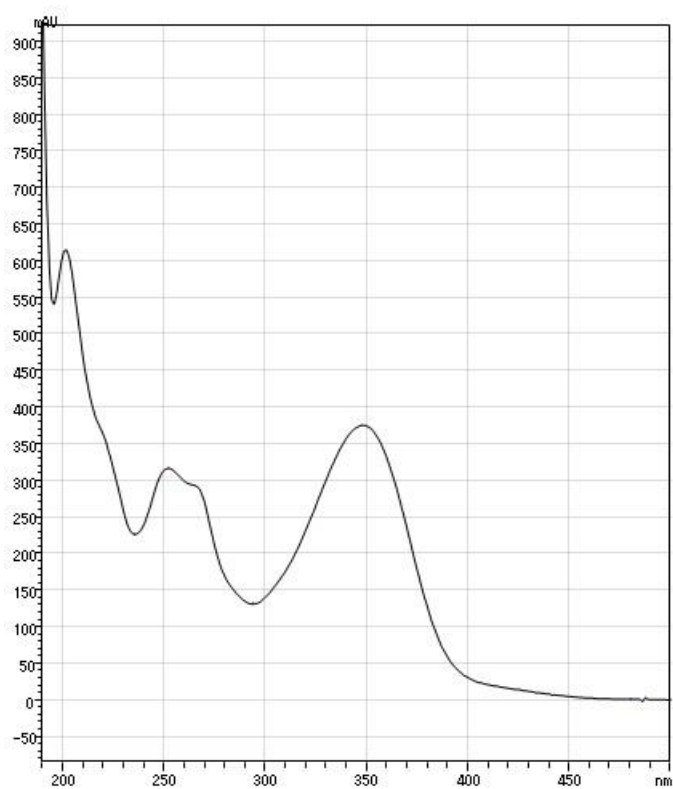


Figure S22. UV Spectrum of Luteolin 7-Sulfate measured with an HPLC-PDA detector

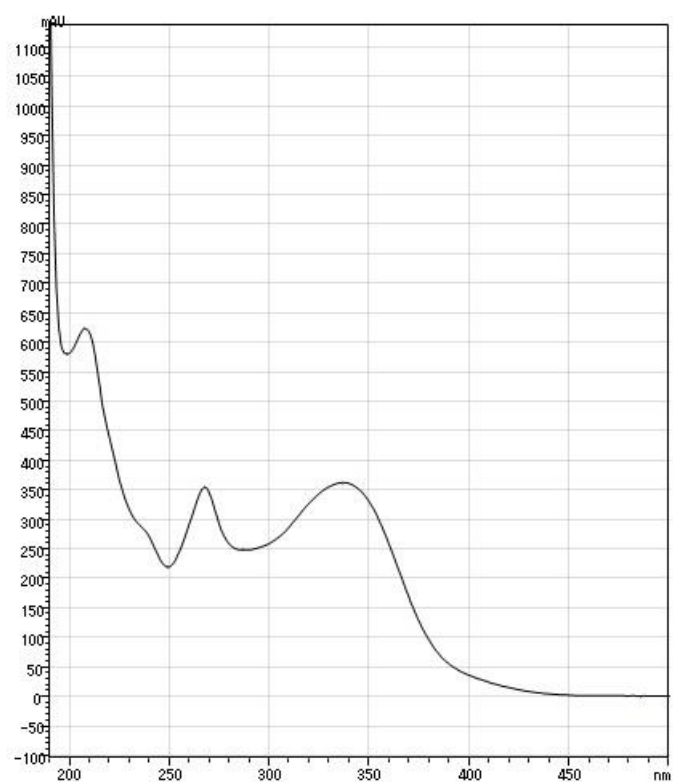


Figure S23. UV Spectrum of Luteolin 3'-Sulfate measured with an HPLC-PDA detector

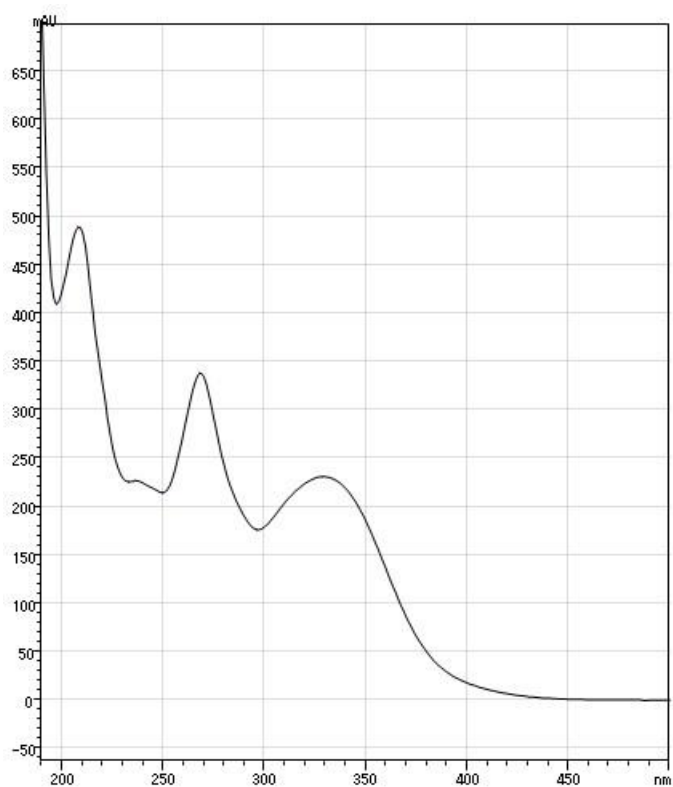


Figure S24. UV Spectrum of Luteolin 4'-Sulfate measured with an HPLC-PDA detector

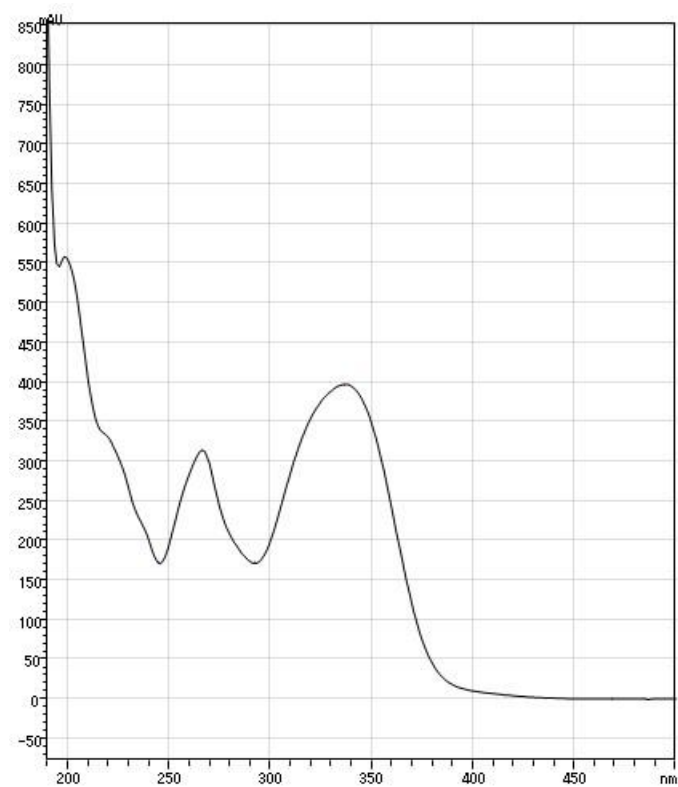


Figure S25. UV Spectrum of Apigenin 7-Sulfate measured with an HPLC-PDA detector

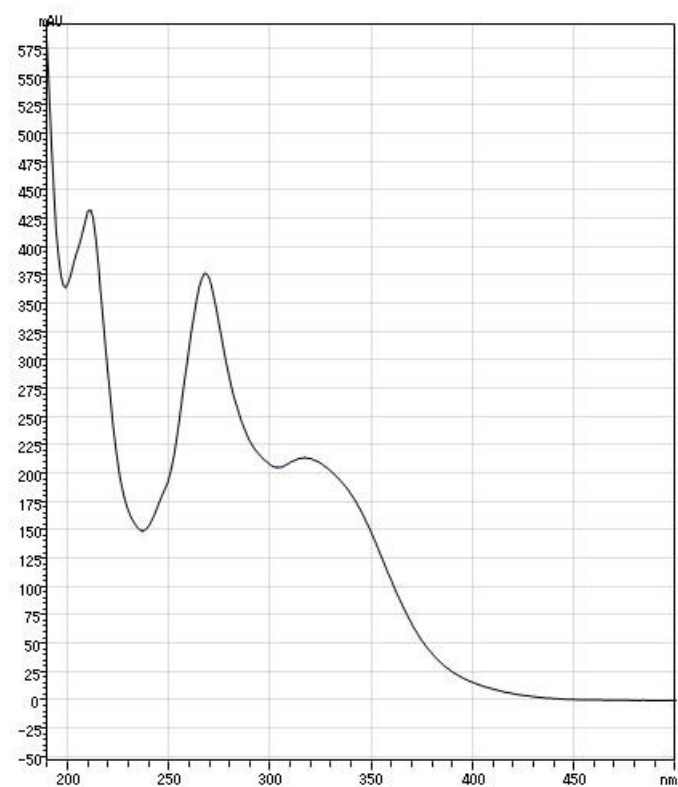


Figure S26. UV Spectrum of Apigenin 4'-Sulfate measured with an HPLC-PDA detector

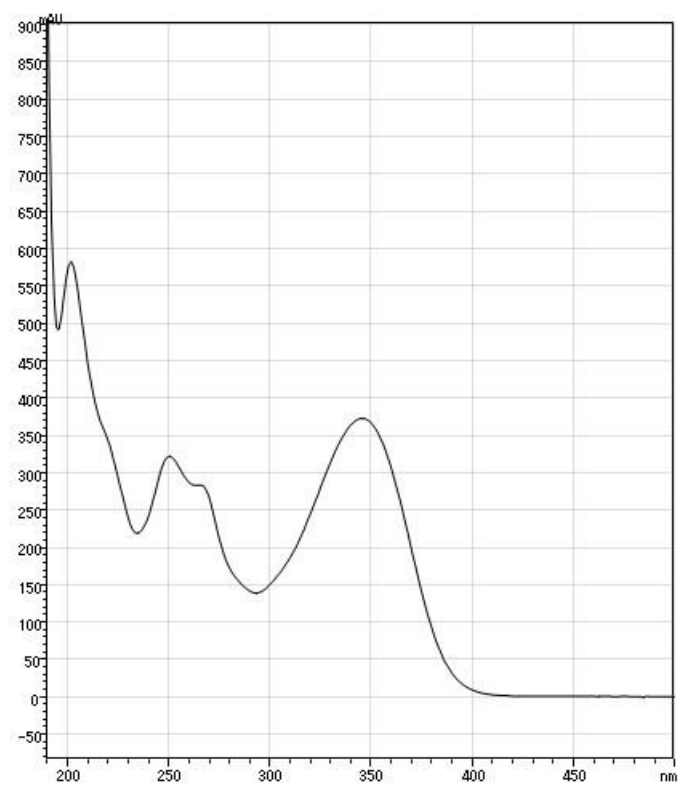


Figure S27. UV Spectrum of Diosmetin 7-Sulfate measured with an HPLC-PDA detector

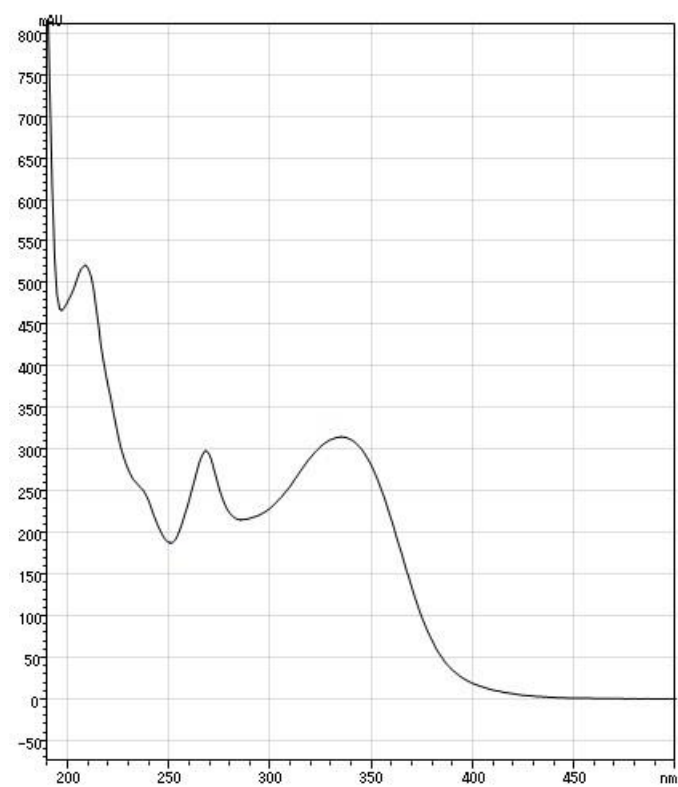


Figure S28. UV Spectrum of Diosmetin 3'-Sulfate measured with an HPLC-PDA detector

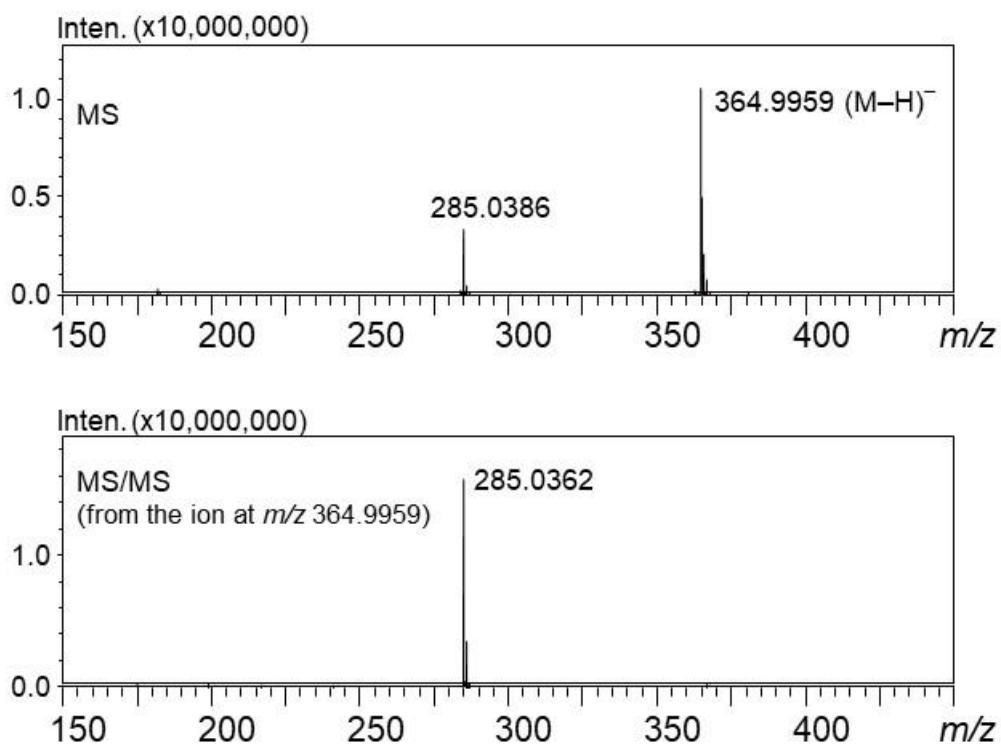


Figure S29. MS and MS/MS Spectra of Luteolin 7-Sulfate

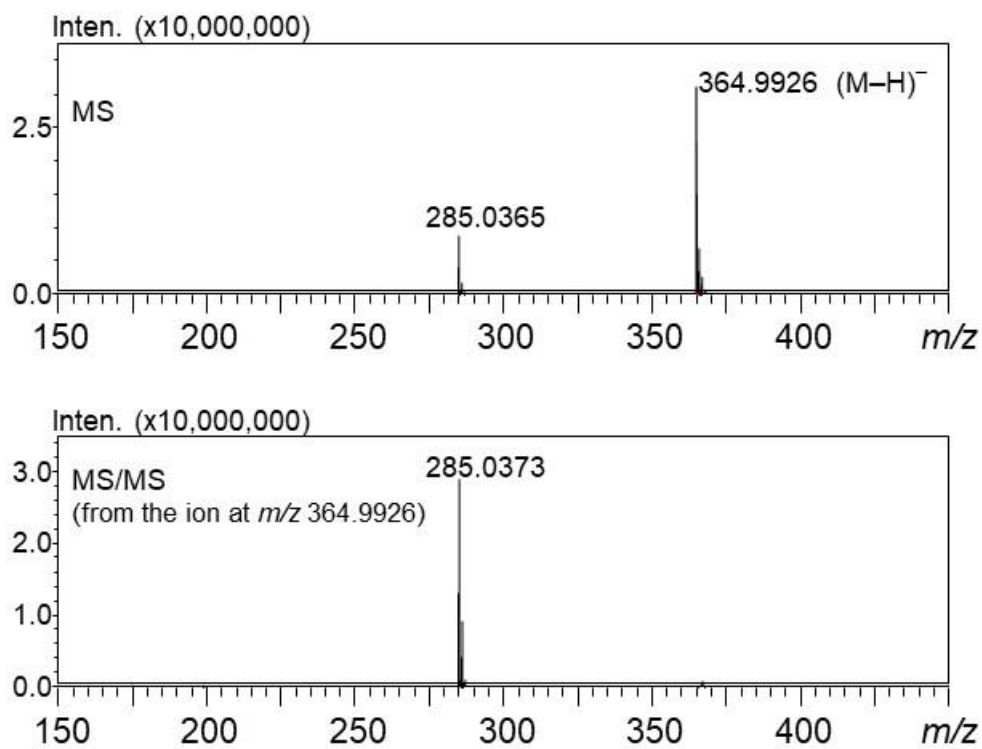


Figure S30. MS and MS/MS Spectra of Luteolin 3'-Sulfate

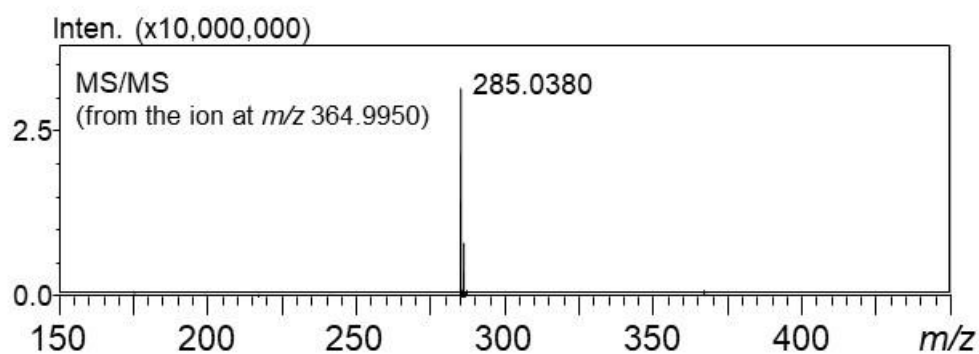
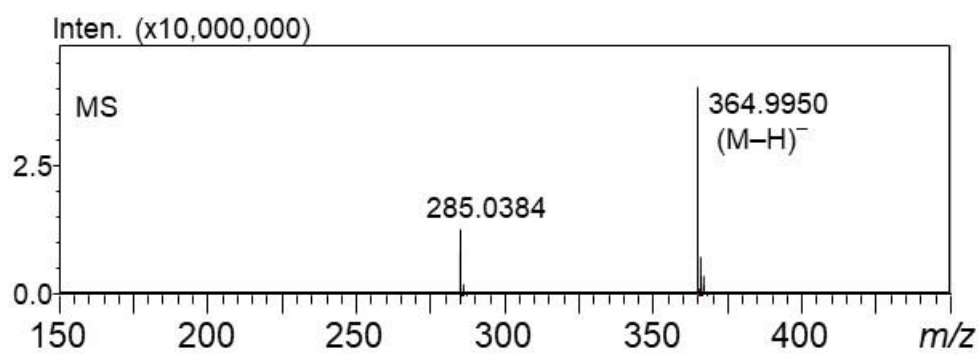


Figure S31. MS and MS/MS Spectra of Luteolin 4'-Sulfate

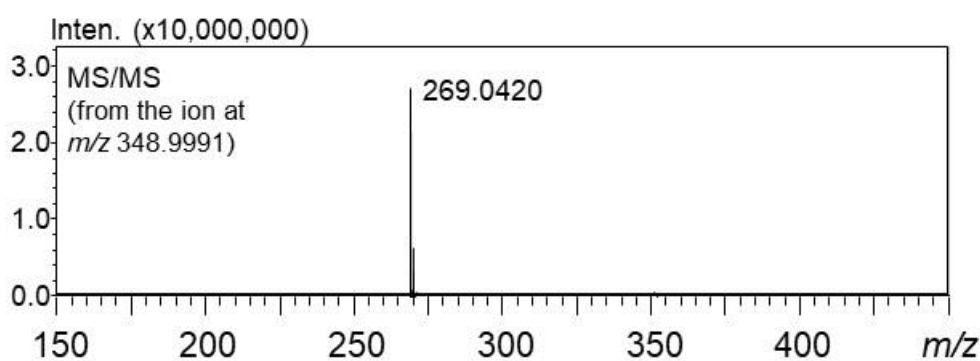
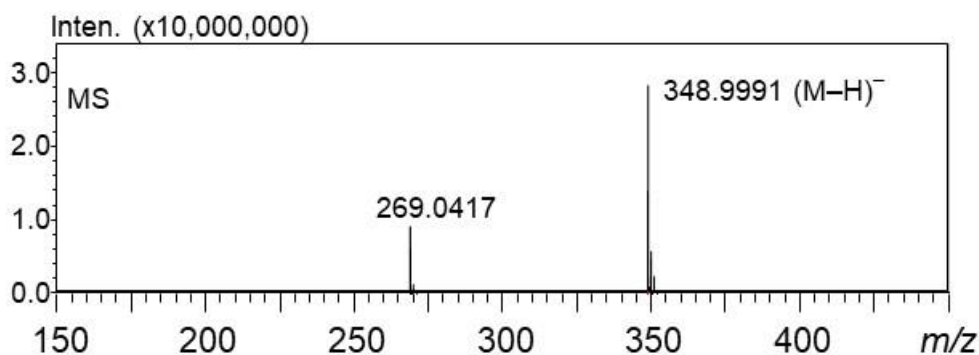


Figure S32. MS and MS/MS Spectra of Apigenin 7-Sulfate

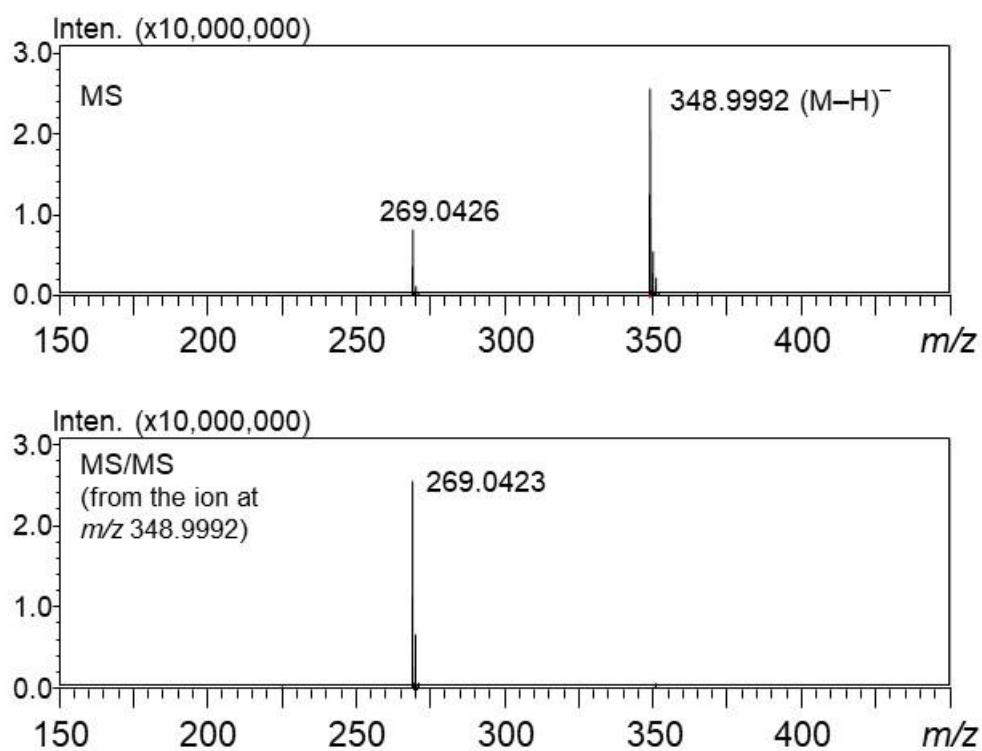


Figure S33. MS and MS/MS Spectra of Apigenin 4'-Sulfate

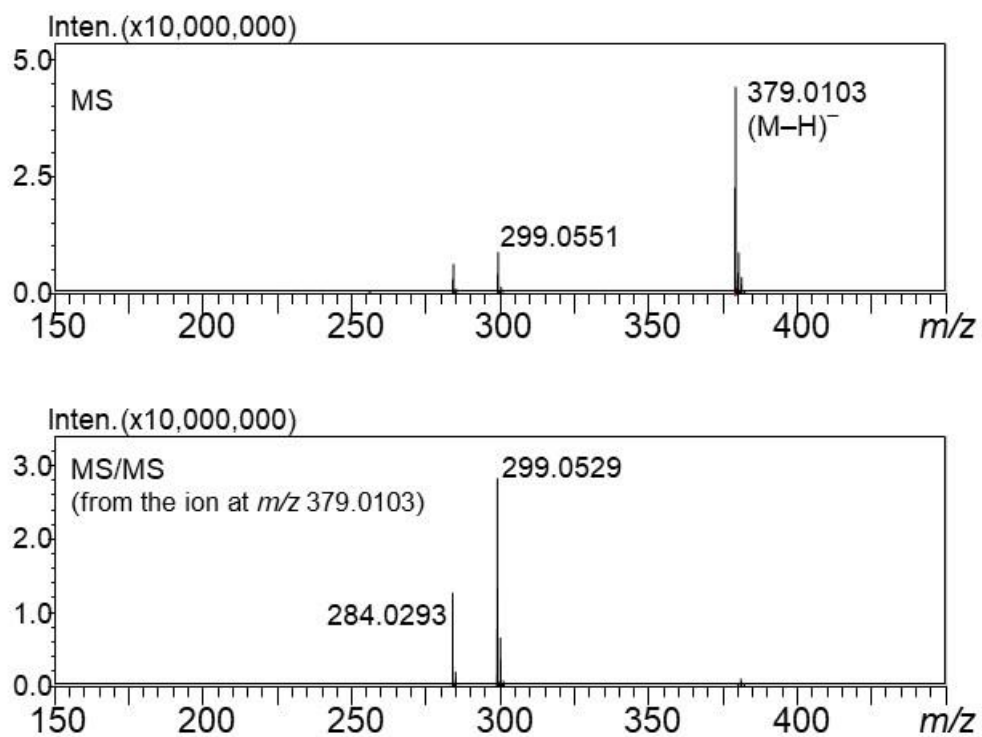


Figure S34. MS and MS/MS Spectra of Diosmetin 7-Sulfate

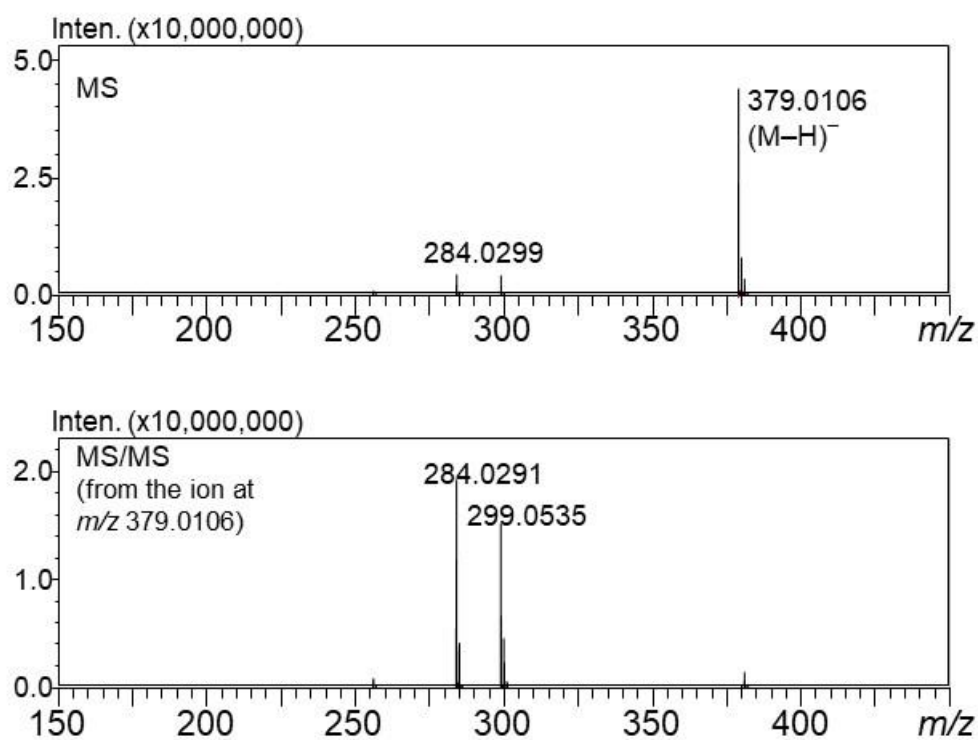


Figure S35. MS and MS/MS Spectra of Diosmetin 3'-Sulfate

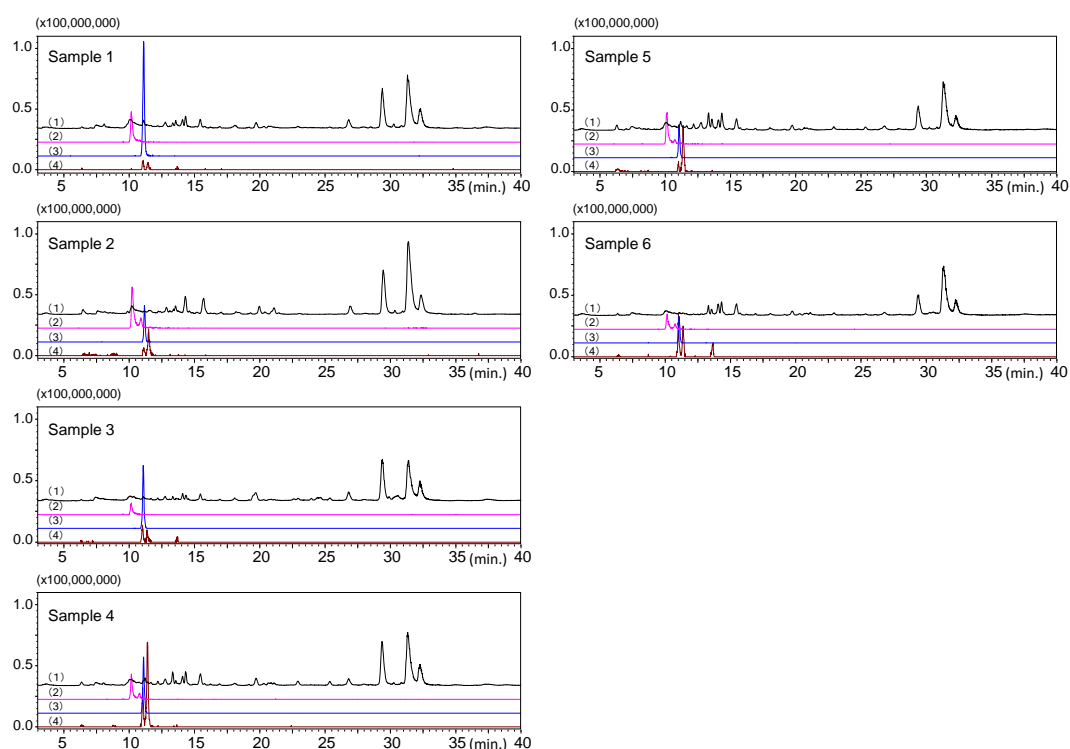


Figure S36. Liquid chromatography–mass spectrometry total-ion chromatograms and mass chromatograms of the extracts of the *E. prostrata* specimens: (1) negative-ion total-ion chromatogram, (2) (M-H)⁻ ions of luteolin sulfate (m/z 364.9970, 25x magnification), (3) apigenin sulfate (m/z 349.0016, 40x magnification), and (4) diosmetin sulfate (m/z 379.0144, 100x magnification)

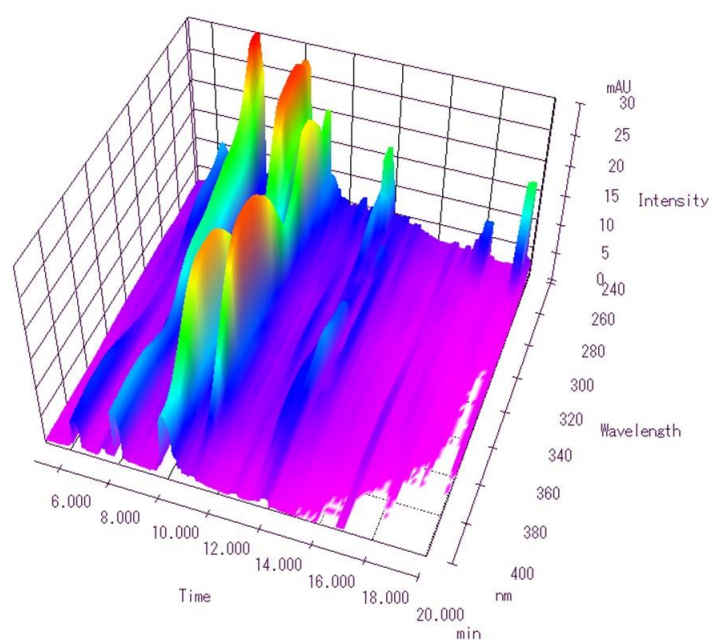


Figure S37. 3D-HPLC Chromatogram of Sample 1 (Henan Province, 2019)

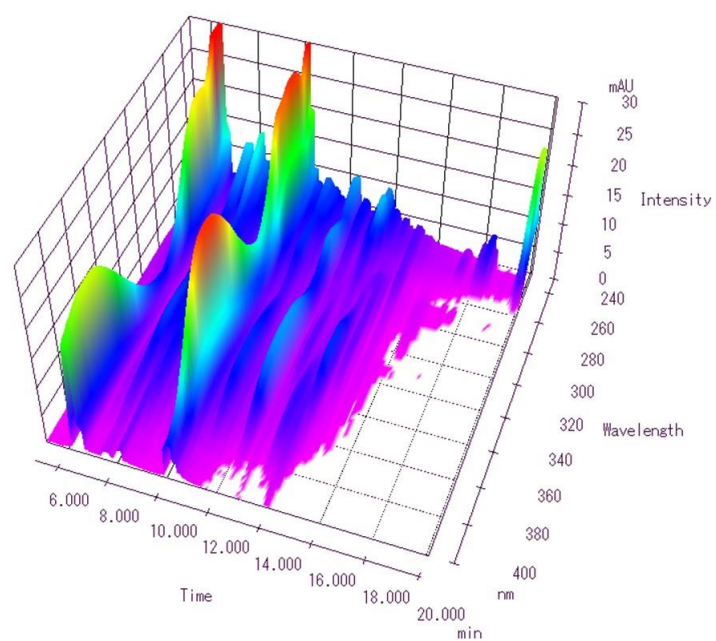


Figure S38. 3D-HPLC Chromatogram of Sample 2 (Henan Province, 2020)

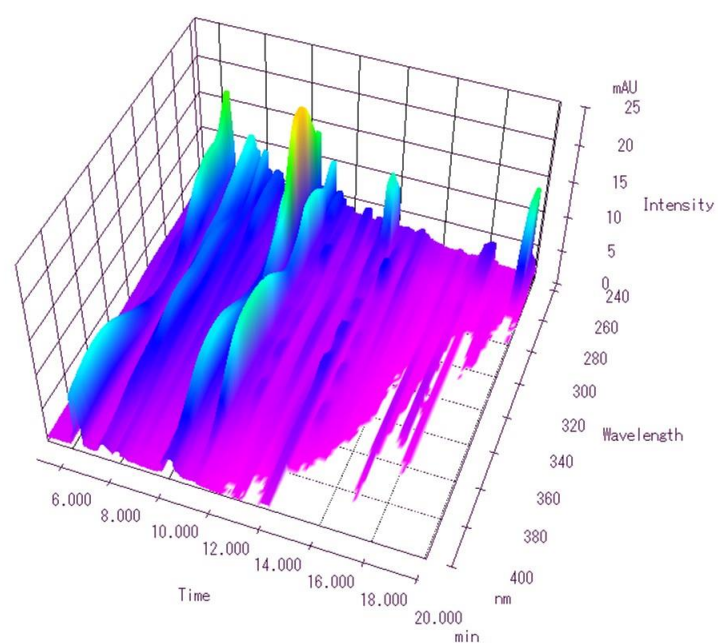


Figure S39. 3D-HPLC Chromatogram of Sample 3 (Henan Province, 2021)

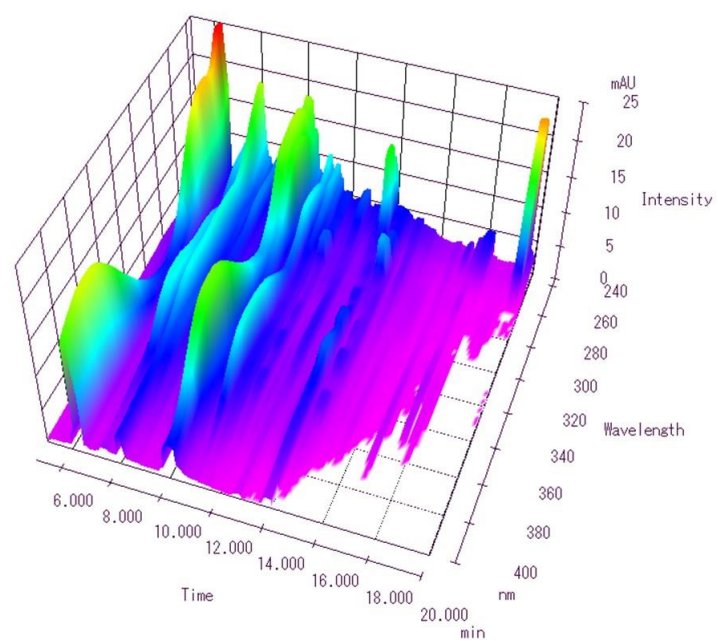


Figure S40. 3D-HPLC Chromatogram of Sample 4 (Henan Province)

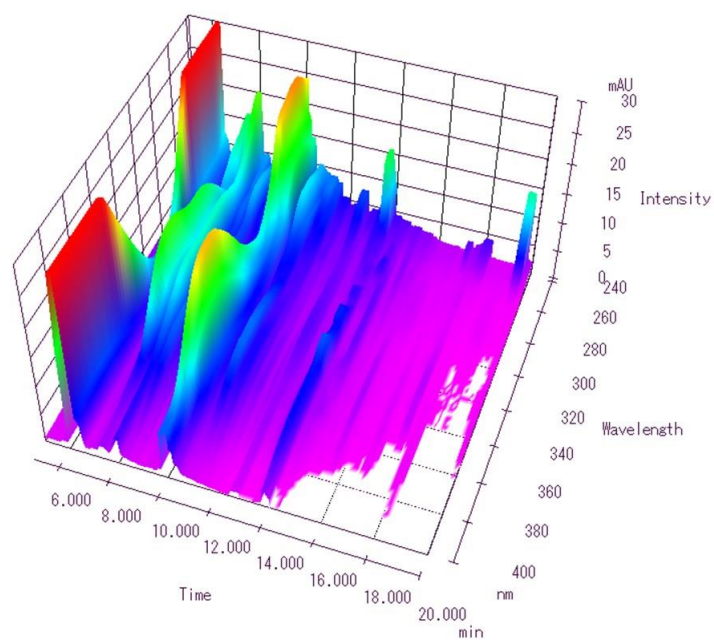


Figure S41. 3D-HPLC Chromatogram of Sample 5 (Hunan Province, 2021)

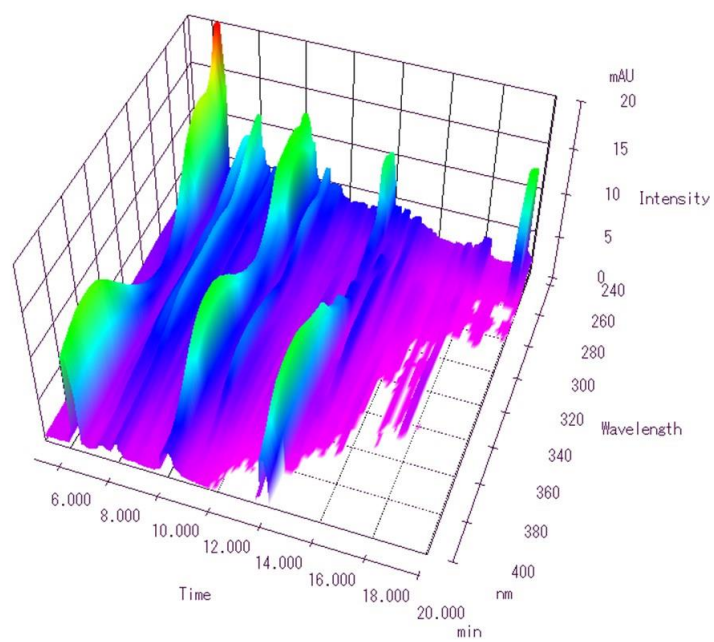


Figure S42. 3D-HPLC Chromatogram of Sample 6 (Jiangxi Province)