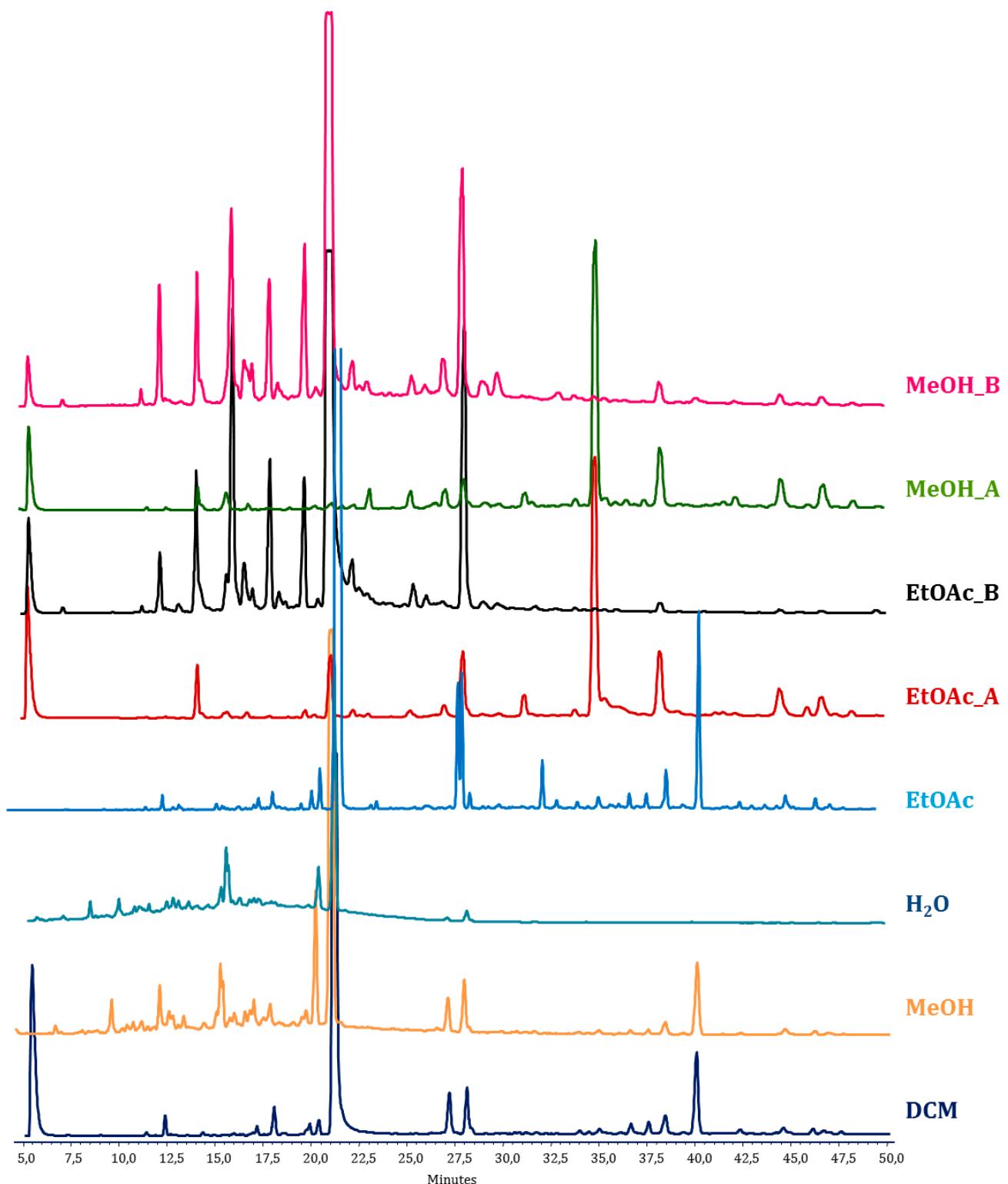


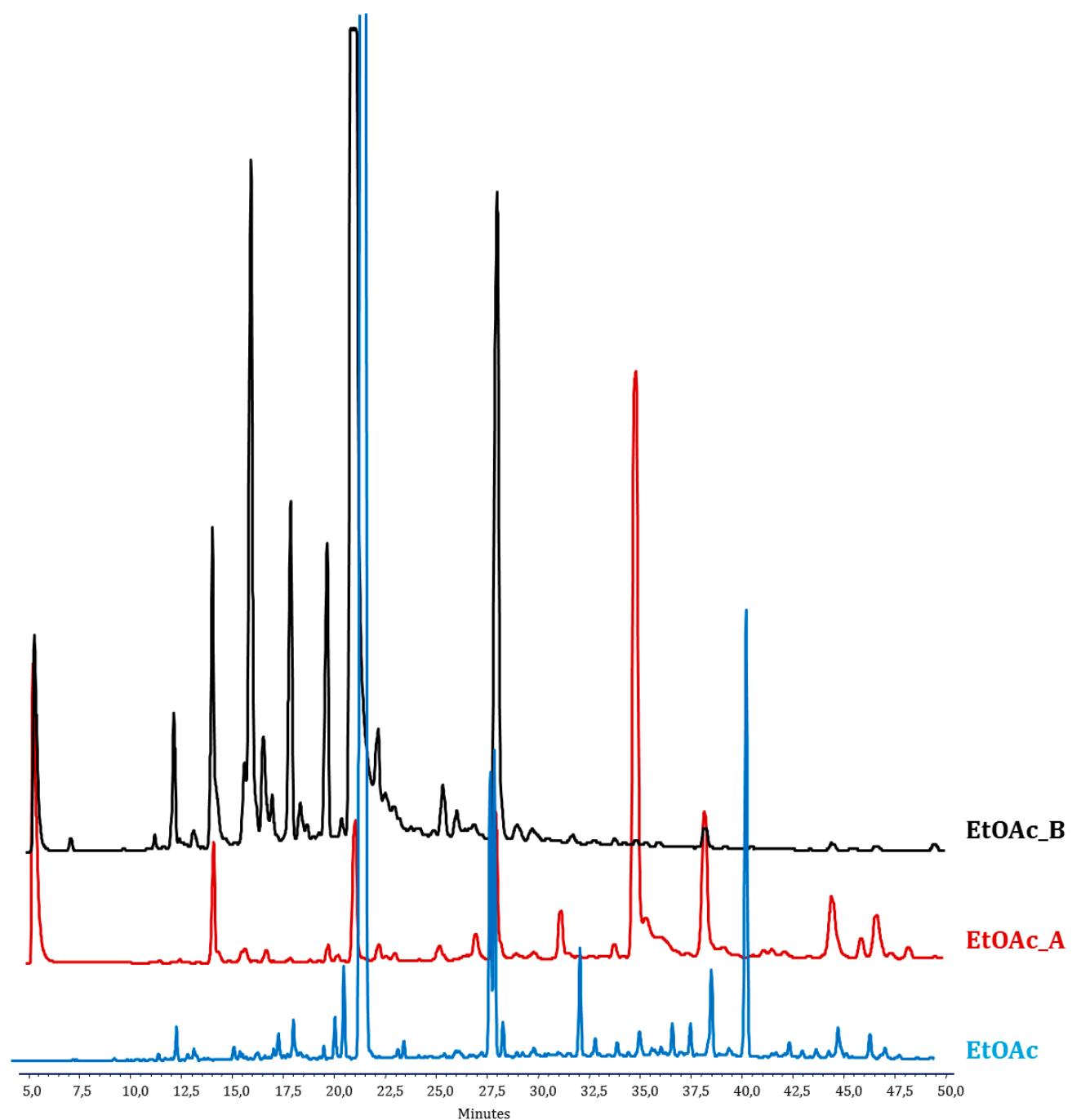
## Supplementary Materials

- Figure S1. HPLC-DAD chromatograms of all obtained *Miromelum* extracts in 280 nm
- Figure S2. HPLC-DAD chromatograms of EtOAc, EtOAc\_A and EtOAc\_B extracts in 280 nm
- Figure S3. <sup>1</sup>H-NMR spectrum of microfalcrin (**1**) in CD<sub>3</sub>OD
- Figure S4. HSQC spectrum of microfalcrin (**1**) in CD<sub>3</sub>OD
- Figure S5. HMBC spectrum of microfalcrin (**1**) in CD<sub>3</sub>OD
- Figure S6. <sup>1</sup>H-NMR spectrum of microcoumaririn (**2**) in CD<sub>3</sub>OD
- Figure S7. HSQC spectrum of microcoumaririn (**2**) in CD<sub>3</sub>OD
- Figure S8. HMBC spectrum of microcoumaririn (**2**) in CD<sub>3</sub>OD
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- Figure S12. Full scan MS and MS/MS spectra of peak 1 of Table 1
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- Figure S25. Full scan MS and MS/MS spectra of microfalcrin (**1**) in ESI(+)
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- Figure S31. Full scan MS and MS/MS spectra of micromarin B (**7**) in ESI(+)
- Figure S32. Full scan MS and MS/MS spectra of micromarin A (**8**) in ESI(+)
- Figure S33. Percentage of nitrite oxide production relative to control (LPS-induced); Resv: Resveratrol, Mmin: Microminutin (**5**), Mmar B: Micromarin B (**7**); MmEtOAc: EtOAc extract
- Figure S34. Percentage of NF<sub>k</sub>B induction relative to control (TNF- $\alpha$  treated); Resv: Resveratrol, Mmin: Microminutin (**5**), Mmar B: Micromarin B (**7**); MmEtOAc: EtOAc extract

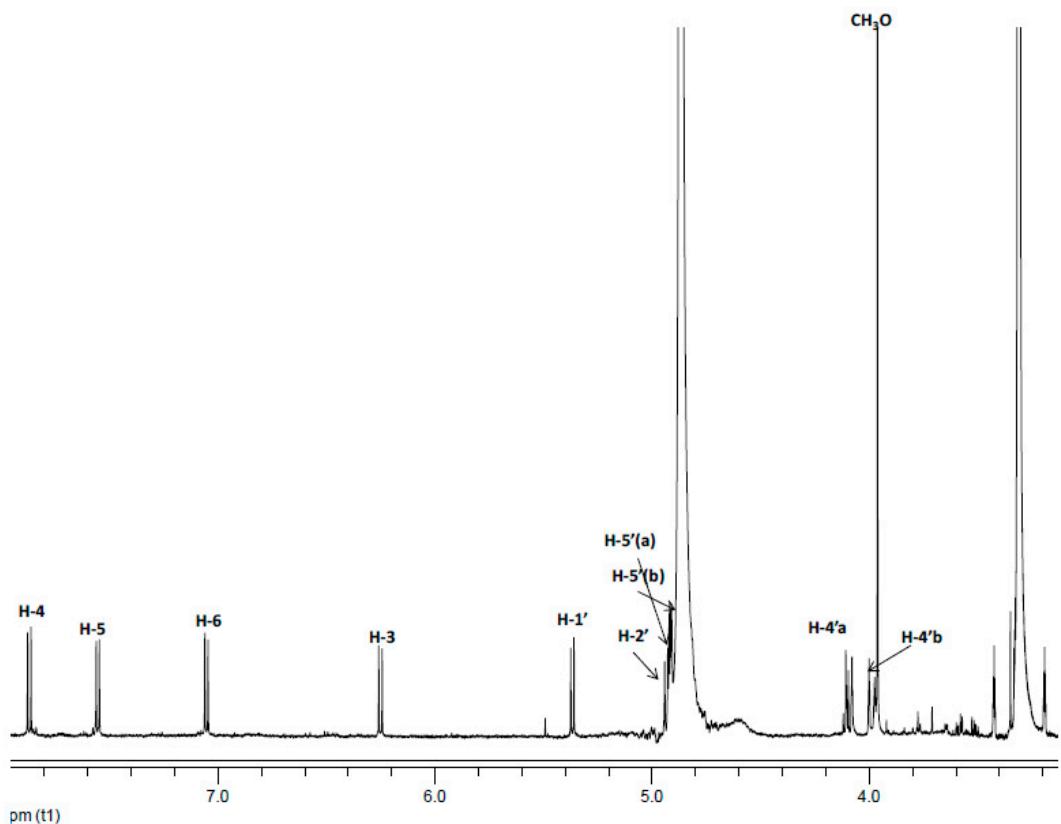
**Figure S1.** HPLC-DAD chromatograms of all obtained *Miromelum* extracts in 280 nm.



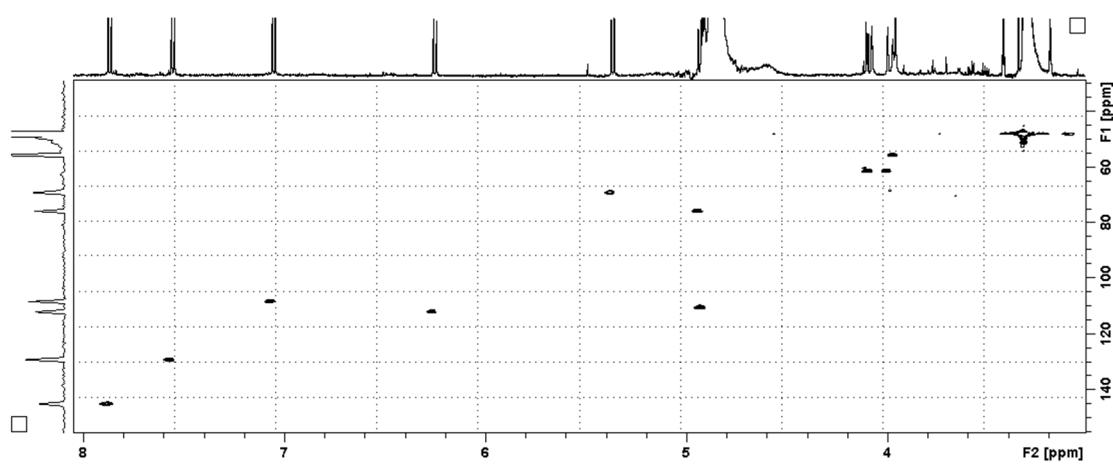
**Figure S2.** HPLC-DAD chromatograms of EtOAc, EtOAc\_A and EtOAc\_B extracts in 280 nm.



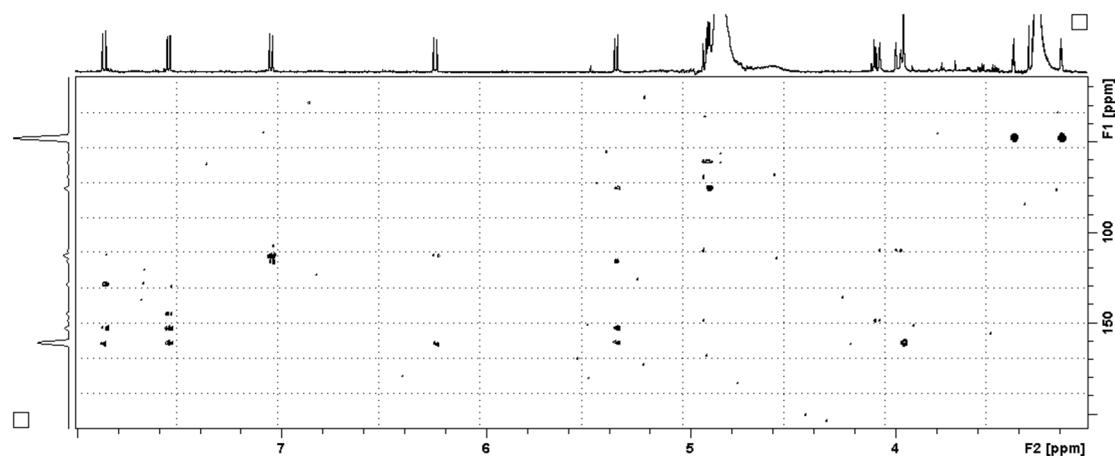
**Figure S3.**  $^1\text{H}$ -NMR spectrum of microfalcirin (**1**) in  $\text{CD}_3\text{OD}$ .



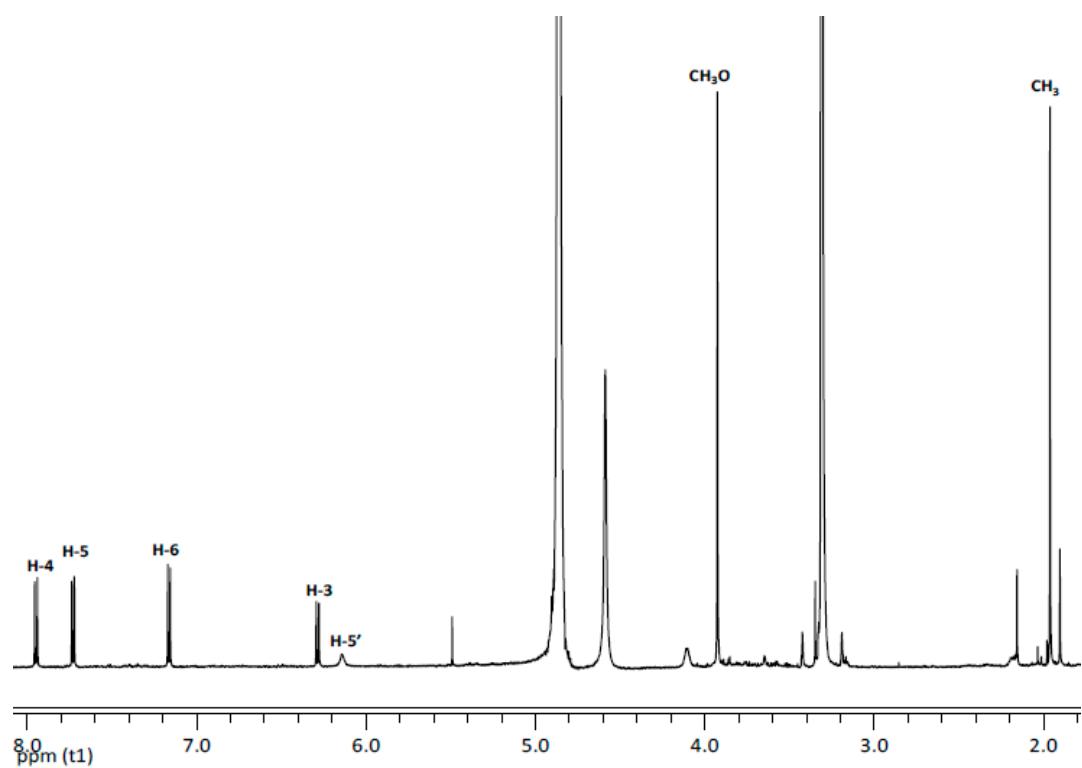
**Figure S4.** HSQC spectrum of microfalcirin (**1**) in  $\text{CD}_3\text{OD}$ .



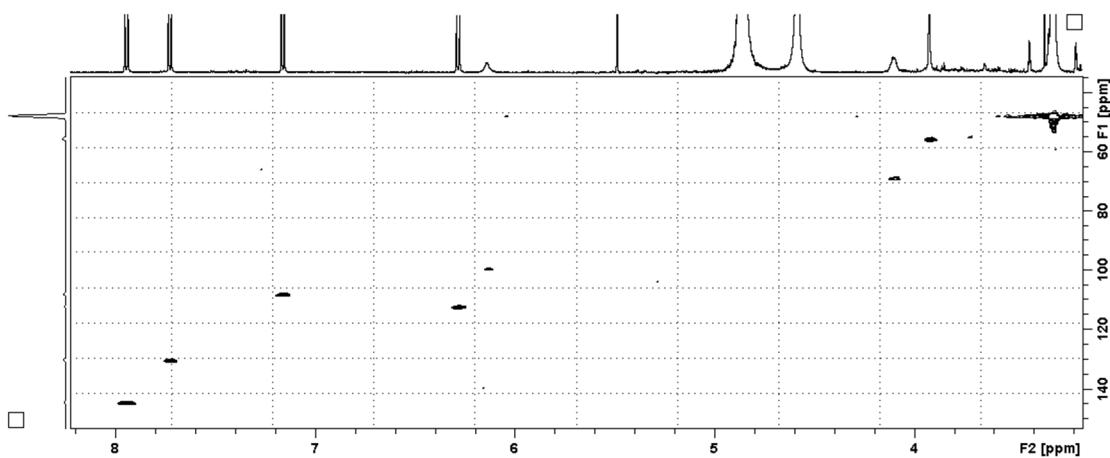
**Figure S5.** HMBC spectrum of microfalcrin (**1**) in CD<sub>3</sub>OD.



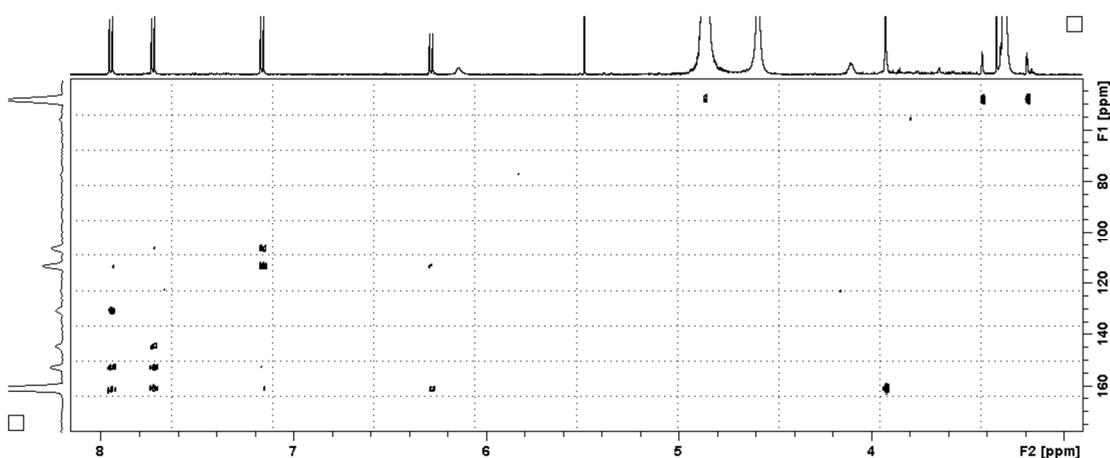
**Figure S6.** <sup>1</sup>H-NMR spectrum of microcoumarin (**2**) in CD<sub>3</sub>OD.



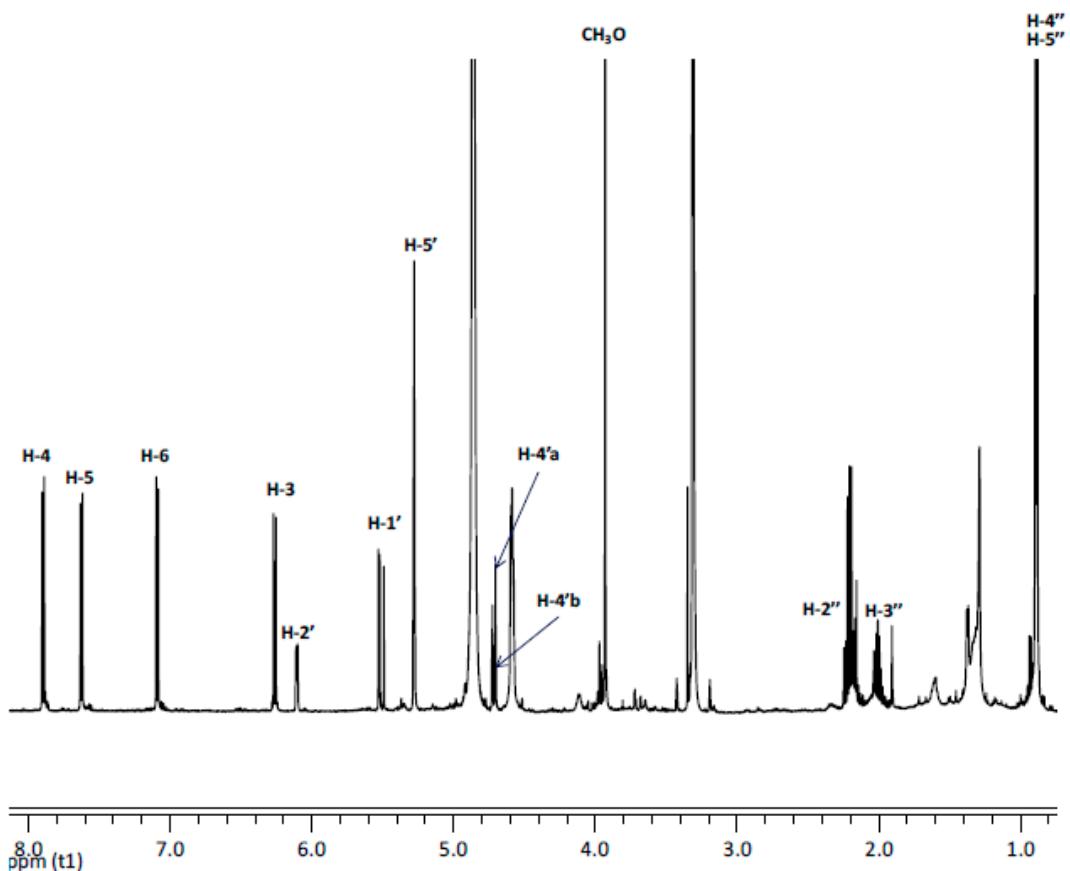
**Figure S7.** HSQC spectrum of microcoumarin (**2**) in CD<sub>3</sub>OD.



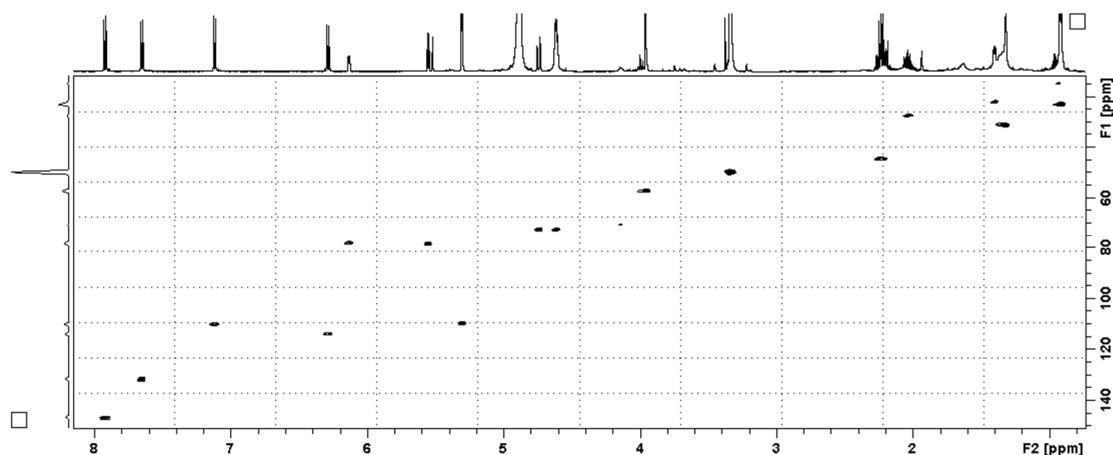
**Figure S8.** HMBC spectrum of microcoumarin (**2**) in CD<sub>3</sub>OD.



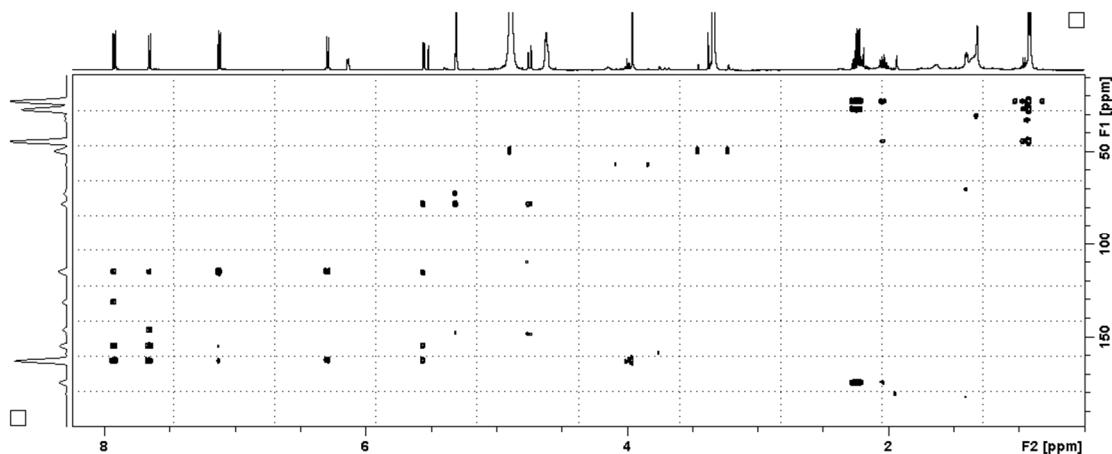
**Figure S9.**  $^1\text{H}$ -NMR spectrum of micromelosidester (**3**) in  $\text{CD}_3\text{OD}$ .



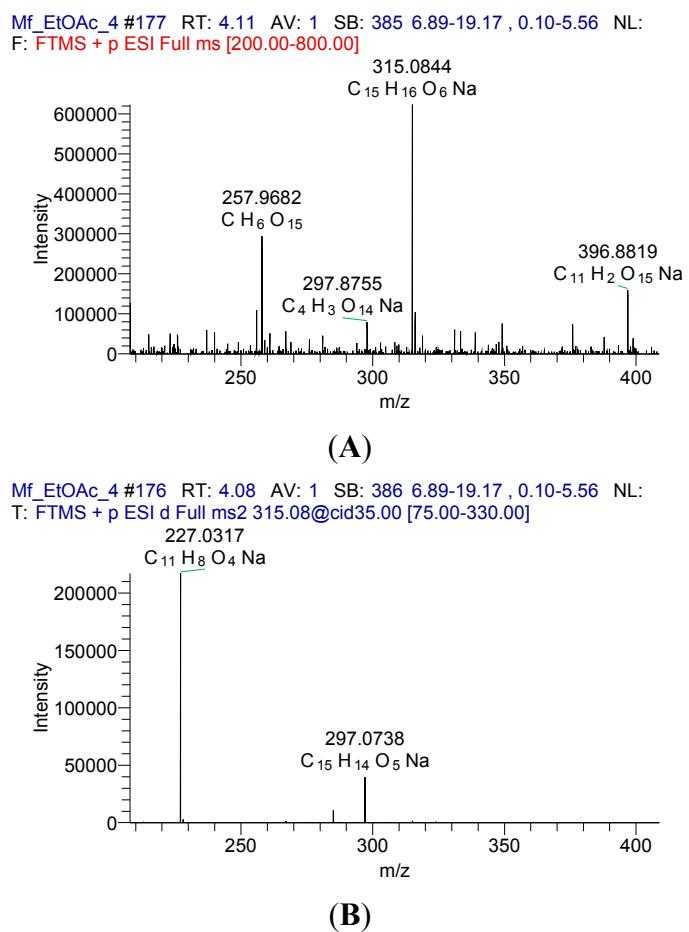
**Figure S10.** HSQC spectrum of micromelosidester (**3**) in  $\text{CD}_3\text{OD}$ .



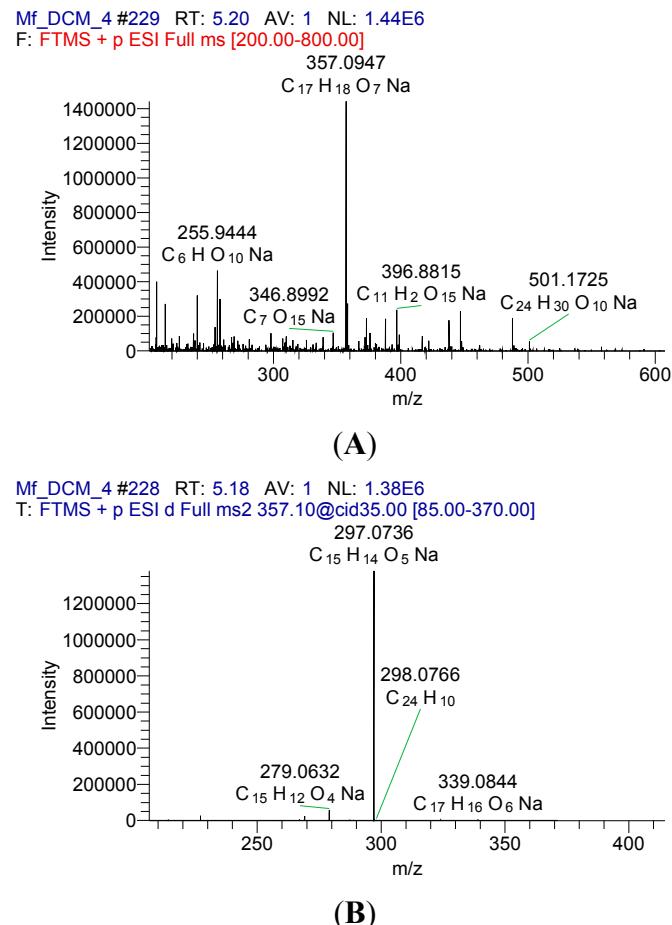
**Figure S11.** HMBC spectrum of micromelosidester (**3**) in CD<sub>3</sub>OD.



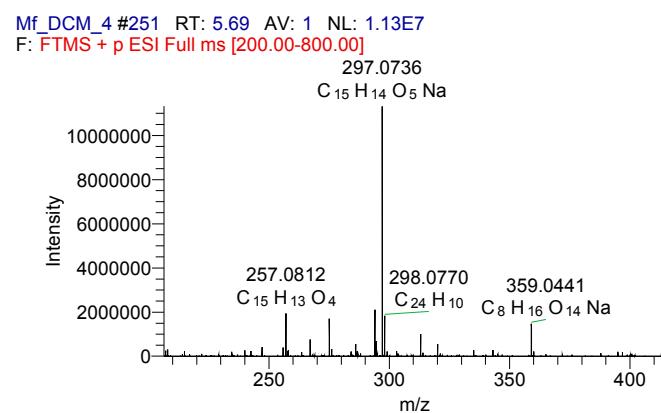
**Figure S12.** Full scan MS (A) and MS/MS (B) spectra of peak 1 of Table 1.

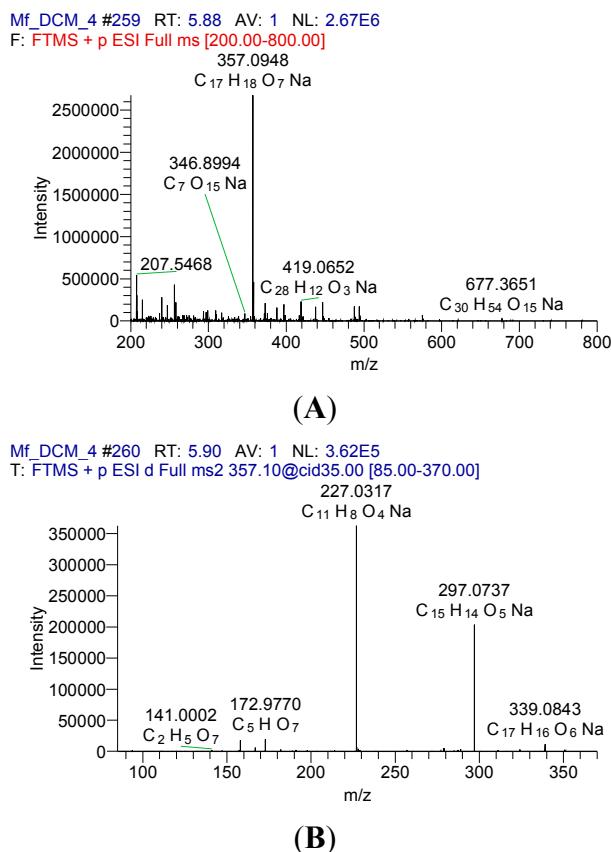
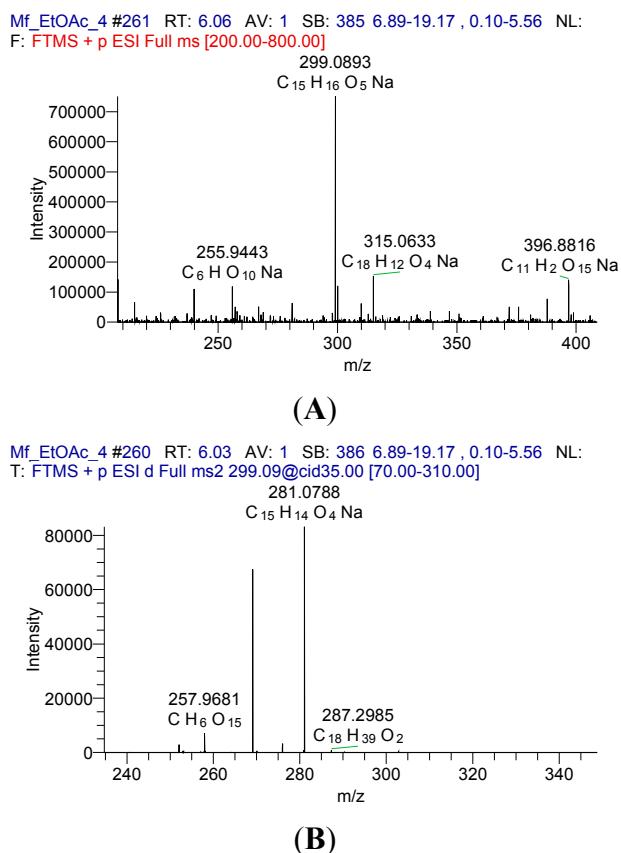


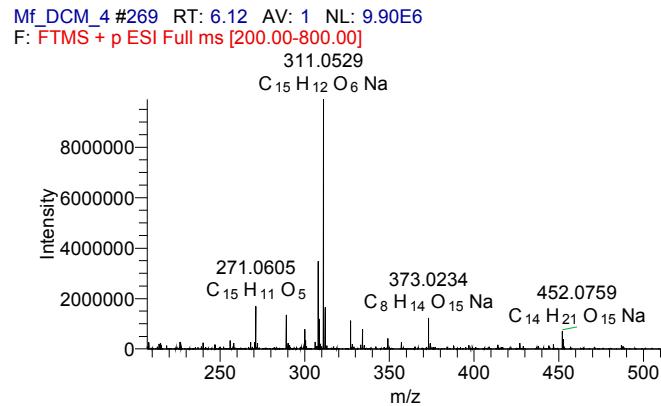
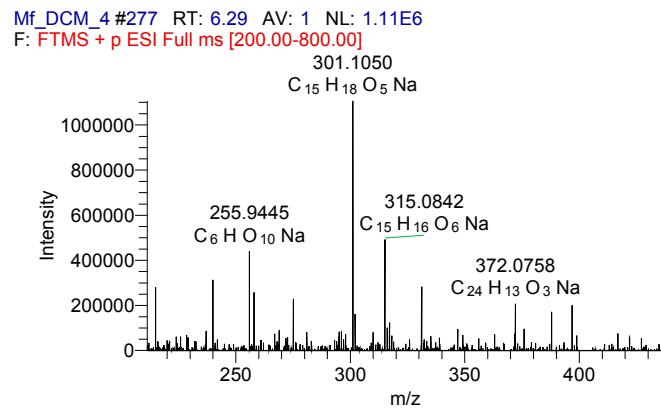
**Figure S13.** Full scan MS (A) and MS/MS (B) spectra of peak 3 of Table 1.



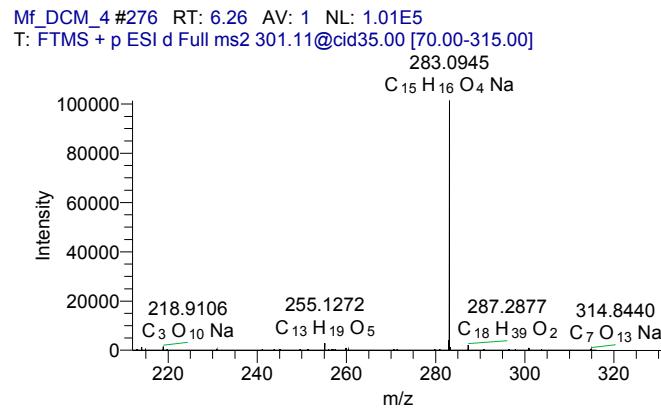
**Figure S14.** Full scan MS spectrum of peak 4 of Table 1.



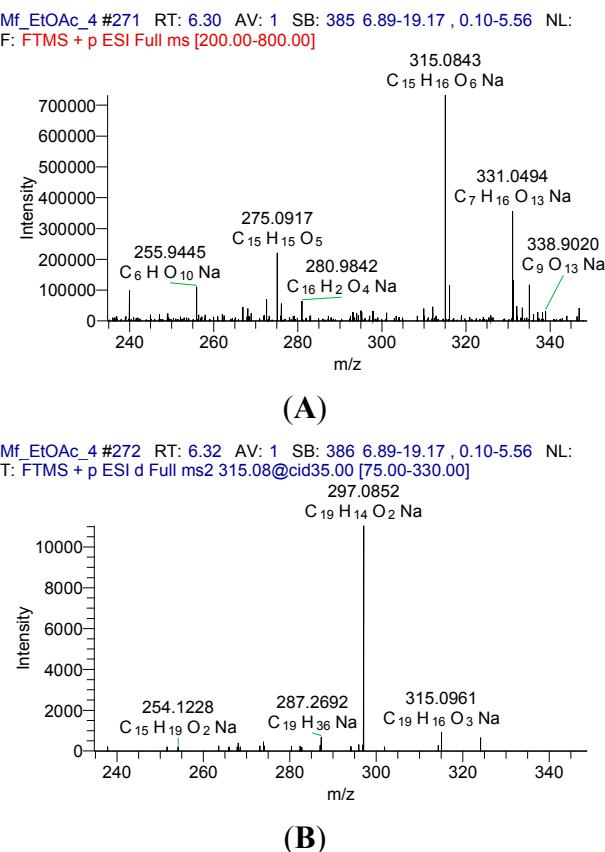
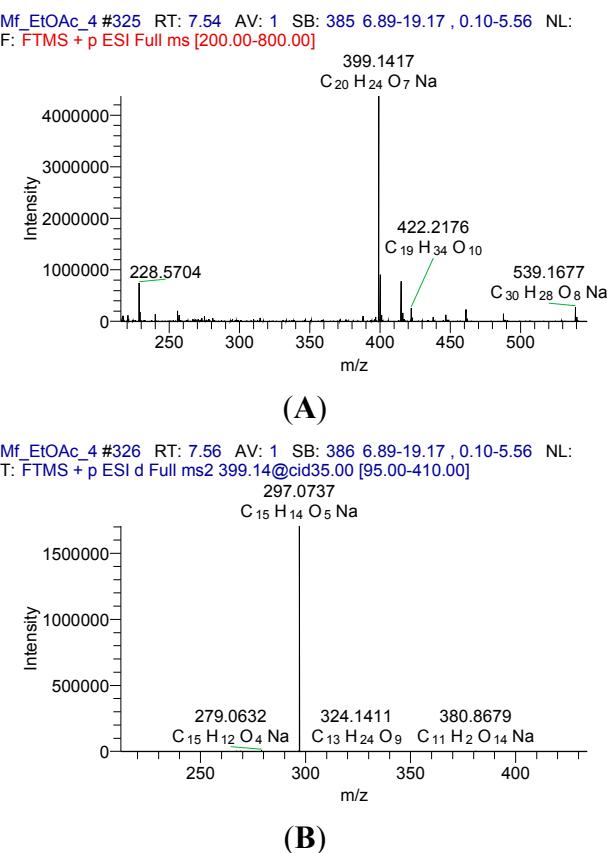
**Figure S15.** Full scan MS (A) and MS/MS (B) spectra of peak 5 of Table 1.**Figure S16.** Full scan MS (A) and MS/MS (B) spectra of peak 6 of Table 1.

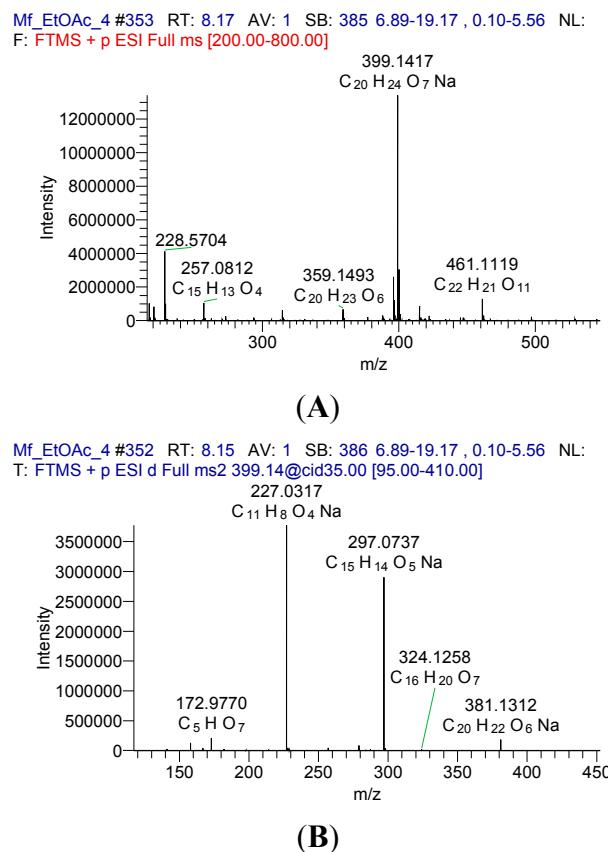
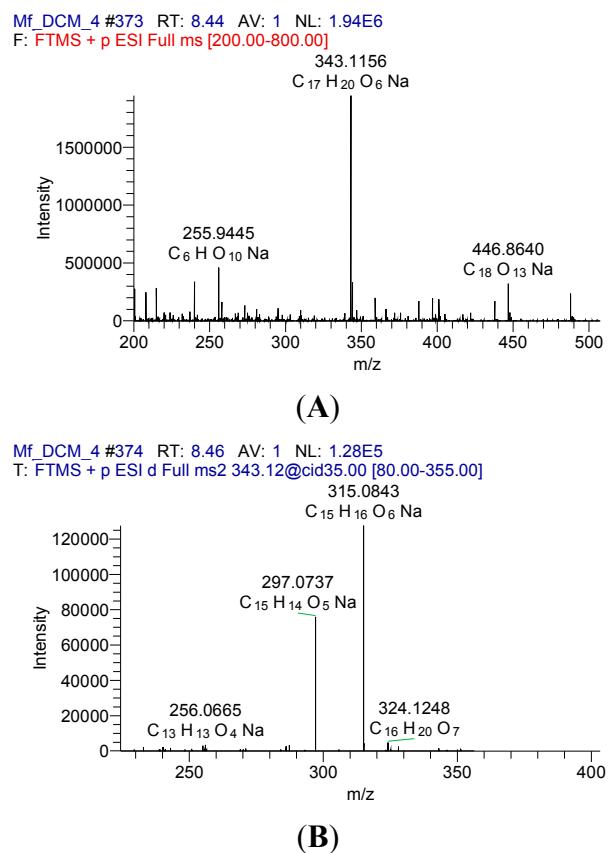
**Figure S17.** Full scan MS spectrum of peak 7 of Table 1.**Figure S18.** Full scan MS (A) and MS/MS (B) spectra of peak 8 of Table 1.

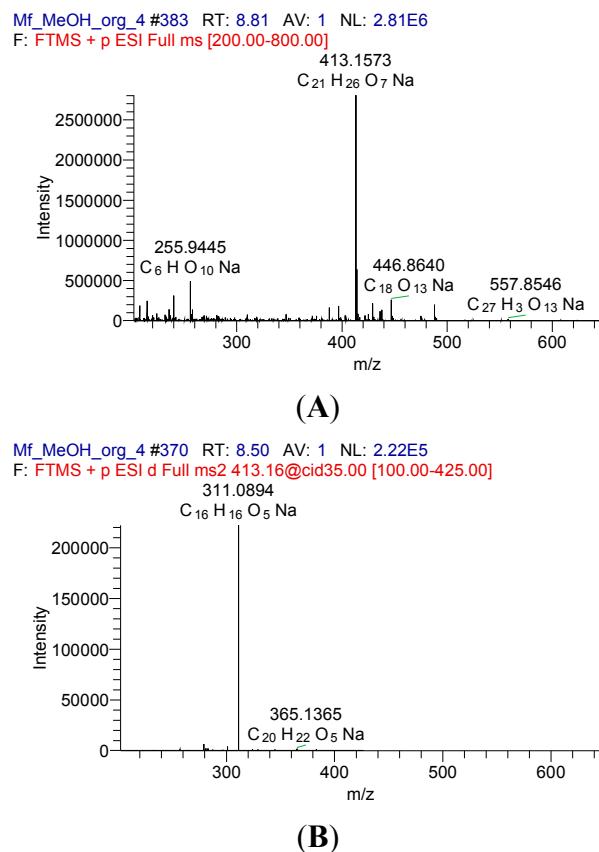
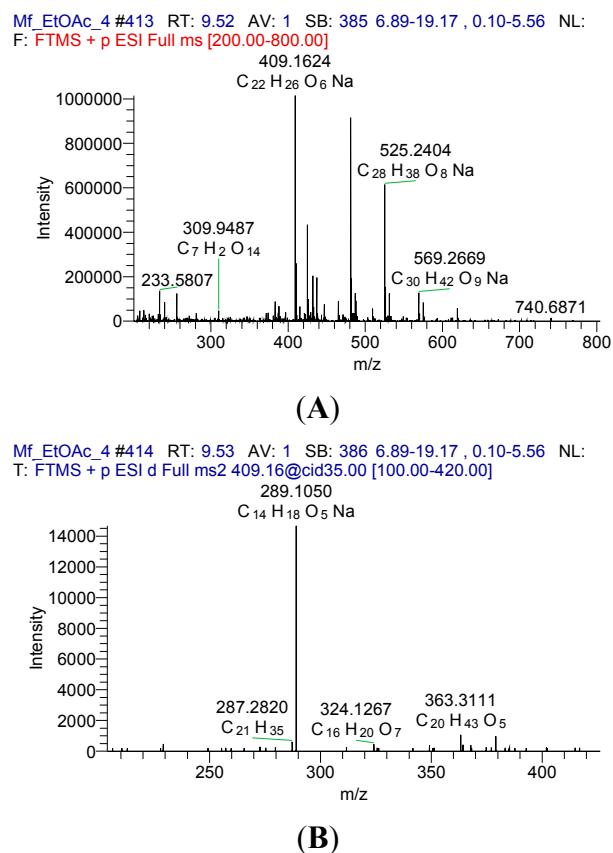
(A)



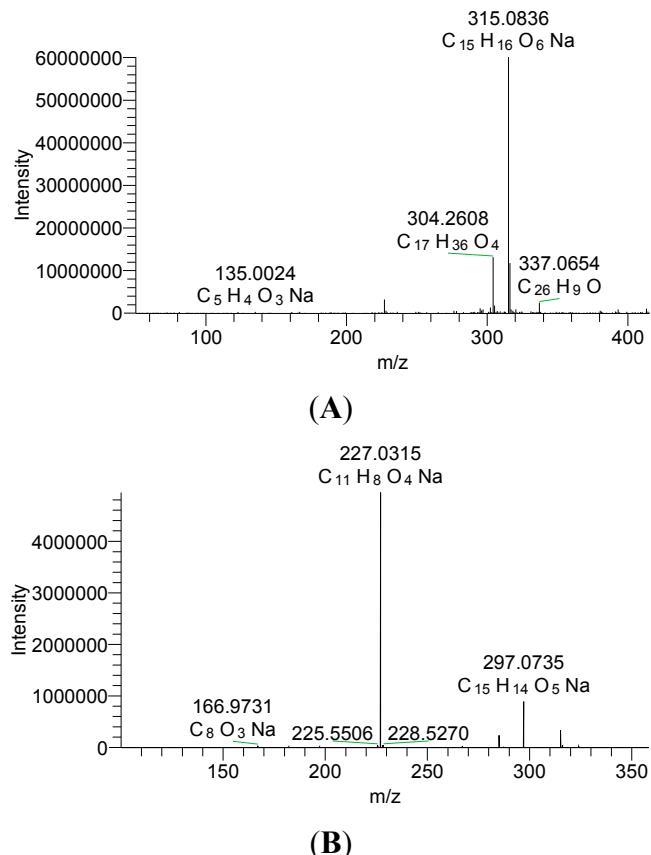
(B)

**Figure S19.** Full scan MS (A) and MS/MS (B) spectra of peak 9 of Table 1.**Figure S20.** Full scan MS (A) and MS/MS (B) spectra of peak 12 of Table 1.

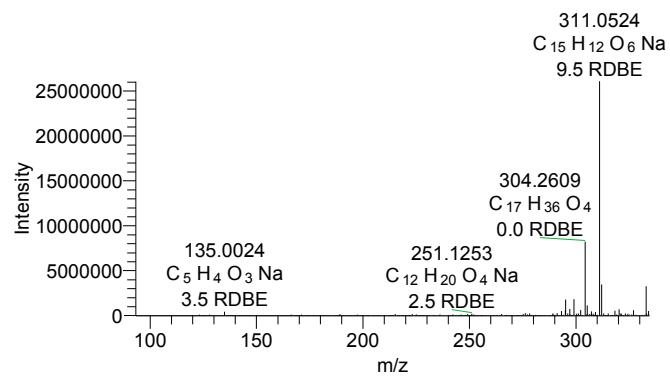
**Figure S21.** Full scan MS (**A**) and MS/MS (**B**) spectra of peak 14 of Table 1.**Figure S22.** Full scan MS (**A**) and MS/MS (**B**) spectra of peak 15 of Table 1.

**Figure S23.** Full scan MS (**A**) and MS/MS (**B**) spectra of peak 16 of Table 1.**Figure S24.** Full scan MS (**A**) and MS/MS (**B**) spectra of peak 17 of Table 1.

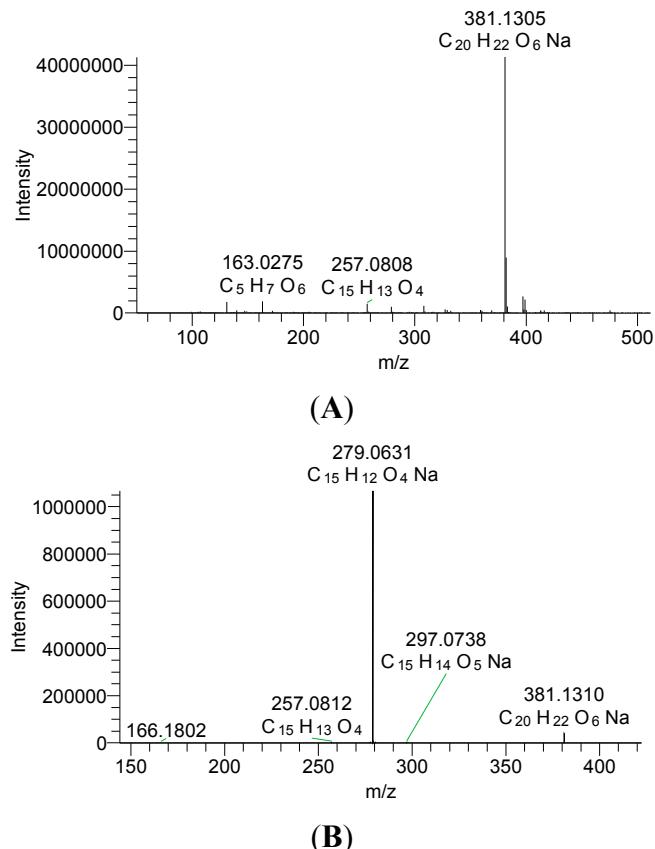
**Figure S25.** Full scan MS (**A**) and MS/MS (**B**) spectra of microfalcrin (**1**) in ESI(+).



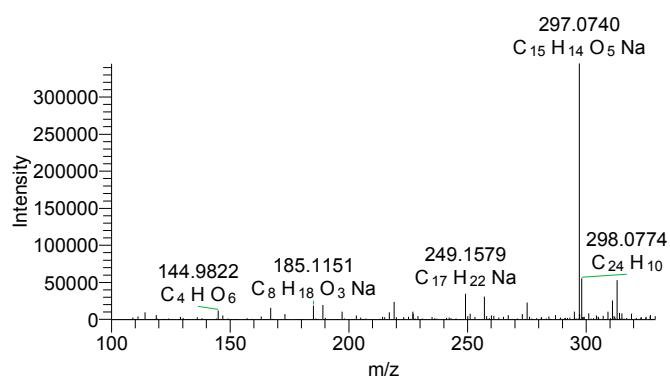
**Figure S26.** Full scan MS spectrum of microcoumaririn (**2**) in ESI(+).



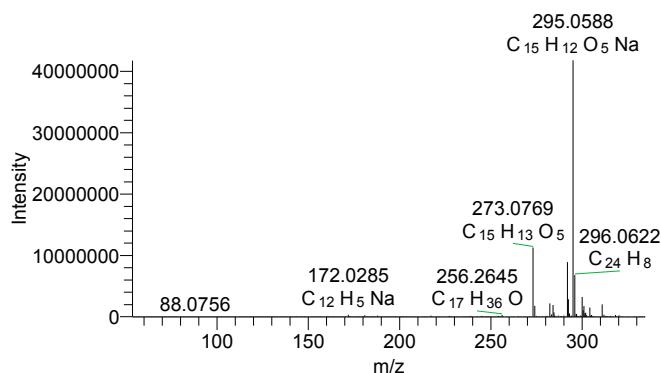
**Figure S27.** Full scan MS (**A**) and MS/MS (**B**) spectra of micromelosidester (**3**) in ESI(+).



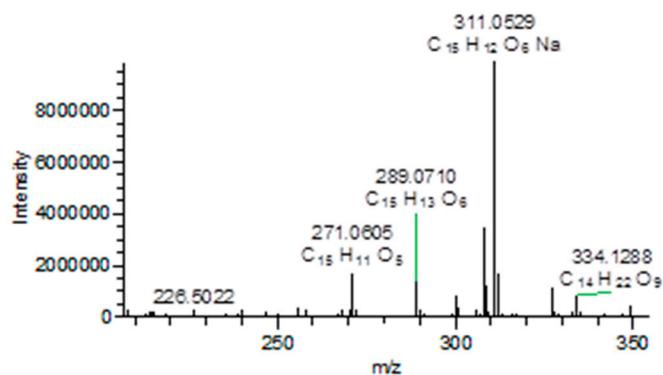
**Figure S28.** Full scan MS spectrum of micromeloside A (**4**) in ESI(+).



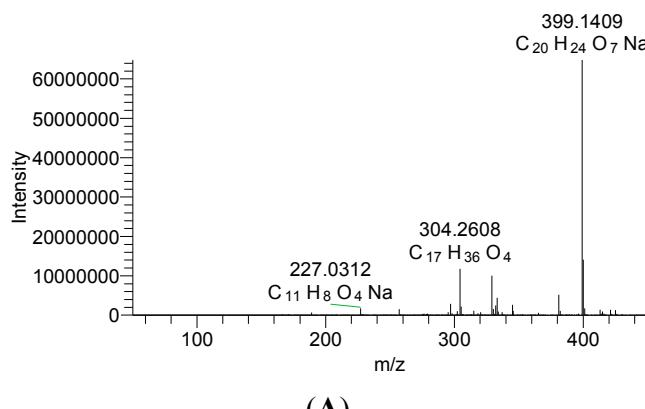
**Figure S29.** Full scan MS spectrum of microminutin (**5**) in ESI(+).



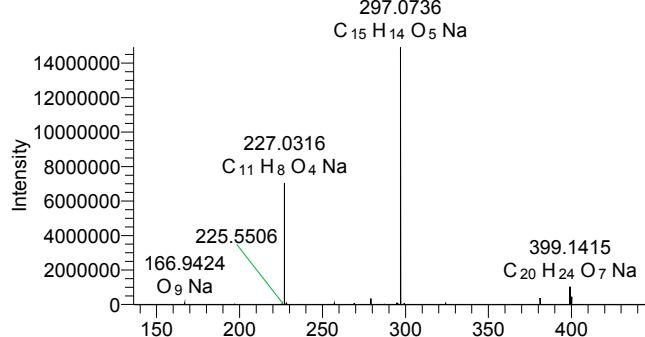
**Figure S30.** Full scan MS spectrum of micromelin (**6**) in ESI(+).



**Figure S31.** Full scan MS (A) and MS/MS (B) spectra of micromarin B (**7**) in ESI(+).

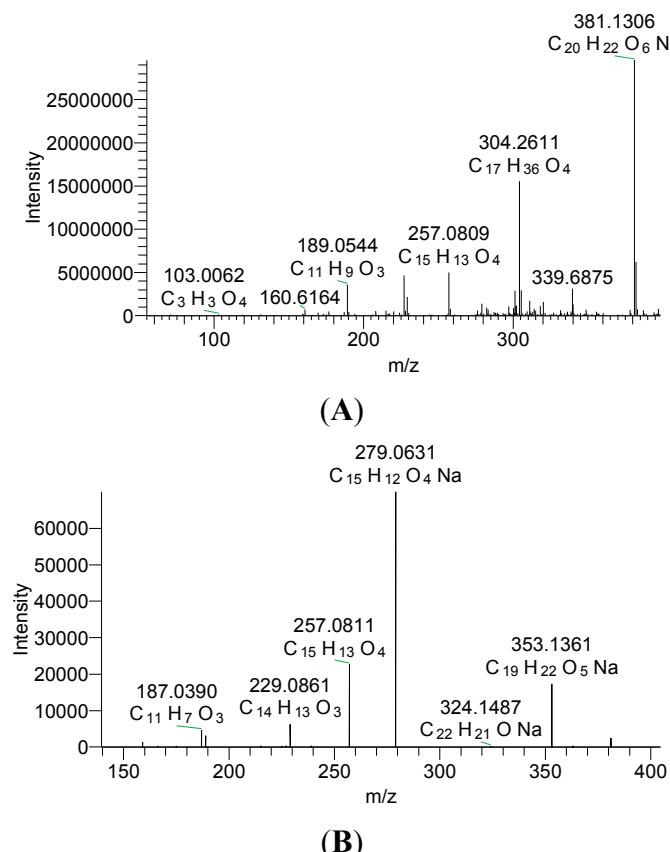


(A)

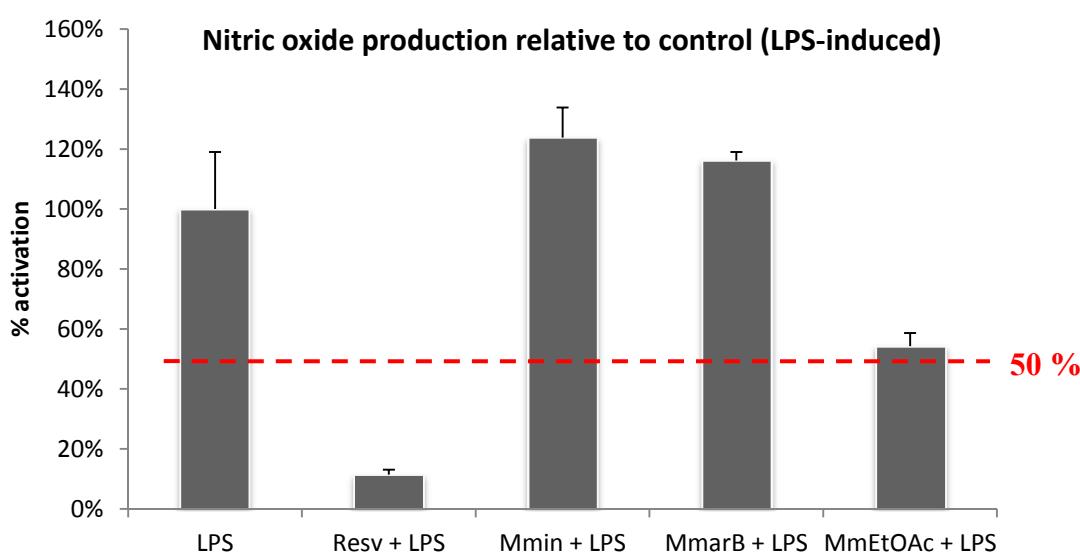


(B)

**Figure S32.** Full scan MS (**A**) and MS/MS (**B**) spectra of micromarin A (**8**) in ESI(+).



**Figure S33.** Percentage of nitrite oxide production relative to control (LPS-induced); Resv: Resveratrol, Mmin: Microminutin (**5**), Mmar B: Micromarin B (**7**); MmEtOAc: EtOAc extract.



**Figure S34.** Percentage of NF $\kappa$ B induction relative to control (TNF- $\alpha$  treated); Resv: Resveratrol, Mmin: Microminutin (5), Mmar B: Micromarin B (7); MmEtOAc: EtOAc extract.

