Supplementary Materials

No Evidence Was Found for the Presence of Terreolides, Terreumols or Saponaceolides H-S in the Fruiting Bodies of *Tricholoma terreum* (Basidiomycota, Agaricales)

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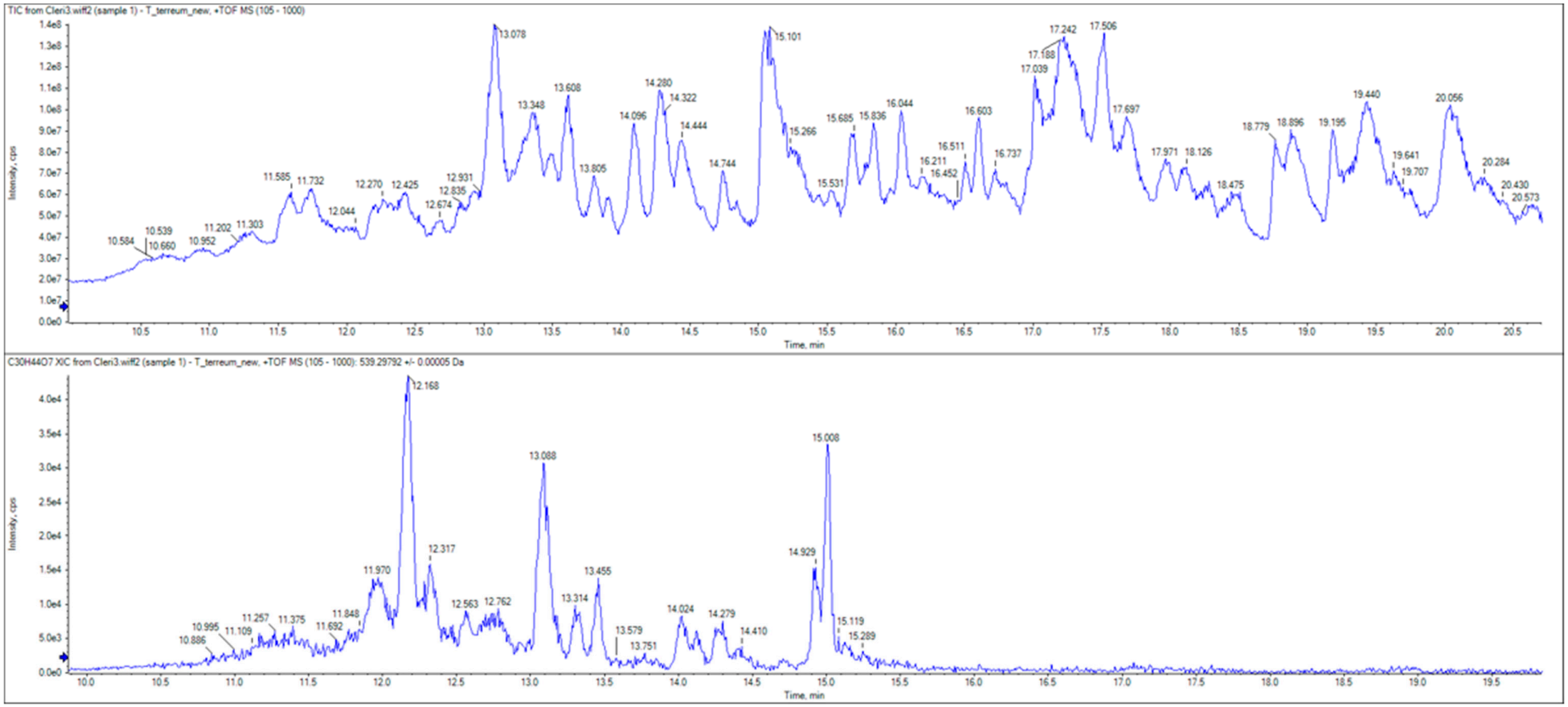


Figure S1: SIM search for the mass peak corresponding to the formula $C_{30}H_{44}O_7$ (terreolide A), in the HR-ESI$^+$ chromatogram of *T. terreum*_Bz. Note that the intensity of the retrieved peaks is almost four orders of magnitude lower than the peaks in the TIC chromatogram. As a consequence, we consider this as a negative result.

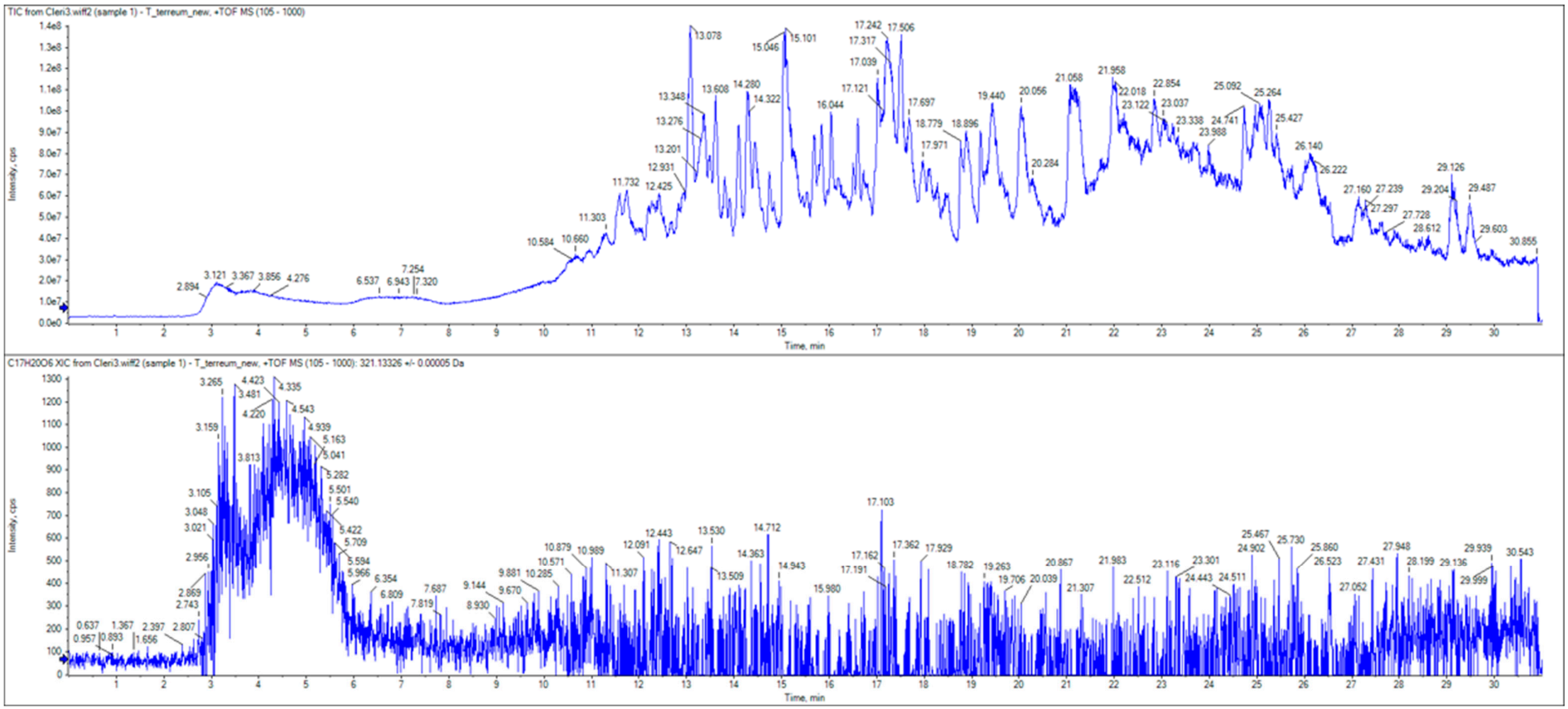


Figure S2: SIM search for the mass peak corresponding to the formula $C_{17}H_{20}O_6$ (terreumol A).

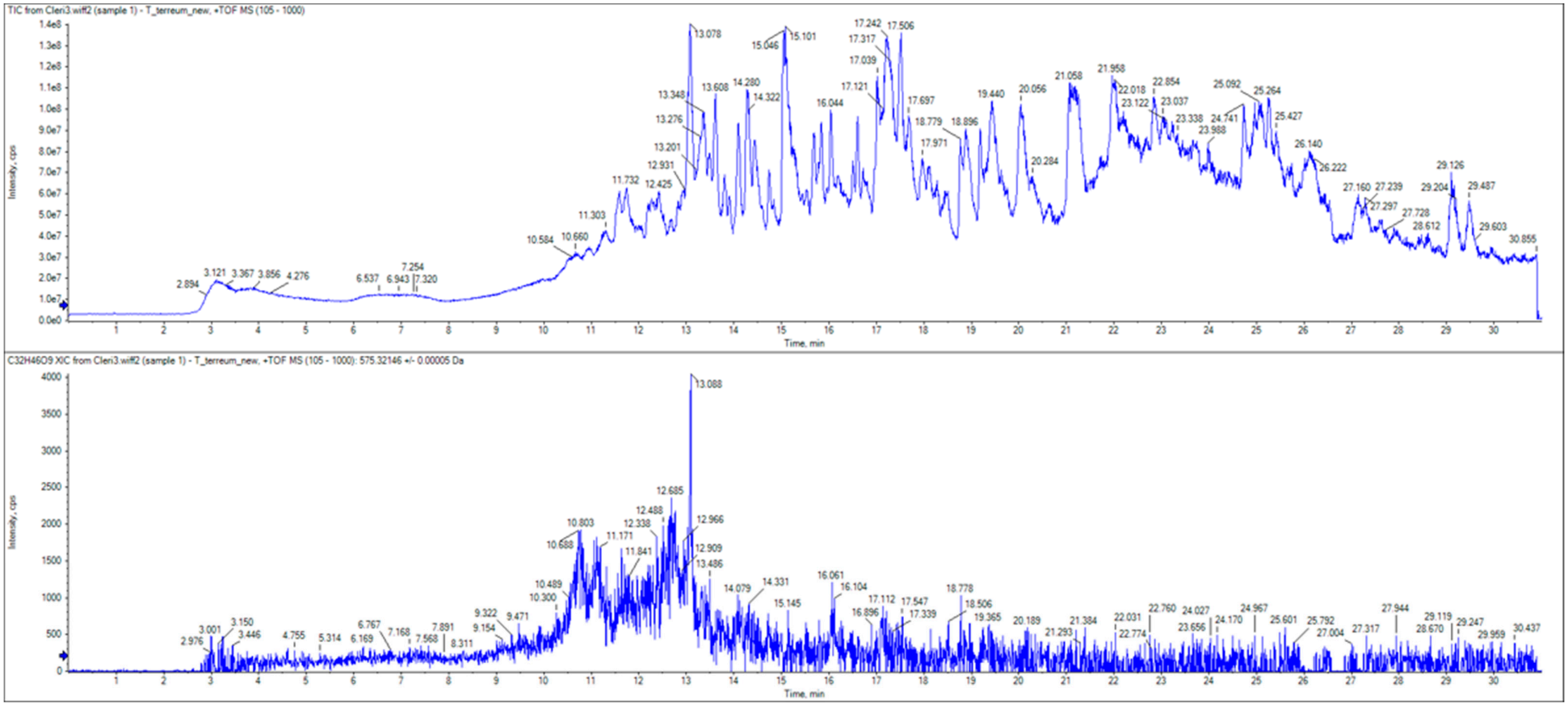


Figure S3: SIM search for the mass peak corresponding to the formula $C_{32}H_{46}O_9$ (saponaceolide M).

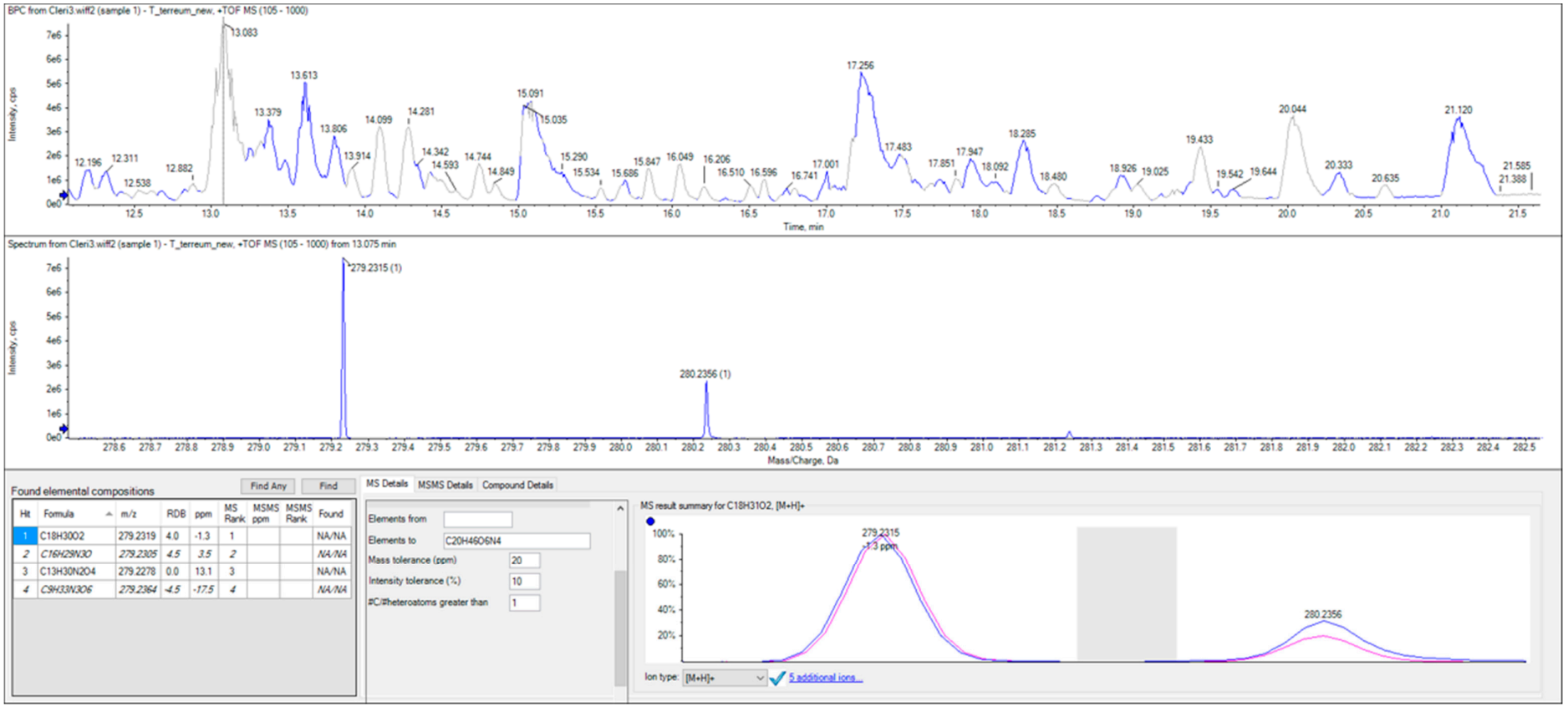
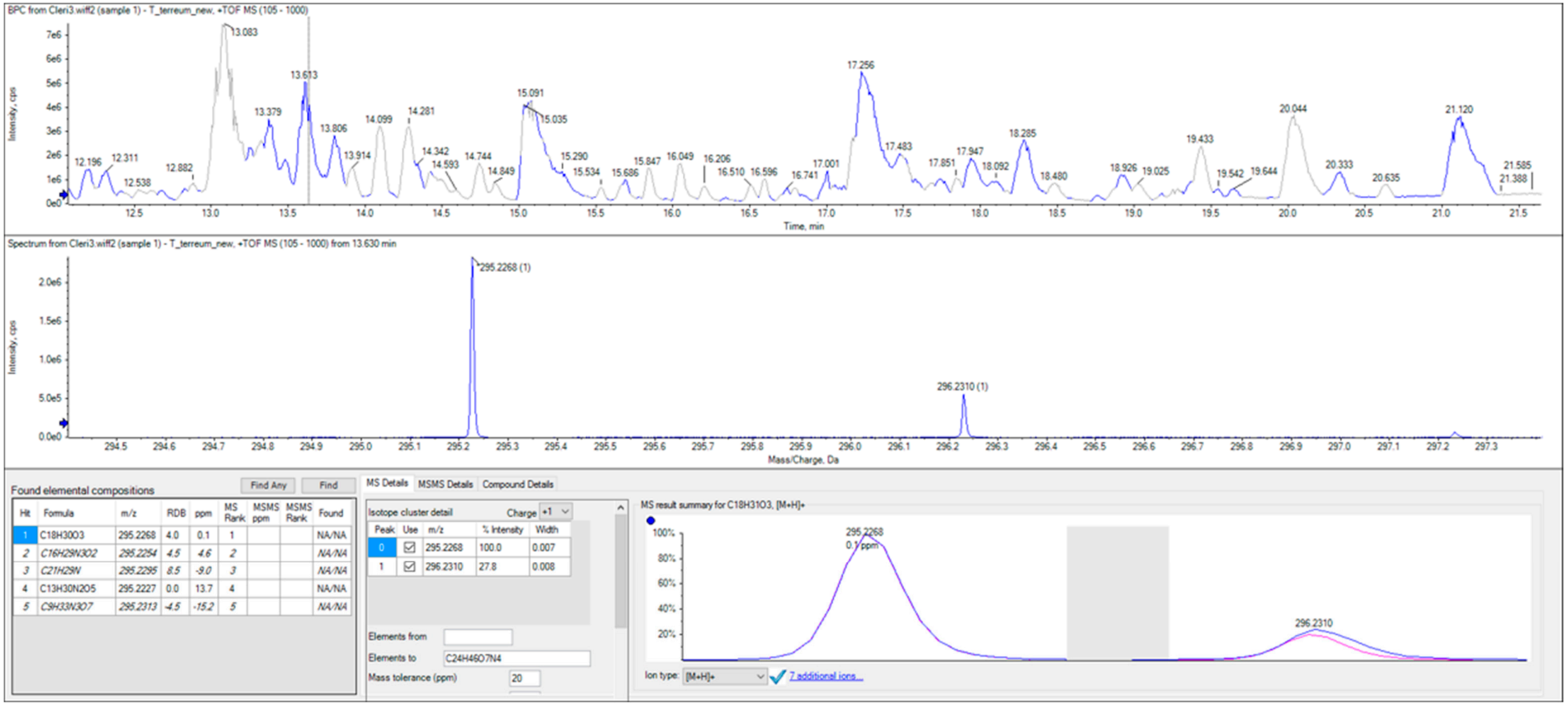


Figure S4: Mass spectrum of the peak at t_R 13.1 minutes in the chromatogram of fig. 3. Best fit is found for a molecular formula $C_{18}H_{30}O_2$.



Hit	Formula	m/z	RDB	ppm	MS Rank	MSMS ppm	MSMS Rank	Found
1	C18H30O3	295.2268	4.0	0.1	1			NA/NA
2	C16H29N3O2	295.2254	4.5	4.6	2			NA/NA
3	C21H29N	295.2295	8.5	-9.0	3			NA/NA
4	C13H30N2O5	295.2227	0.0	13.7	4			NA/NA
5	C9H33N3O7	295.2313	-4.5	-15.2	5			NA/NA

Peak	Use	m/z	% Intensity	Width
0	☑	295.2268	100.0	0.007
1	☑	296.2310	27.8	0.008

Figure S5: Mass spectrum of the peak at t_R 13.6 minutes in the chromatogram of fig. 3. Best fit is found for a molecular formula $C_{18}H_{30}O_3$.

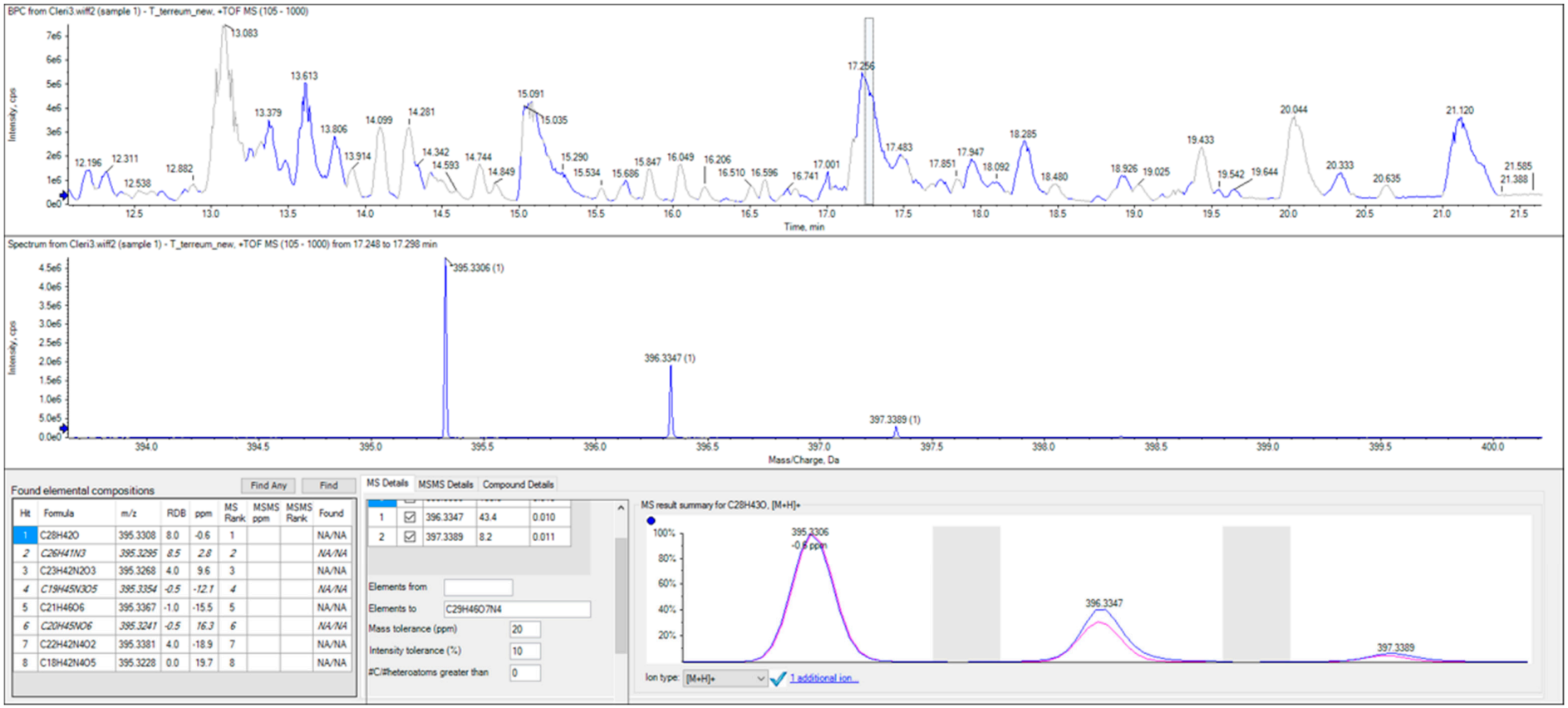


Figure S6: Mass spectrum of the peak at t_R 17.3 minutes in the chromatogram of fig. 3. Best fit is found for a molecular formula $C_{28}H_{42}O$.

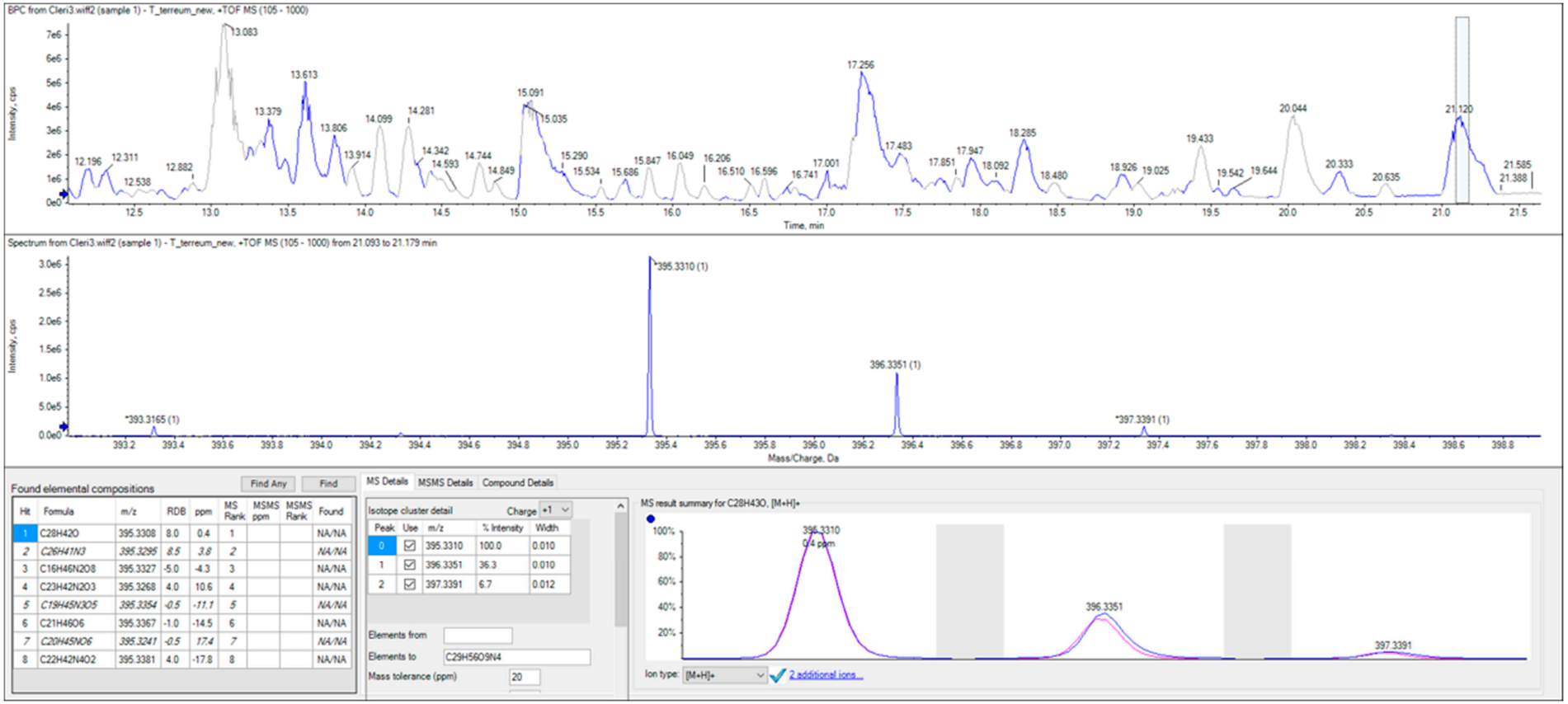
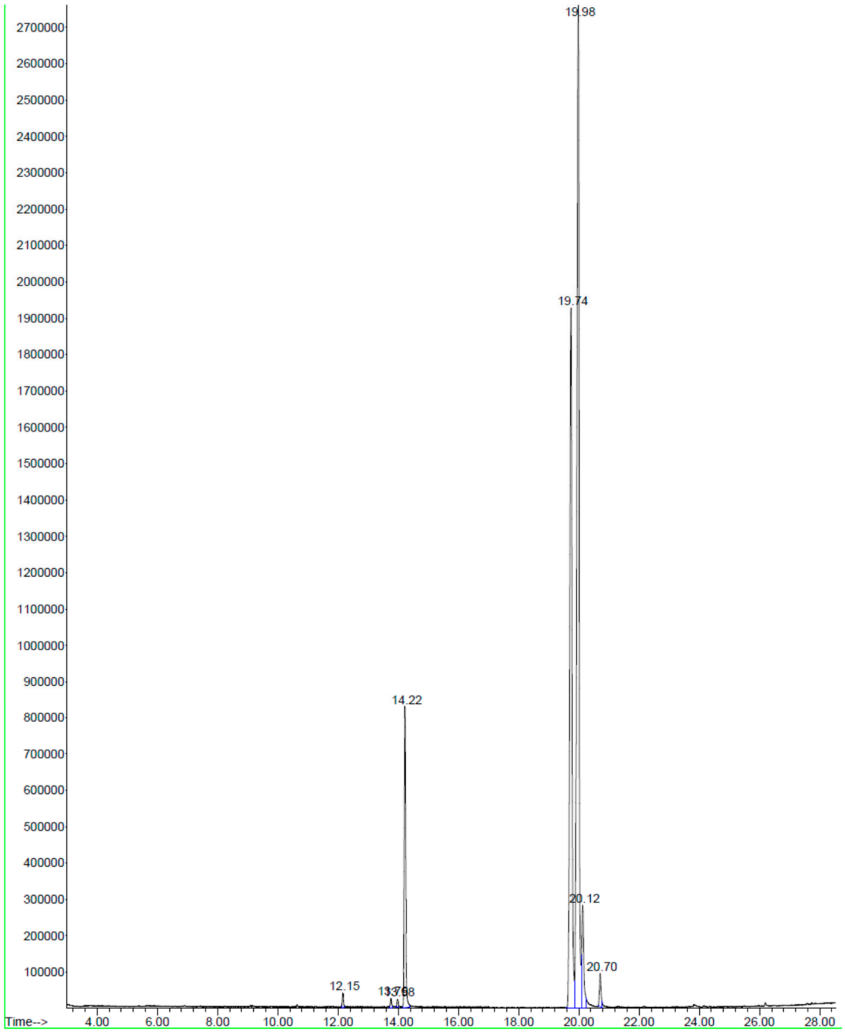


Figure S7: Mass spectrum of the peak at t_R 21.1 minutes in the chromatogram of fig. 3. Best fit is found for a molecular formula $C_{28}H_{42}O$



peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	12.153	1709	1715	1727	M2	40583	1046539	0.74%	0.366%
2	13.755	2006	2015	2024	M6	26051	816460	0.58%	0.285%
3	13.974	2048	2056	2064	M5	21426	627305	0.44%	0.219%
4	14.220	2087	2102	2133	M2	830081	28337847	20.10%	9.901%
5	19.742	3015	3035	3052	M2	1935090	98870253	70.12%	34.544%
6	19.980	3052	3071	3086	M	2766602	140998092	100.00%	49.263%
7	20.126	3087	3093	3109	M3	282116	12236644	8.68%	4.275%
8	20.702	3172	3180	3189	M4	91188	3283962	2.33%	1.147%

t_R 12.15 min: pentadecanoic acid methyl ester
t_R 13.75 min and 13.97 min: palmitoleic acid methyl ester isomers
t_R 14.22 min: palmitic acid methyl ester
t_R 19.74 min: linoleic acid methyl ester
t_R 19.98 min: oleic acid methyl ester
t_R 20.13 min: asclepic acid methyl ester
t_R 20.70 min: stearic acid methyl ester

Figure S8: GC-MS analysis of the fatty acid content of the *T. terreum*_Bz extract.

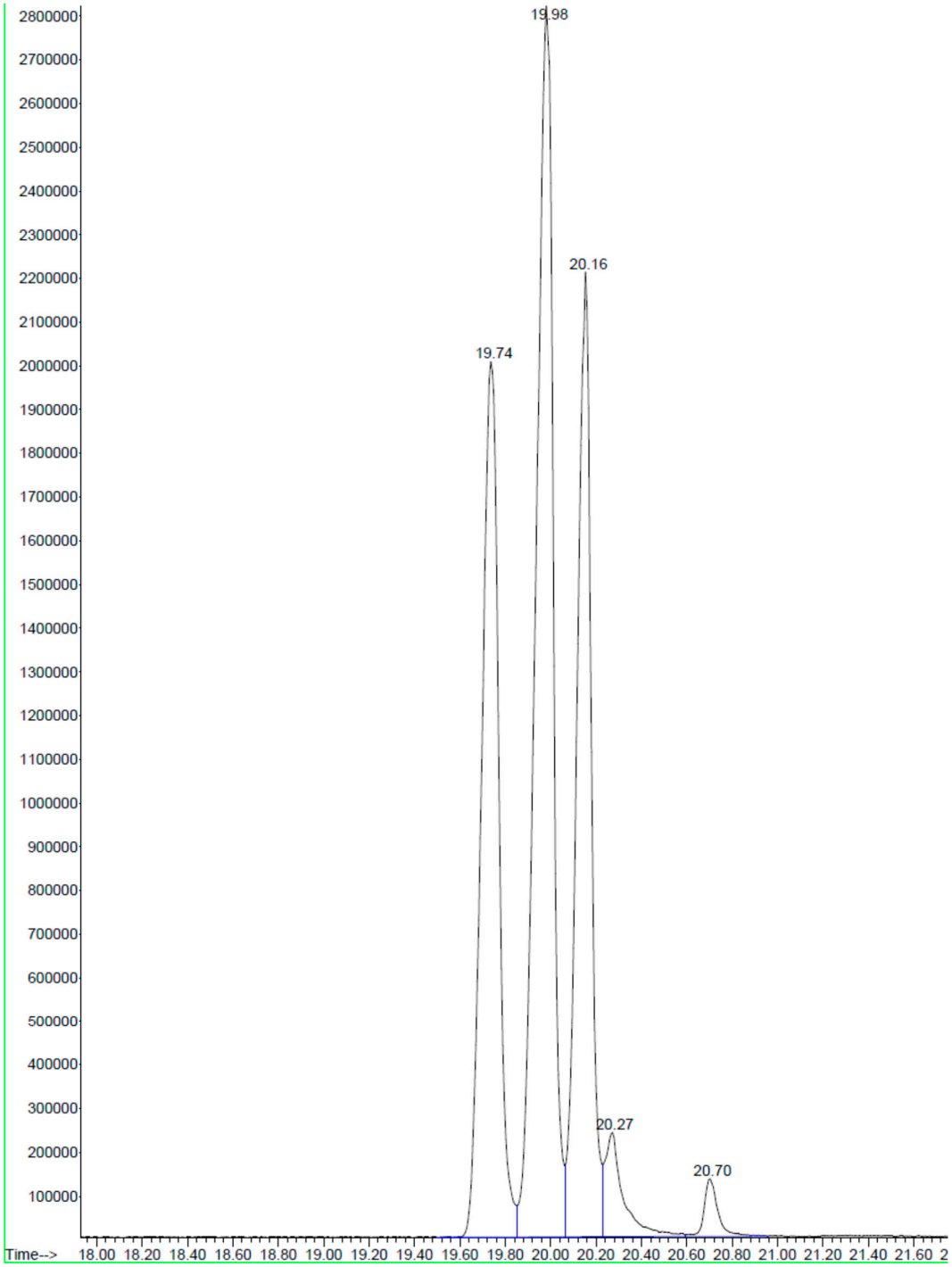


Figure S9: GC-MS analysis of the fatty acid content of the *T. terreum*_Bz extract after addition of a reference standard of asclepic acid (t_R 20.16 min) containing the corresponding *trans* isomer (vaccenic acid, t_R 20.27 min).

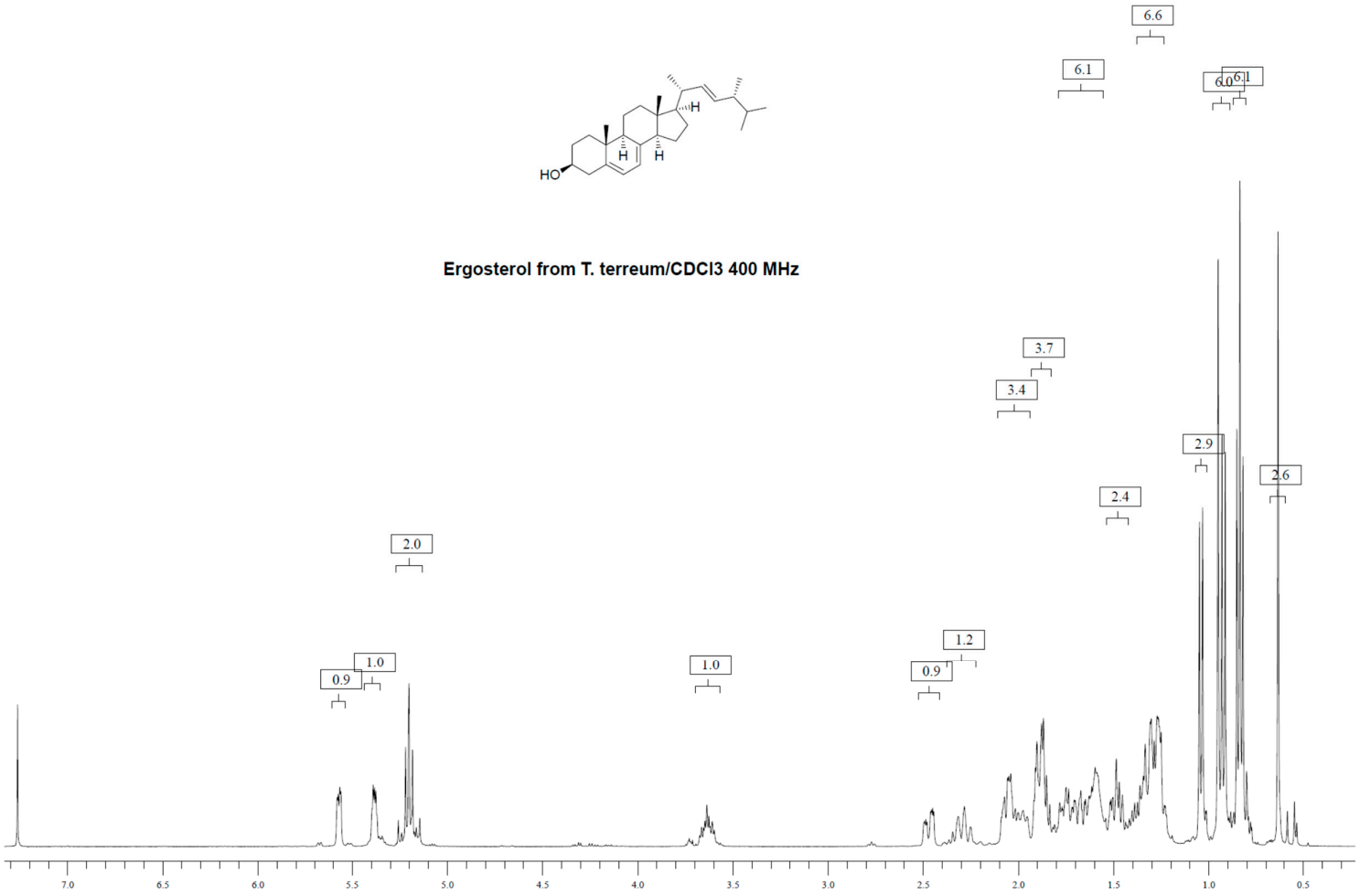


Figure S10: ^{1}H NMR spectrum of ergosterol extracted from *T. terreum* _Bz.

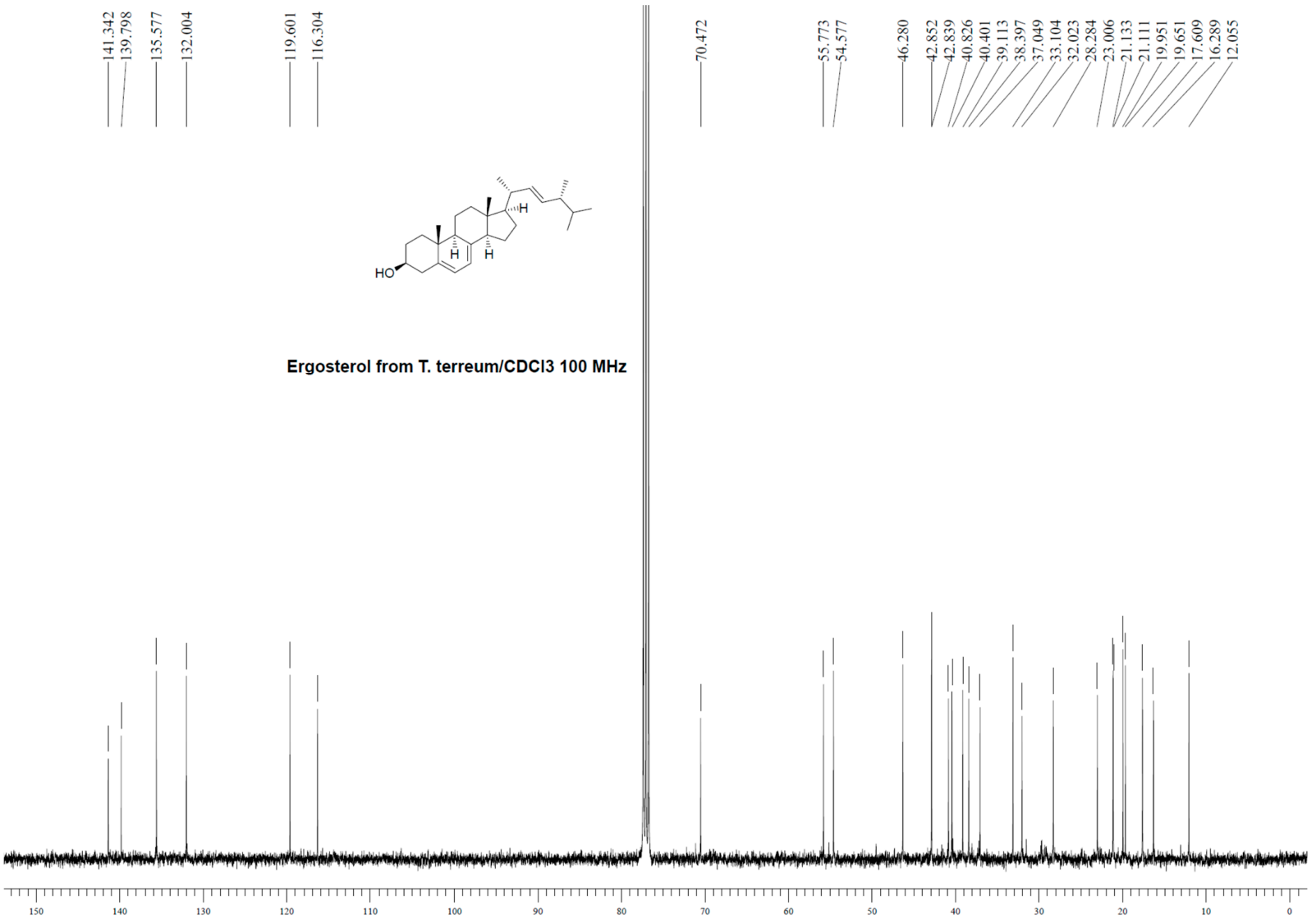


Figure S11: ^{13}C NMR spectrum of ergosterol extracted from *T. terreum* _Bz.

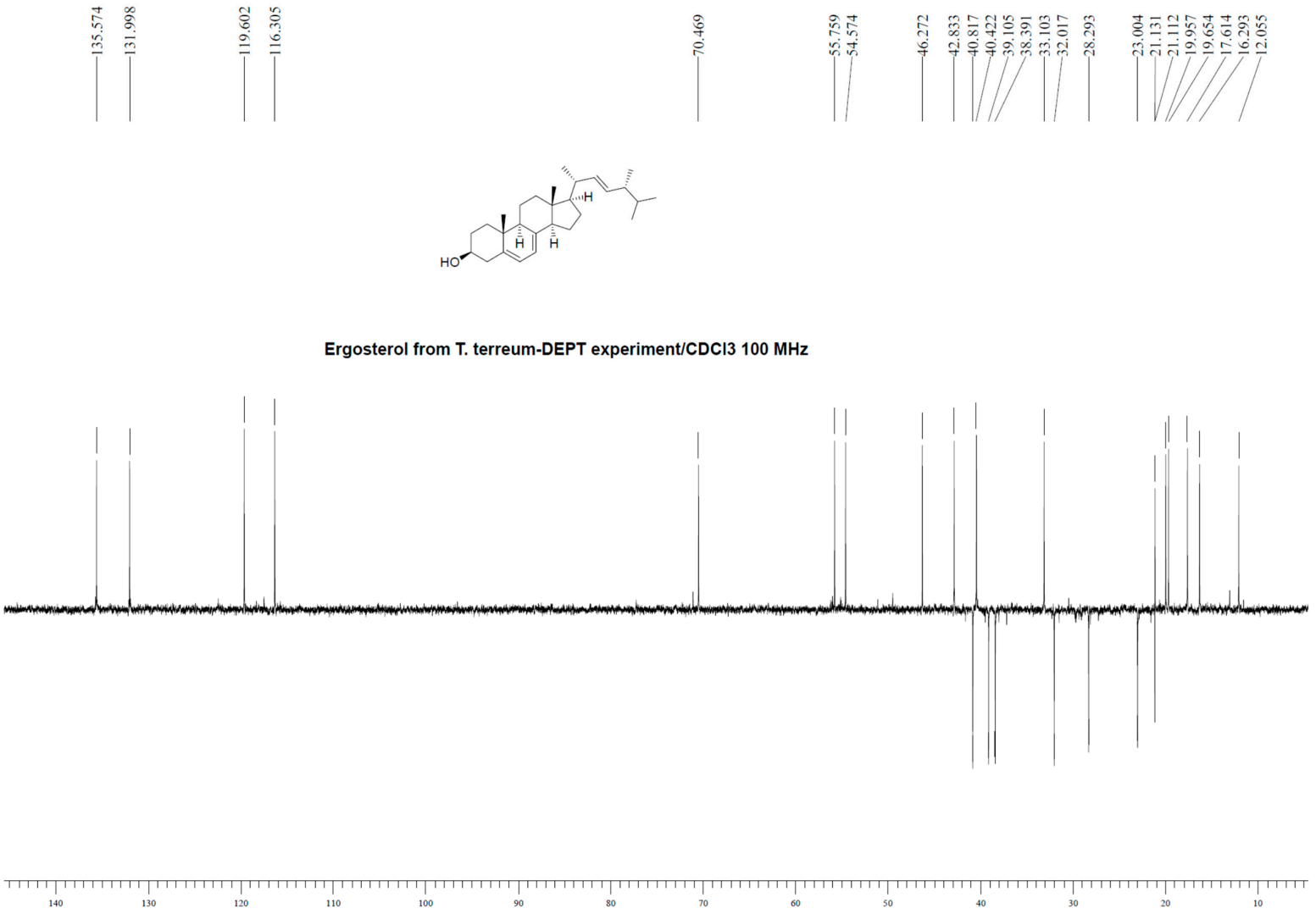


Figure S12: ^{13}C DEPT135 NMR spectrum of ergosterol extracted from *T. terreum* _Bz.

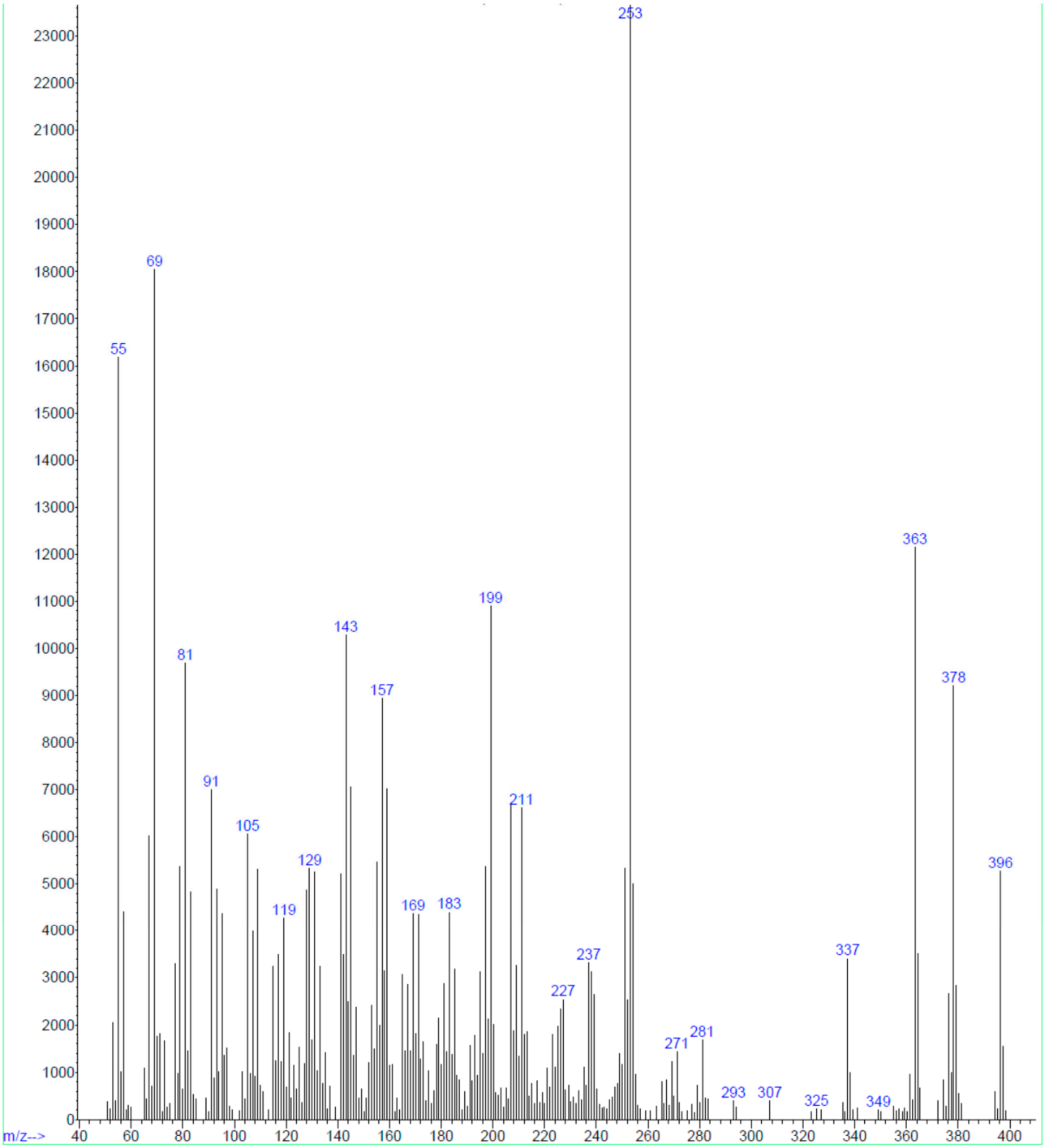


Figure S13: GC-MS spectrum of ergosterol extracted from *T. terreum* _Bz

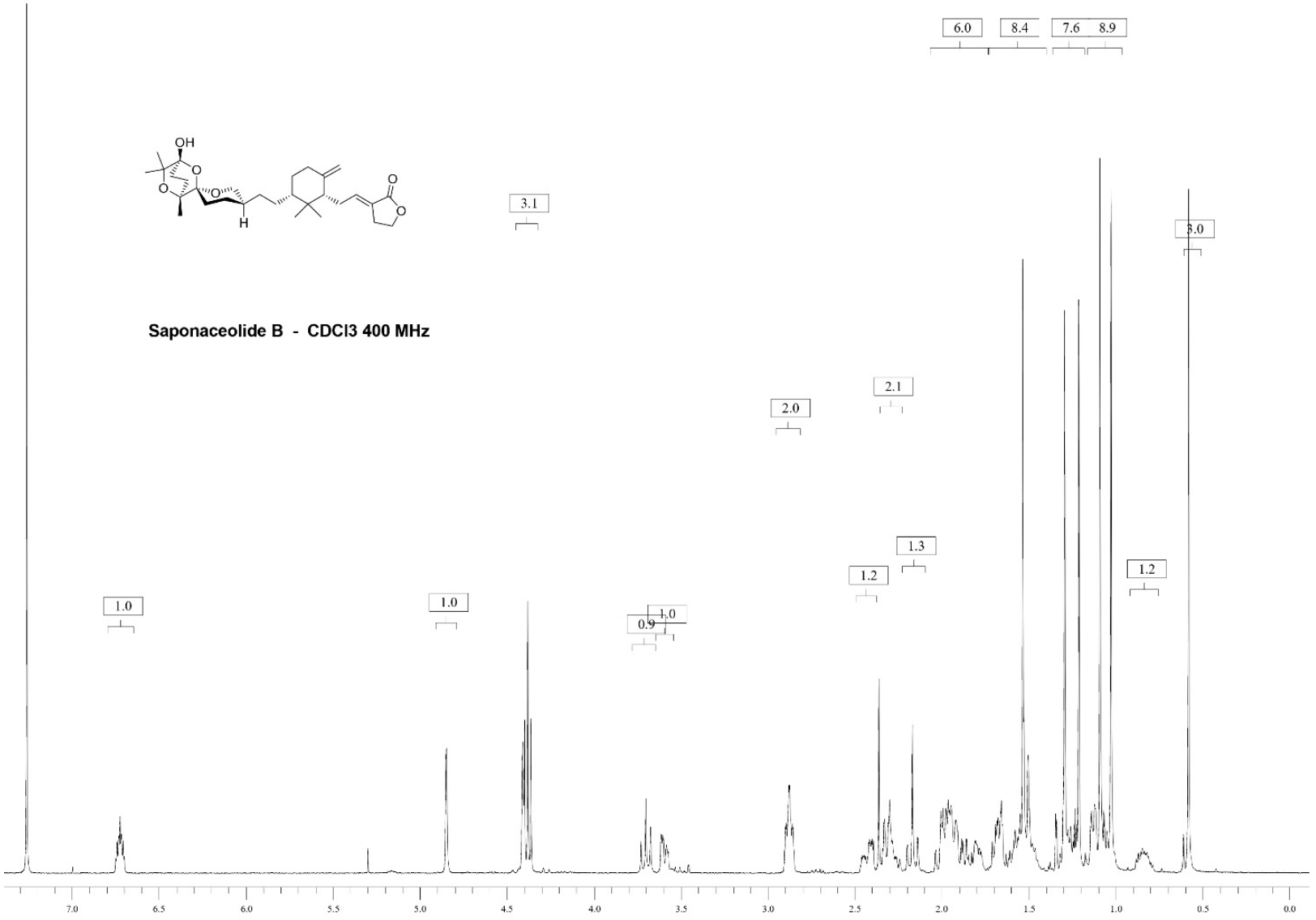


Figure S14: ^{1}H NMR spectrum of the saponaceolide B (**1**) sample obtained in the present investigation.

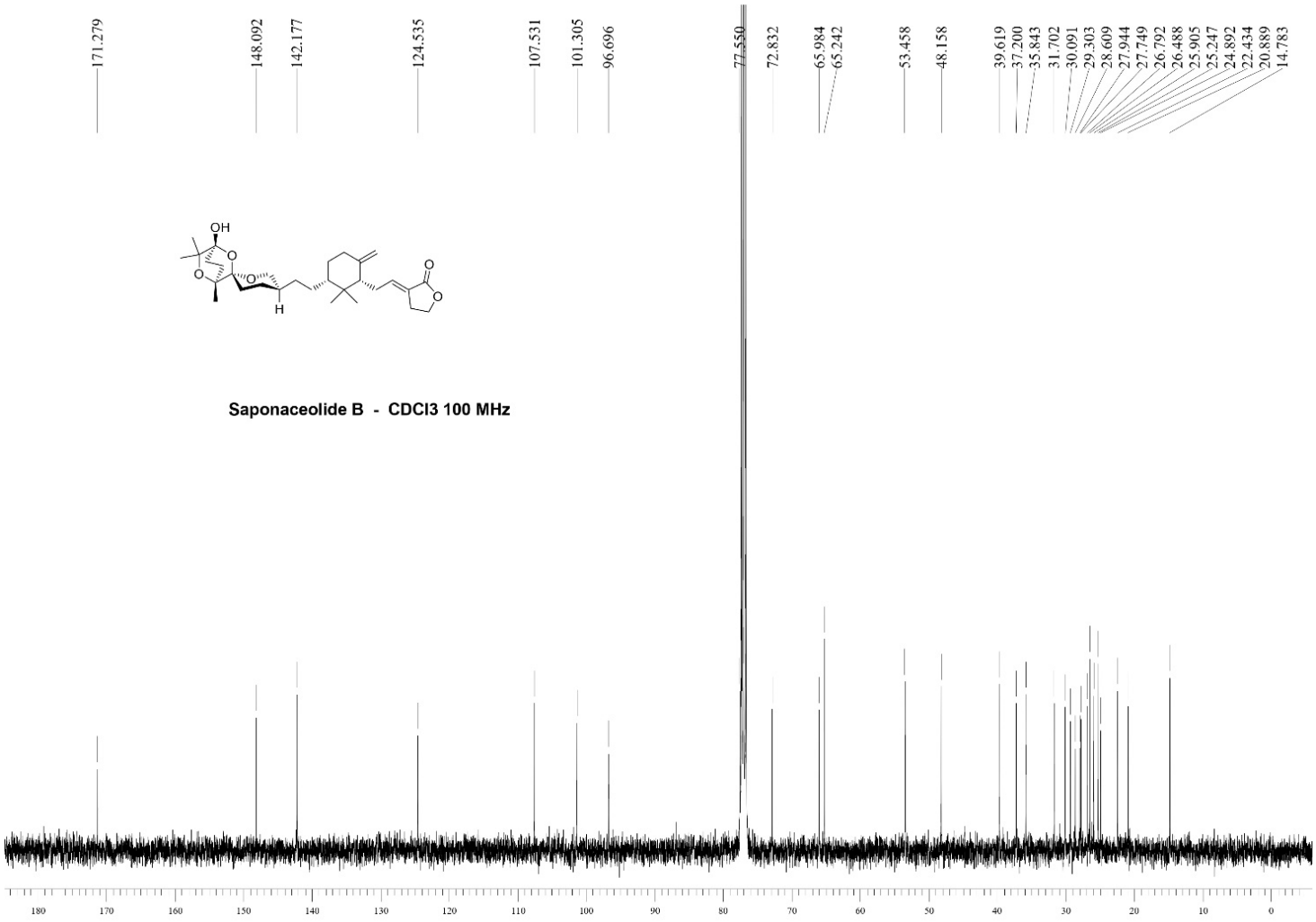


Figure S15: ^{13}C NMR spectrum of the same sample.

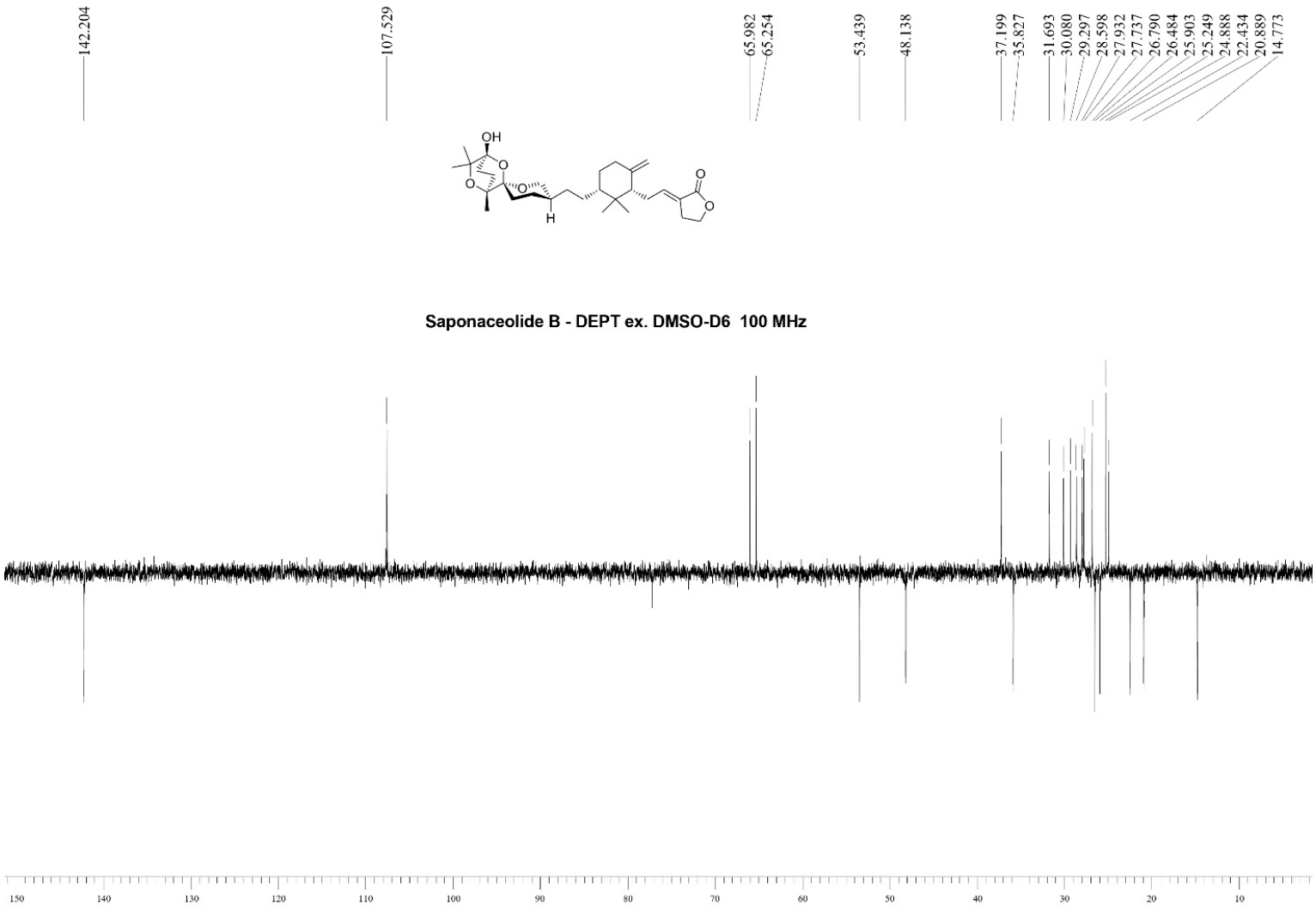


Figure S16: ^{13}C DEPT135 NMR spectrum of the same sample.

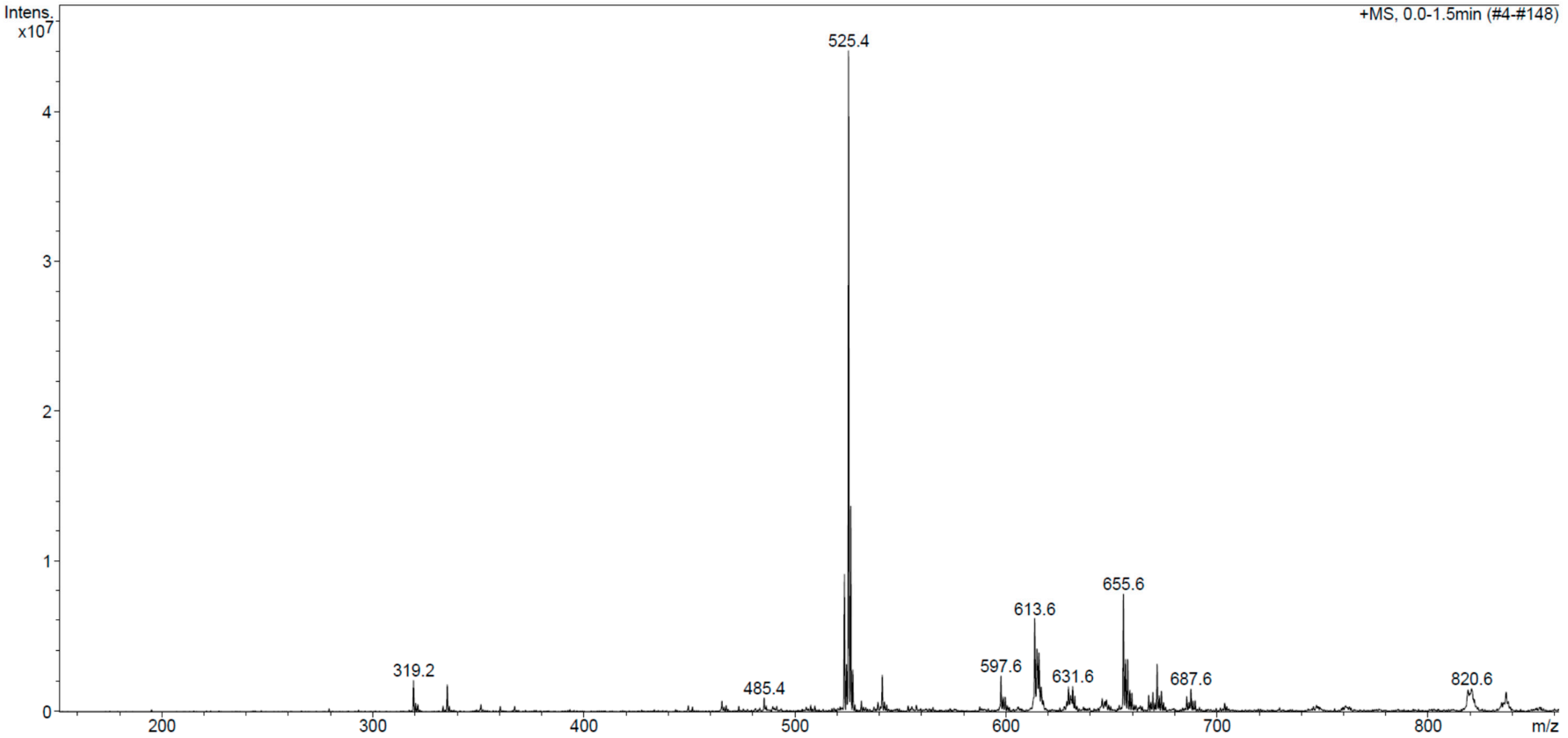


Figure S17: Low resolution ESI$^+$ MS spectrum of the same sample.

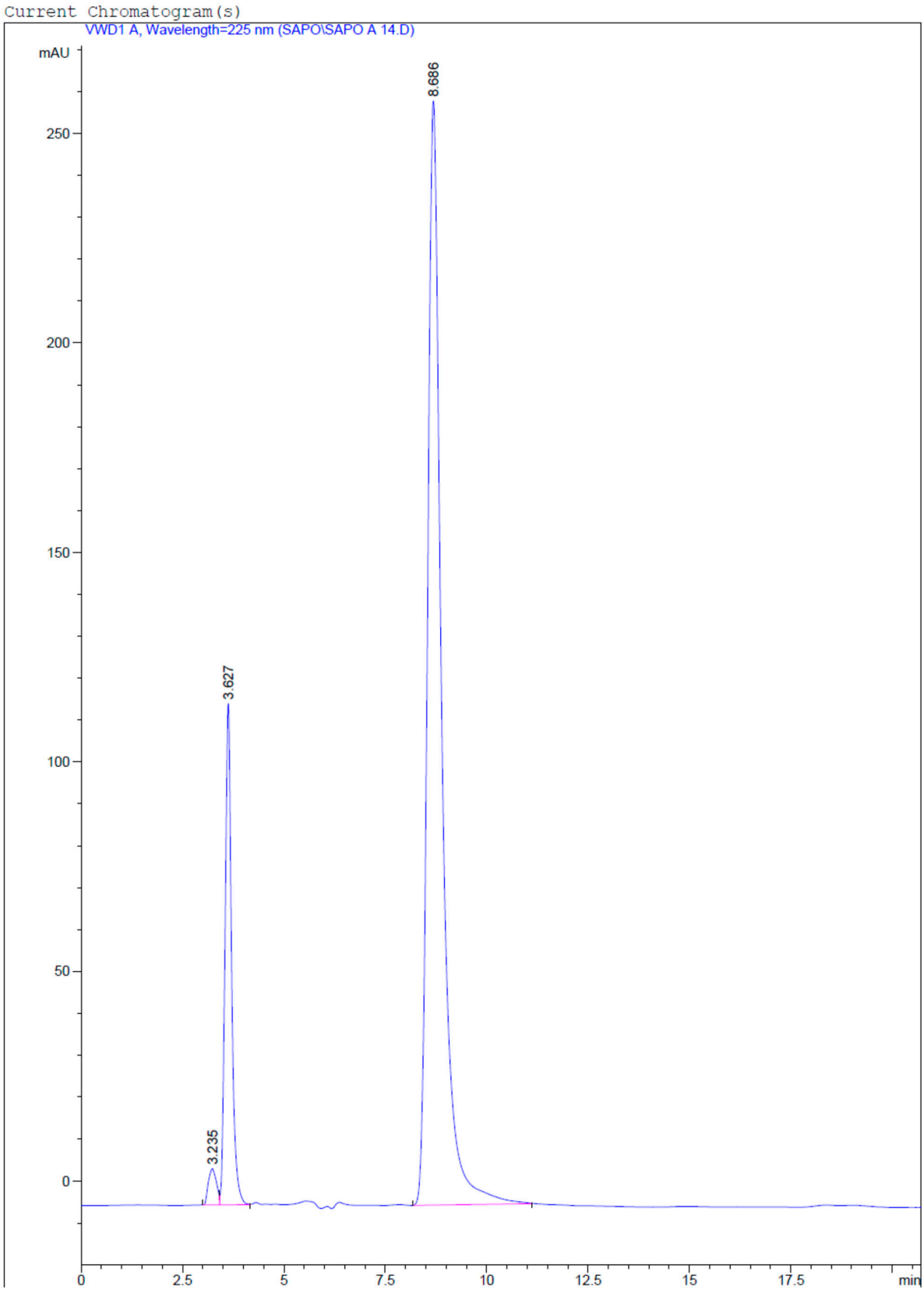


Figure S18: Direct-phase HPLC chromatogram (UV, 225 nm) of a reference standard of saponaceolide A

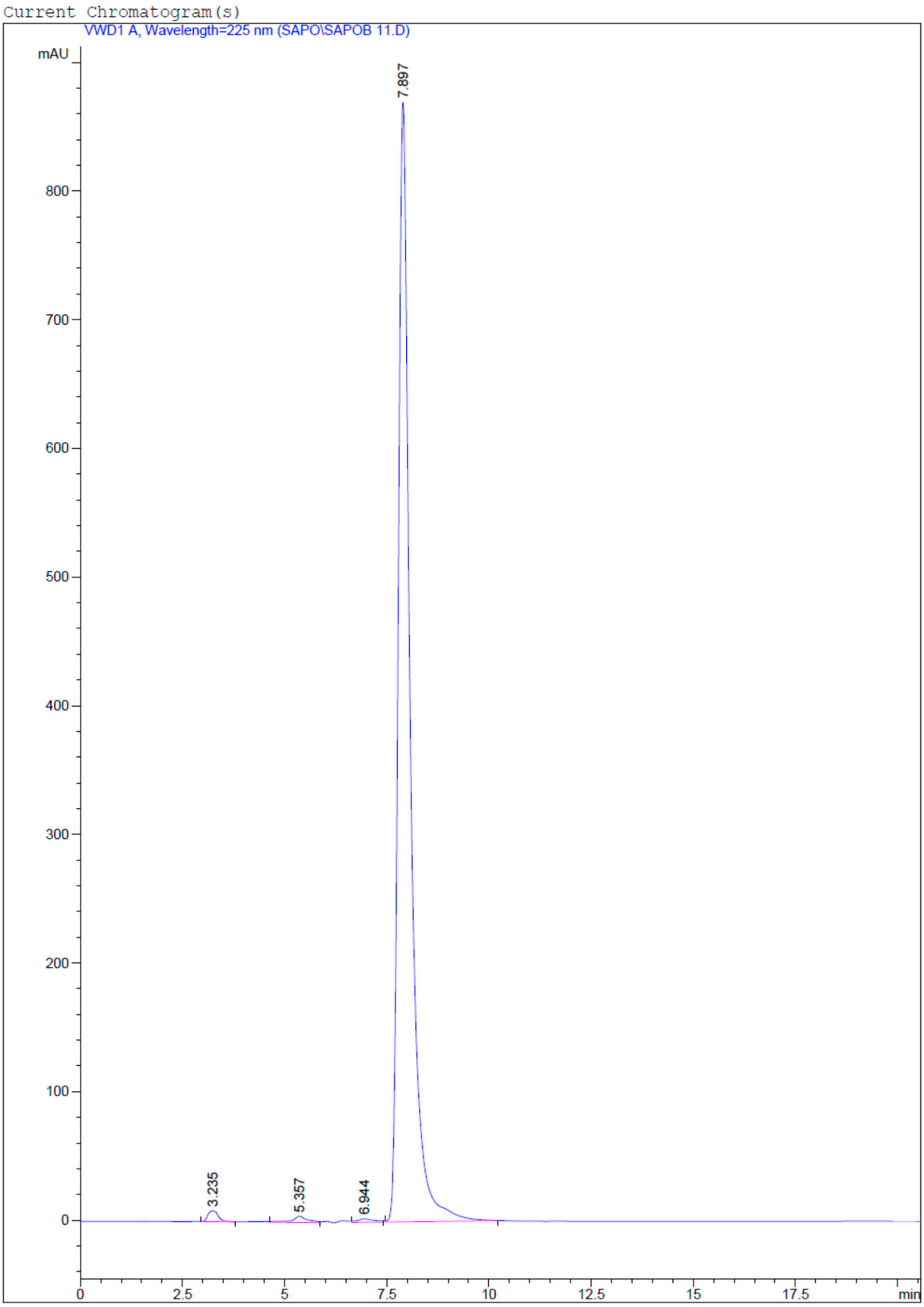


Figure S19: Direct-phase HPLC chromatogram of a reference standard of saponaceolide B.

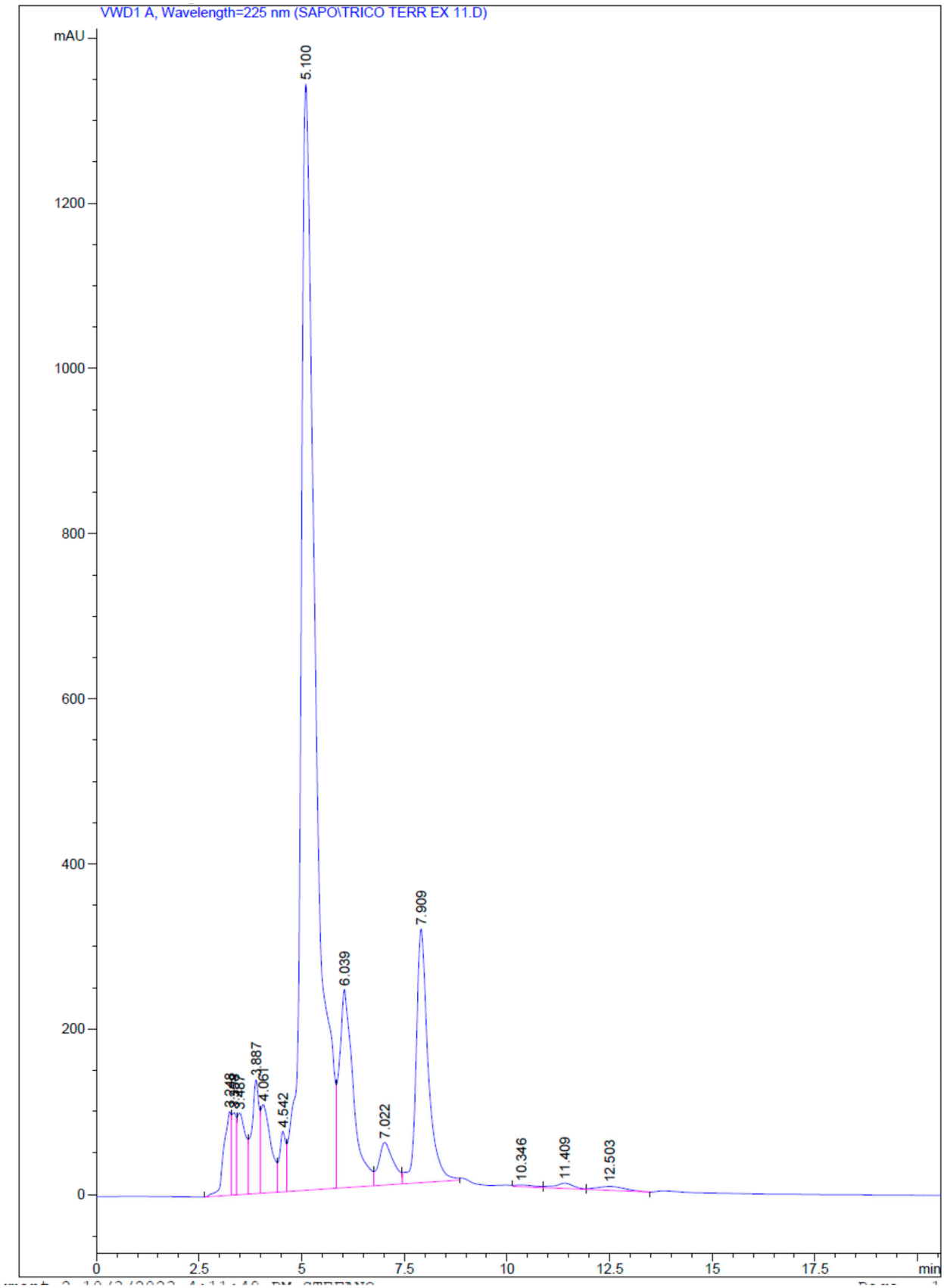


Figure S20: Direct-phase HPLC chromatogram of *T. terreum*_Bz.

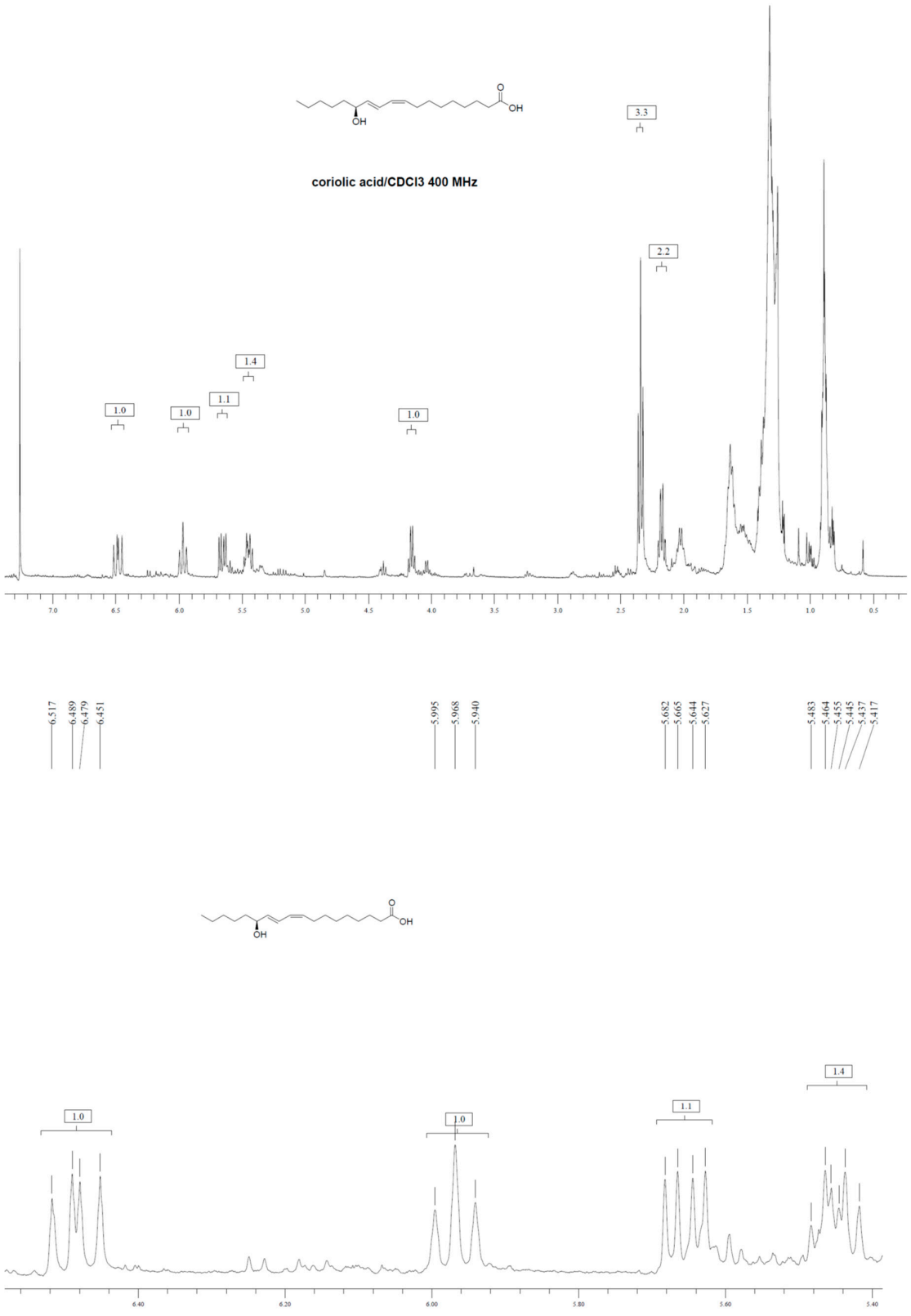


Figure S21: ^{1}H NMR spectrum of the coriolic acid extracted from *T. terreum* _Bz; below the expansion of the vinylic protons signals

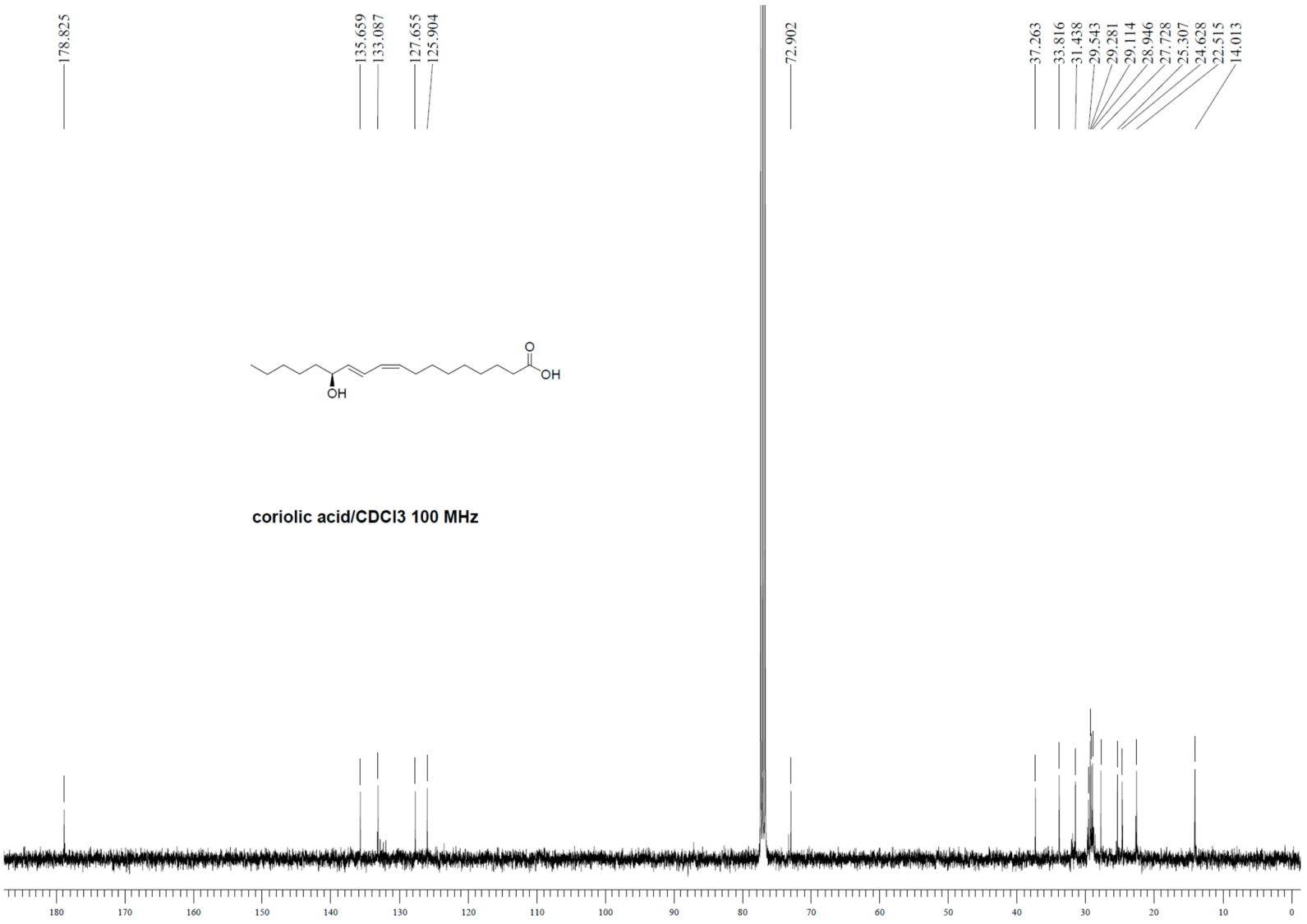


Figure S22: ^{13}C NMR spectrum of the coriolic acid extracted from *T. terreum* _Bz

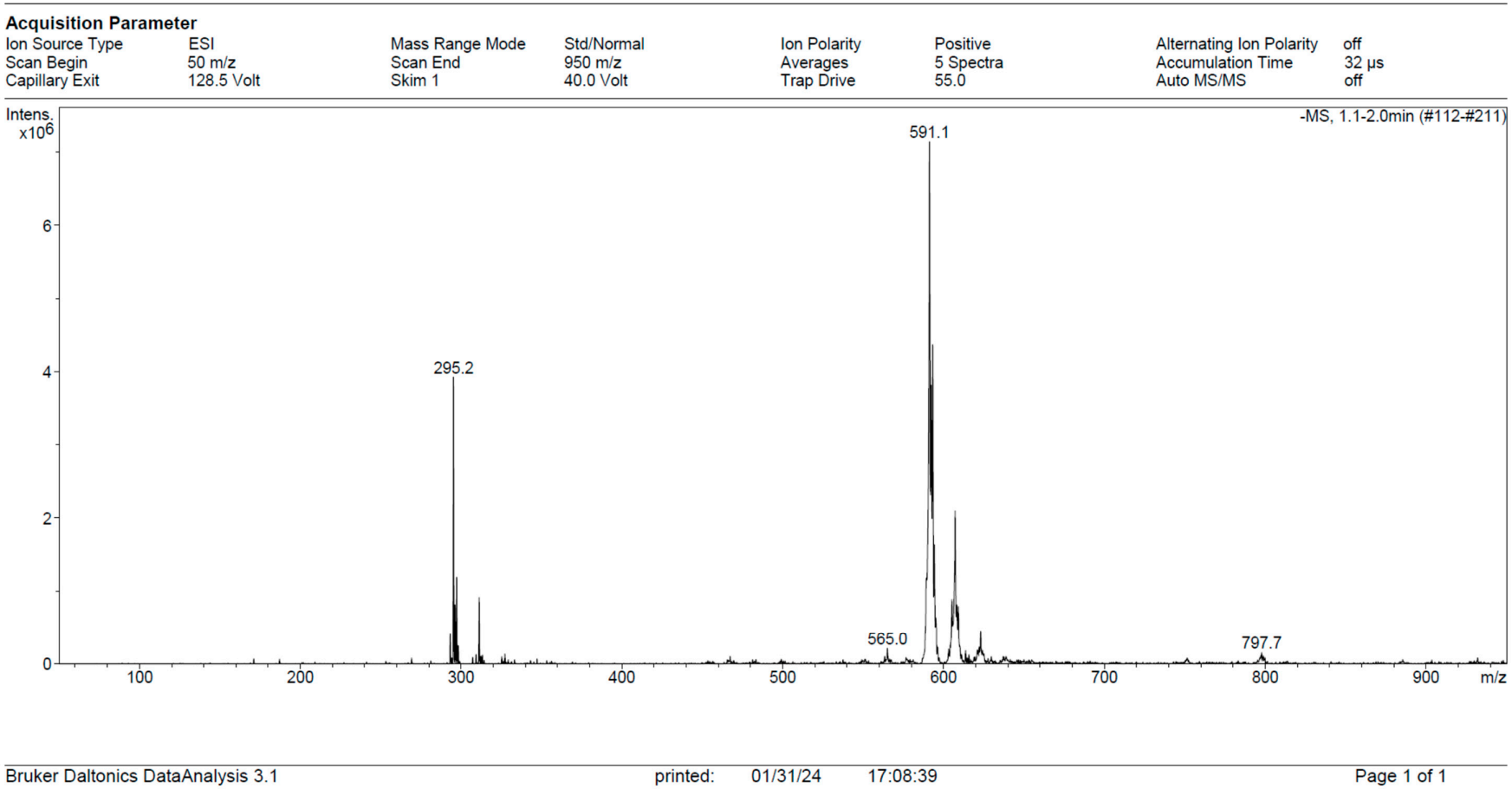


Figure S23: ESI-MS spectrum of the coriolic acid extracted from *T. terreum* _Bz