
SUPPLEMENTARY MATERIALS

**Metabolite Profiling of *Aspergillus fumigatus* KMM4631 and its
Co-Cultures with Other Marine Fungi**

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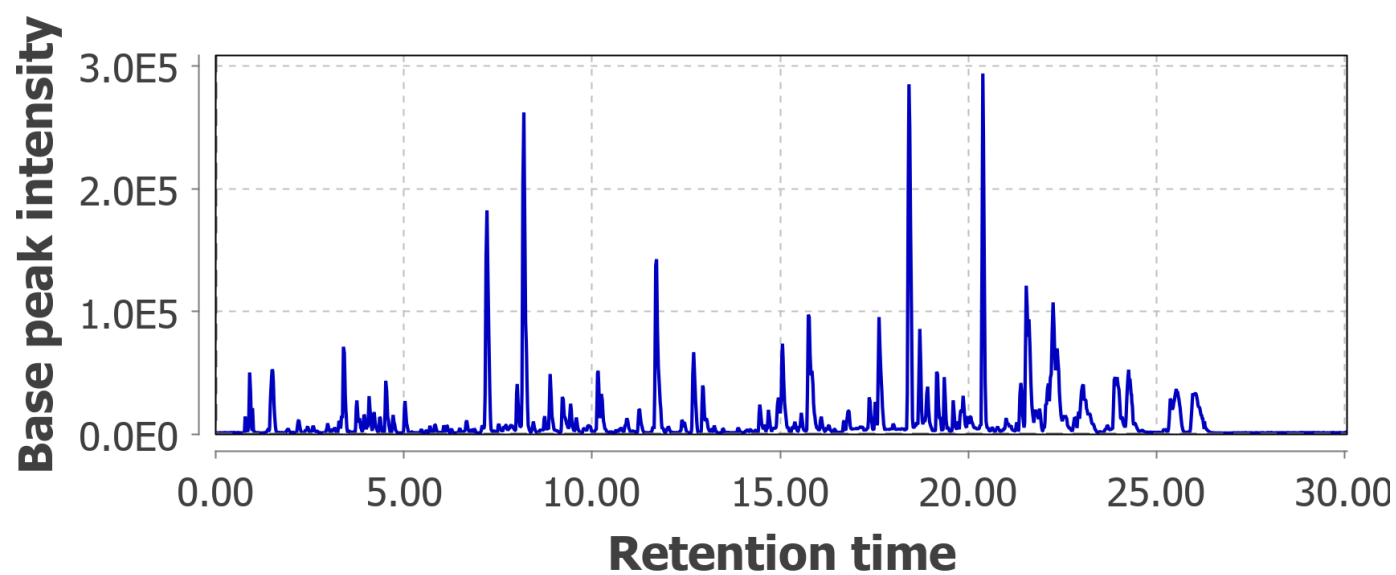


Figure S1. UHPLC MS chromatogram of extract of *Aspergillus fumigatus* KMM 4631 monoculture.

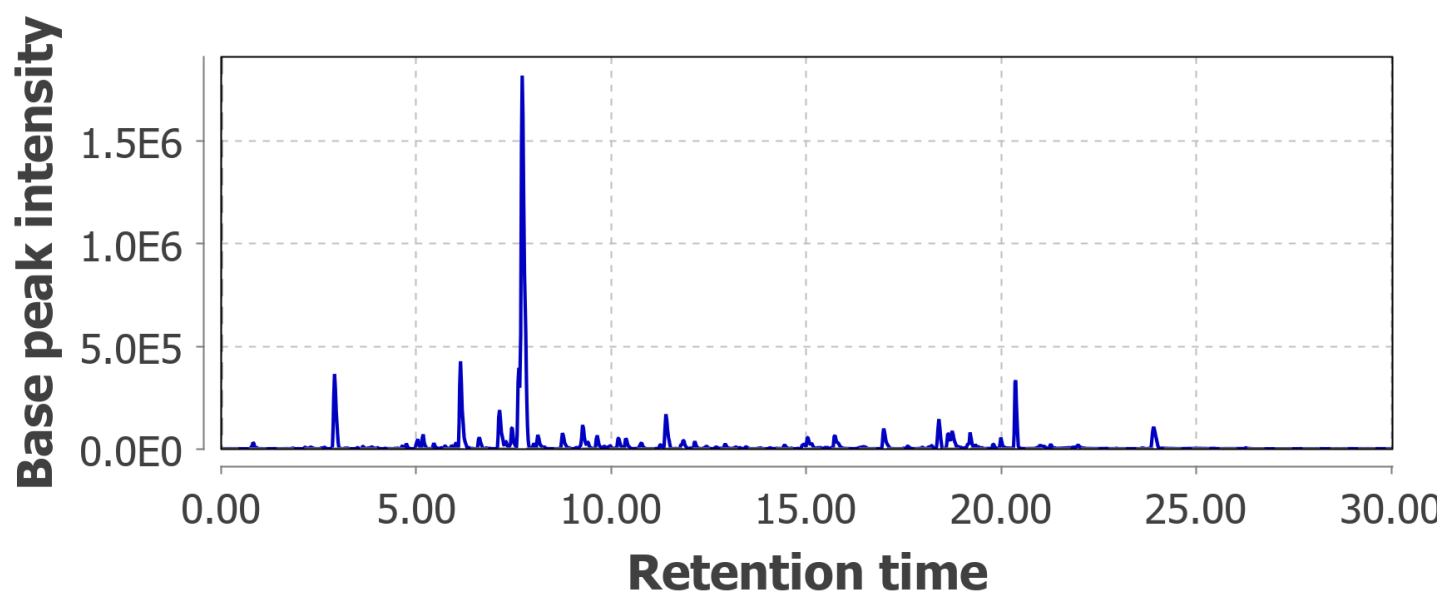


Figure S2. UHPLC MS chromatogram of extract of *Penicillium hispanicum* KMM 4689 monoculture.

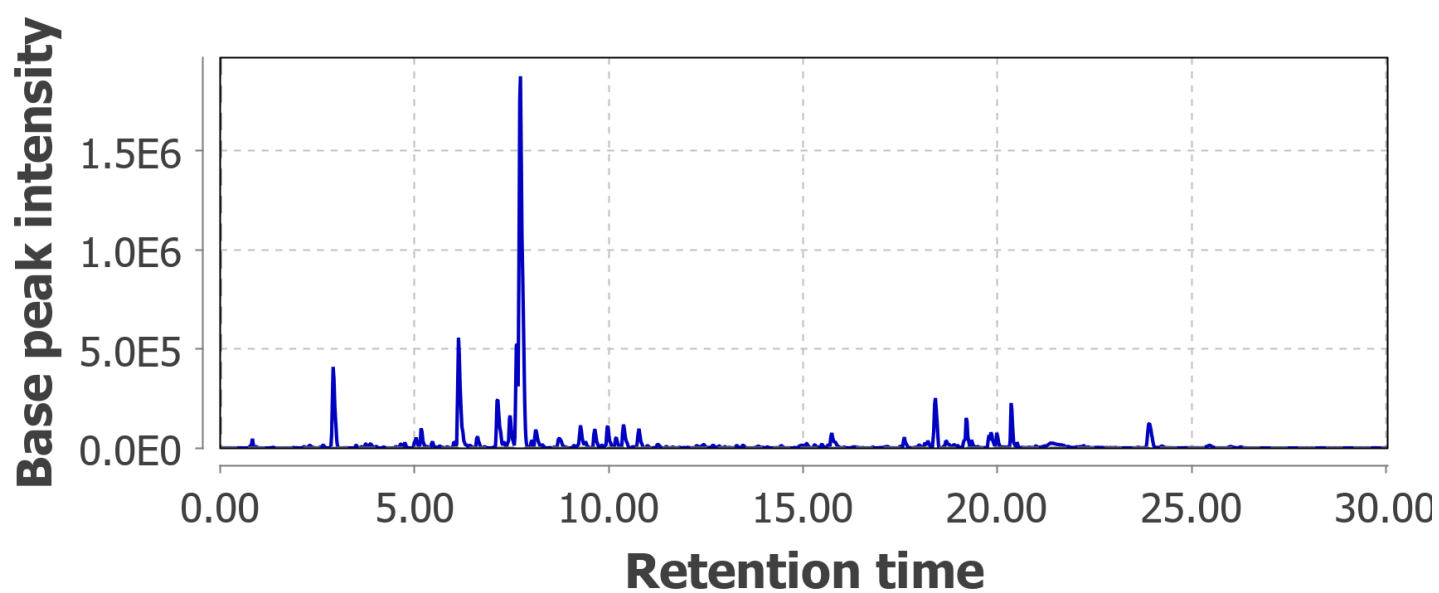


Figure S3. UHPLC MS chromatogram of extract of *Aspergillus fumigatus* KMM 4631+ *Penicillium hispanicum* KMM 4689 co-culture.

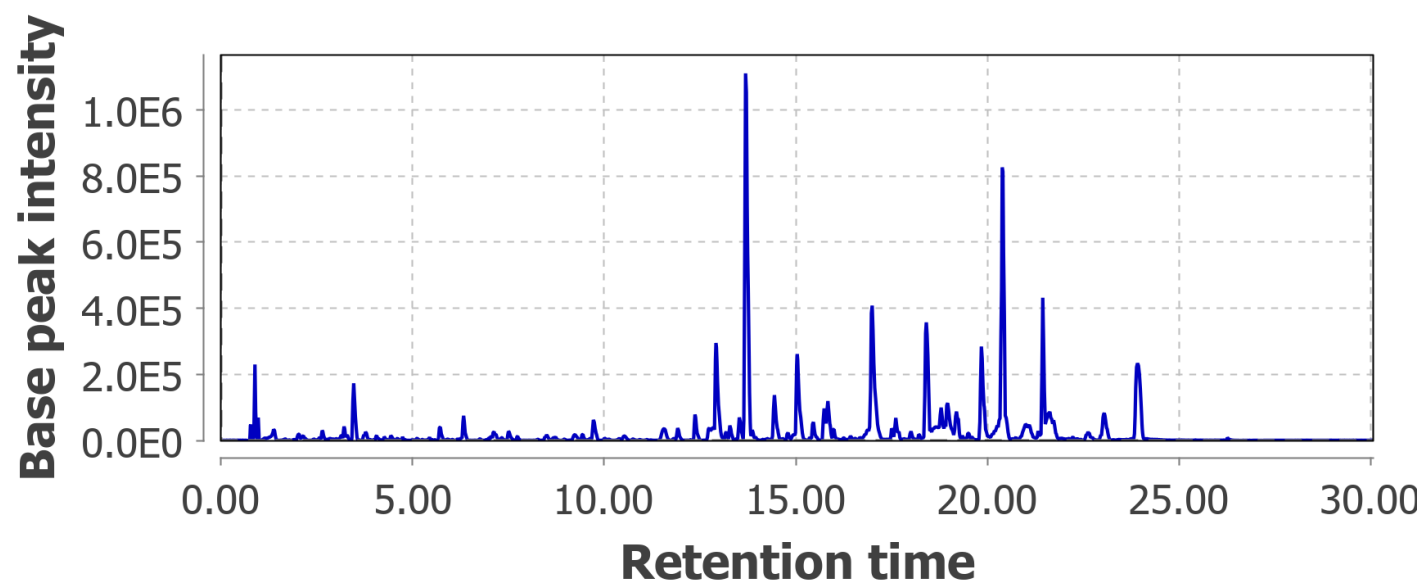


Figure S4. UHPLC MS chromatogram of extract of *Amphichorda* sp. KMM 4639 monoculture.

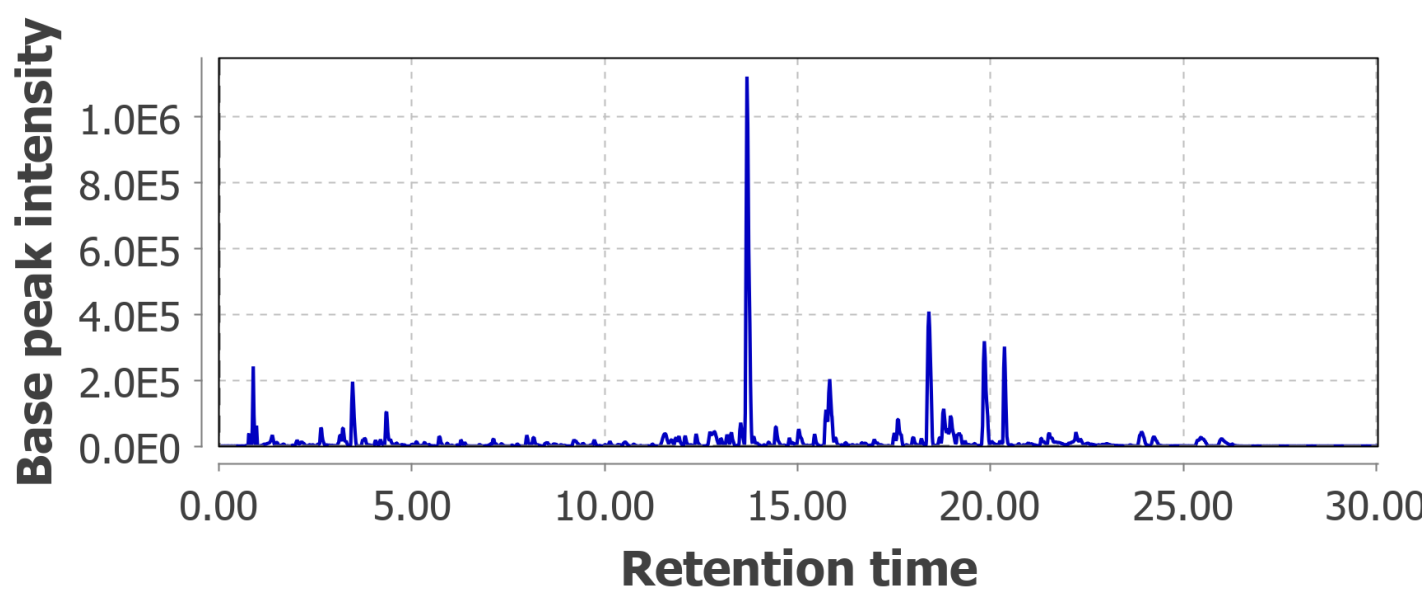


Figure S5. UHPLC MS chromatogram of extract of *Aspergillus fumigatus* KMM 4631+*Amphichorda* sp. KMM 4639 co-culture.

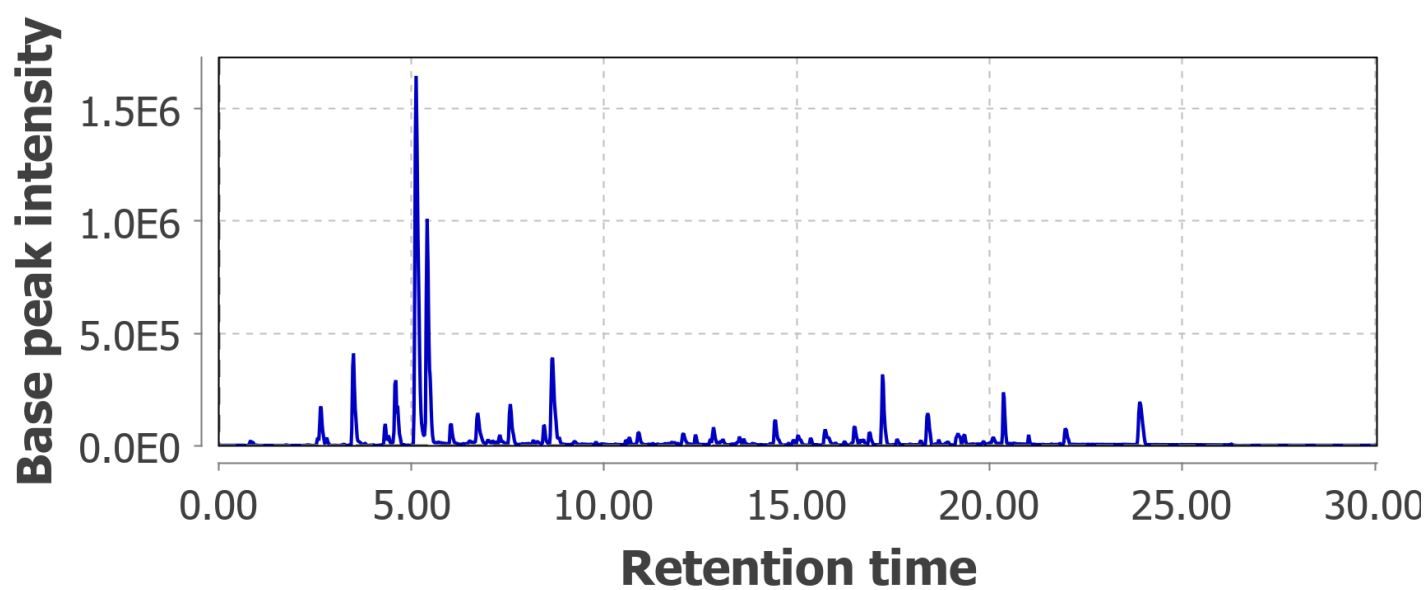


Figure S6. UHPLC MS chromatogram of extract of *Penicillium* sp. KMM 4672 monoculture.

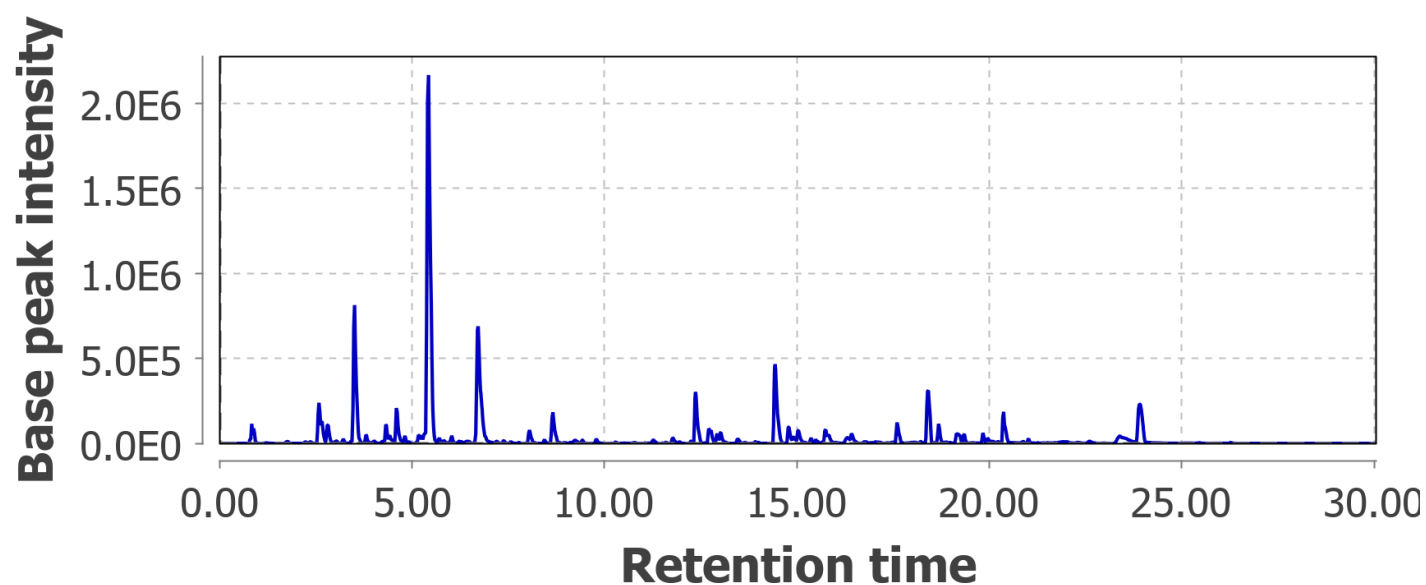


Figure S7. UHPLC MS chromatogram of extract of *Aspergillus fumigatus* KMM 4631+*Penicillium* sp. KMM 4672 co-culture.

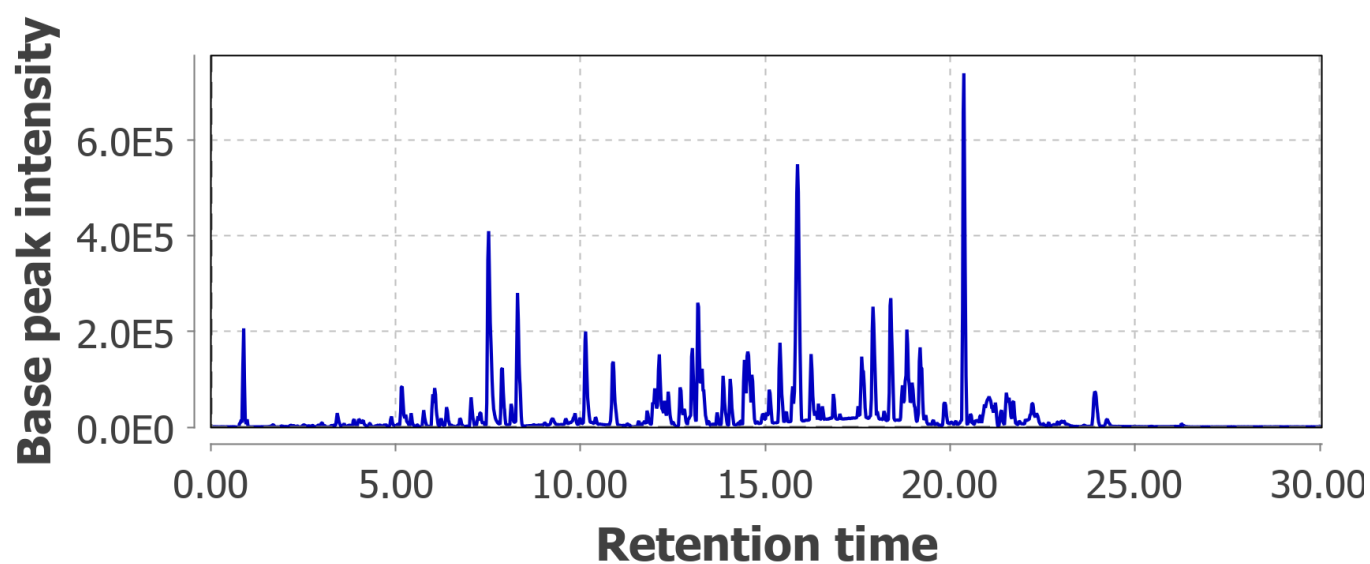


Figure S8. UHPLC MS chromatogram of extract of *Asteromyces cruciatus* KMM 4696 monoculture.

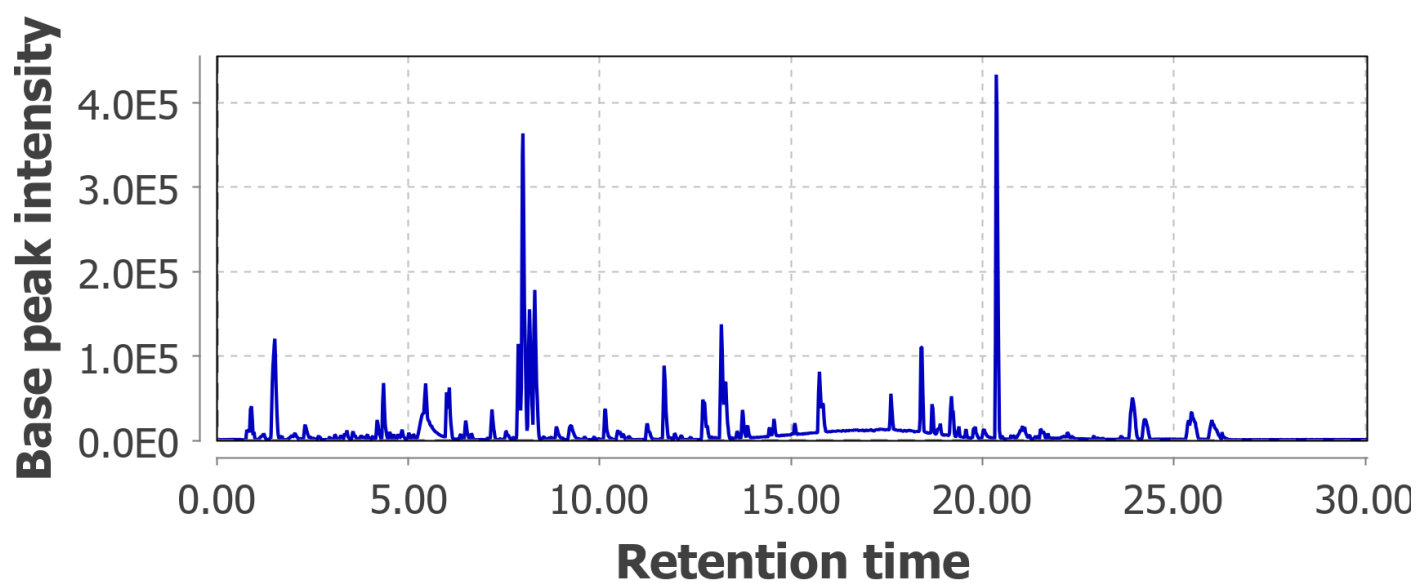


Figure S9. UHPLC MS chromatogram of extract of *Aspergillus fumigatus* KMM 4631+ *Asteromyces cruciatus* KMM 4696 co-culture.

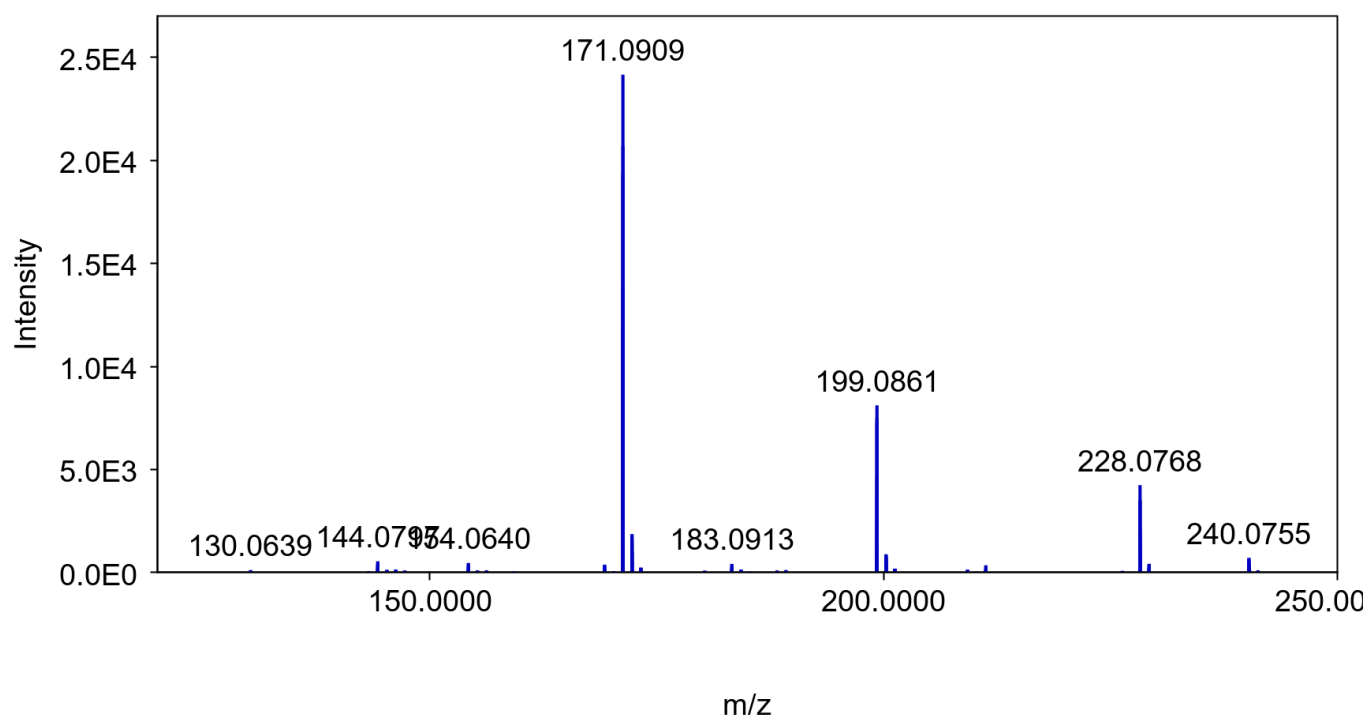


Figure S10. MS/MS fragmentation of fumiquinazoline C (3) and D (4).

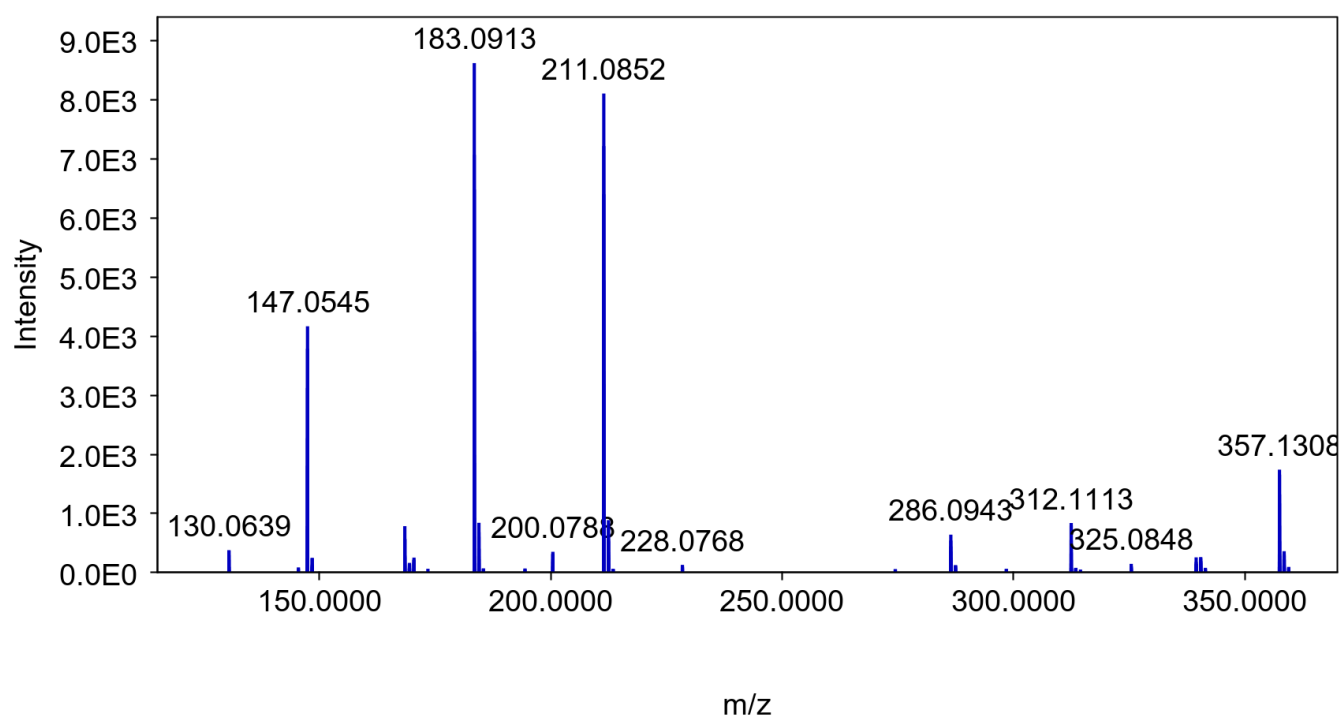


Figure S11. MS/MS fragmentation of fumiquinazoline K (6).

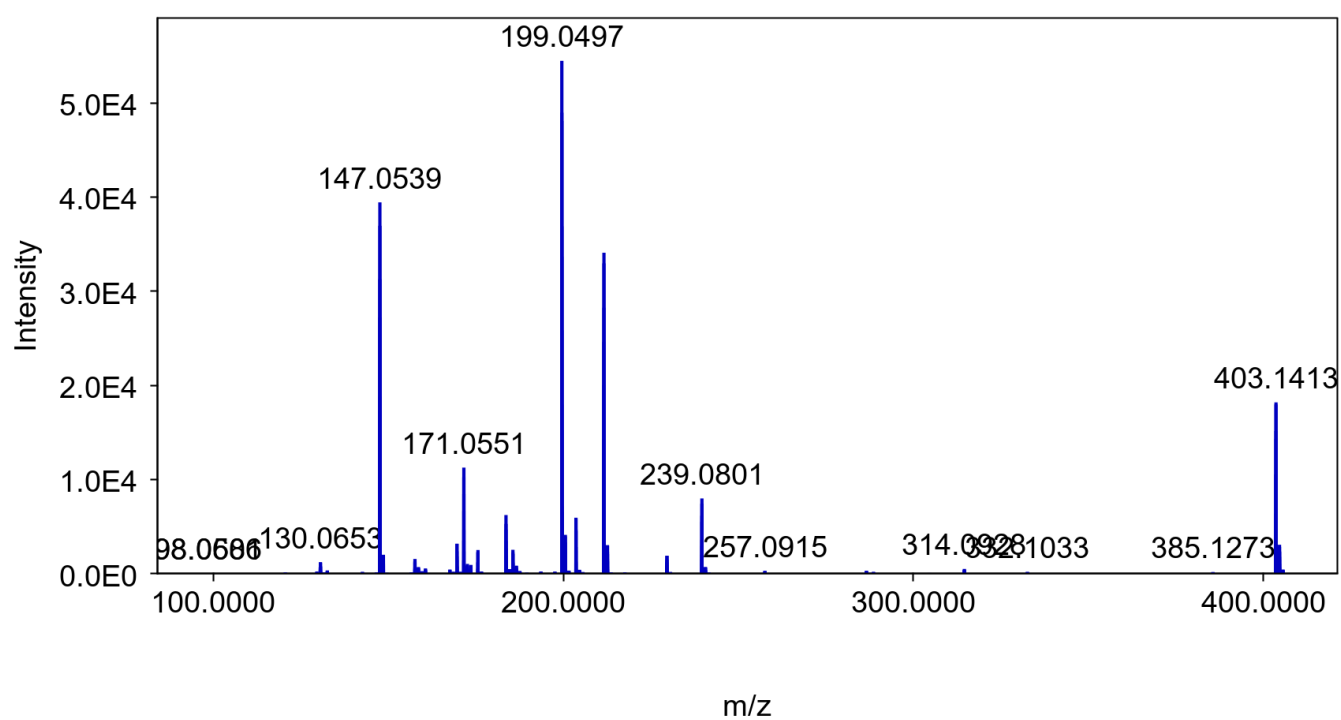


Figure S12. MS/MS of tryptoquivaline J (9) and F (5).

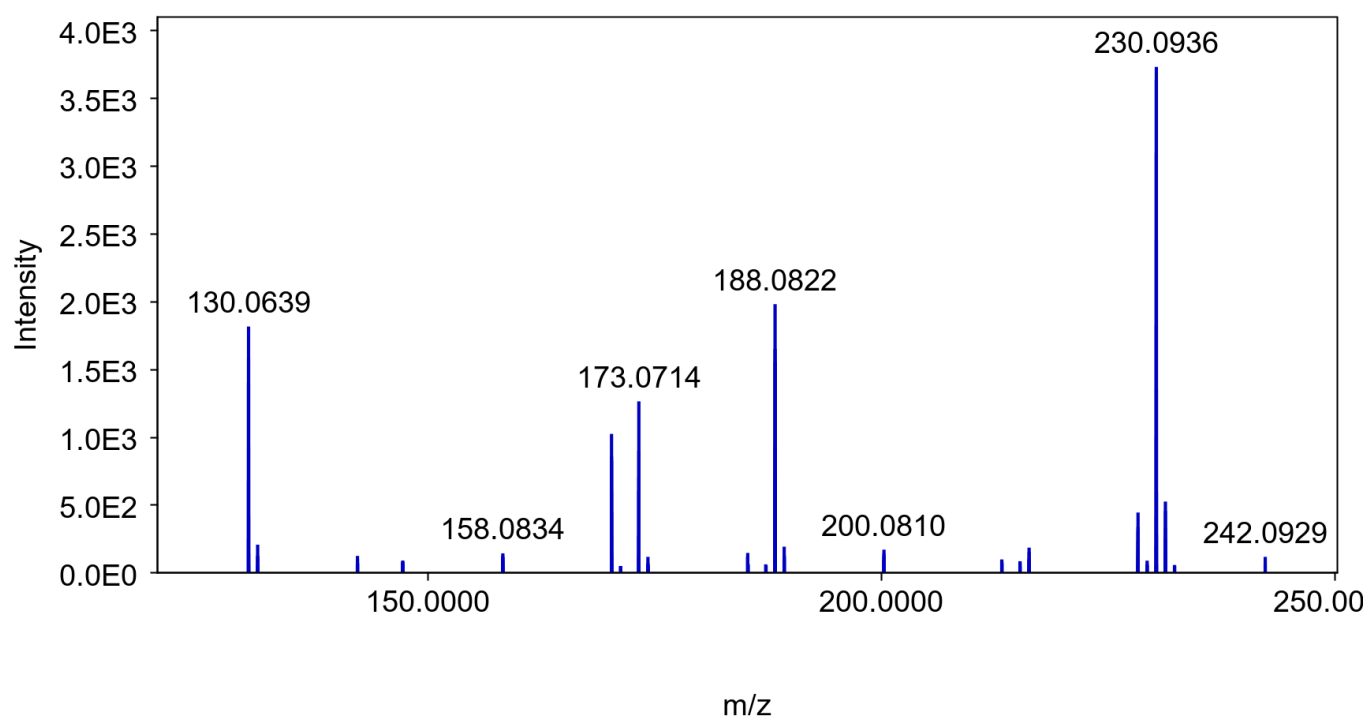


Figure S13. MS/MS fragmentation of fumiquinazoline F (10).

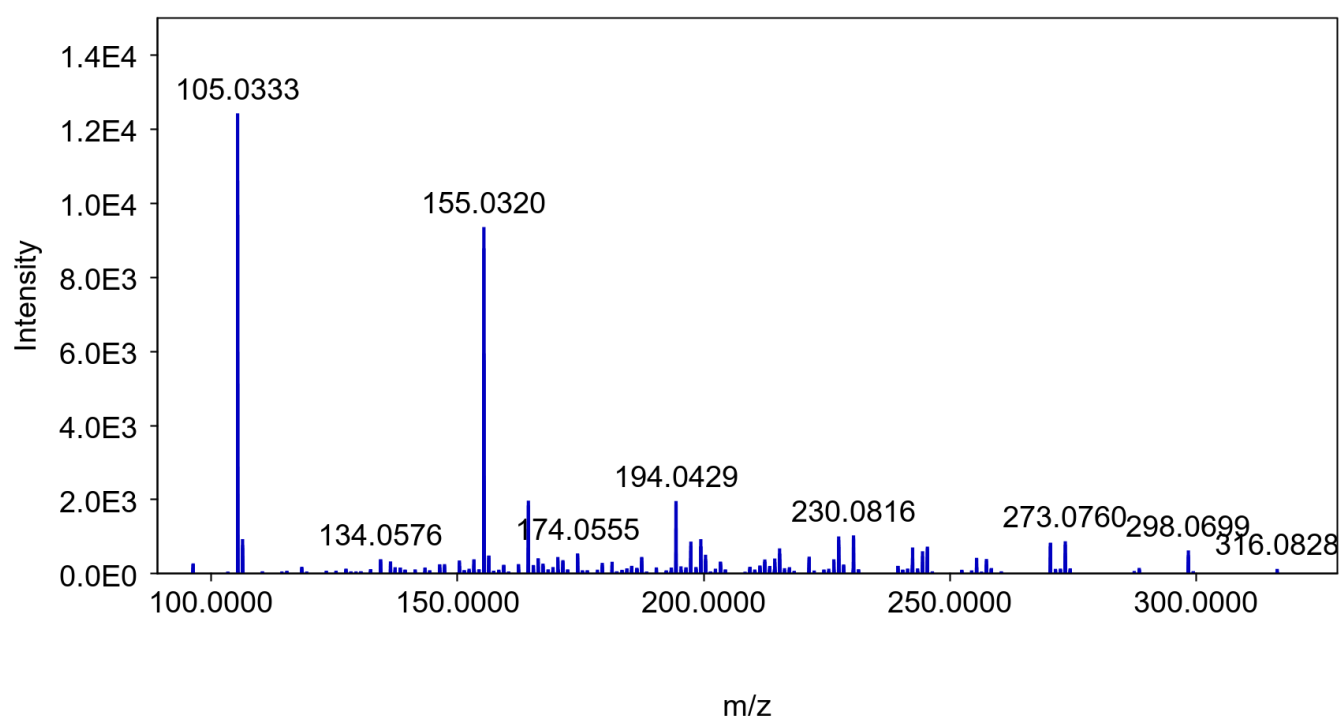


Figure S14. MS/MS fragmentation of pseurotin A (11) and D (15).

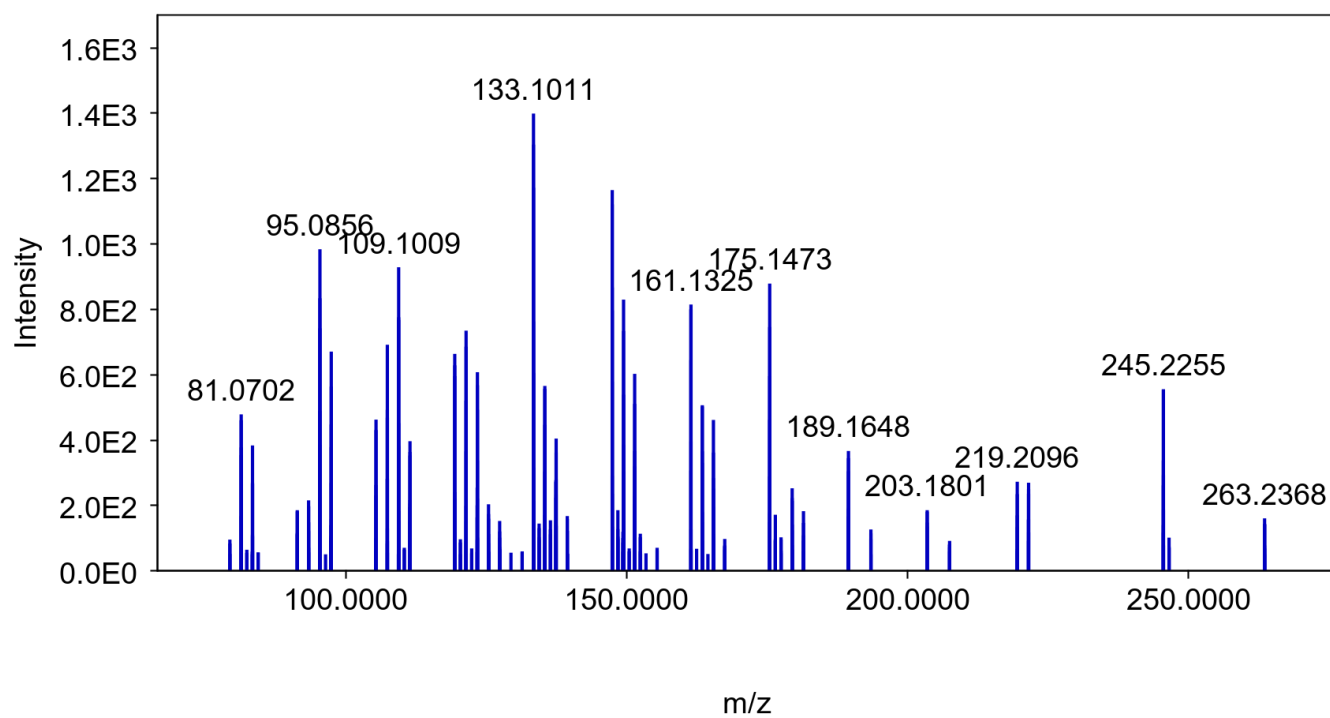


Figure S15. MS/MS fragmentation of conjugated linoleic acid (10E,12Z) (12).

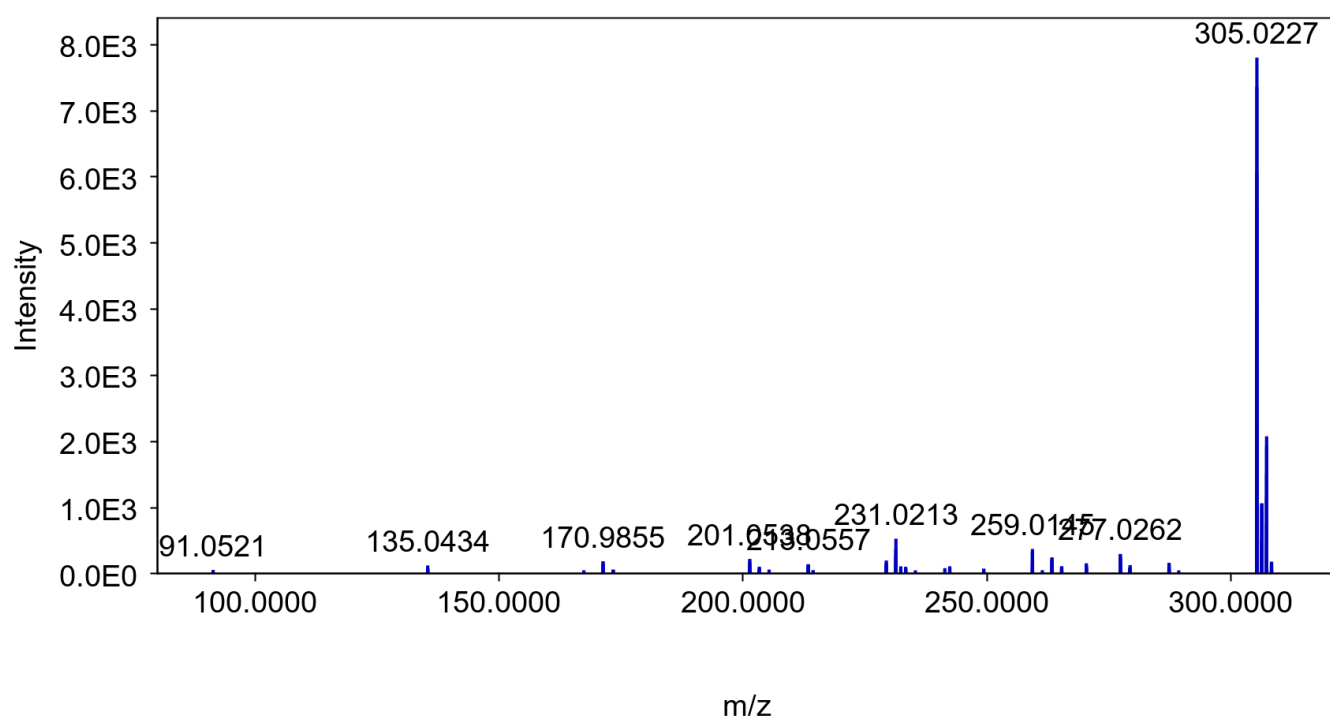


Figure S16. MS/MS fragmentation of 2-chloroemodin (13).

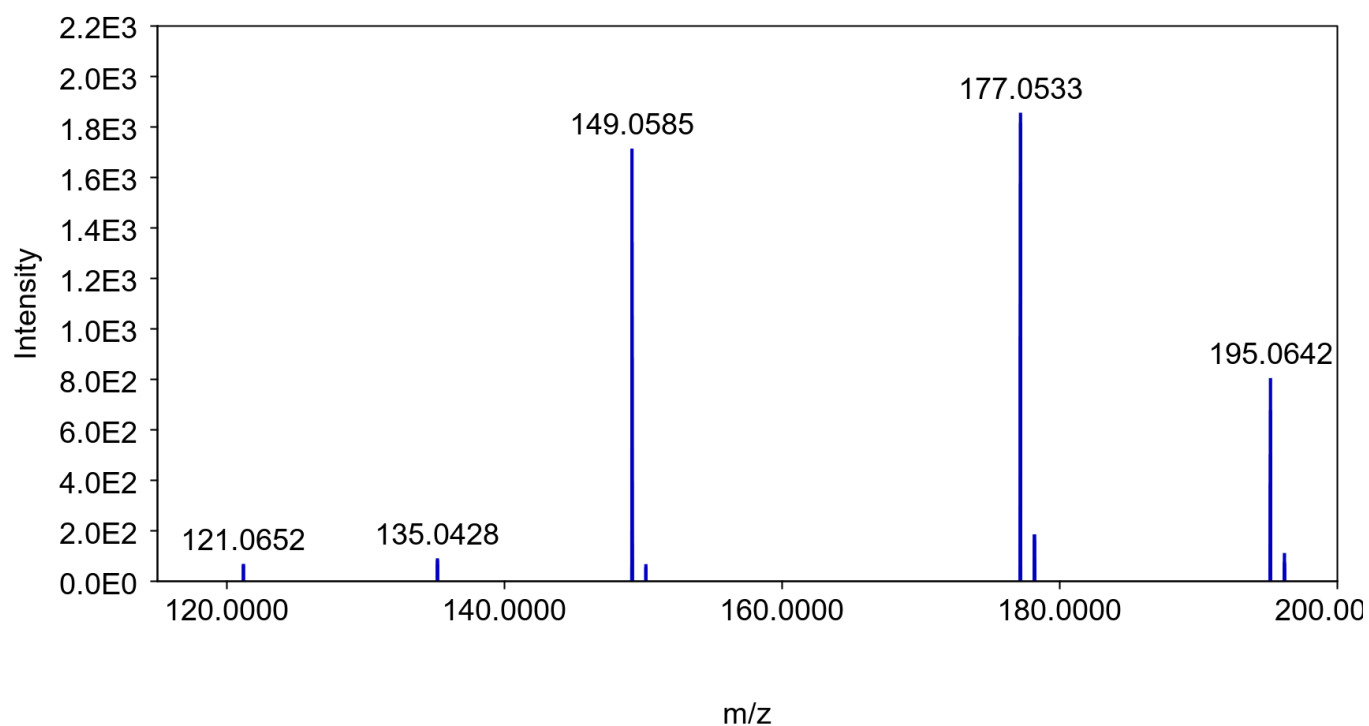


Figure S17. MS/MS fragmentation of scytalone (14).

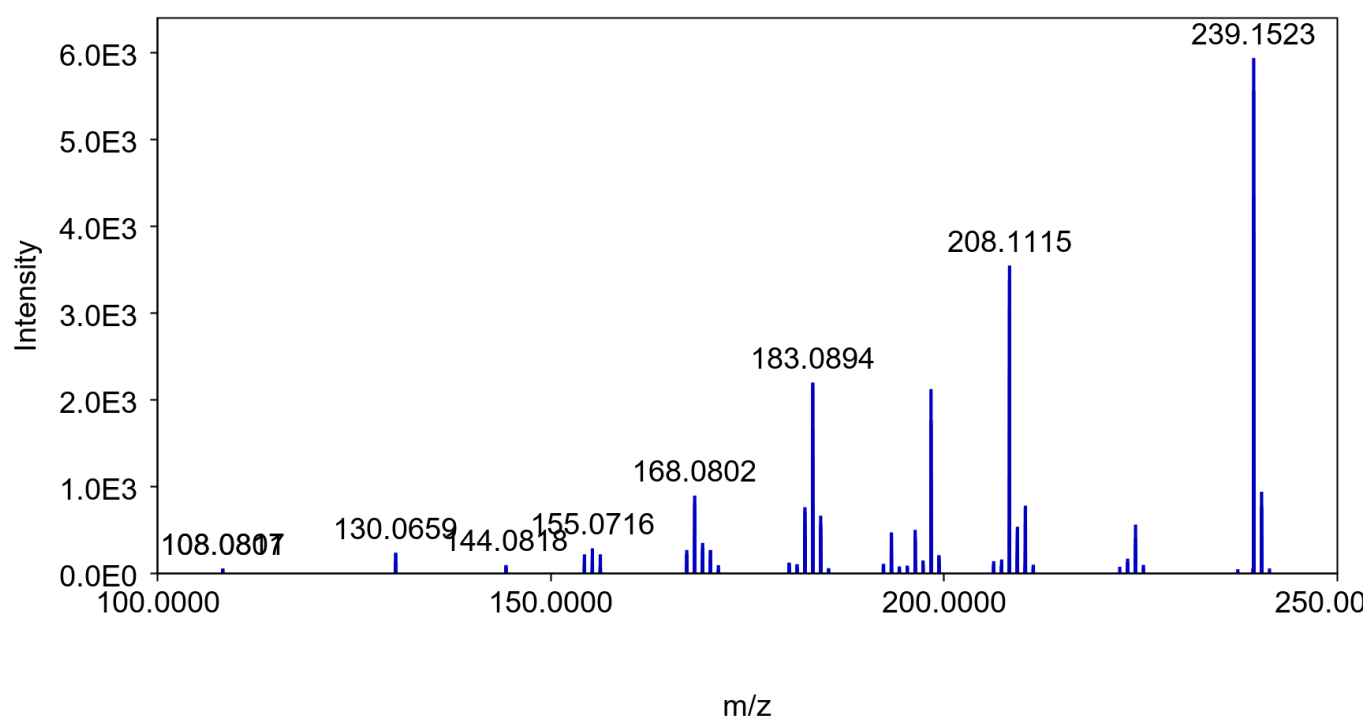


Figure S18. MS/MS fragmentation of agroclavine (16).

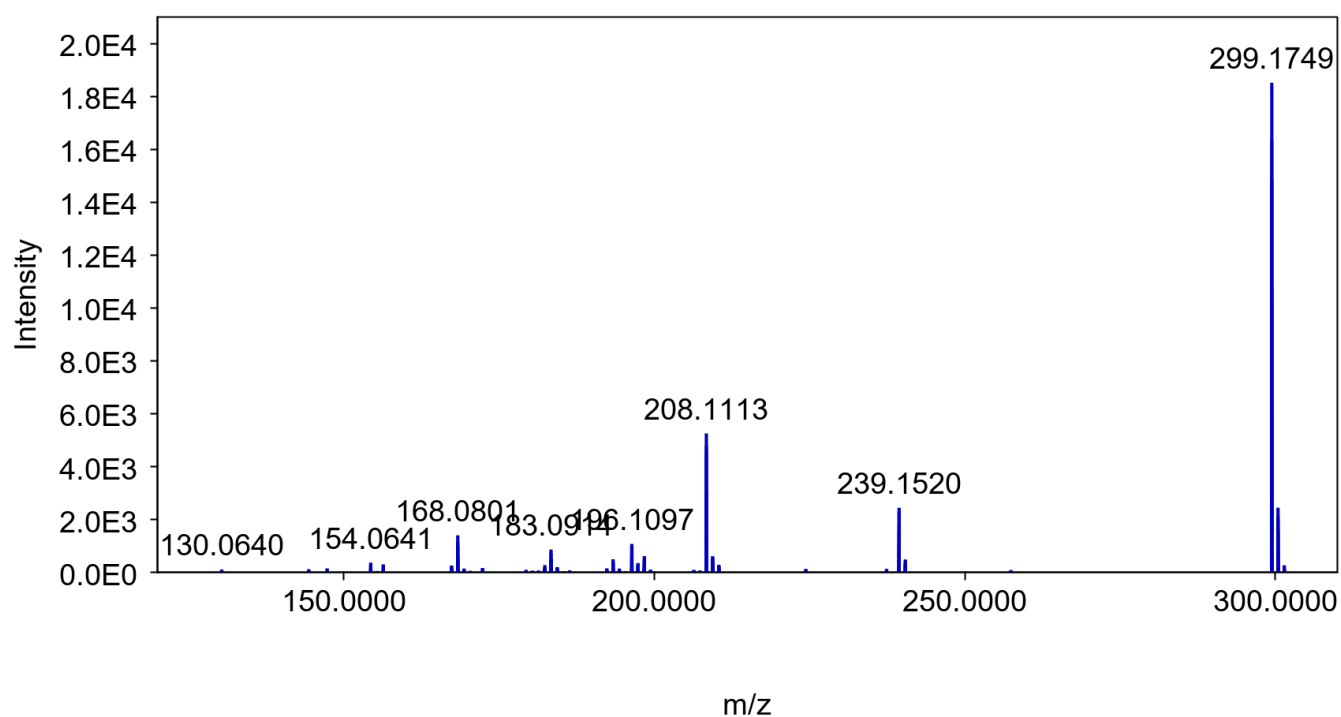


Figure S19. MS/MS fragmentation of fumigaclavine A (17).

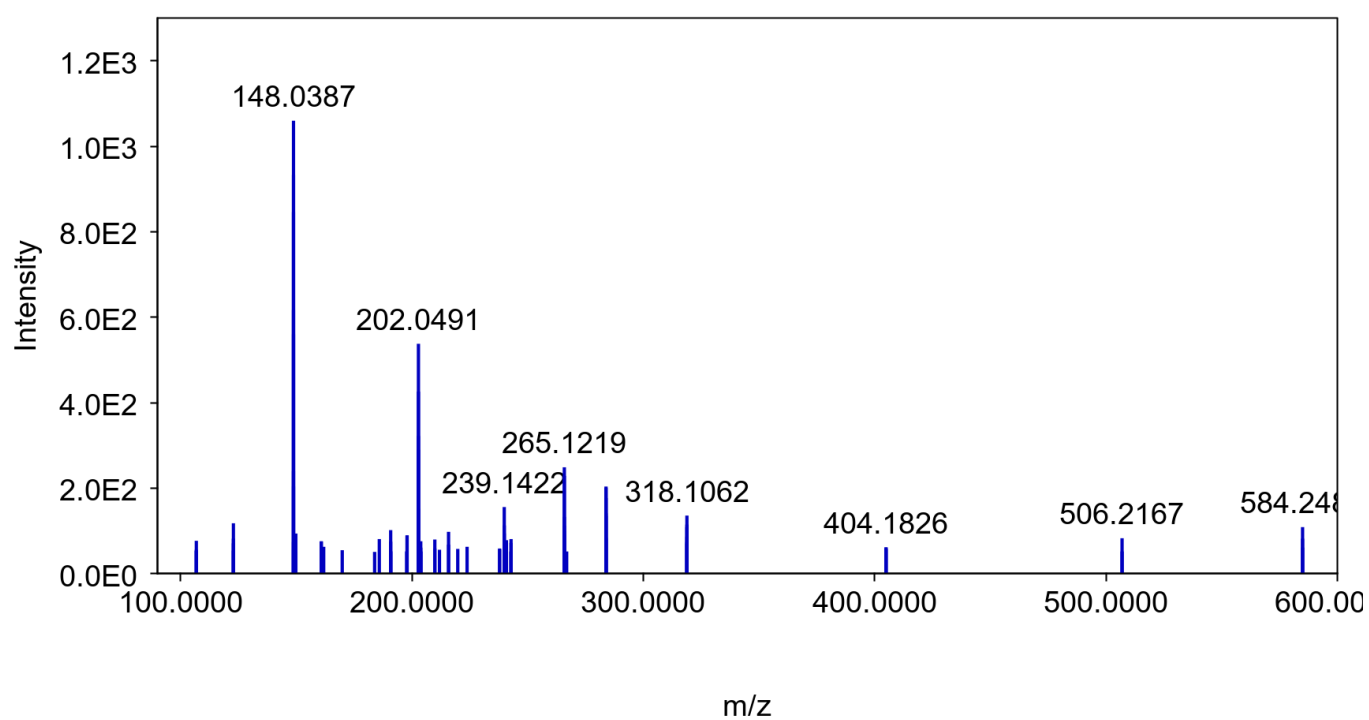


Figure S20. MS/MS fragmentation of pyripyropene A (18).

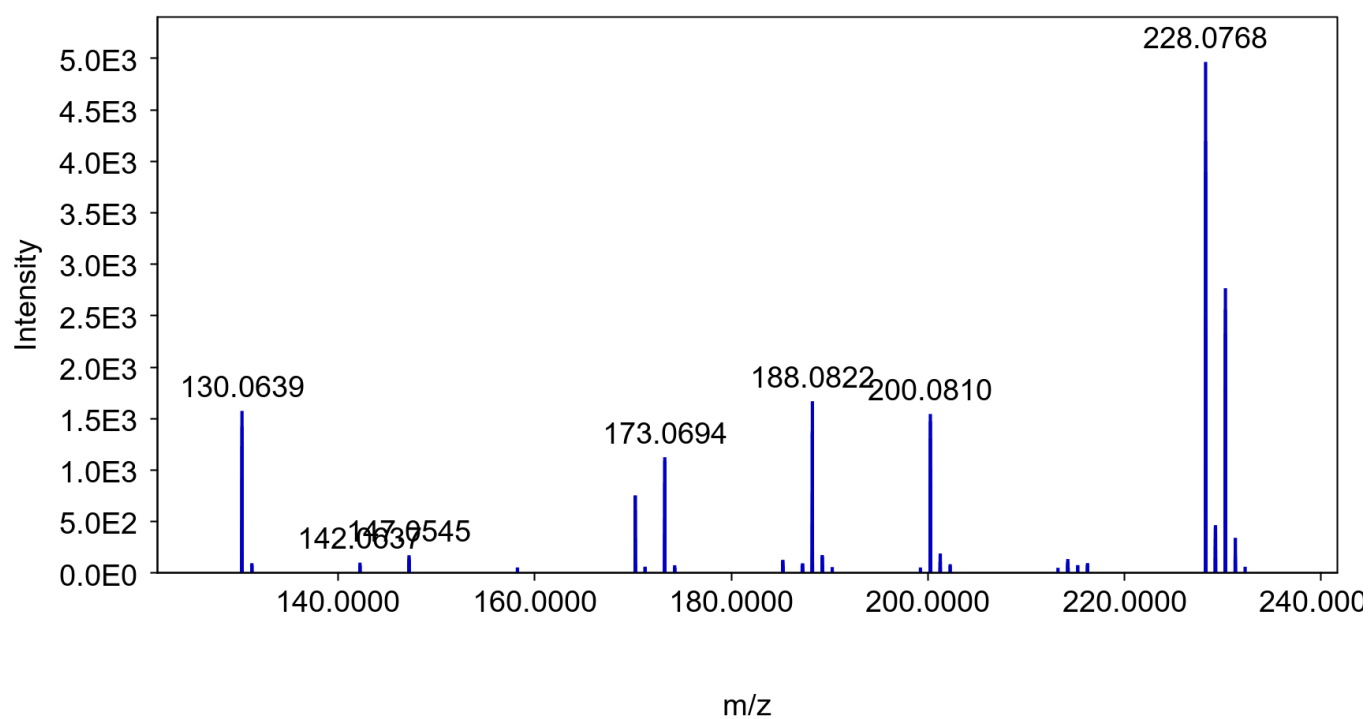


Figure S21. MS/MS fragmentation of fumiquinazoline G (19).

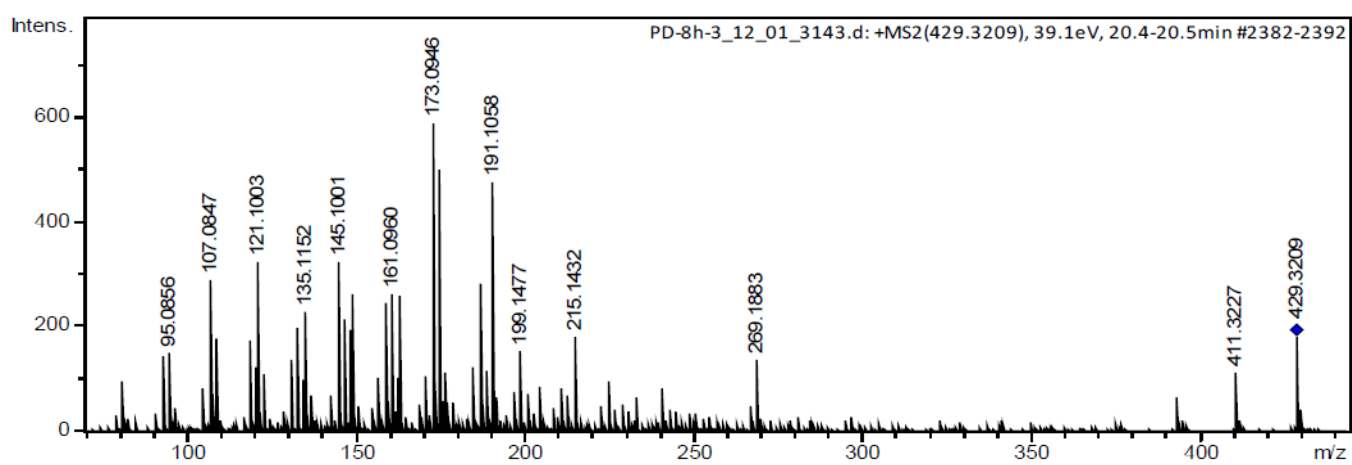


Figure S22. MS/MS fragmentation of ergosterol peroxide (20).

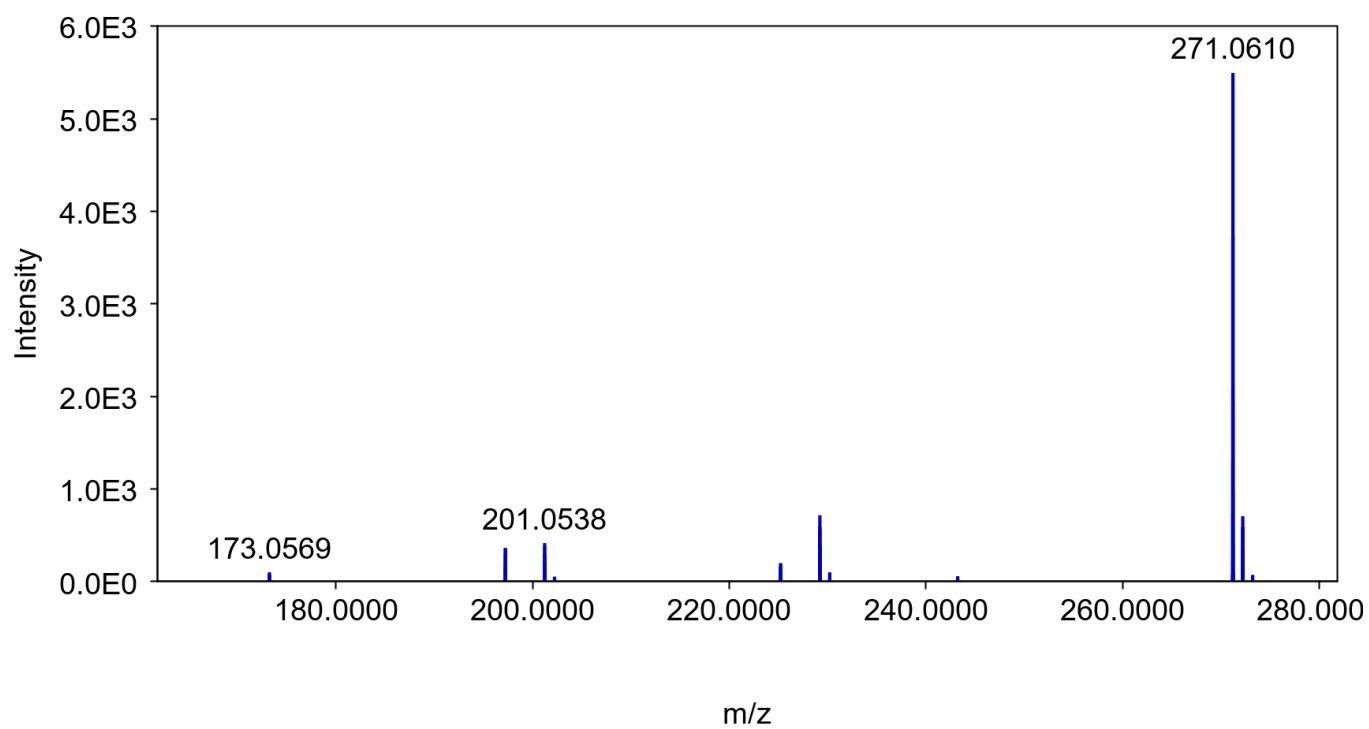


Figure S23. MS/MS fragmentation of emodin (21).

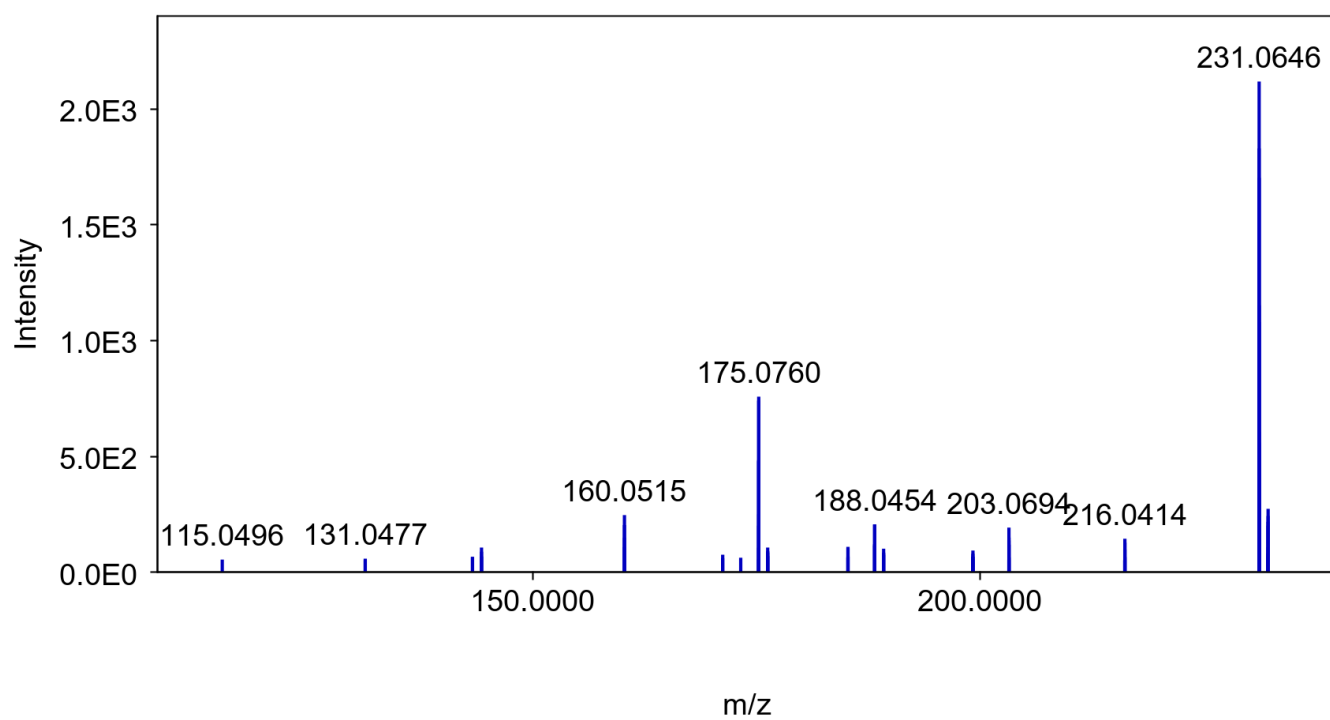


Figure S24. MS/MS fragmentation of diorcin (54).

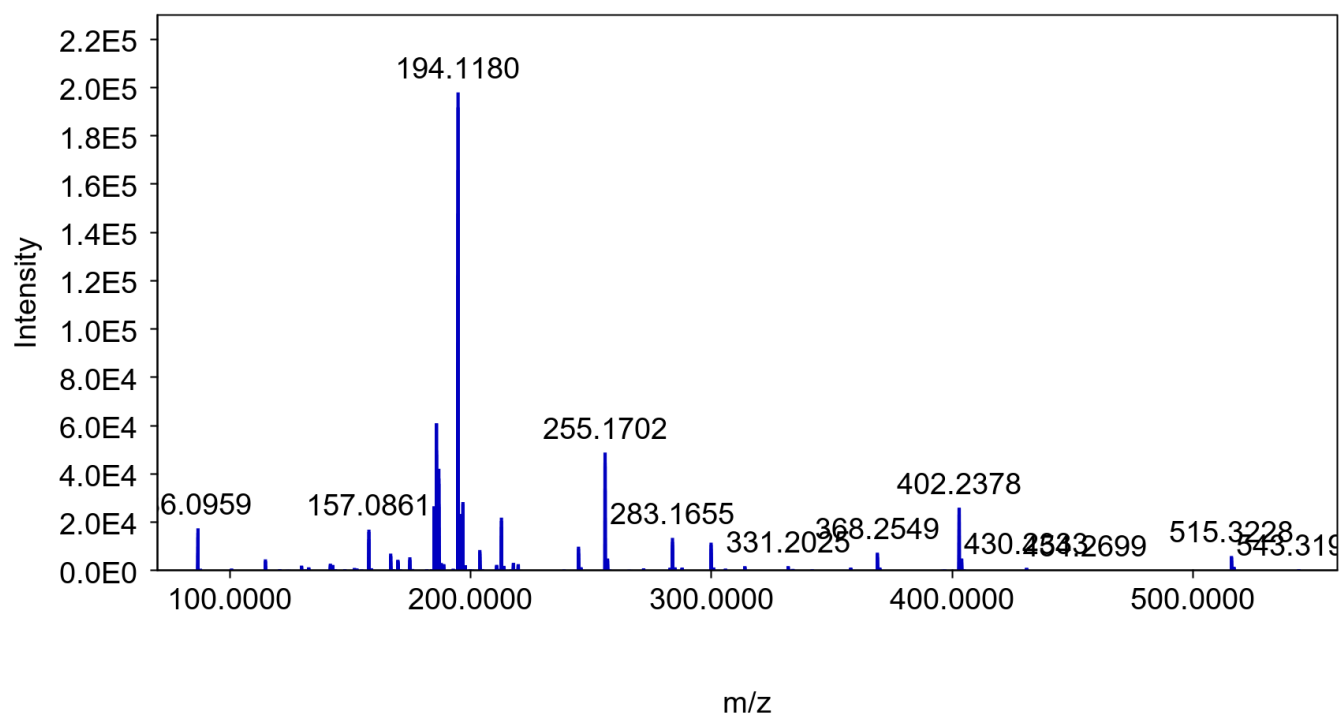


Figure S25. MS/MS fragmentation of isaridin E (55).

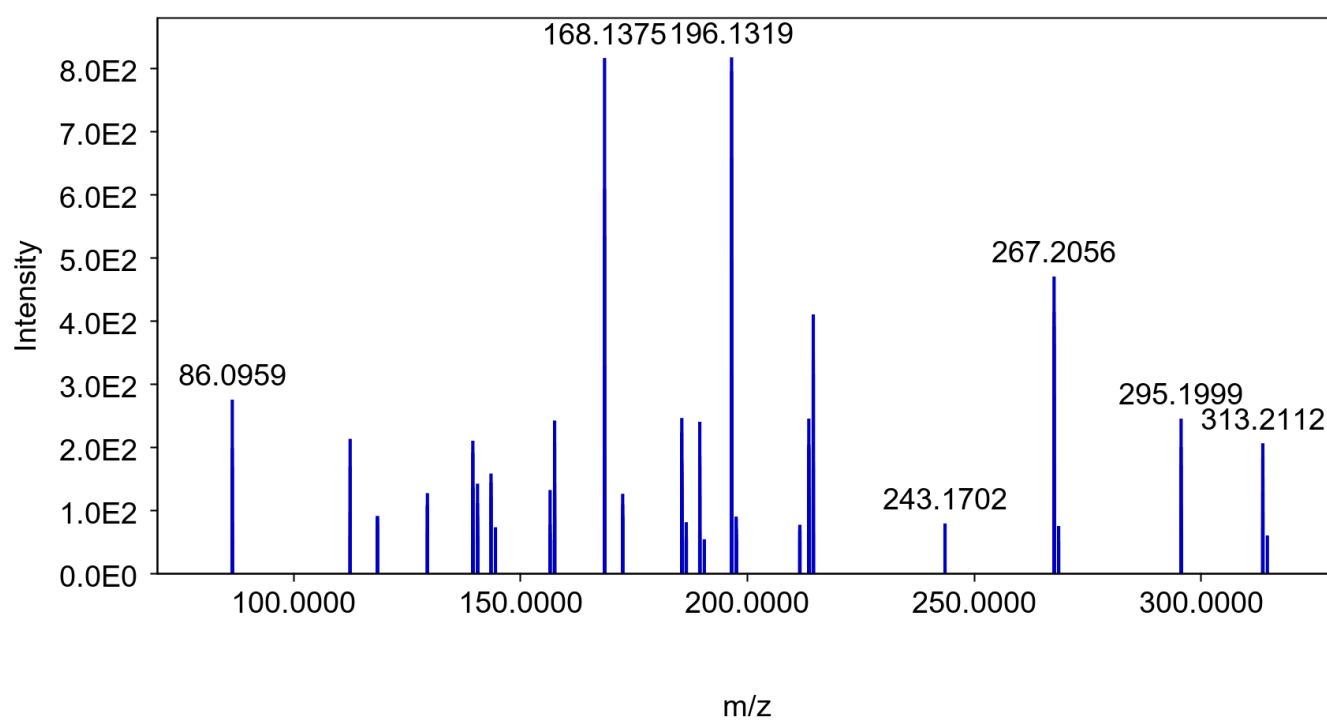


Figure S26. MS/MS fragmentation of isaridin B (56).

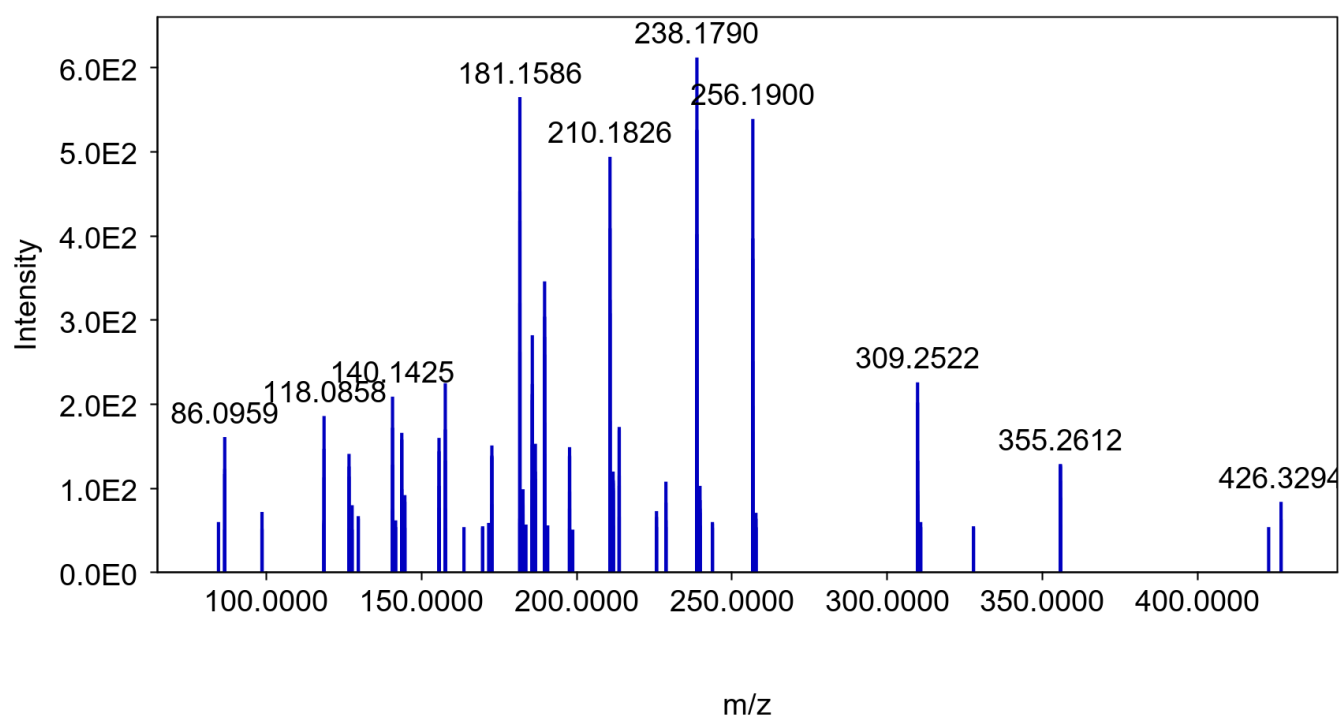


Figure S27. MS/MS fragmentation of isariin (58).

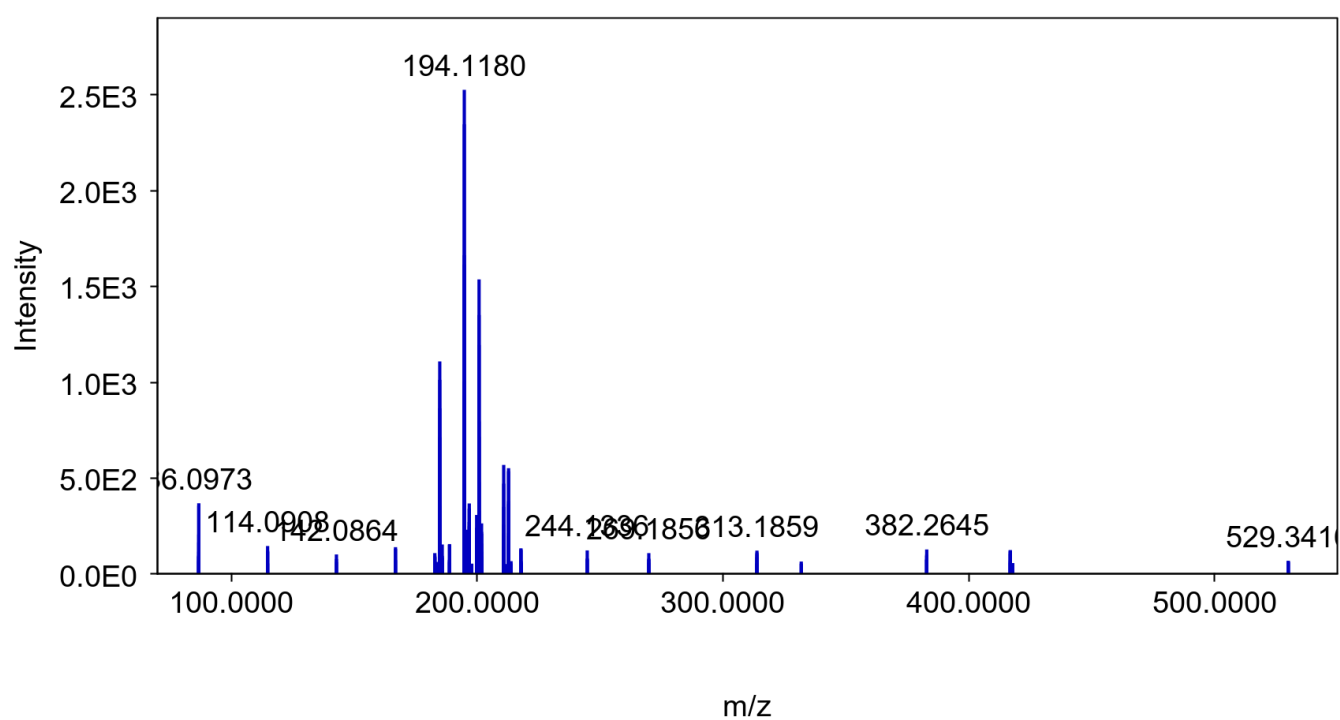


Figure S28. MS/MS fragmentation of psuedodestruxin C (60).

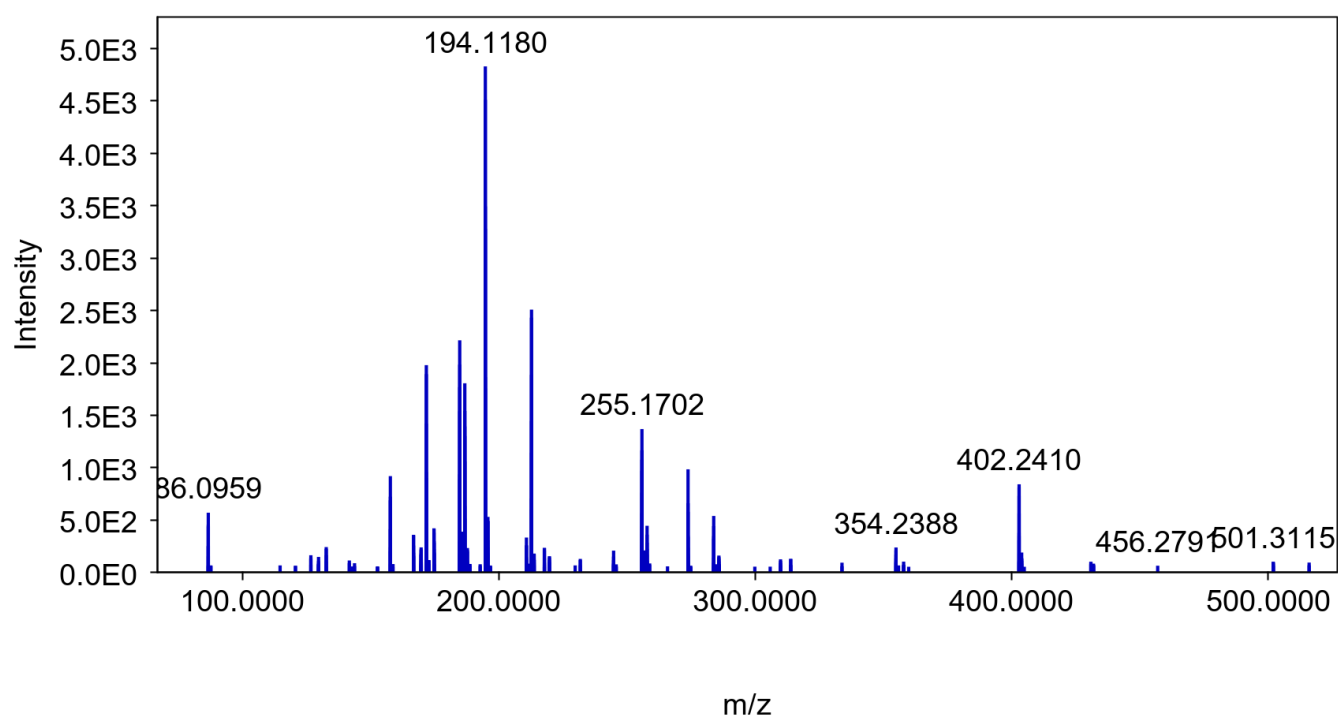


Figure S29. MS/MS fragmentation of desmethyrisaridin E (61).

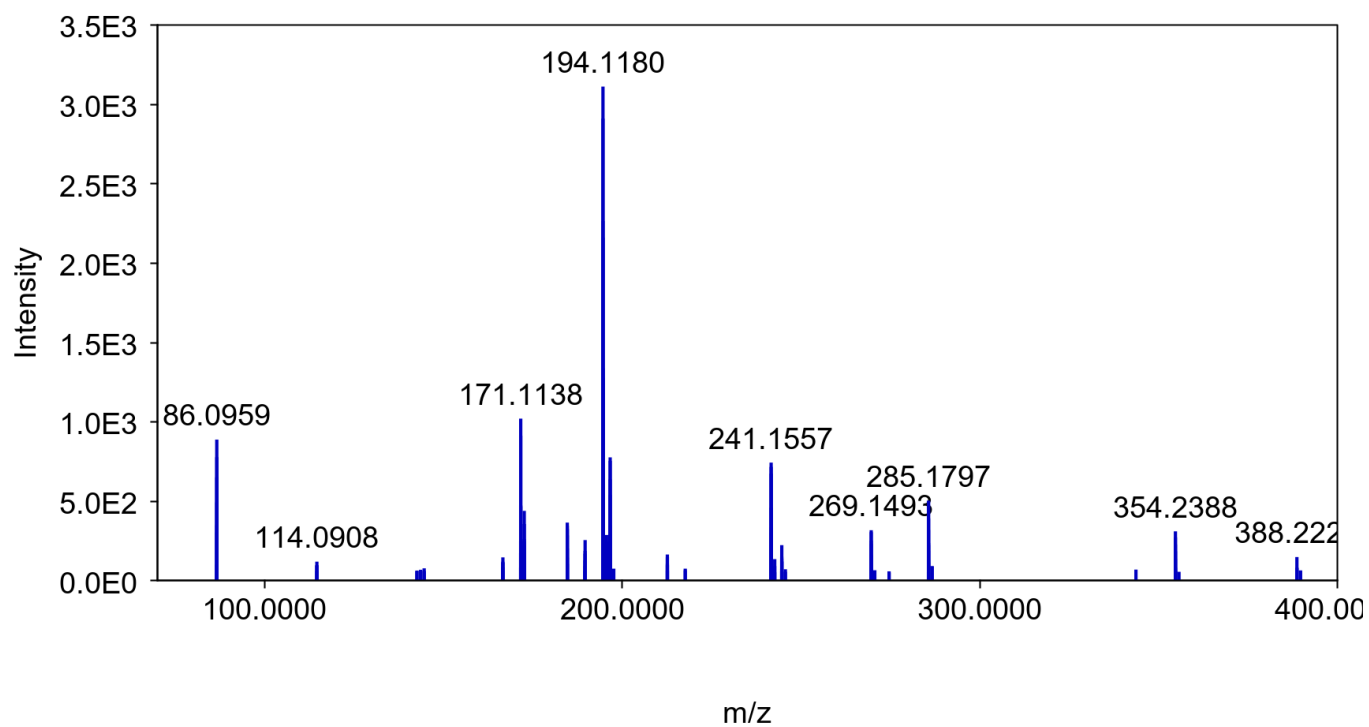


Figure S30. MS/MS fragmentation of isaridin F (62).

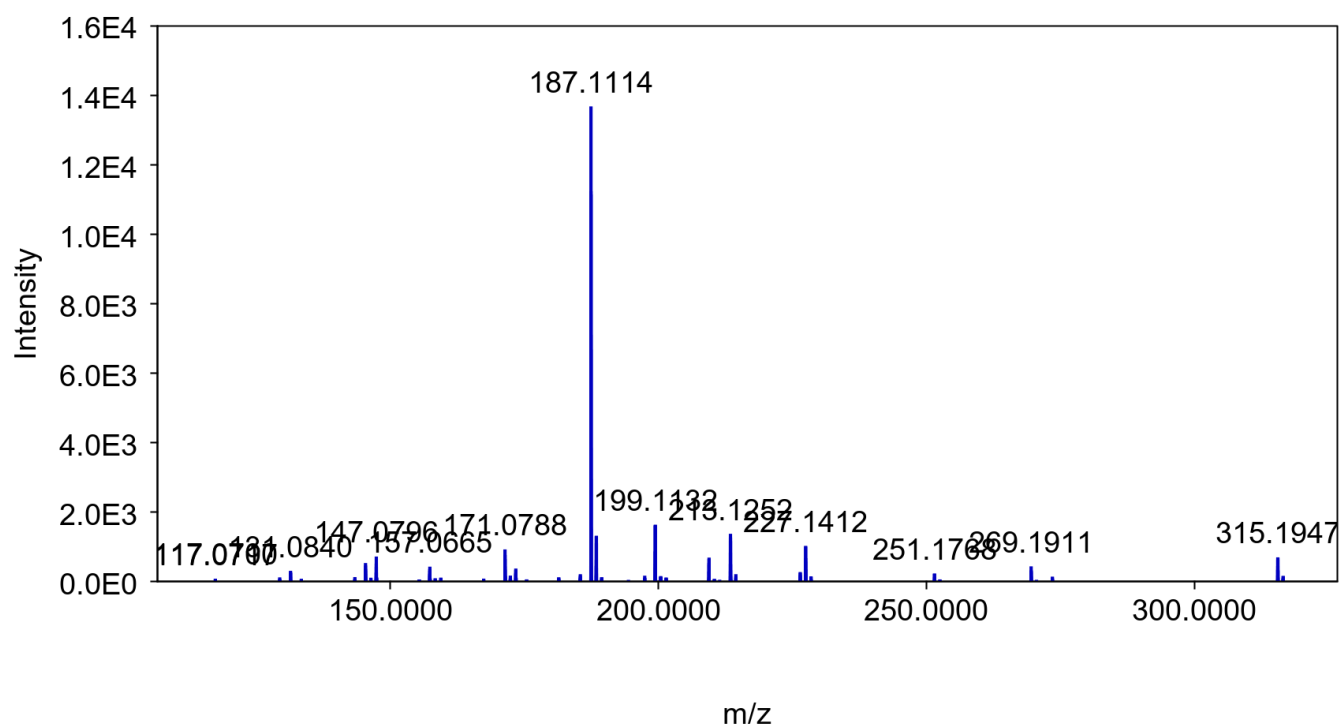


Figure S31. MS/MS fragmentation of 1,4a-dimethyl-9-oxo-7-propan-2-yl-3,4,10,10a-tetrahydro-2H-phenanthrene-1-carboxylic acid (63).

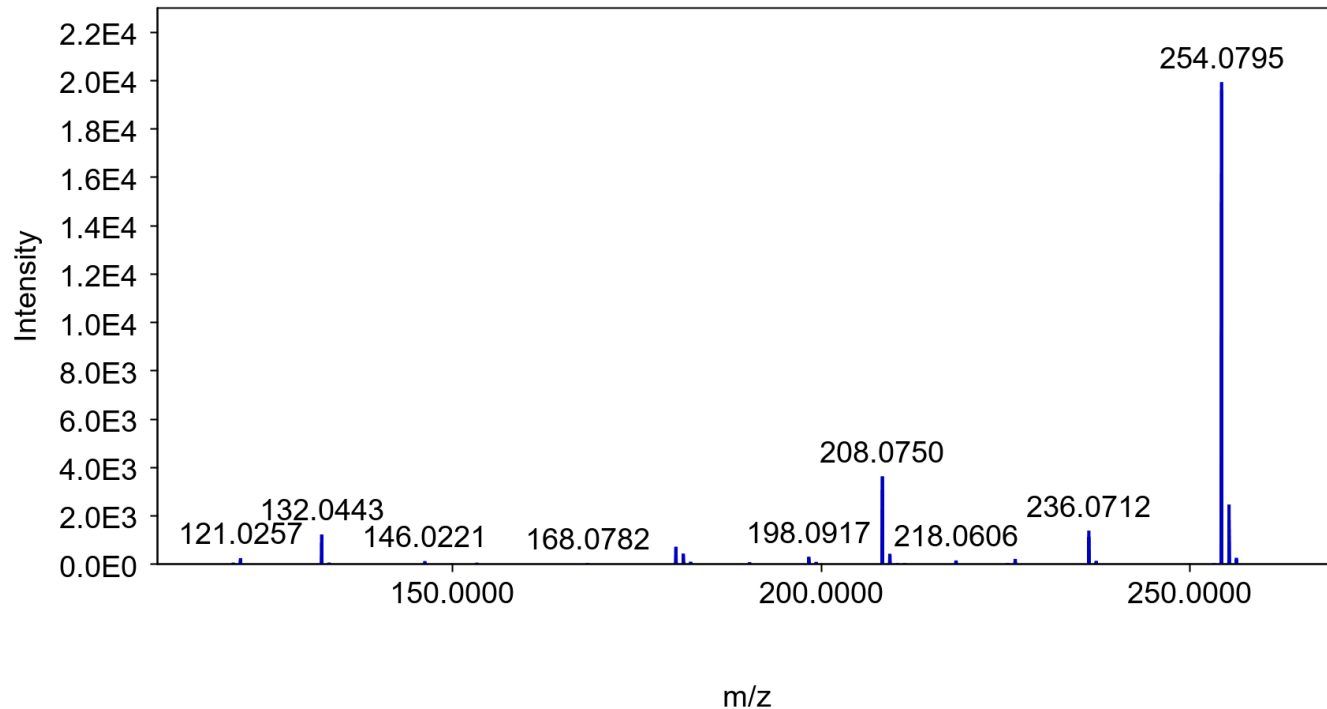


Figure S32. MS/MS fragmentation of viridicatol (64).

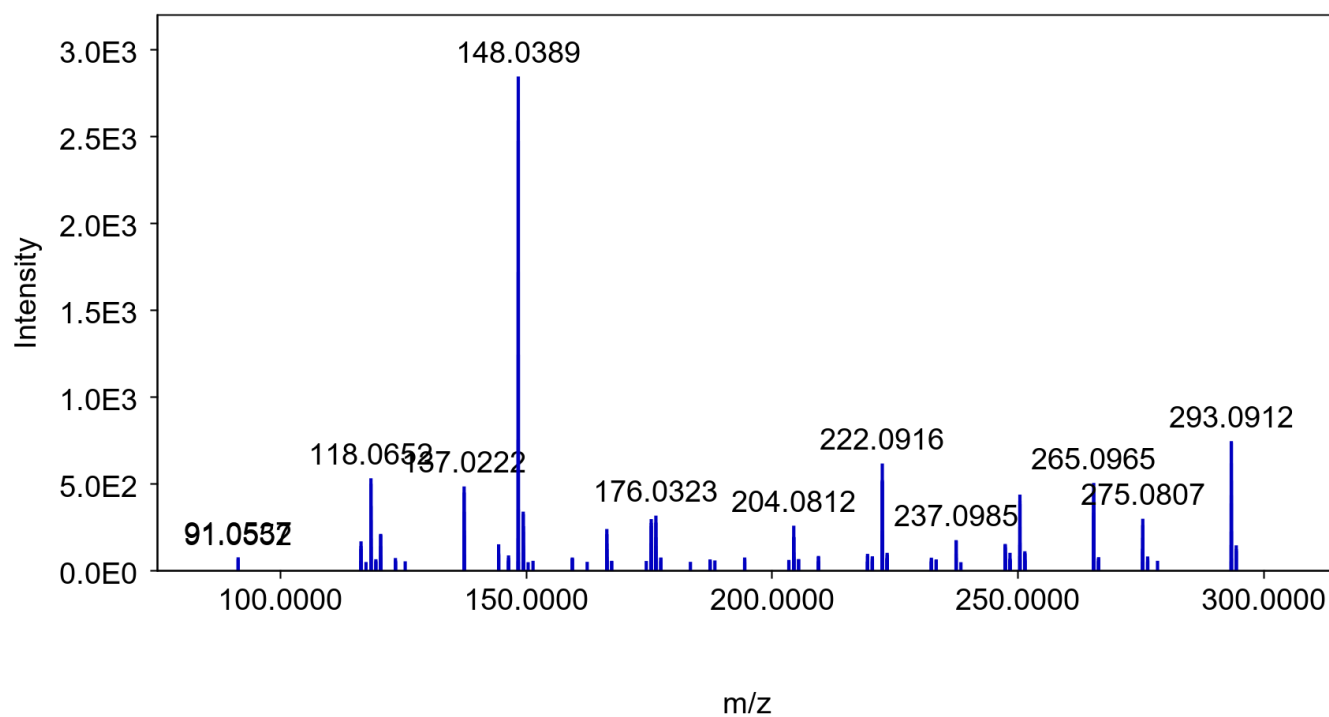


Figure S33. MS/MS fragmentation of citriperazine D (75).

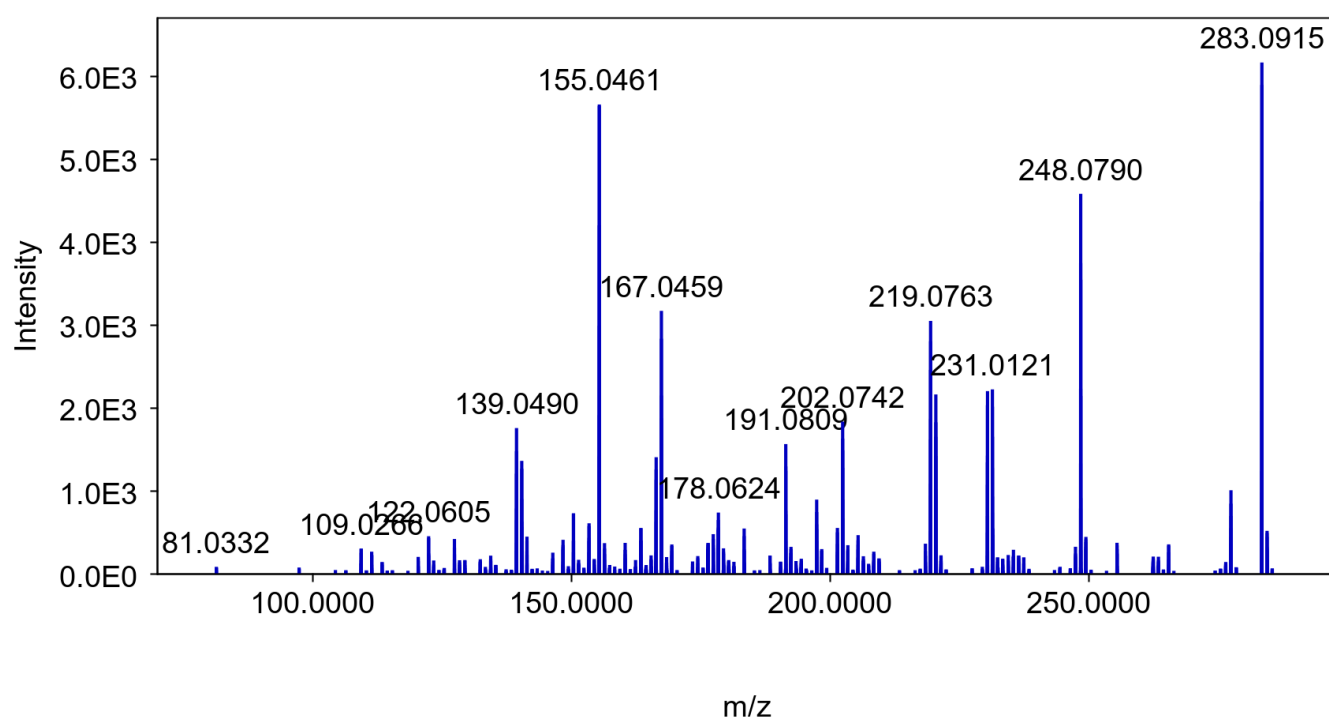


Figure S34. MS/MS fragmentation of pretrichodermamide C (76).

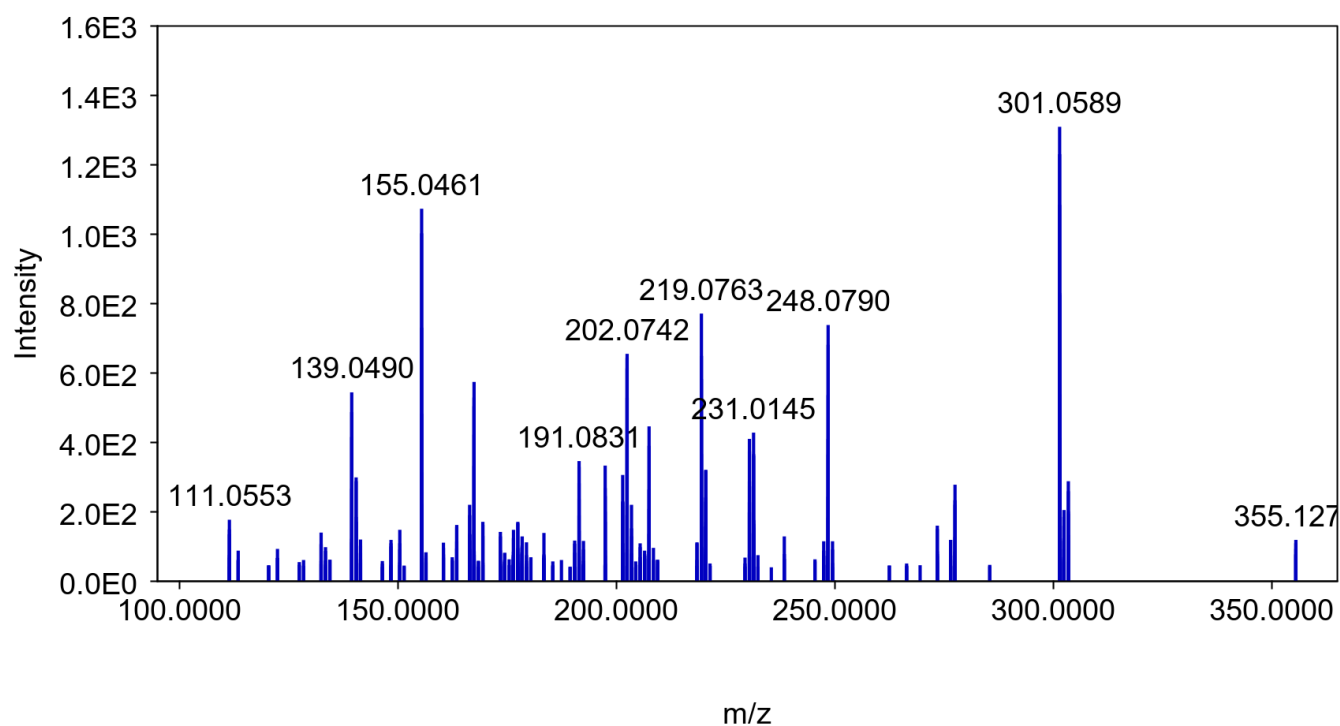


Figure S35. MS/MS fragmentation of N-methylpretichodermamide B (77).

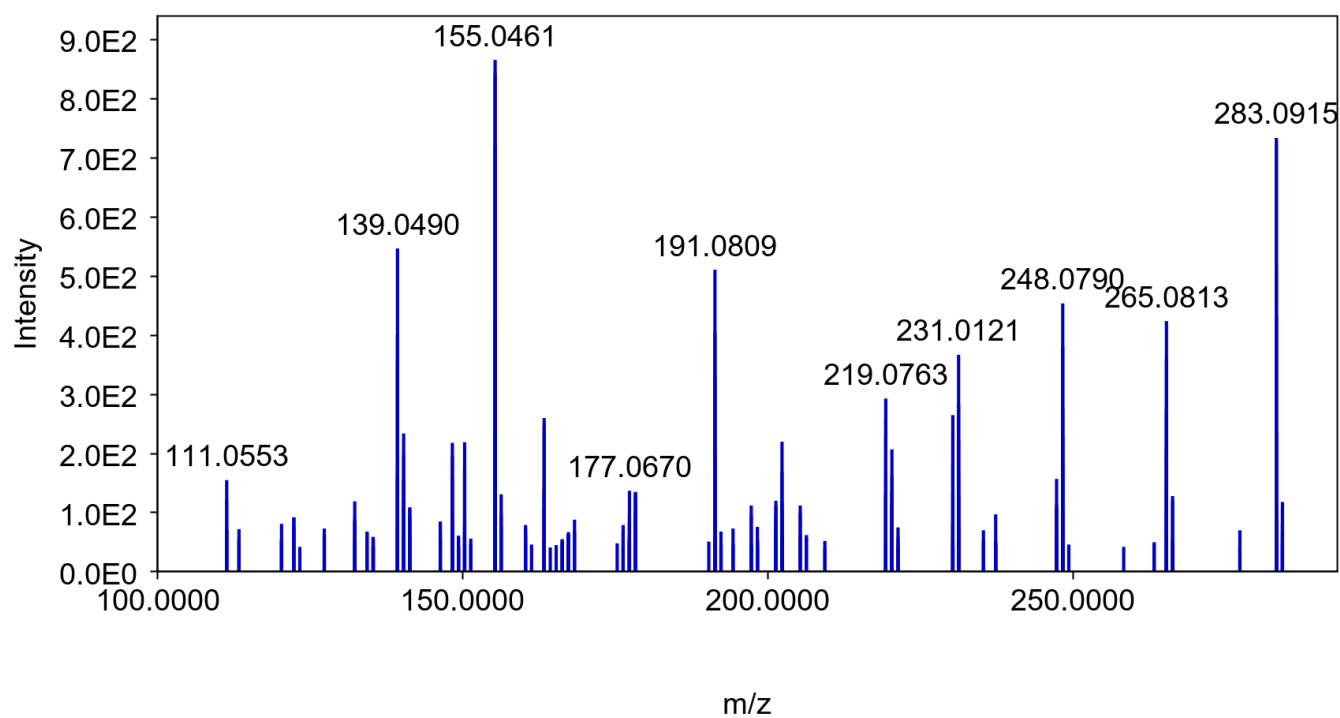


Figure S36. MS/MS fragmentation of pretichodermamide D (78).

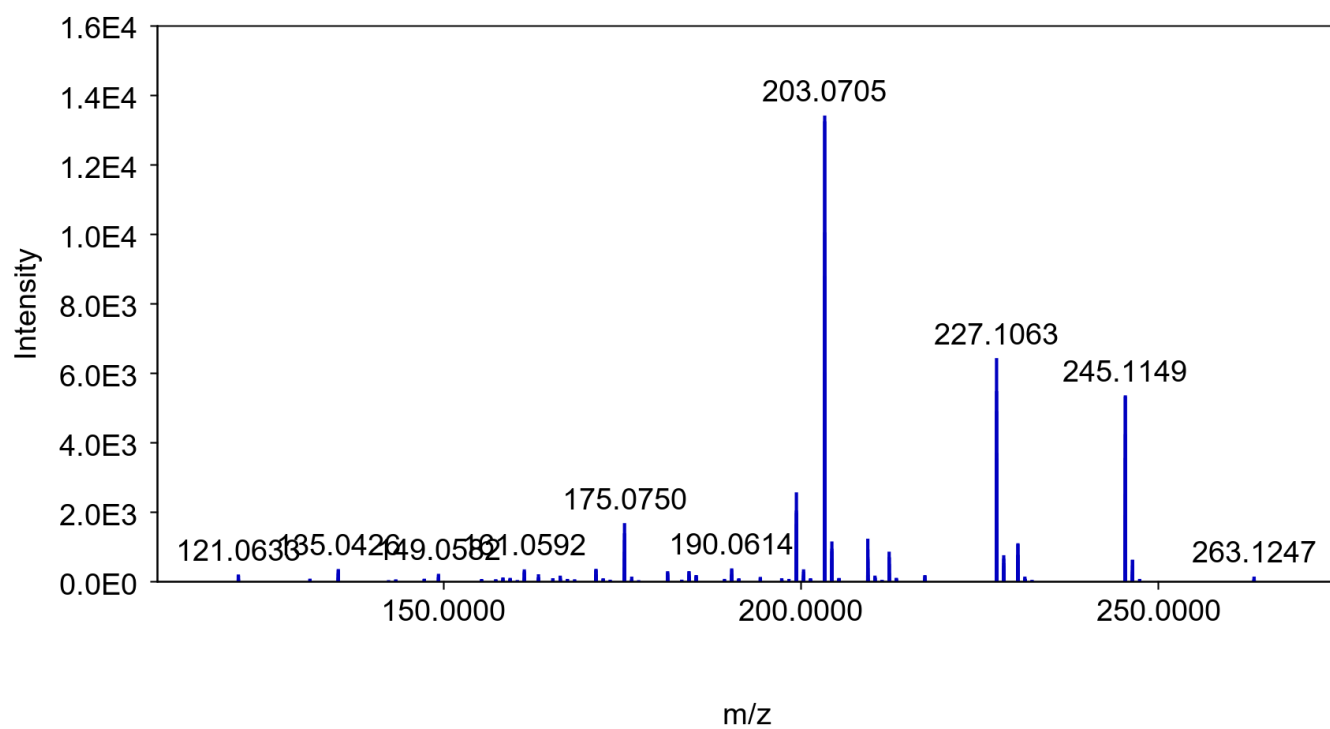


Figure S37. MS/MS fragmentation of coniothyronine B (86).

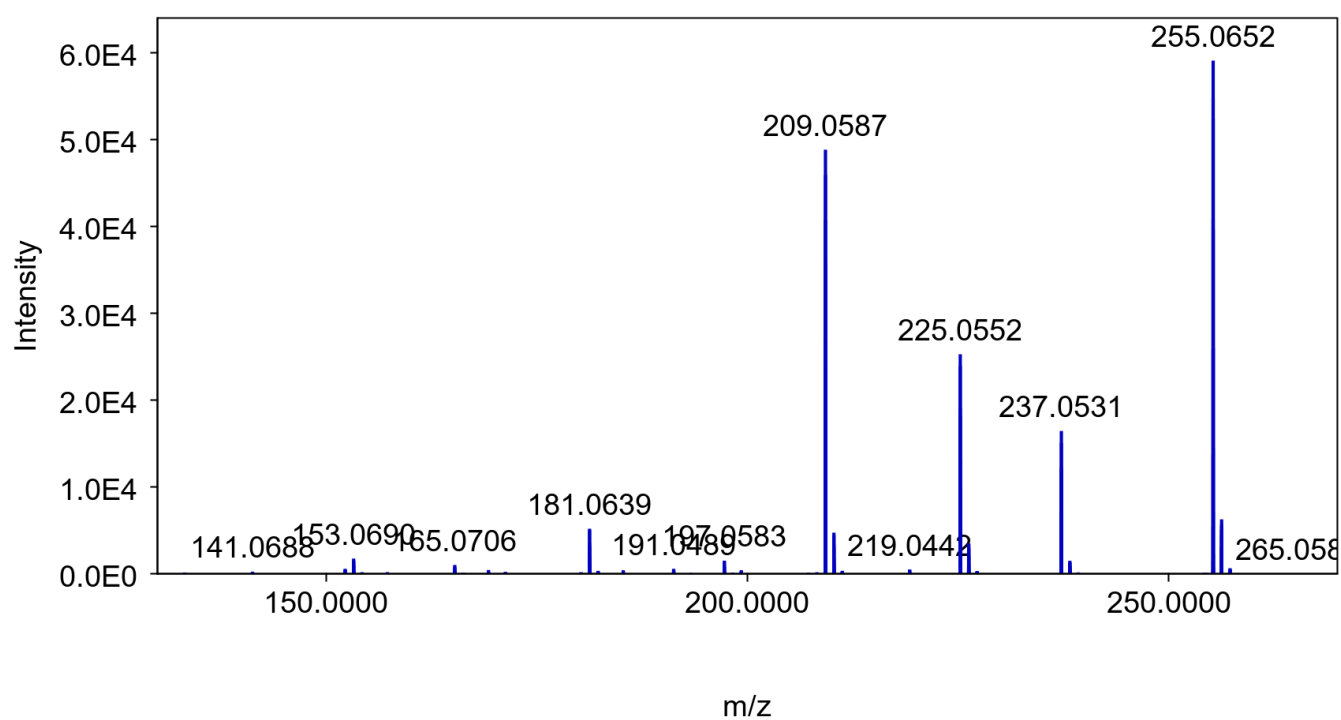


Figure S38. MS/MS fragmentation of 9,10-anthracenedione (88).

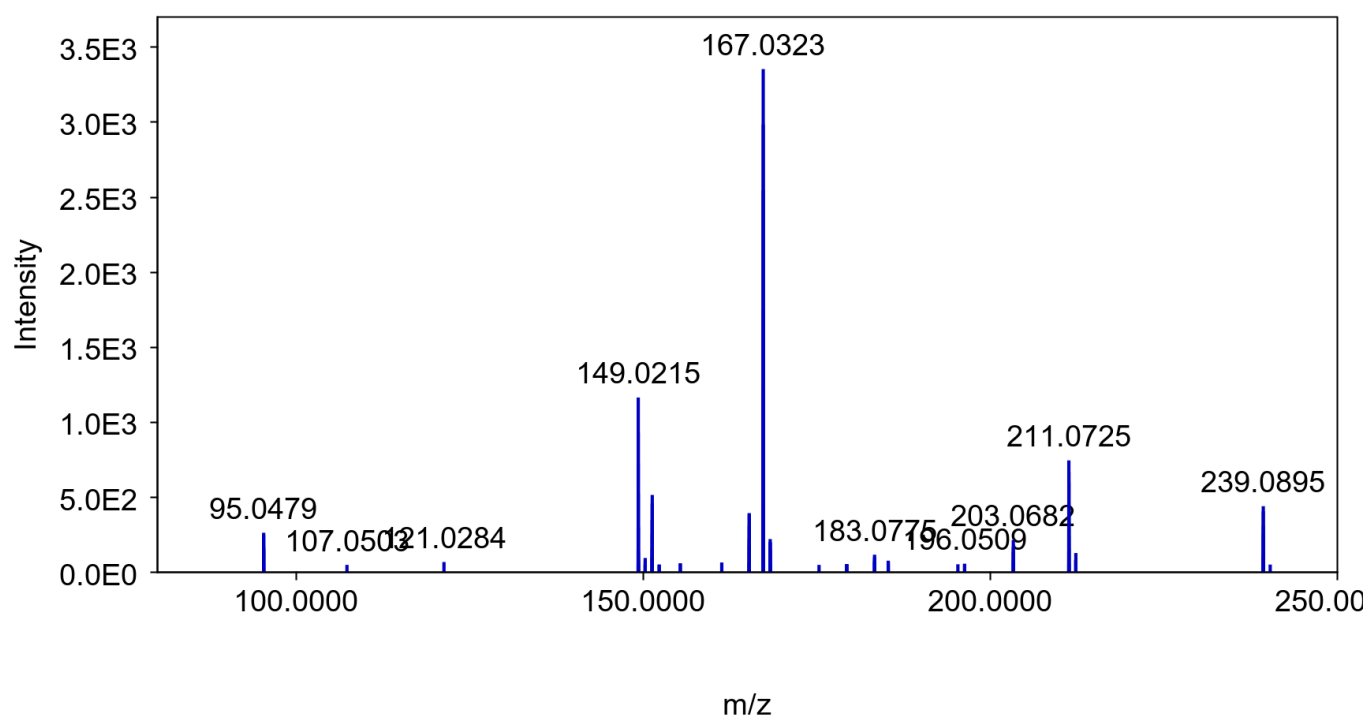


Figure S39. MS/MS fragmentation of trans-3,4-dihydroxy-3,4-dihydroanofinic acid (89).

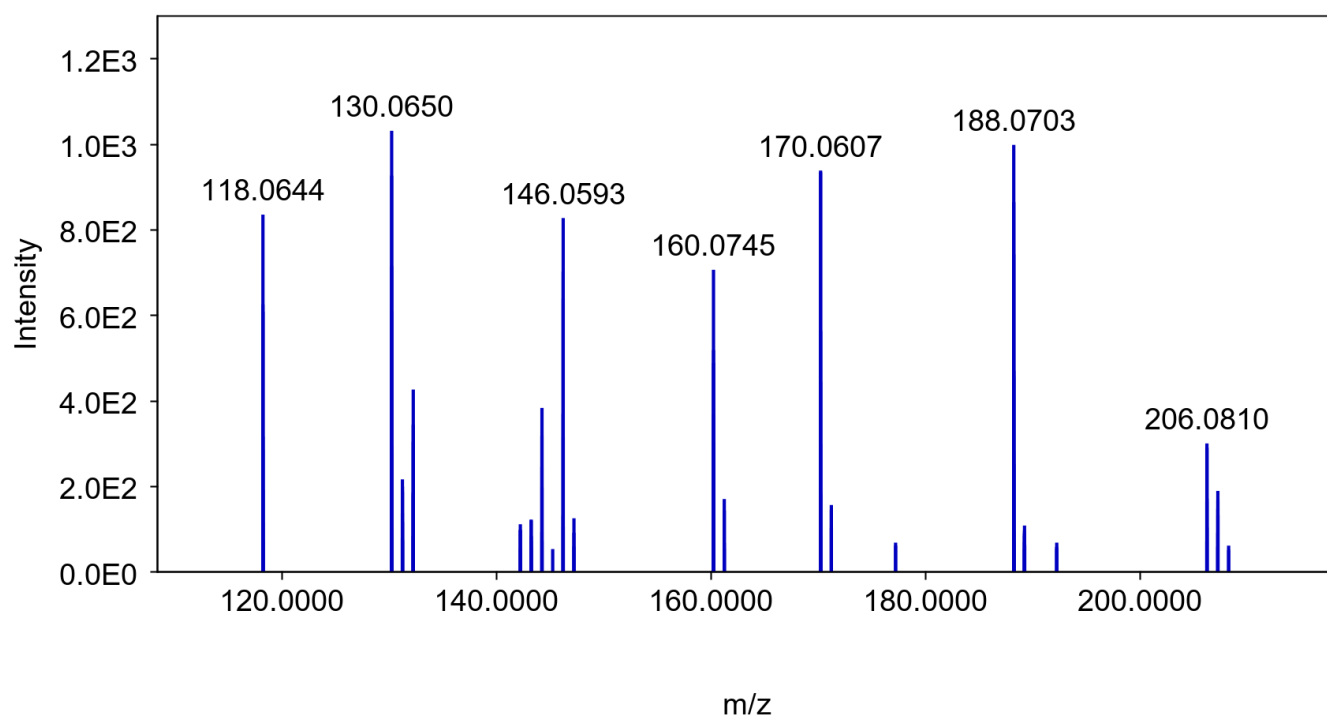


Figure S40. MS/MS fragmentation of indolelactic acid (94).

Table S1. Experimental UPLC MS data for reference compounds

N	Name	RT	Measured main peak	Calcd [M+H] ⁺
1	verruculogen	15.1	512.2400 [M+H] ⁺	512.2391
2	fumitremorgin C	10.1	380.1971 [M+H] ⁺	380.1969
5	tryptoquivaline J	8.0	403.1399 [M+H] ⁺	403.1401
7	spirotriprostatin A	10.4	396.1917 [M+H] ⁺	396.1918
8	6-methoxyspirotriprostatin B	7.6	394.1756 [M+H] ⁺	394.1761
9	tryptoquivaline F	7.8	403.1398 [M+H] ⁺	403.1401
20	ergosterol peroxide	20.4	429.3348 [M+H] ⁺	429.3363
24	16 α -hydroxy-17 β -methoxy-deoxydihydroiso-austamide	7.3	396.1921 [M+H] ⁺	396.1918
25	16 β -hydroxy-17 α -methoxy-deoxydihydroiso-austamide	7.3	396.1921 [M+H] ⁺	396.1918
26	16 α -hydroxy-17 α -methoxy-deoxydihydroiso-austamide	7.3	396.1921 [M+H] ⁺	396.1918
27	16,17-dihydroxy-deoxydihydroisoaustamide	6.2	382.1748 [M+H] ⁺	382.1761
28	16 β ,17 α -dihydroxy-deoxydihydroisoaustamide	6.0	382.1748 [M+H] ⁺	382.1761
29	16 α ,17 α -dihydroxy-deoxydihydroisoaustamide	6.6	382.1748 [M+H] ⁺	382.1761
30	3 β -hydroxydeoxyisoaustamide	2.9	364.1655 [M+H] ⁺	364.1656
31	deoxy-14,15-dehydroisoaustamide	10.8	346.1544 [M+H] ⁺	346.1550
32	(+)-deoxyisoaustamide	7.7	348.1713 [M+H] ⁺	348.1707
33	desoxybrevianamide E	9.6	352.2019 [M+H] ⁺	352.2020
45	oxirapentyn B	9.7	335.1496 [M+H] ⁺	335.1489
46	oxirapentyn E	7.2	275.1280 [M-H ₂ O+H] ⁺	275.1278
47	oxirapentyn F	7.1	353.1593 [M+H] ⁺	353.1595
48	oxirapentyn G	2.2	311.1504 [M+H] ⁺	311.1489

49	oxirapentyn H	2.9	371.1702 [M+H] ⁺	371.1700
50	oxirapentyn I	2.9	371.1702 [M+H] ⁺	371.1700
51	oxirapentyn J	6.2	353.1589 [M+H] ⁺	353.1595
52	isariketide A	5.7	313.0911 [M+H] ⁺	313.0918
53	acremine S	3.7	207.1014 [M+H] ⁺	207.1016
54	diorcin	10.4	231.1011 [M+H] ⁺	231.1016
66	quinolactacide	5.4	237.0665 [M+H] ⁺	237.0659
67	3,5-dimethyl-8-methoxy-3,4-dihydro-1H-iso-chromene-6-ol	8.7	209.1171 [M+H] ⁺	209.1172
68	anserinone B	4.6	193.0856 [M-H ₂ O+H] ⁺	193.0859
69	formylanserinone B	7.5	239.0915 [M+H] ⁺	239.0914
70	6-methyl curvulinic acid	5.3	207.0650 [M-H ₂ O+H] ⁺	207.0652
71	4-methoxyisoquinolin-1(2H)-one	2.6	176.0702 [M+H] ⁺	176.0706
72	N,N-diethyl-3-methylbenzamide	9.7	192.1390 [M+H] ⁺	192.1383
73	4-hydroxy-3,6-dimethyl-2-pyrone	2.7	141.0548 [M+H] ⁺	141.0546
74	hydroxy-N-acetyl-β-oxotriptamine	2.4	233.0924 [M+H] ⁺	233.0921
75	citriperazine D	4.4	339.0975 [M-H ₂ O+H] ⁺	339.0976
76	pretrichodermamide C	5.4	513.0990 [M+H] ⁺	513.1996
77	N-methylpretrichodermamide B	8.1	531.0647 [M+H] ⁺	531.0657
78	pretrichodermamide D	5.9	513.0990 [M+H] ⁺	513.0996
79	4-hydroxyscytalone	2.2	211.0604 [M+H] ⁺	211.0601
80	4-hydroxy-6-dehydroxyscytalone	3.0	195.0654 [M+H] ⁺	195.0652
81	3-methylorsellinic acid	2.6	183.0659	183.0652
82	acruciquinone A	6.4	277.1067 [M+H] ⁺	277.1071
83	acruciquinone C	4.6	279.1227 [M+H] ⁺	279.1227

84	pleosporon	3.8	291.0855 [M+H] ⁺	291.0863
85	coniothyrinone D	4.9	279.1226 [M+H] ⁺	279.1227
86	coniothyrinone B	7.0	263.1277 [M+H] ⁺	263.1278
87	rubrumol	5.2	277.1064 [M+H] ⁺	277.1071
88	9,10-anthracenedione	10.1	255.0651 [M+H] ⁺	255.0652
89	trans-3,4-dihydroxy-3,4- dihydroanofinic acid	4.9	239.0909 [M+H] ⁺	239.0914
90	quadricinctapyran A	7.8	221.0815 [M+H] ⁺	221.0808
91	7-hydroxymethyl-1,2- naphthalenediol	6.2	191.0706 [M+H] ⁺	191.0703
92	gliovictin	8.3	377.0962 [M+Na] ⁺	377.0964
93	acrucipentyn A	4.1	231.0781 [M+H] ⁺	231.0782
