

Supplementary data

Essential Oils and Supercritical CO₂ Extracts of Arctic Angelica (*Angelica archangelica* L.), Marsh Labrador Tea (*Rhododendron tomentosum*) and Common Tansy (*Tanacetum vulgare*)—Chemical Compositions and Antimicrobial Activities

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The selected obtained chromatograms of the studied EOs and scCO₂ extracts are shown in Figures S1–S12.

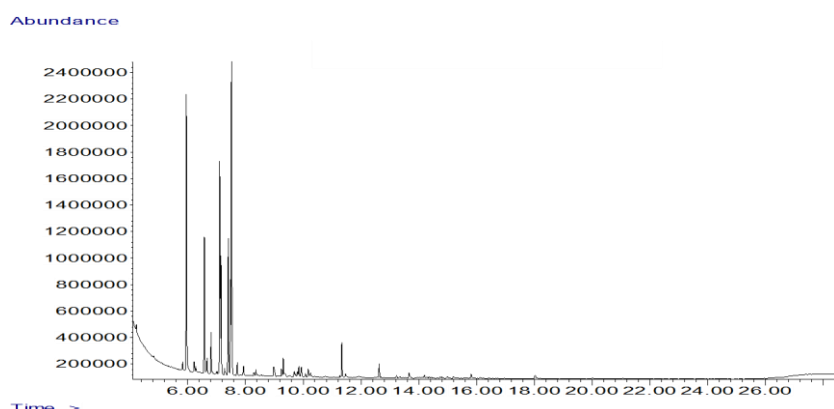


Figure S1. Chromatogram of air-dried Angelica root EO.

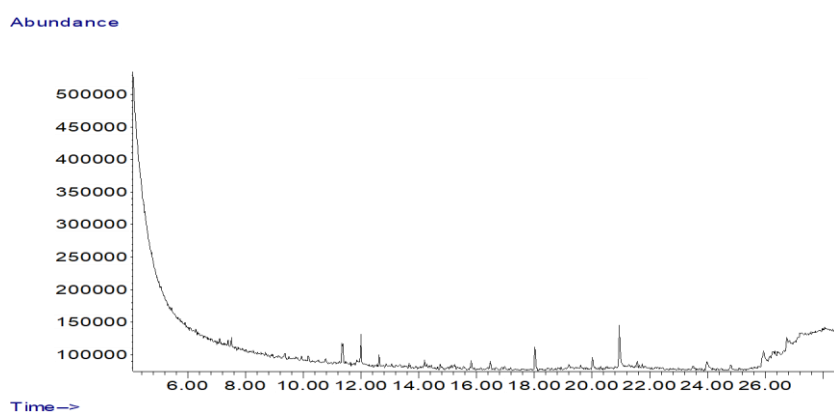


Figure S2. Chromatogram of air-dried Angelica root scCO₂ extract.

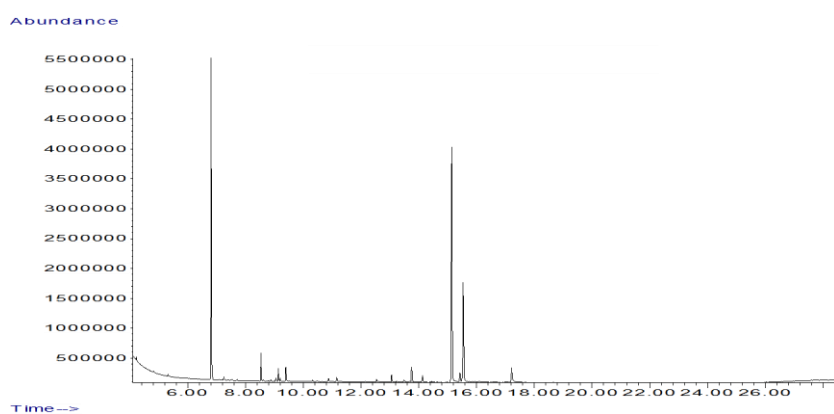


Figure S3. Chromatogram of air-dried marsh Labrador tea EO.

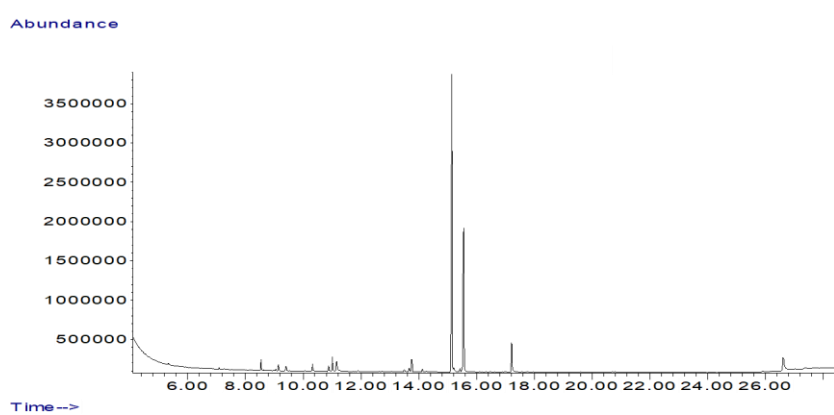


Figure S4. Chromatogram of air-dried marsh Labrador tea scCO₂ extract.

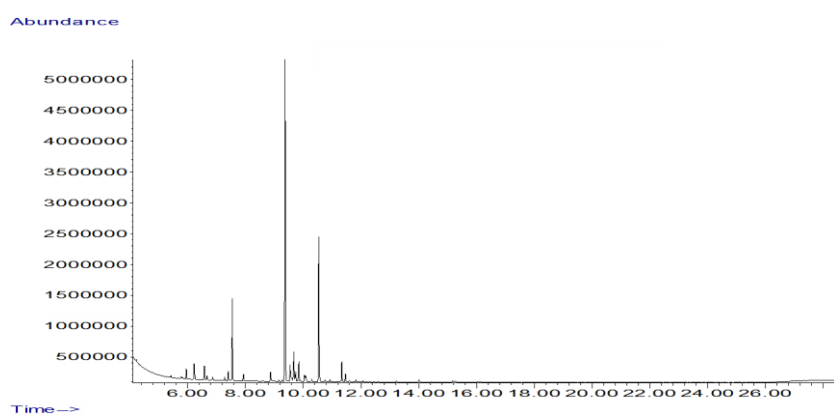


Figure S5. Chromatogram of air-dried common tansy inflorescence EO.

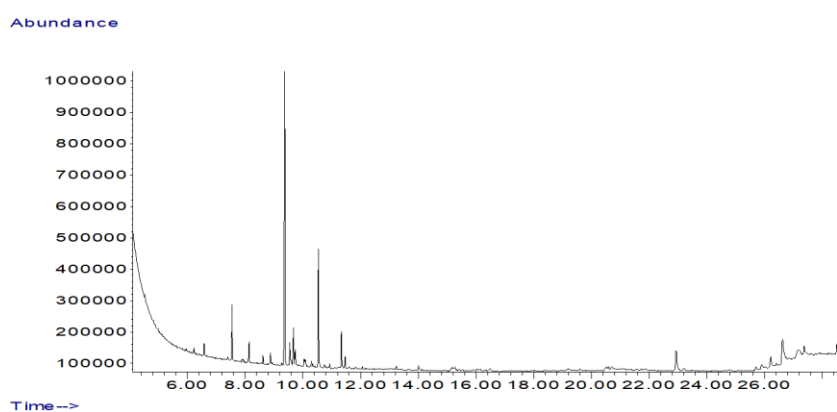


Figure S6. Chromatogram of air-dried common tansy inflorescence scCO₂ extract.

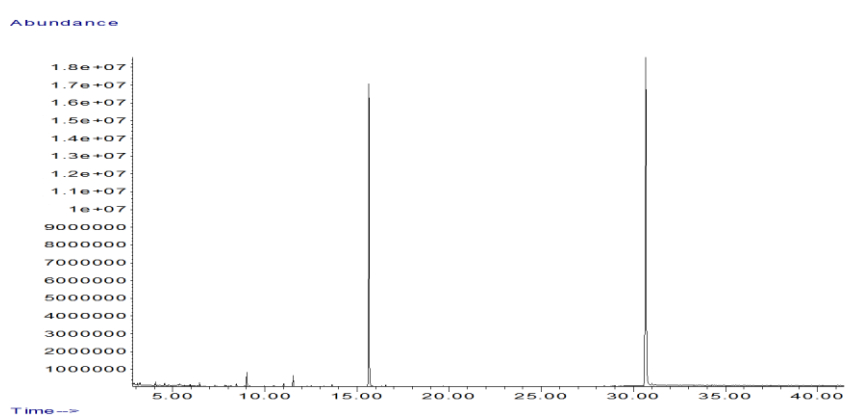


Figure S7. Chromatogram of the silylated Angelica root EO. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

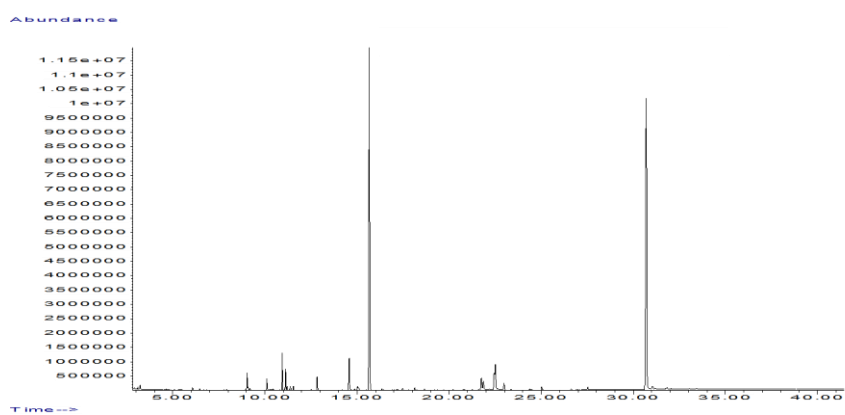


Figure S8. Chromatogram of the silylated Angelica root scCO₂ extract. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

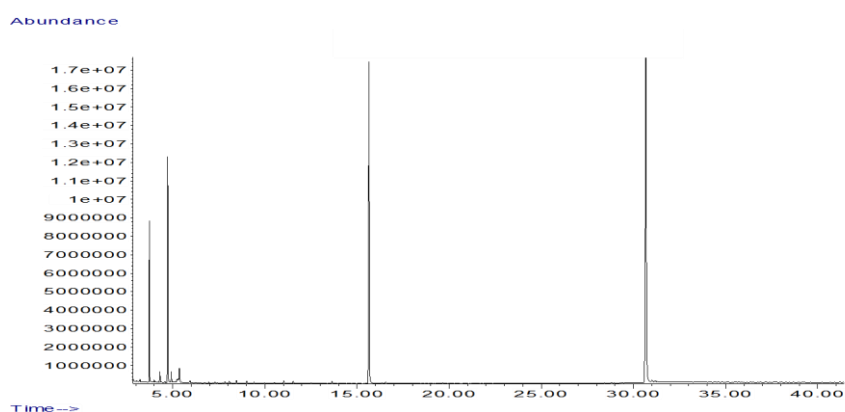


Figure S9. Chromatogram of the silylated marsh Labrador tea EO. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

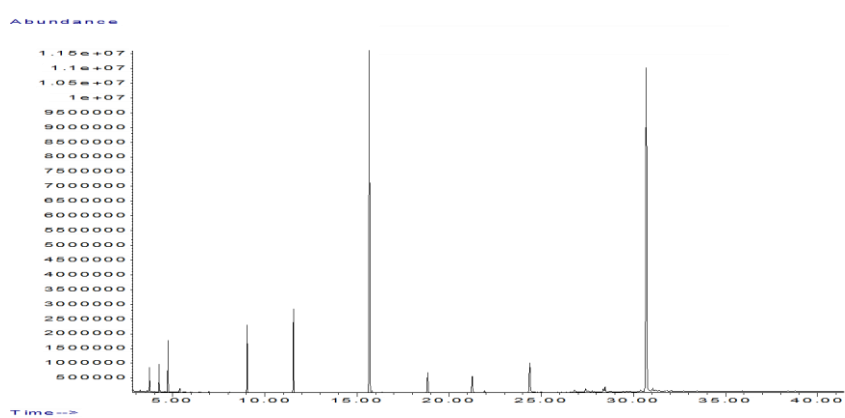


Figure S10. Chromatogram of the silylated marsh Labrador tea main scCO₂ extract. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

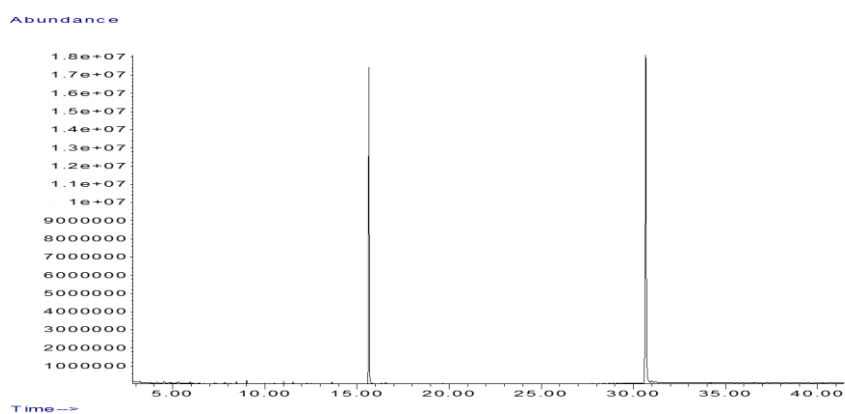


Figure S11. Chromatogram of the silylated common tansy inflorescence EO. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

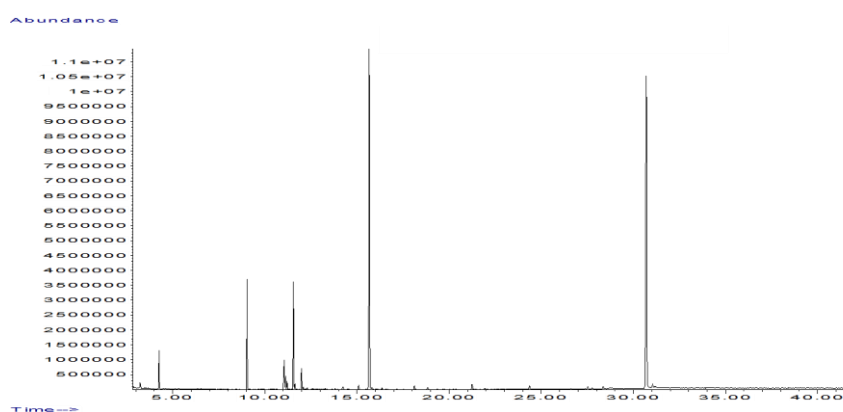


Figure S12. Chromatogram of the silylated common tansy inflorescence scCO₂ extract. Peaks at 15.6 and 30.7 min are internal standards, C:21 respective betulinol.

Fragmentation patterns of selected main compounds are shown in Figures S13–S44. Red bars indicate the unknown peak and blue bars indicate the compound found in the library.

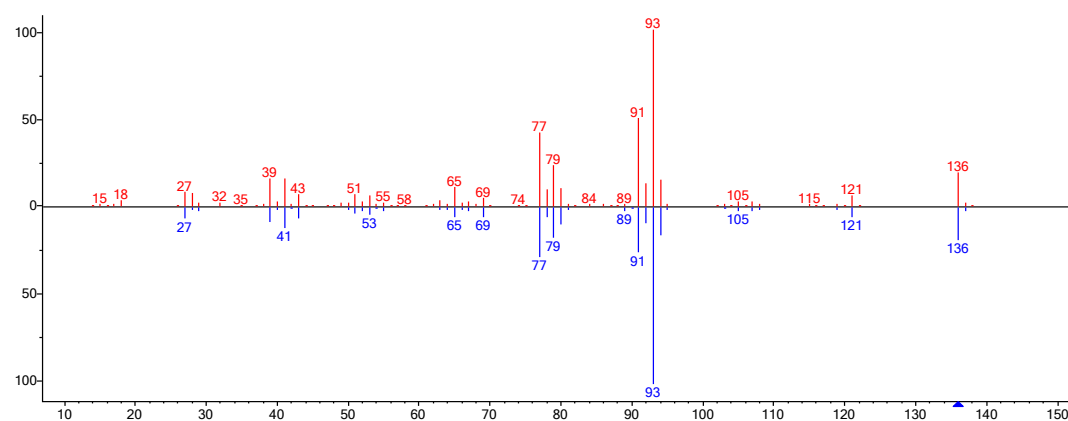


Figure S13. Fragmentation pattern of β -phellandrene found in Angelica root EO.

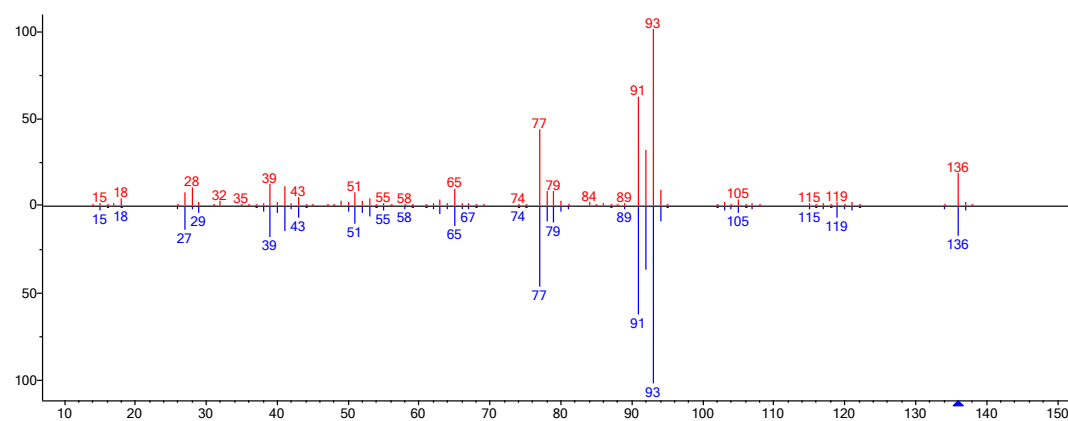


Figure S14. Fragmentation pattern of α -phellandrene found in Angelica root EO.

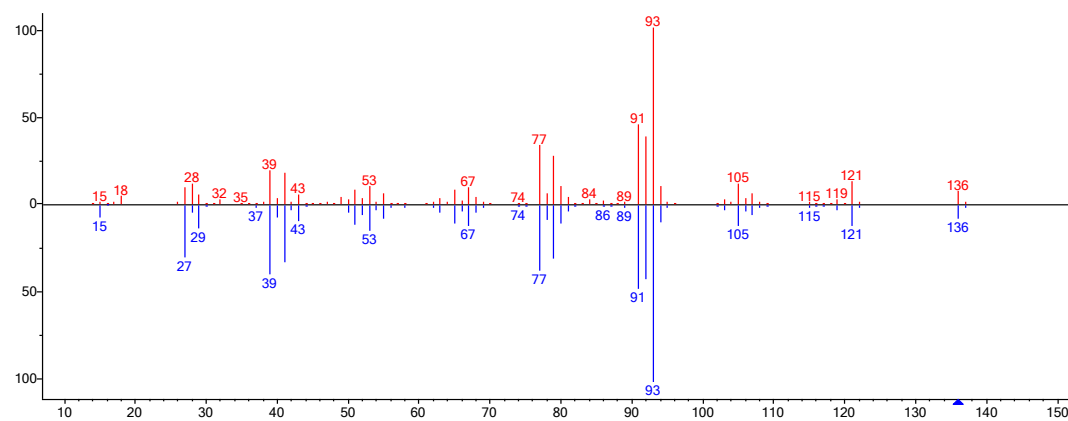


Figure S15. Fragmentation pattern of α -pinene found in Angelica root EO and common tansy inflorescence EO.

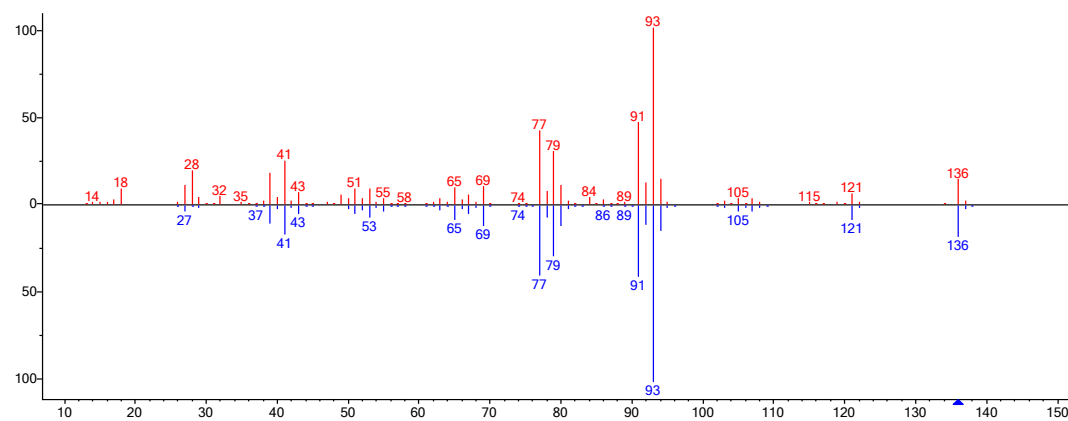


Figure S16. Fragmentation pattern of sabinene found in Angelica root EO, common tansy inflorescence EO and scCO₂ extracts.

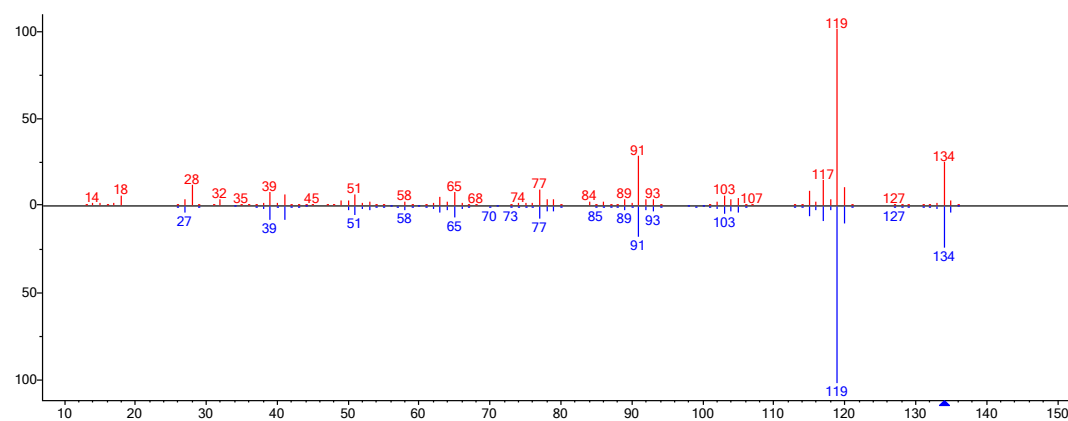


Figure S17. Fragmentation pattern of *p*-cymene found in Angelica root EO, scCO₂ extract and common tansy inflorescence EO.

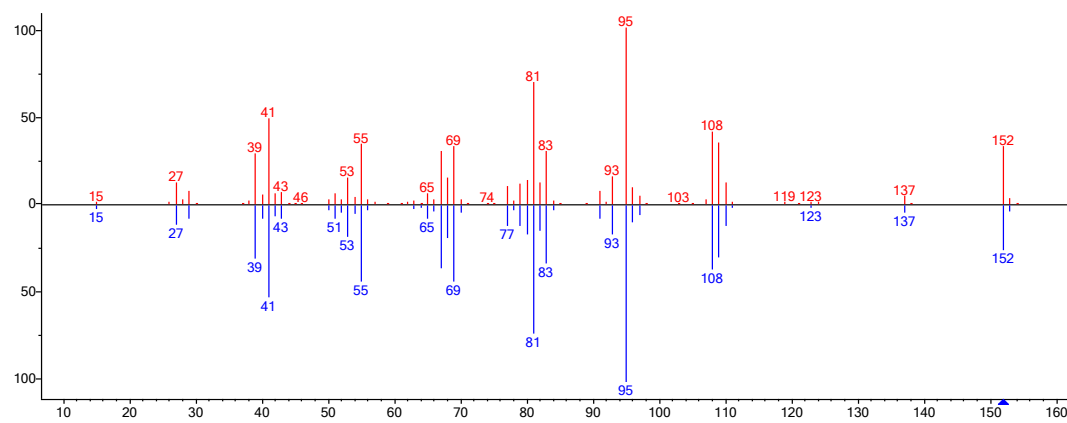


Figure S18. Fragmentation pattern of camphor found in Angelica root EO and scCO₂ extract.

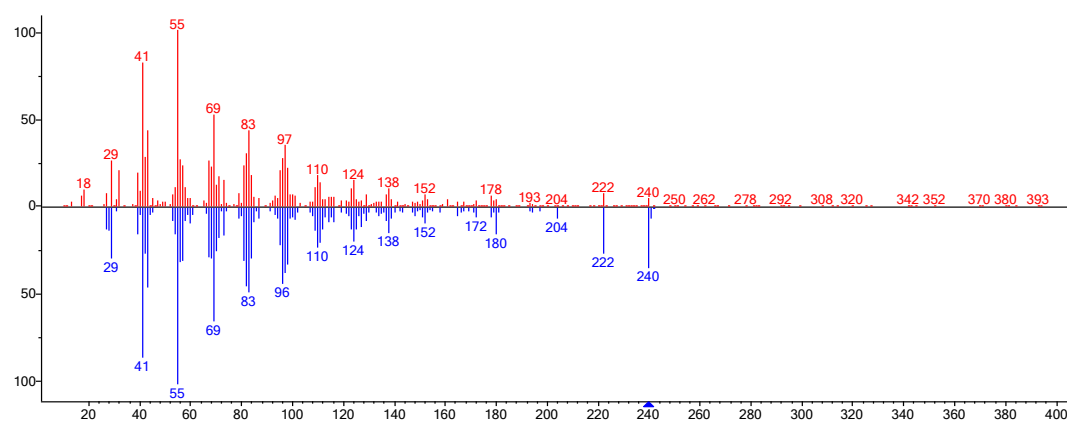


Figure S19. Fragmentation pattern of pentadecalactone found in Angelica root scCO₂ extract.

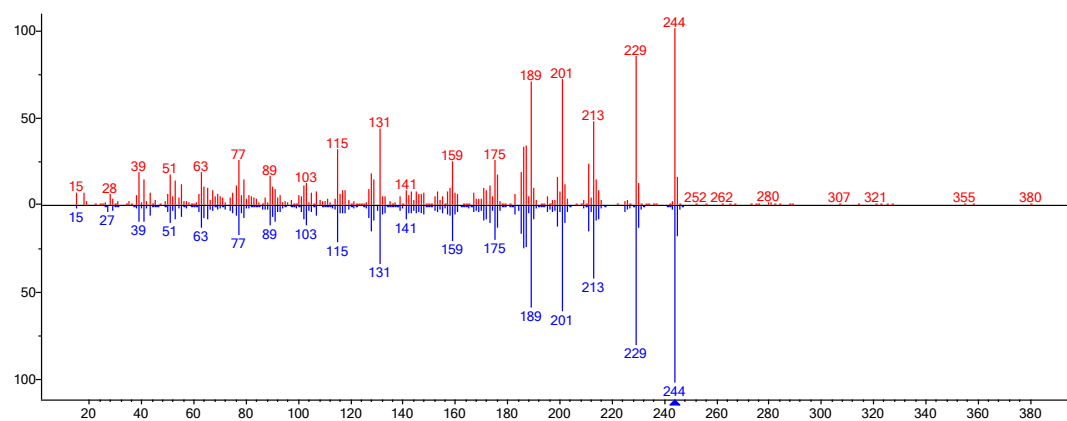


Figure S20. Fragmentation pattern of osthole found in Angelica root scCO₂ extract.

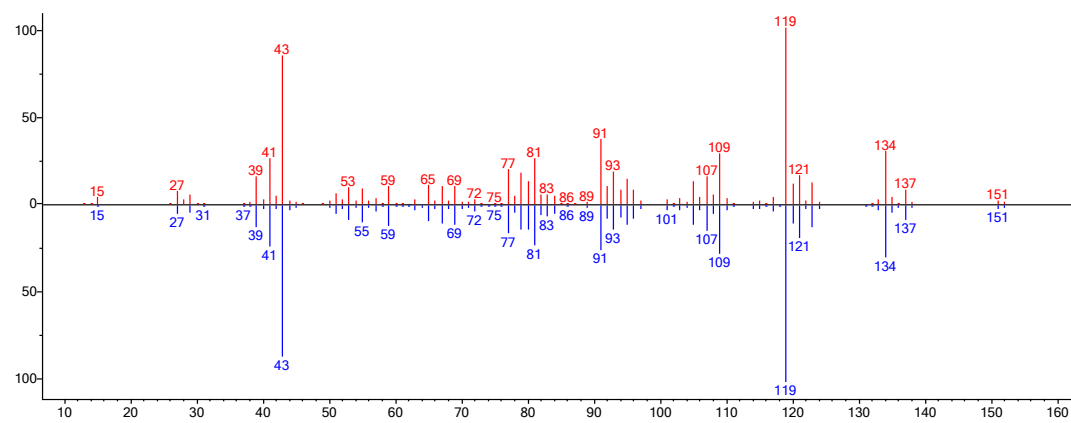


Figure S21. Fragmentation pattern of trans-chrysanthenyl acetate found in Angelica root scCO₂ extract, common tansy inflorescence EO and scCO₂ extracts.

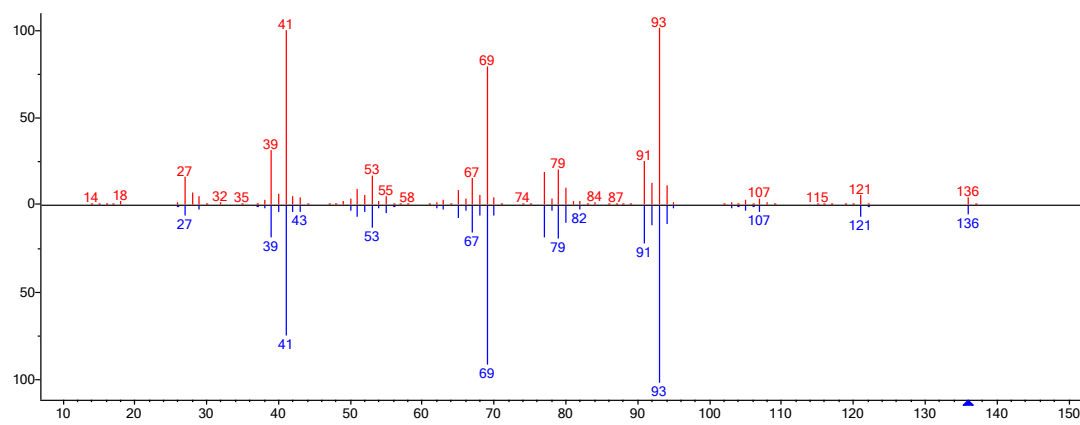


Figure S22. Fragmentation pattern of β-myrcene found in marsh Labrador tea EO.

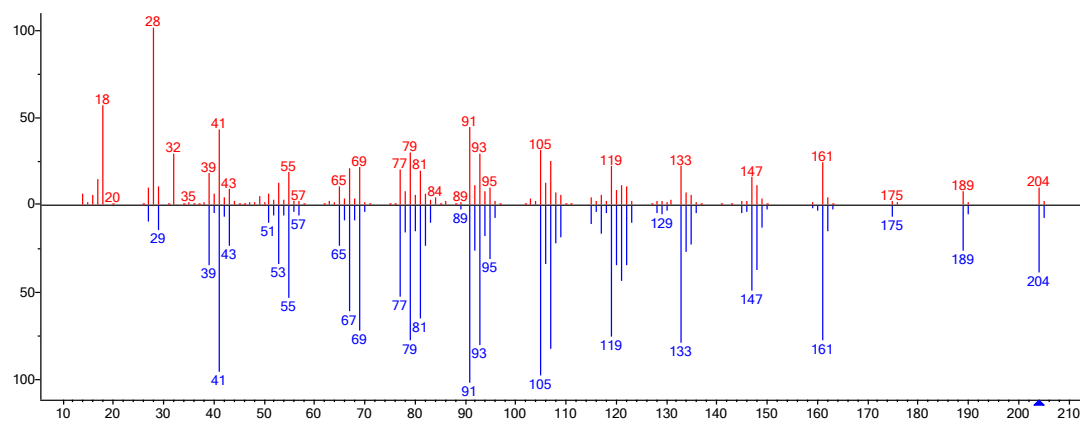


Figure S23. Fragmentation pattern of 9-epi-β-caryophyllene found in marsh Labrador tea EO and scCO₂ extracts.

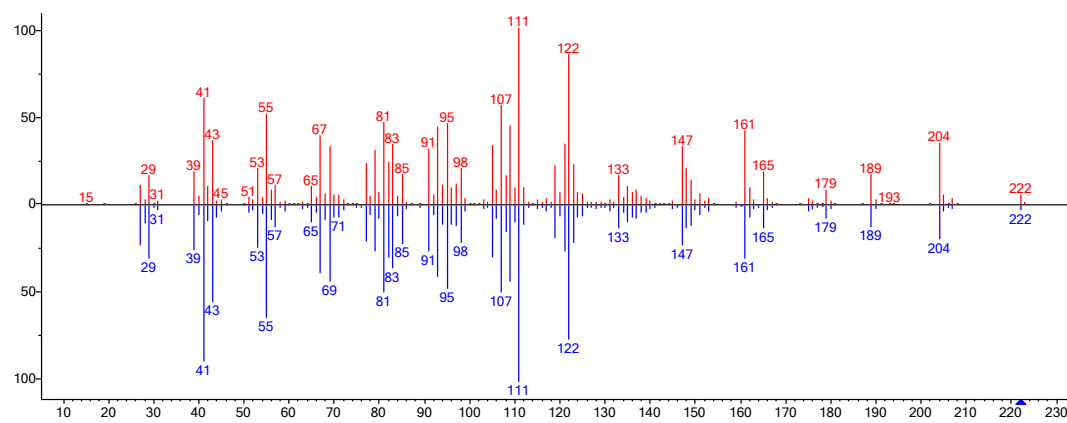


Figure S24. Fragmentation pattern of palustrol found in marsh Labrador tea EO and scCO₂ extracts.

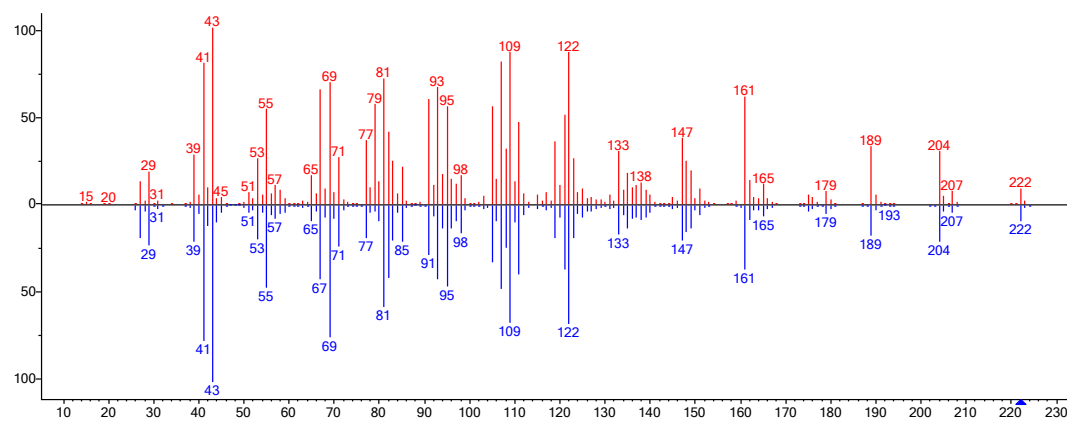
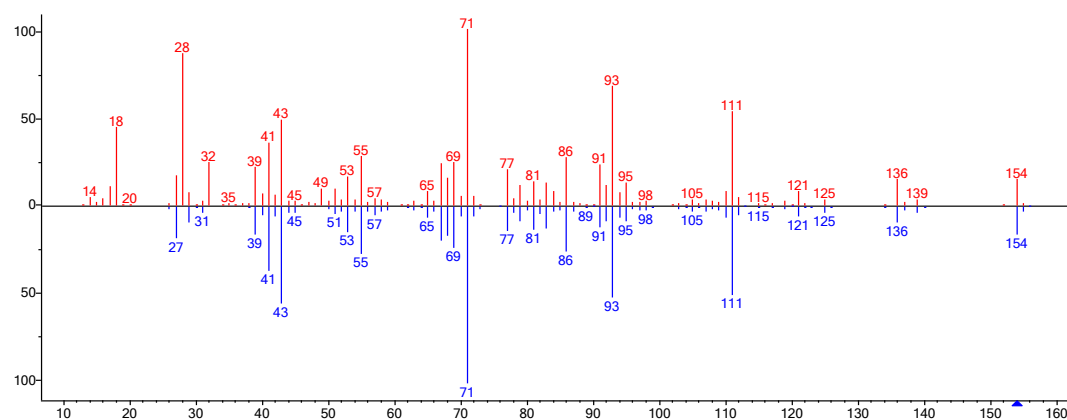


Figure S25. Fragmentation pattern of ledol found in marsh Labrador tea EO and scCO₂ extracts.



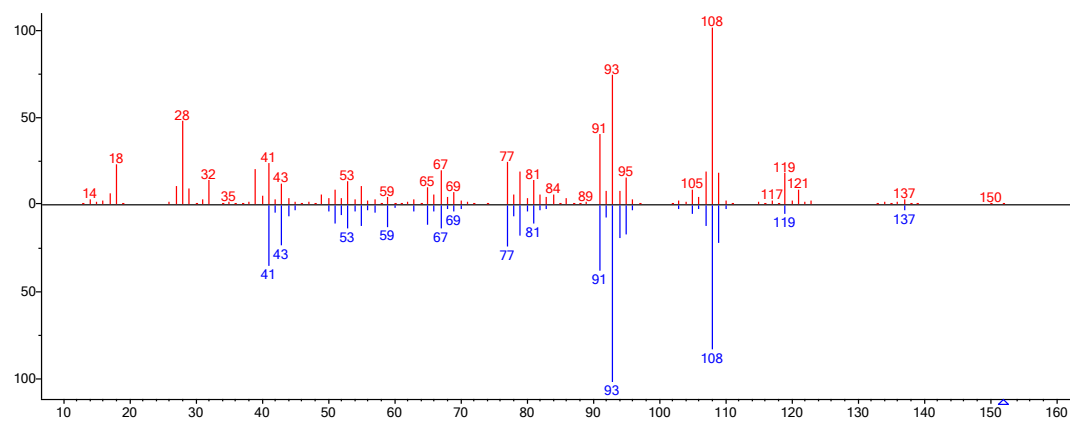


Figure S27. Fragmentation pattern of camphen-6-ol found in common tansy inflorescence EO and scCO₂ extracts.

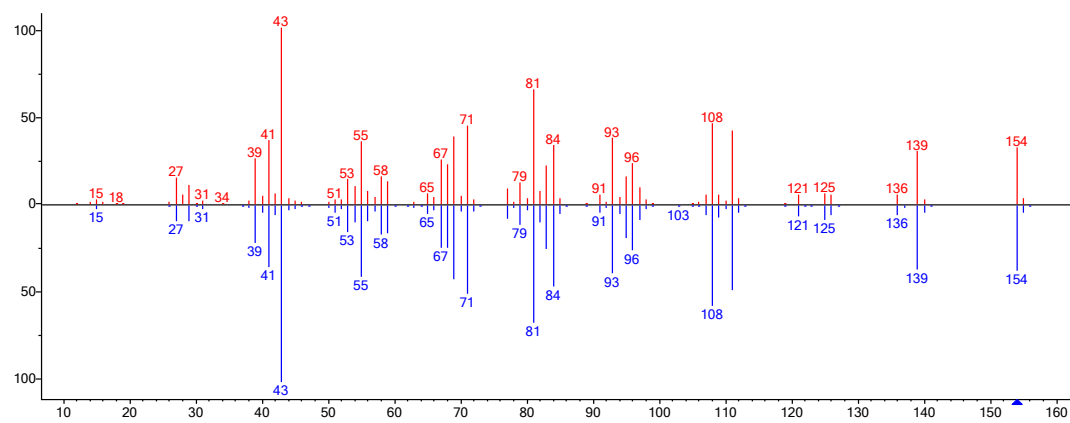


Figure S28. Fragmentation pattern of eucalyptol (*syn.* 1,8-cineole) found in common tansy inflorescence EO and scCO₂ extracts.

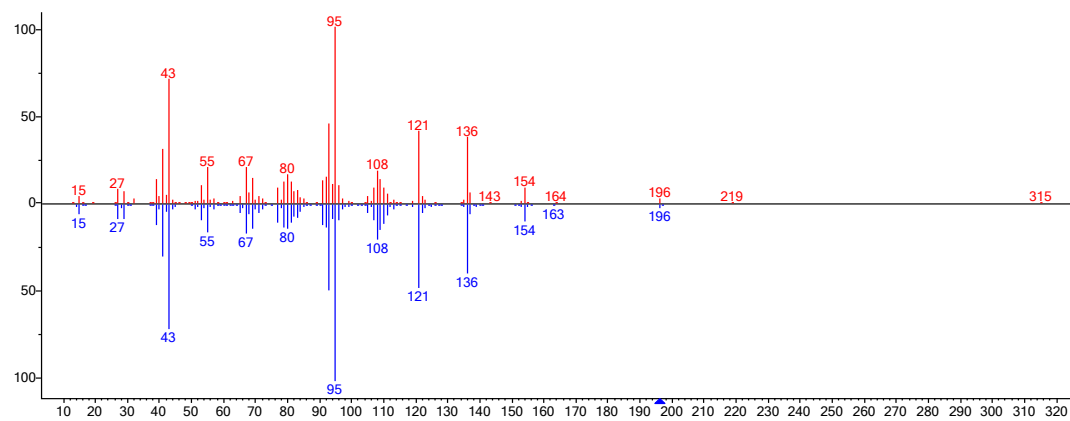


Figure S29. Fragmentation pattern of bornyl acetate found in Angelica root EO, common tansy inflorescence EO and scCO₂ extracts.

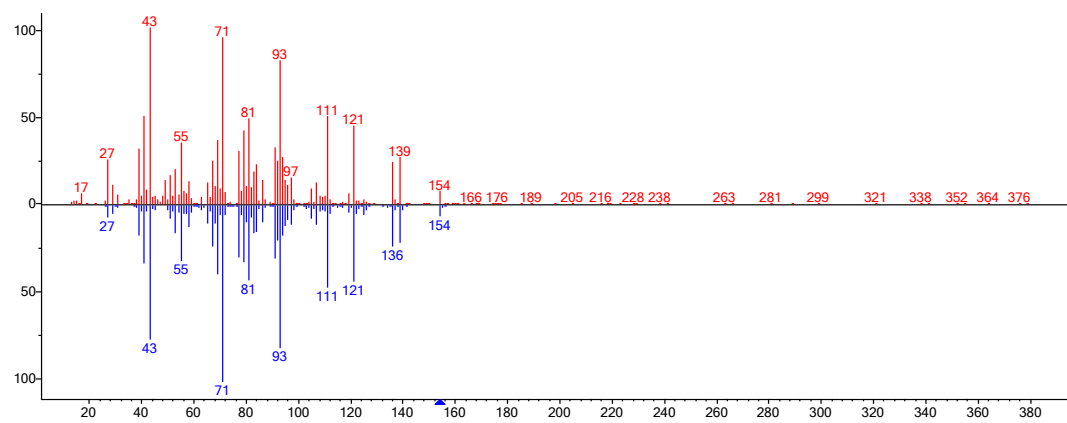


Figure S30. Fragmentation pattern of cis-sabinene hydrate found in common tansy inflorescence EO.

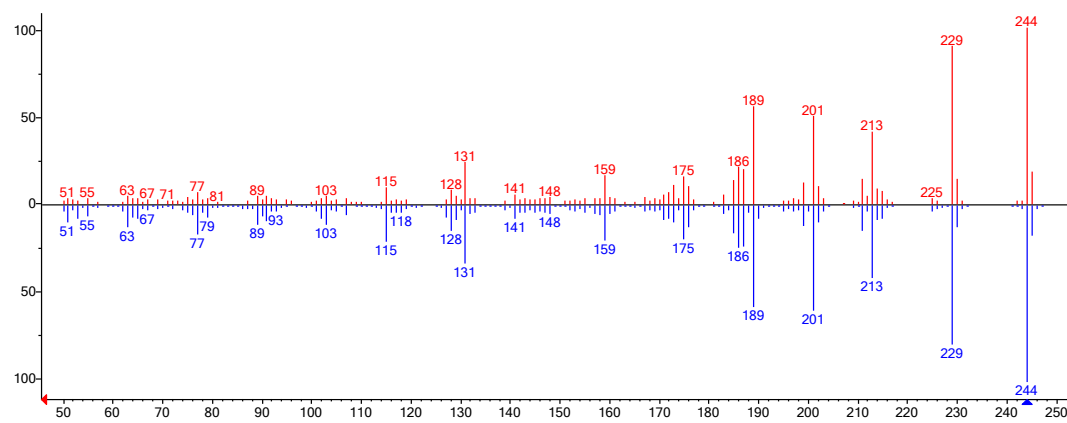


Figure S31. Fragmentation pattern of osthole, trimethylsilyl (TMS) derivate found in silylated Angelica root scCO₂ extract.

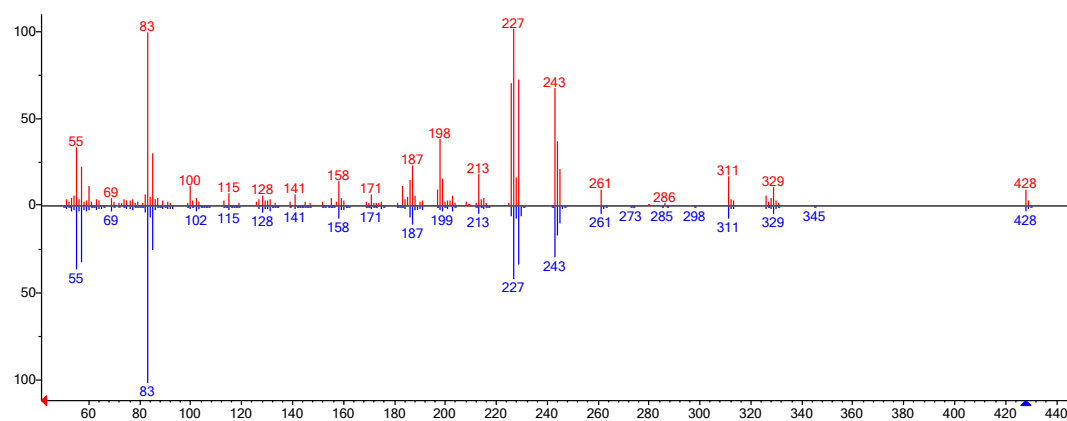


Figure S32. Fragmentation pattern of 2'-angeloyl-3'-isovaleryl vaginate, TMS derivate found in silylated Angelica root scCO₂ extract.

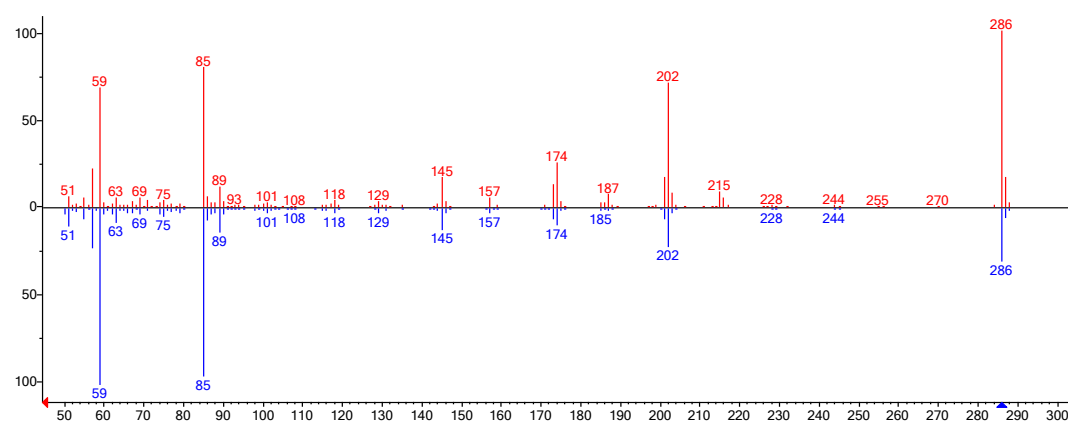


Figure S33. Fragmentation pattern of oxypeucedanin, TMS derivate found in silylated Angelica root scCO₂ extract.

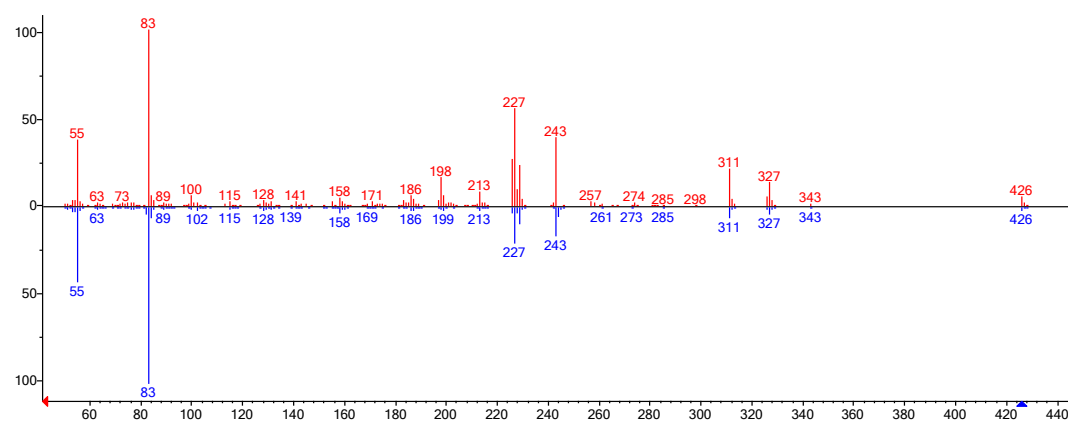


Figure S34. Fragmentation pattern of archangelicin, TMS derivate found in silylated Angelica root scCO₂ extract.

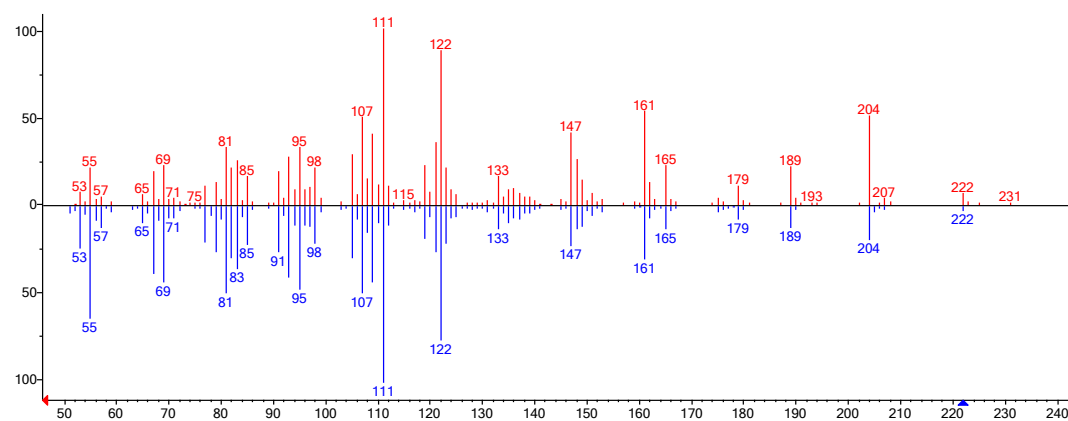


Figure S35. Fragmentation pattern of palustrol, TMS derivate found in silylated marsh Labrador tea EO and scCO₂ extracts.

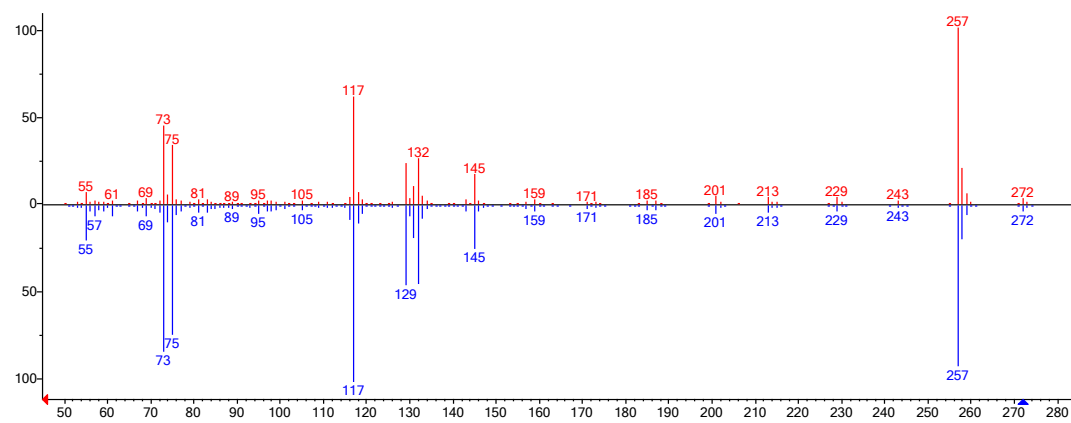


Figure S36. Fragmentation pattern of lauric acid, TMS derivate found in silylated marsh Labrador tea EO, scCO₂ extracts, common tansy inflorescence EO and scCO₂ extracts.

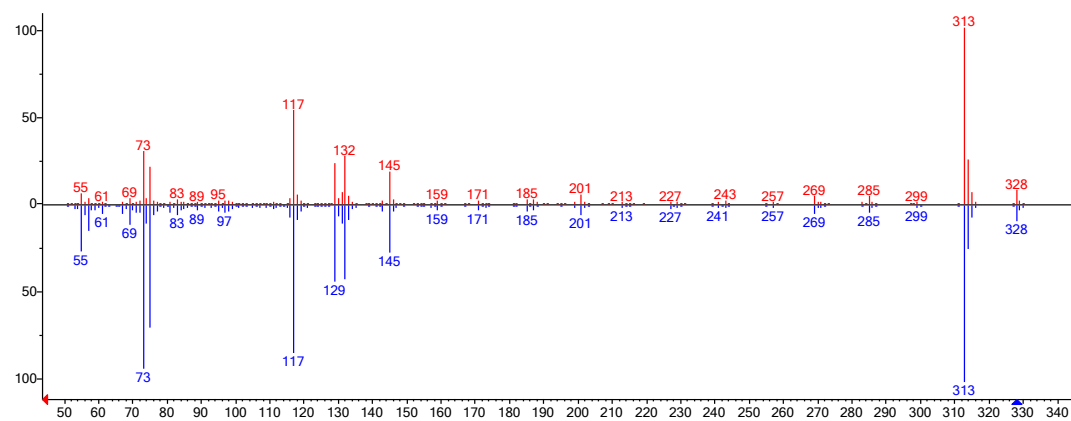


Figure S37. Fragmentation pattern of palmitic acid, TMS derivate found in silylated Angelica root EO, scCO₂ extract, marsh Labrador tea EO, scCO₂ extracts, common tansy inflorescence EO and scCO₂ extracts.

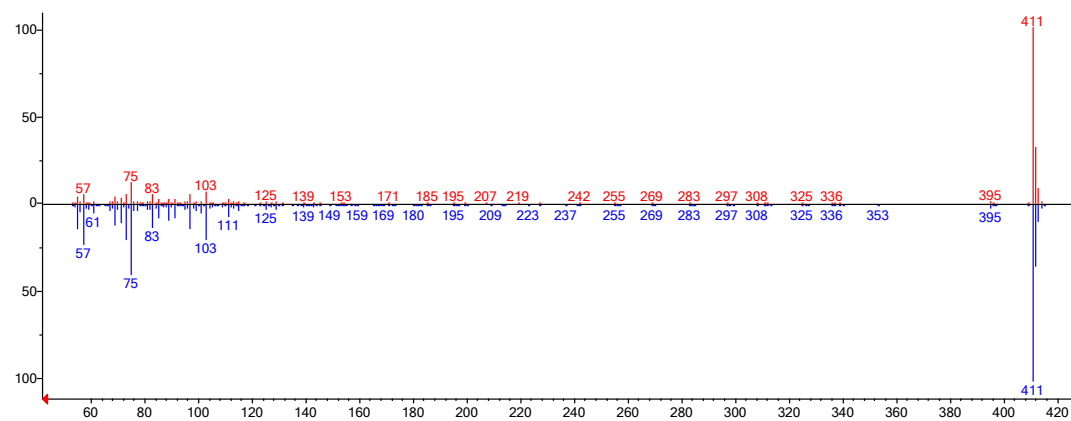


Figure S38. Fragmentation pattern of alcohol 24:0, TMS derivate found in silylated marsh Labrador tea scCO₂ extracts and common tansy inflorescence scCO₂ extracts.

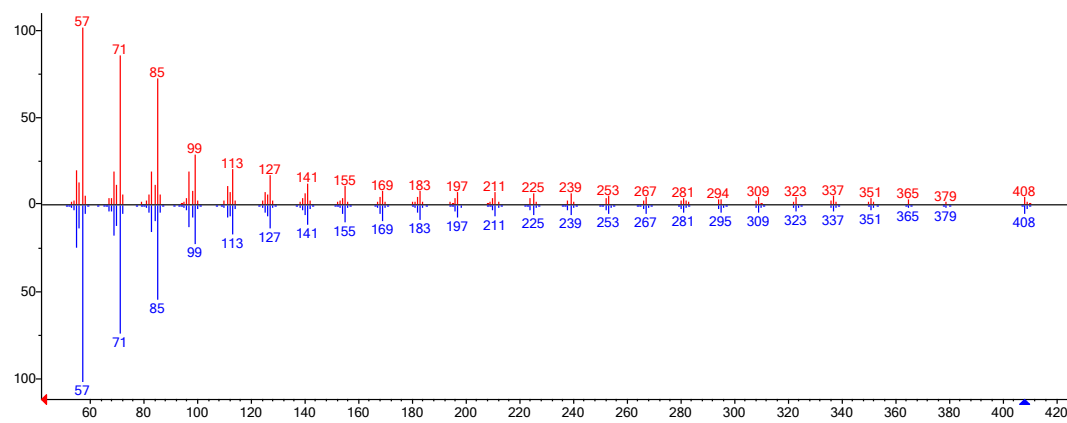


Figure S39. Fragmentation pattern of n-nonacosane found in silylated marsh Labrador tea scCO₂ extracts and common tansy inflorescence scCO₂ extracts.

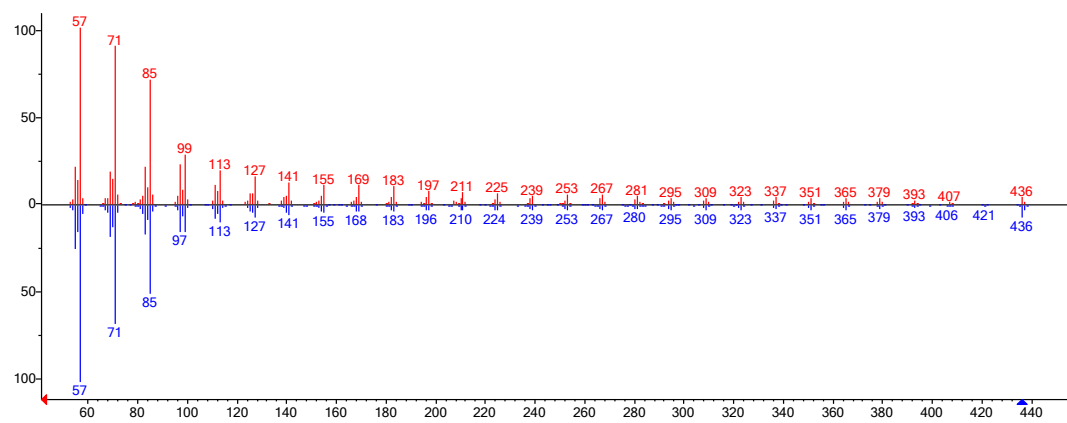


Figure S40. Fragmentation pattern of hentriacontane found in silylated marsh Labrador tea scCO₂ extracts and common tansy inflorescence scCO₂ extracts.

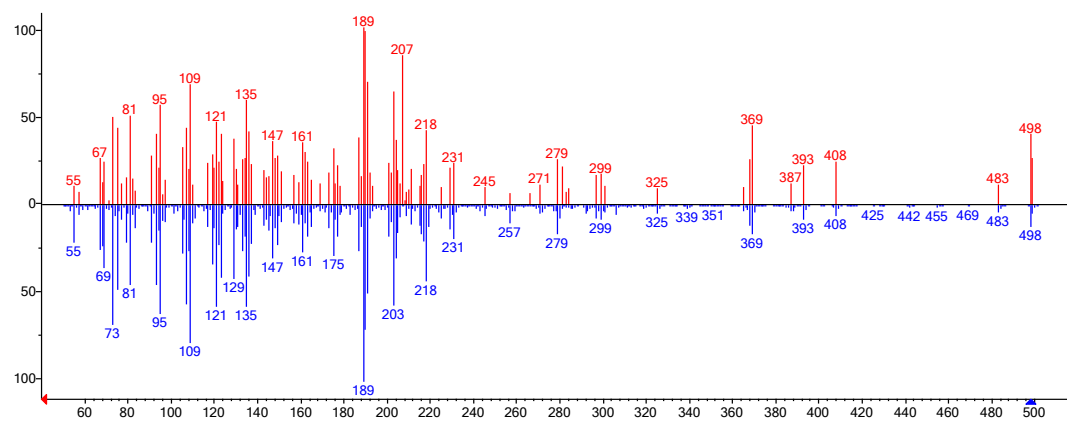


Figure S41. Fragmentation pattern of lupeol, TMS derivative found in silylated marsh Labrador tea scCO₂ extracts.

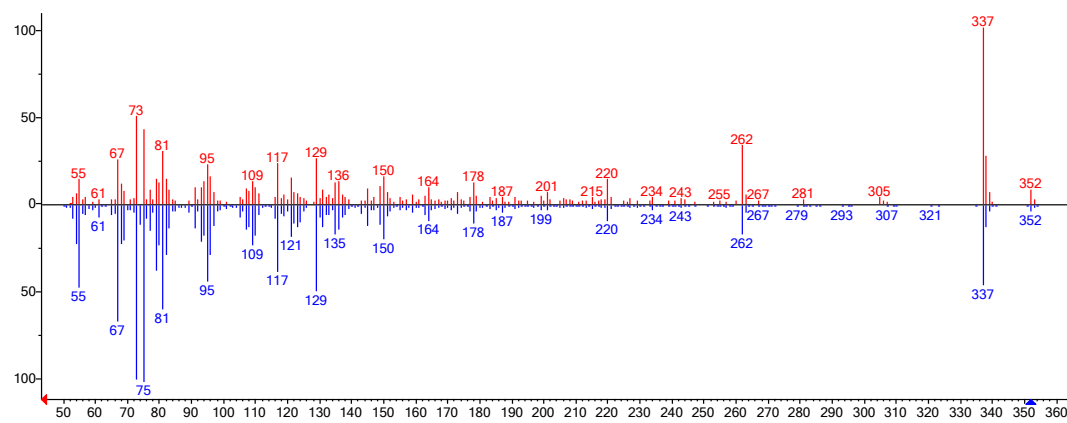


Figure S42. Fragmentation pattern of linoleic acid, TMS derivative found in silylated Angelica root scCO₂ extract and common tansy inflorescence scCO₂ extracts.

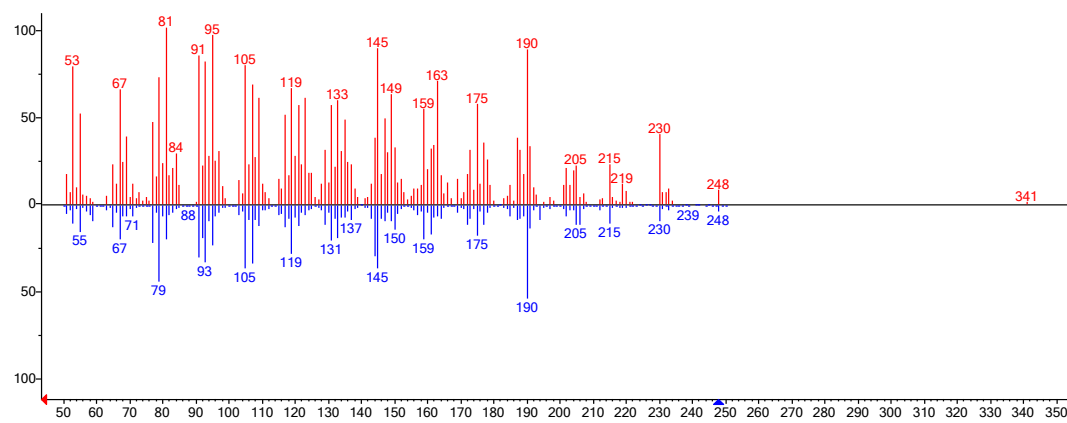


Figure S43. Fragmentation pattern of parthenolide, TMS derivative found in silylated common tansy inflorescence scCO₂ extracts.

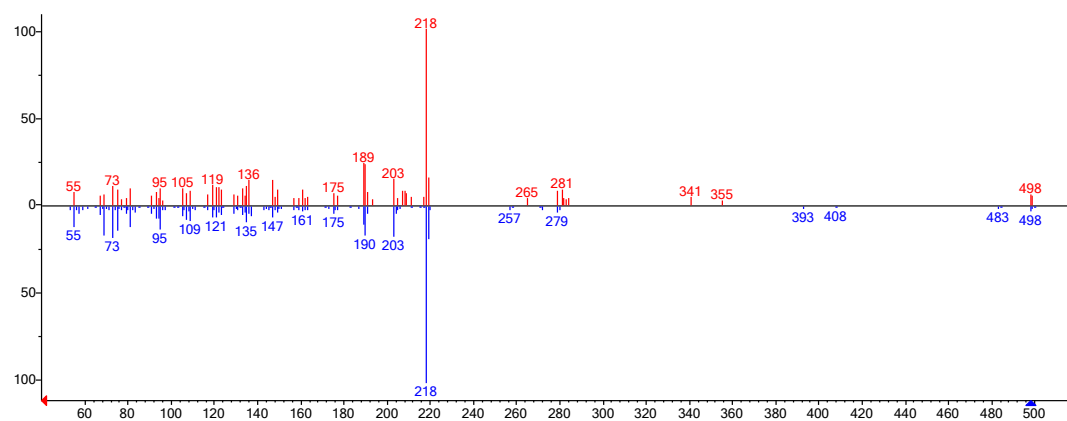


Figure S44. Fragmentation pattern of β -amyrin, TMS derivative found in silylated marsh Labrador tea scCO₂ extracts and common tansy inflorescence scCO₂ extracts.