

Supplementary Information

Figure S1. ^1H NMR spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Pachydictyol B (1a)	2
Figure S2. ^{13}C NMR Spectrum (CDCl_3 , 125 MHz) of <i>cis</i> -Pachydictyol B (1a)	3
Figure S3. ^1H - ^1H -COSY Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Pachydictyol B (1a)	4
Figure S4. HSQC spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Pachydictyol B (1a)	5
Figure S5. HMBC Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Pachydictyol B (1a).....	6
Figure S6. NOESY Spectrum (CDCl_3 , 600 MHz) of <i>cis</i> -Pachydictyol B (1a)	7
Figure S7. ^1H NMR Spectrum (CDCl_3 , 600 MHz) of <i>trans</i> -Pachydictyol B (1b)	8
Figure S8. H,H COSY Spectrum (CDCl_3 , 600 MHz) of <i>trans</i> -Pachydictyol B (1b).....	9
Figure S9. HSQC Spectrum (CDCl_3 , 600/150 MHz) of <i>trans</i> -Pachydictyol B (1b).....	10
Figure S10. HMBC Spectrum (CDCl_3 , 600/150 MHz) of <i>trans</i> -Pachydictyol B (1b).....	11
Figure S11. HMBC correlations in <i>trans</i> -pachydictyol B (1b).....	12
Figure S12. ^1H NMR Spectrum (CDCl_3 , 300 MHz) of Pachydictyol C (2).....	13
Figure S13. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of Pachydictyol C (2)	14
Figure S14. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of Pachydictyol C (2)	15
Figure S15. HSQC spectrum (CDCl_3 , 300 MHz) of Pachydictyol C (2)	16
Figure S16. HMBC spectrum (CDCl_3 , 300 MHz) of Pachydictyol C (2)	17
Figure S17. ^1H NMR spectrum (CDCl_3 , 300 MHz) of Pachydictyol A (3)	18
Figure S18. ^{13}C NMR Spectrum (CDCl_3 , 125 MHz) of Pachydictyol A (3)	19
Figure S19. ^1H - ^1H -COSY Spectrum (CDCl_3 , 300 MHz) of Pachydictyol A (3)	20
Figure S20. HSQC Spectrum (CDCl_3 , 300 MHz) of Pachydictyol A (3)	21
Figure S21. HMBC Spectrum (CDCl_3 , 300 MHz) of Pachydictyol A (3)	22
Figure S22. ^1H NMR Spectrum (CDCl_3 , 300 MHz) of Dictyol E (4).....	23
Figure S23. ^{13}C NMR Spectrum (CDCl_3 , 125 MHz) of Dictyol E (4)	24
Figure S24. ^1H - ^1H -COSY Spectrum (CDCl_3 , 300 MHz) of Dictyol E (4).....	25
Figure S25. HSQC Spectrum (CDCl_3 , 300 MHz) of Dictyol E (4).....	26
Figure S26. HMBC Spectrum (CDCl_3 , 300 MHz) of Dictyol E (4).....	27
Figure S27. NOESY Spectrum (CDCl_3 , 600 MHz) of Dictyol E (4)	28
Figure S28. ^1H NMR Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Africanan-1 α -ol (5a).....	29
Figure S29. ^{13}C NMR Spectrum (CDCl_3 , 125 MHz) of <i>cis</i> -Africanan-1 α -ol (5a).....	30
Figure S30. ^1H - ^1H -COSY Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Africanan-1 α -ol (5a).....	31
Figure S31. HSQC Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Africanan-1 α -ol (5a)	32
Figure S32. HMBC Spectrum (CDCl_3 , 300 MHz) of <i>cis</i> -Africanan-1 α -ol (5a)	33
Figure S33. ^1H NMR Spectrum (CDCl_3 , 300 MHz) of Fucosterol (6)	34
Figure S34. ^{13}C NMR Spectrum (CDCl_3 , 125 MHz) of Fucosterol (6)	35
Table S1. GC-MS analysis of the nonpolar fraction I	36
Table S2. GC-MS analysis of the unsaponifiable part of the petroleum ether extract of <i>D. dichotoma</i>	36

Figure S1. ^1H NMR spectrum (CDCl_3 , 300 MHz) of *cis*-pachydictyol B (**1a**).

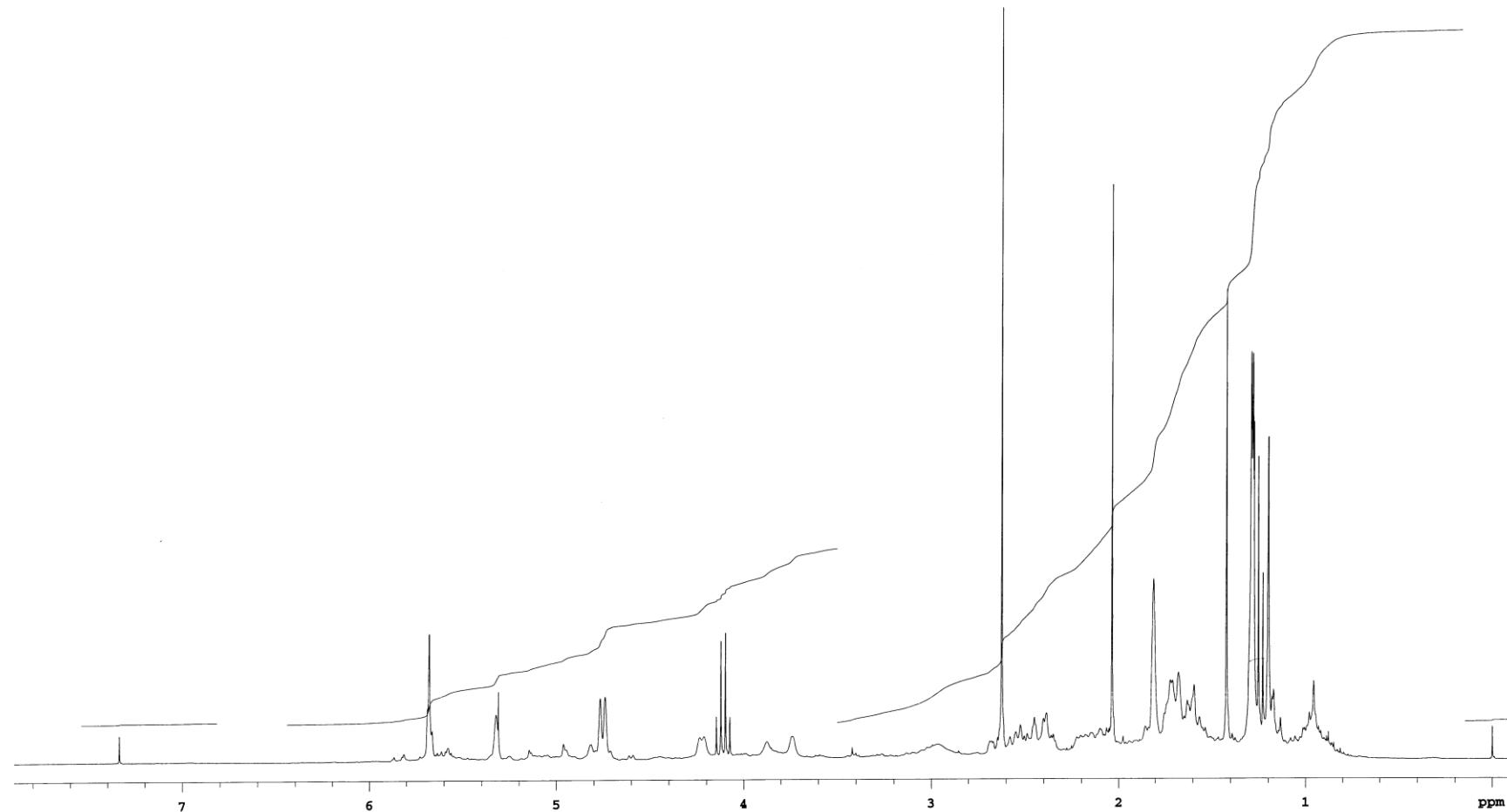
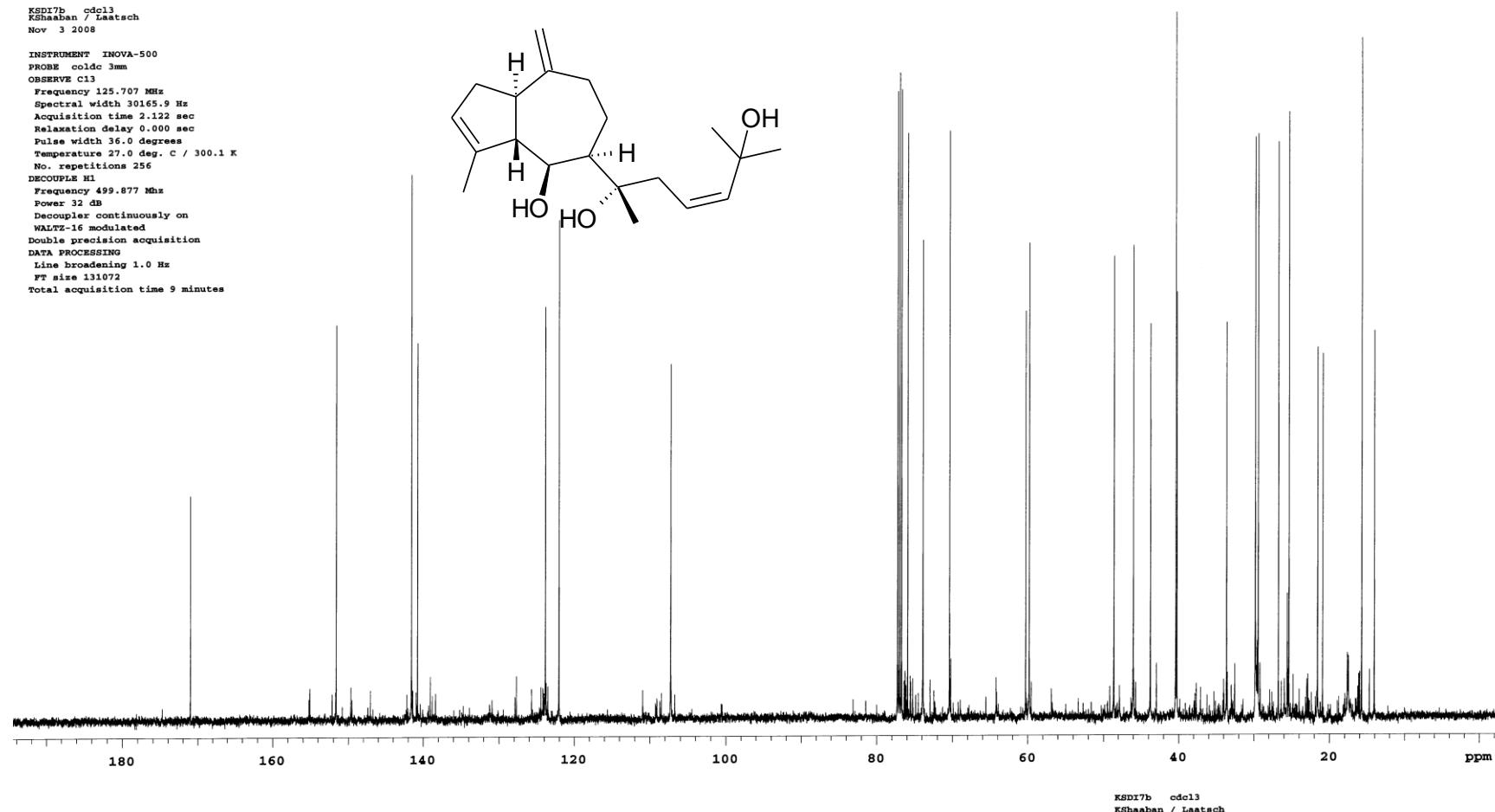


Figure S2. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of *cis*-pachydictyol B (**1a**).



The carbon signals at δ 171.0, 60.3, 20.9 und 14.1 are belonging to ethyl acetate (ethyl acetate present in the deuterated CDCl_3), and the signal δ 26.8 due to fatty acid impurities.

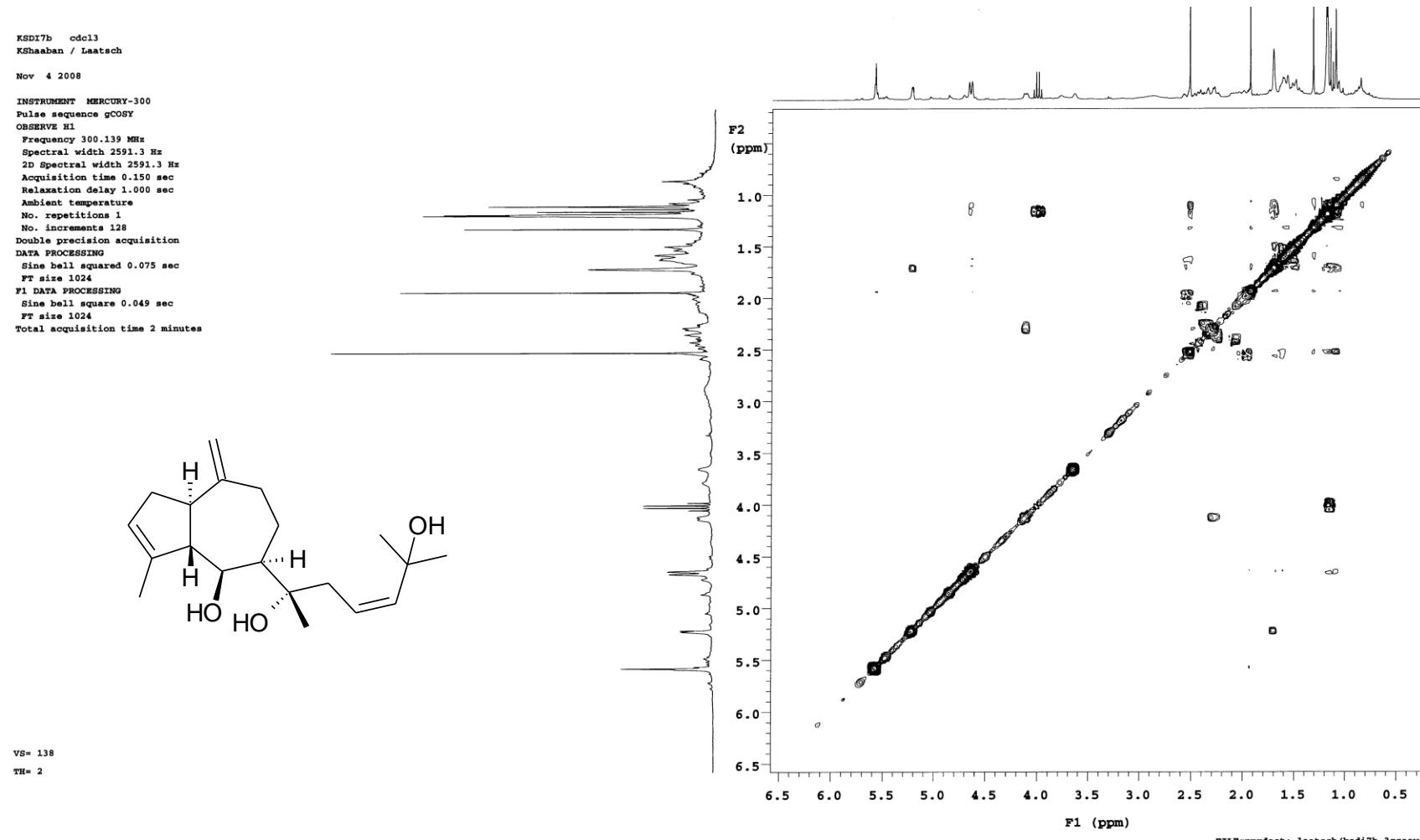
Figure S3. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of *cis*-pachydictyol B (**1a**).

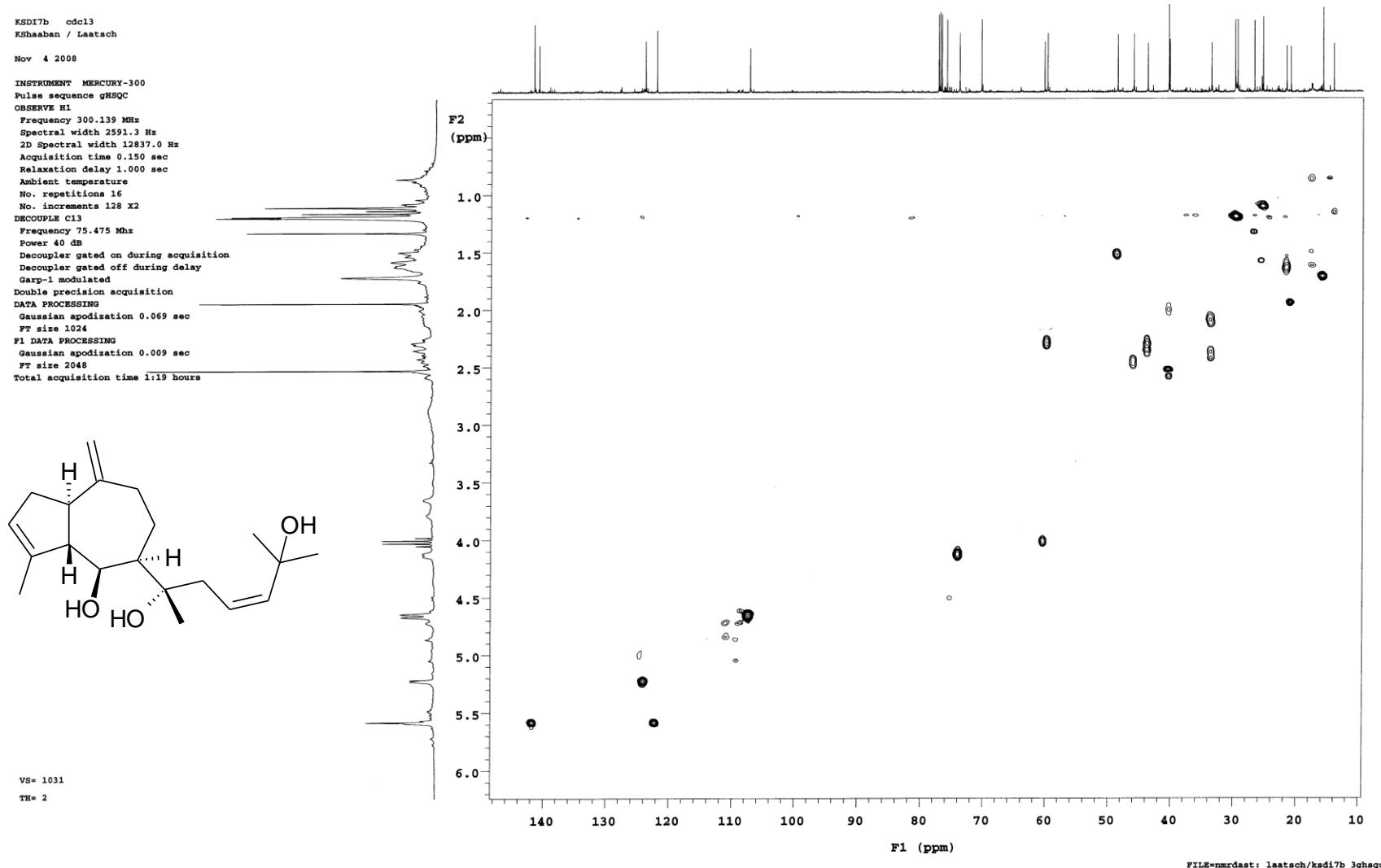
Figure S4. HSQC spectrum (CDCl_3 , 300 MHz) of *cis*-pachydictyol B (**1a**).

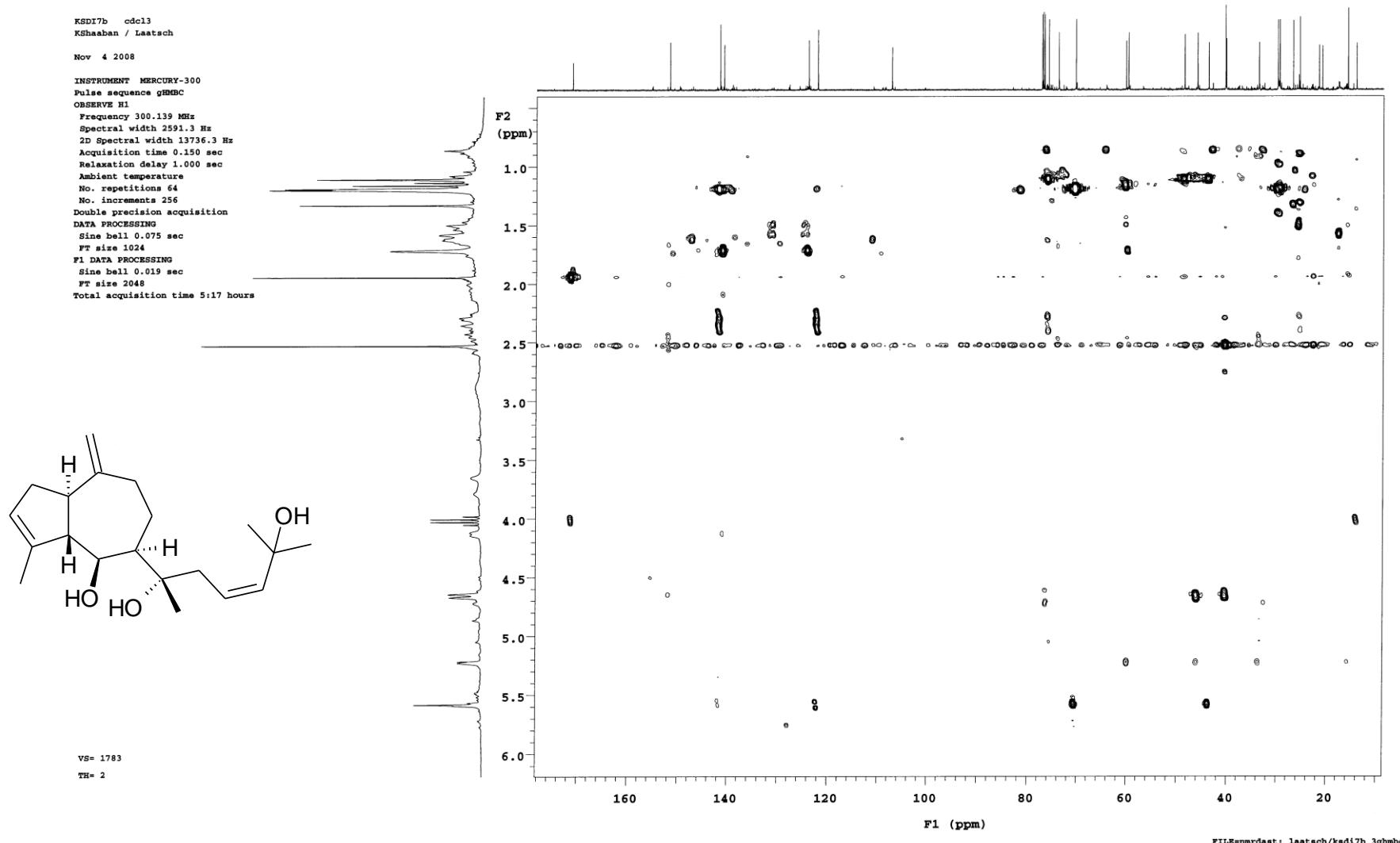
Figure S5. HMBC spectrum (CDCl_3 , 300 MHz) of *cis*-pachydictyol B (1a).

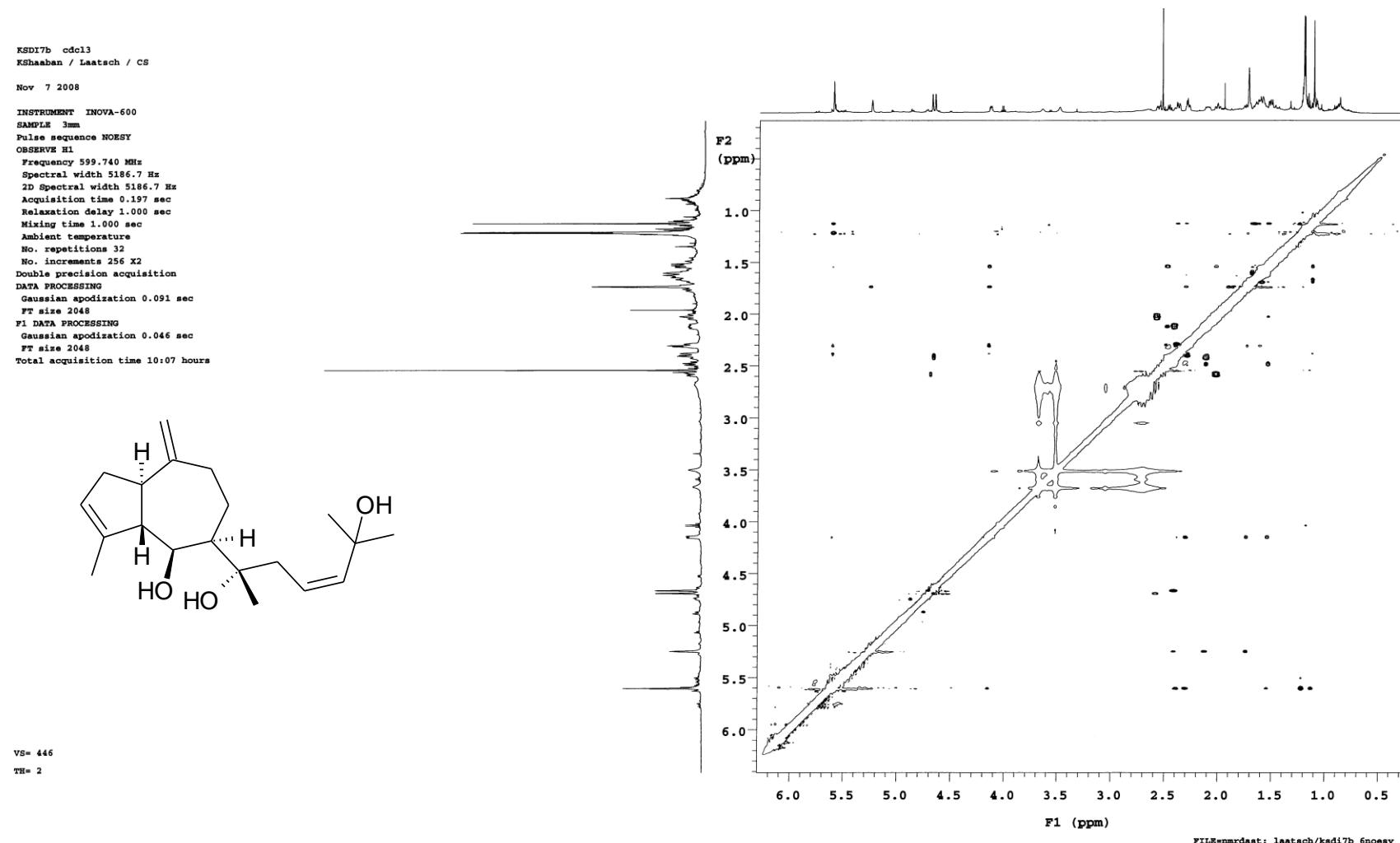
Figure S6. NOESY spectrum (CDCl_3 , 600 MHz) of *cis*-pachydictyol B (**1a**).

Figure S7. ^1H NMR spectrum (CDCl_3 , 600 MHz) of *trans*-pachydictyol B (**1b**).

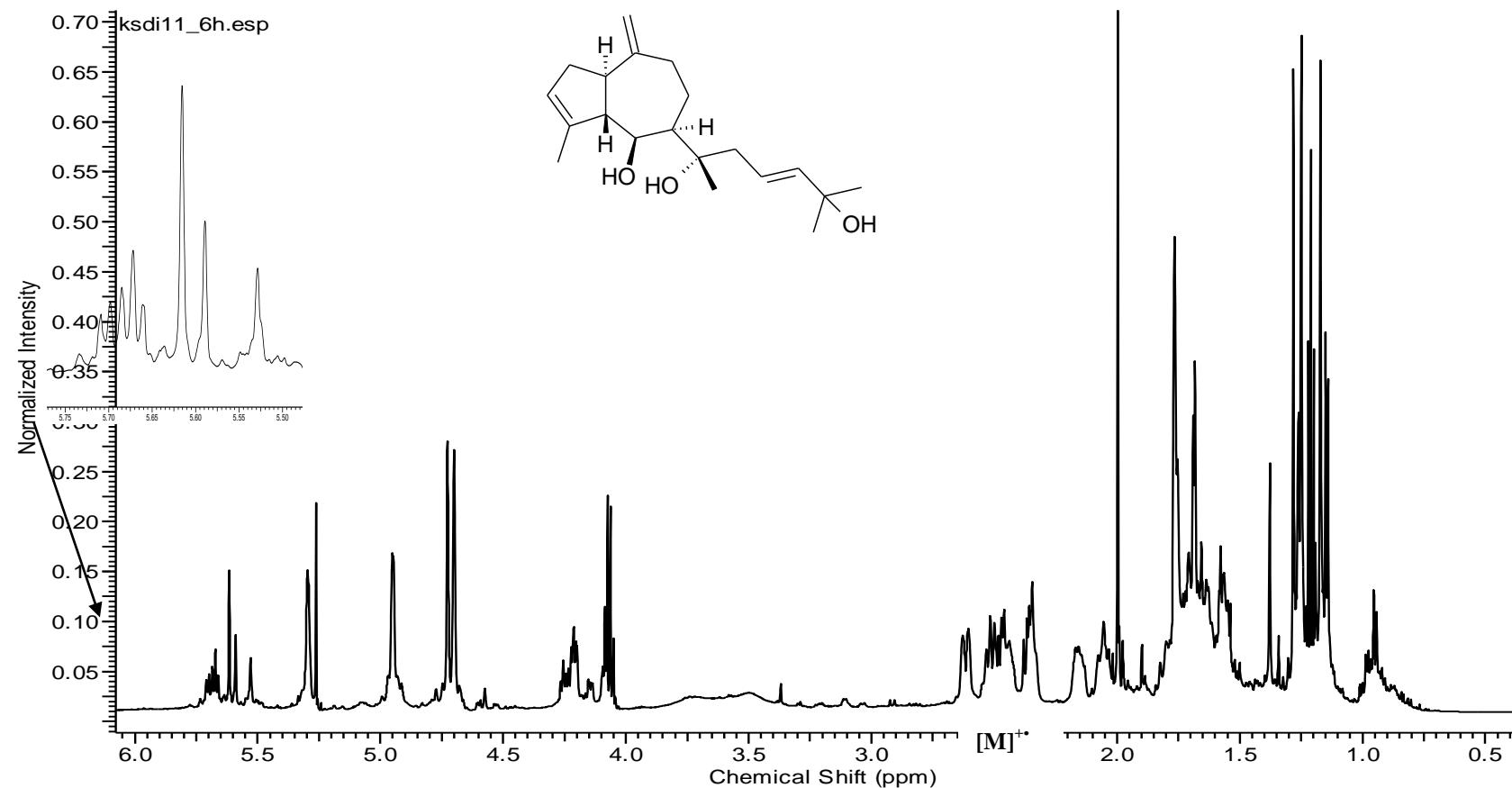


Figure S8. H,H COSY spectrum (CDCl_3 , 600 MHz) of *trans*-pachydictyol B (**1b**).

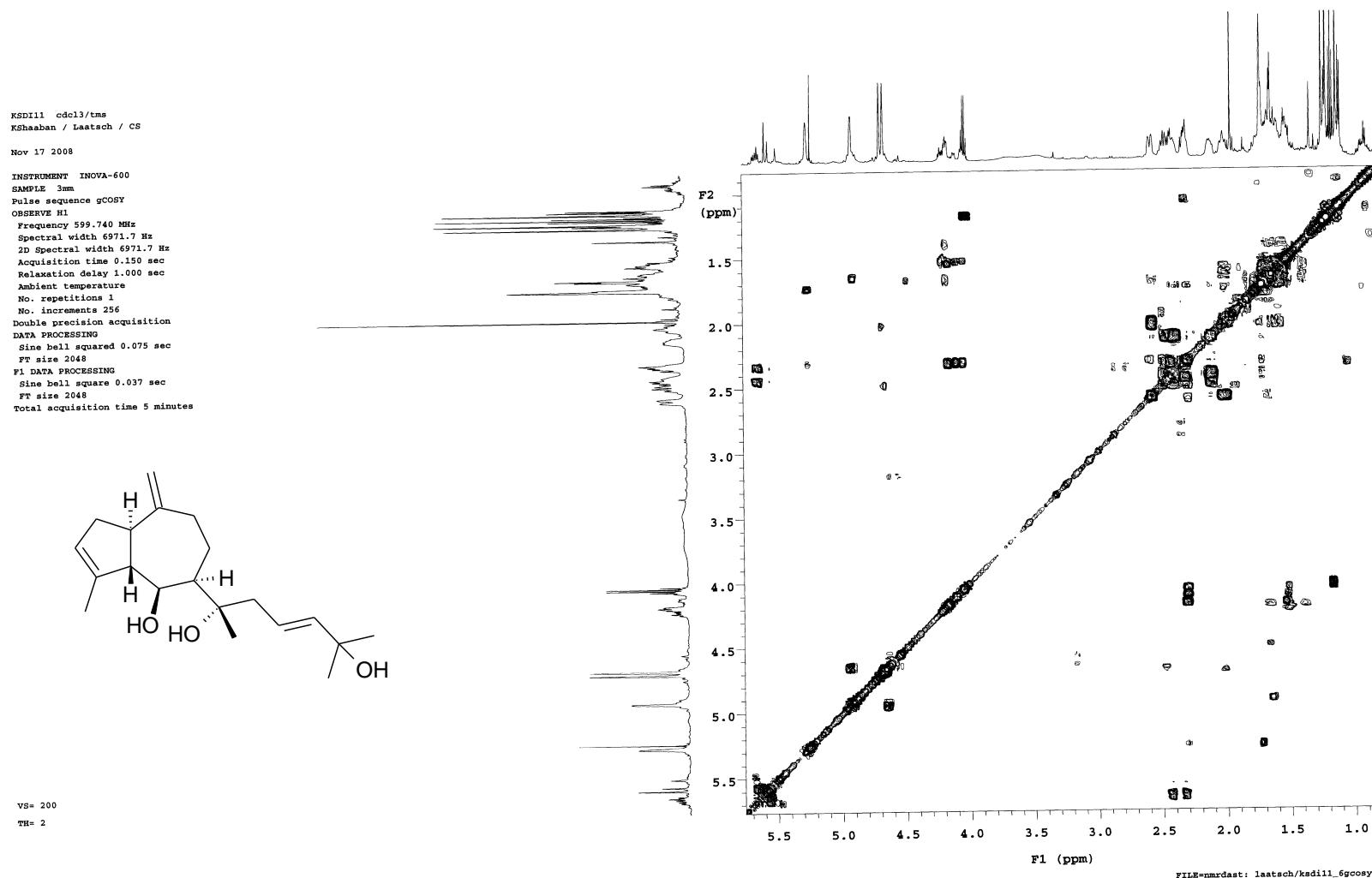


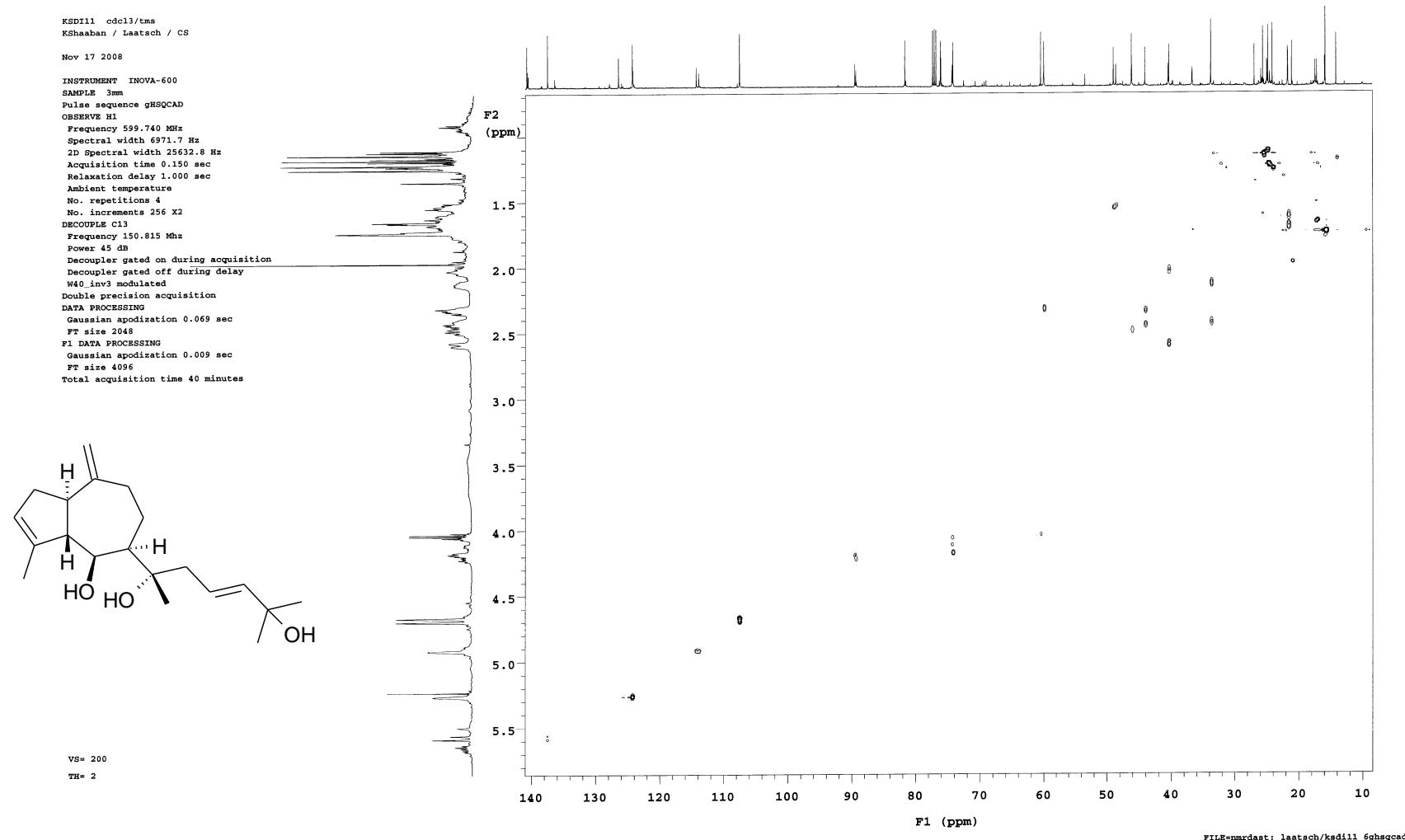
Figure S9. HSQC spectrum (CDCl_3 , 600/150 MHz) of *trans*-pachydictyol B (**1b**).

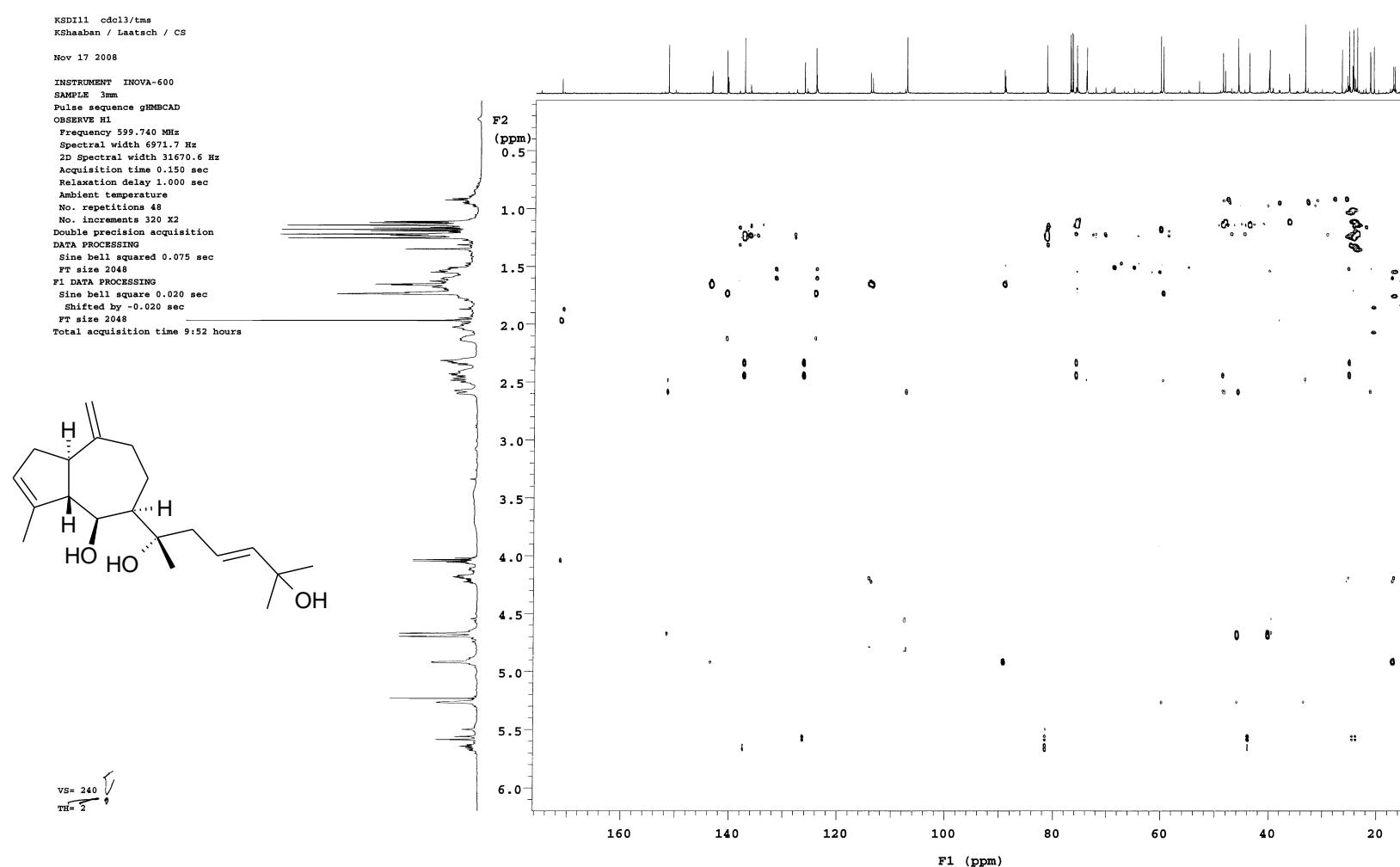
Figure S10. HMBC spectrum (CDCl_3 , 600/150 MHz) of *trans*-pachydictyol B (**1b**).

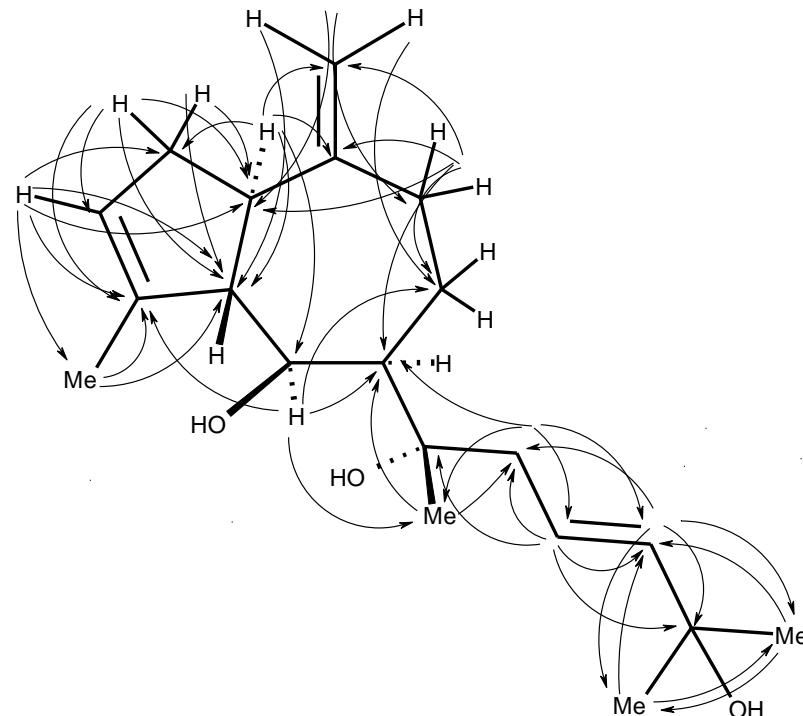
Figure S11. HMBC correlations in *trans*-pachydictyol B (**1b**).

Figure S12. ^1H NMR spectrum (CDCl_3 , 300 MHz) of pachydictyol C (2).

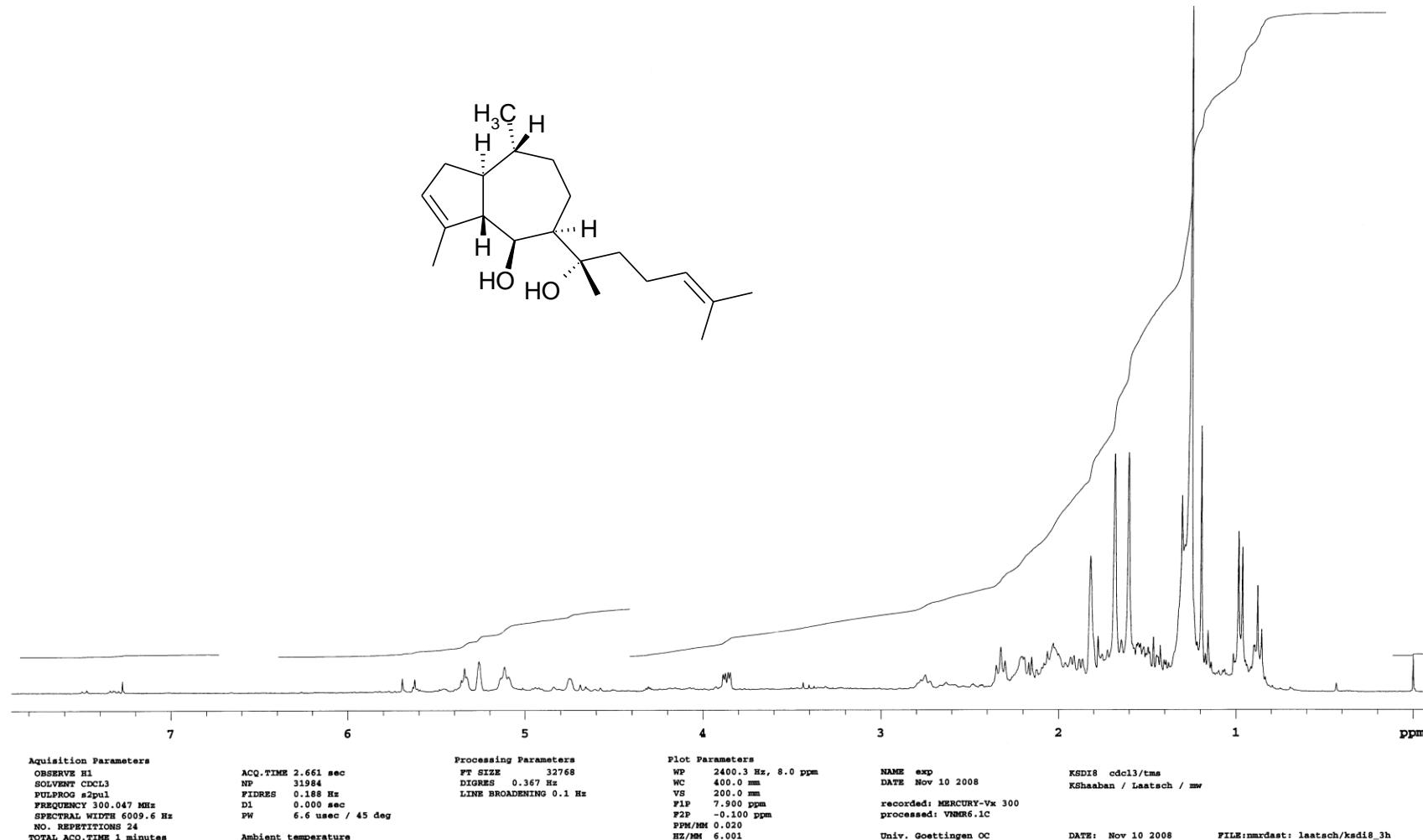


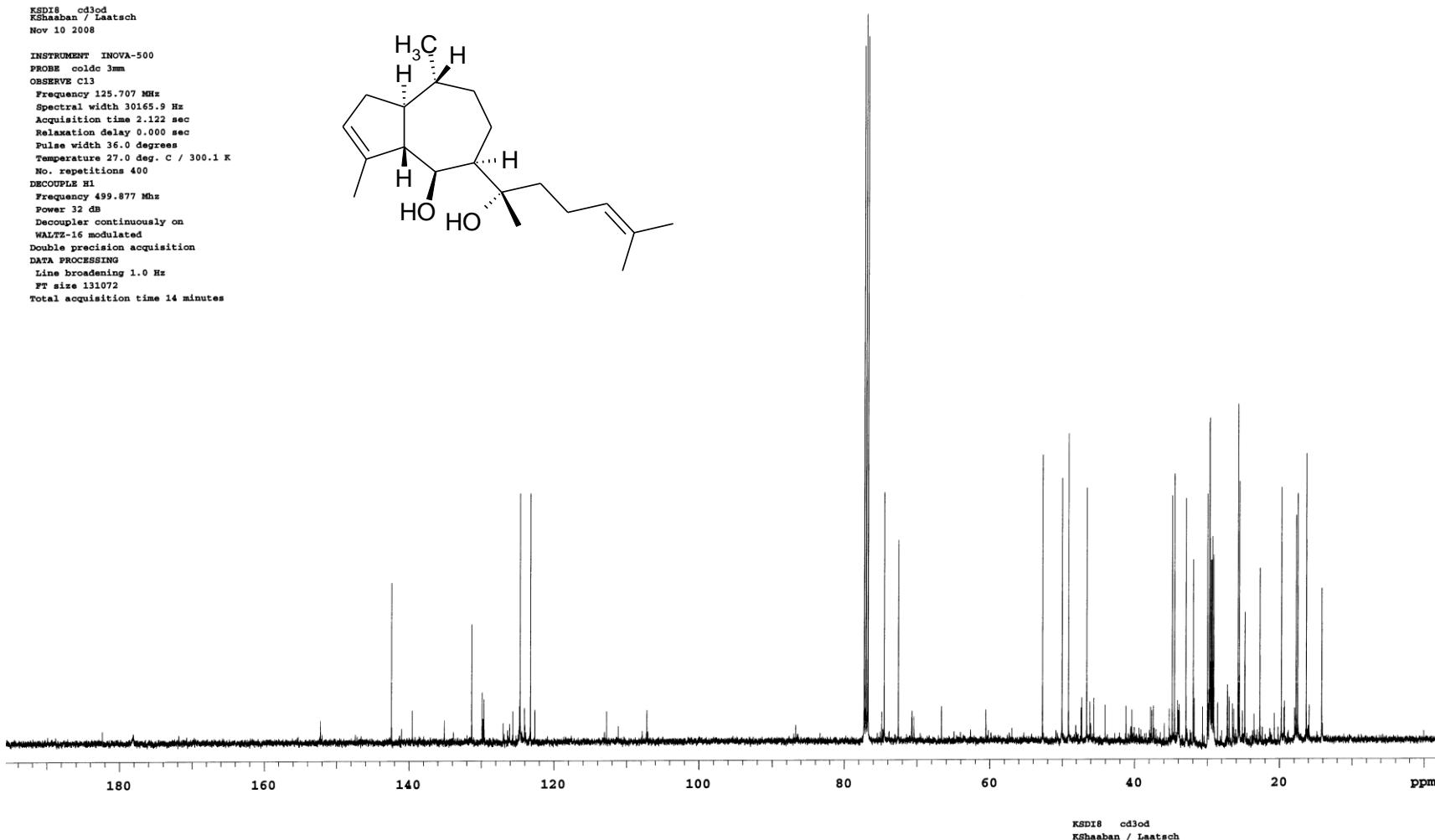
Figure S13. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of pachydictyol C (2).

Figure S14. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of pachydictyol C (2).

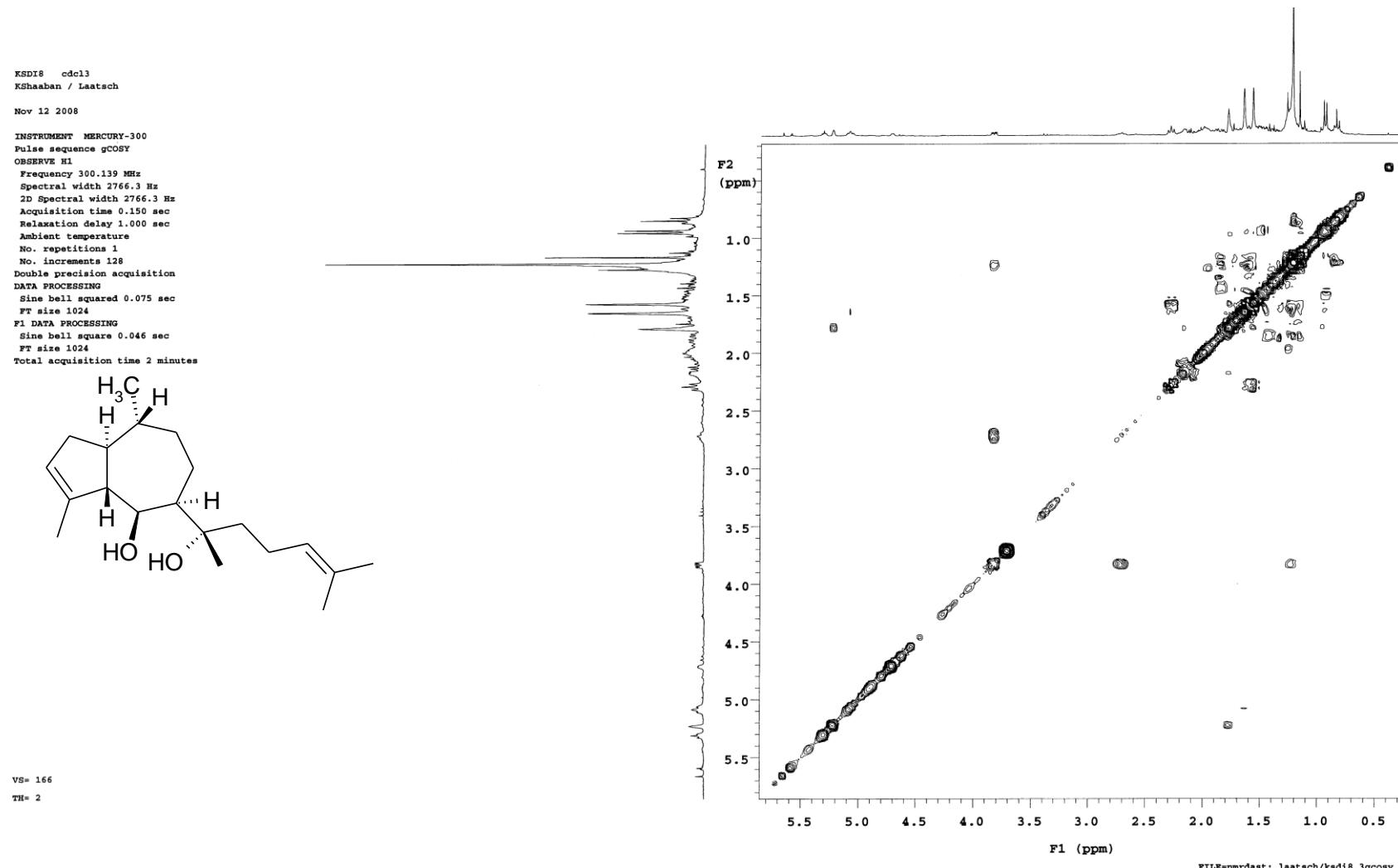


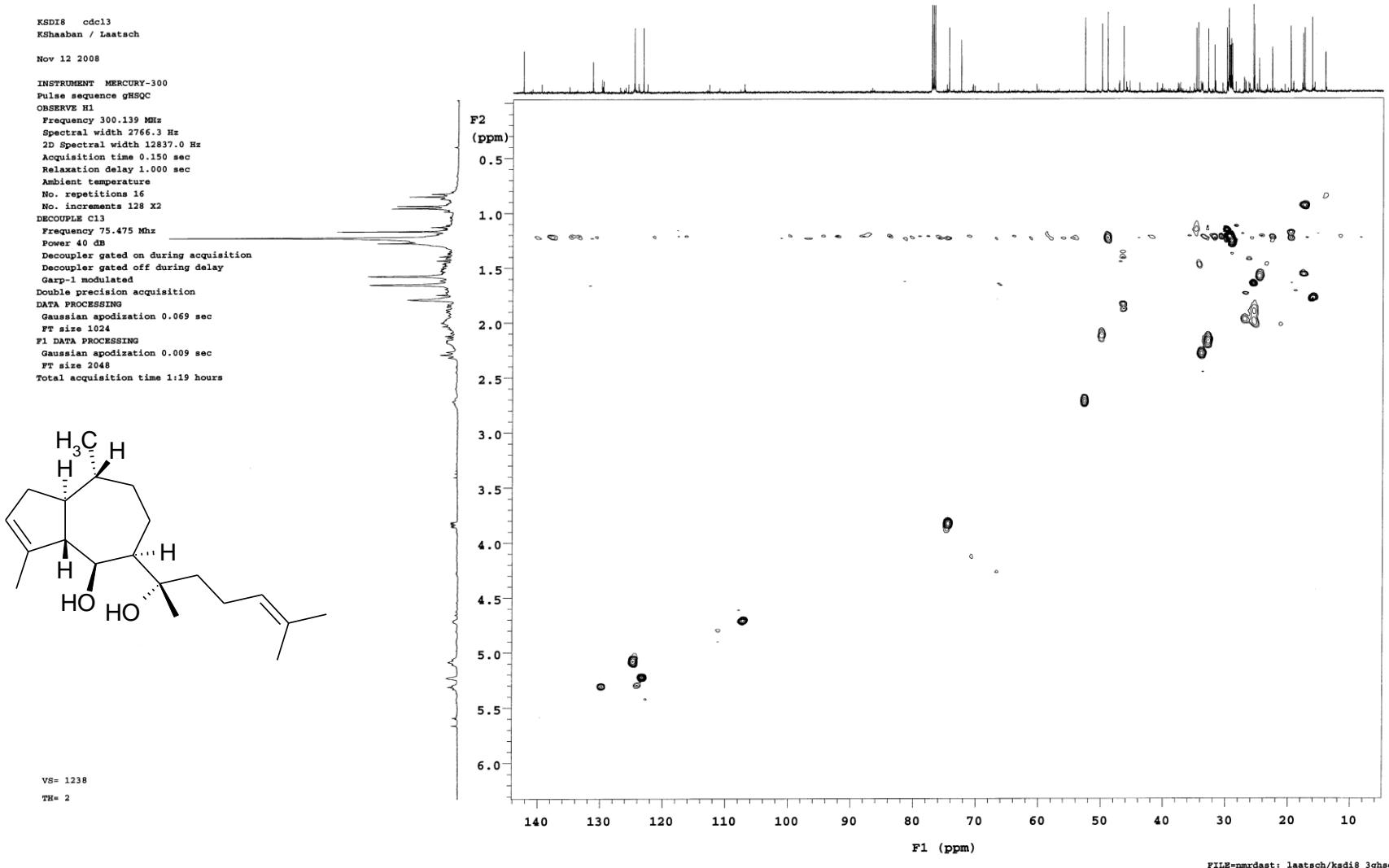
Figure S15. HSQC spectrum (CDCl_3 , 300 MHz) of pachydictyol C (2).

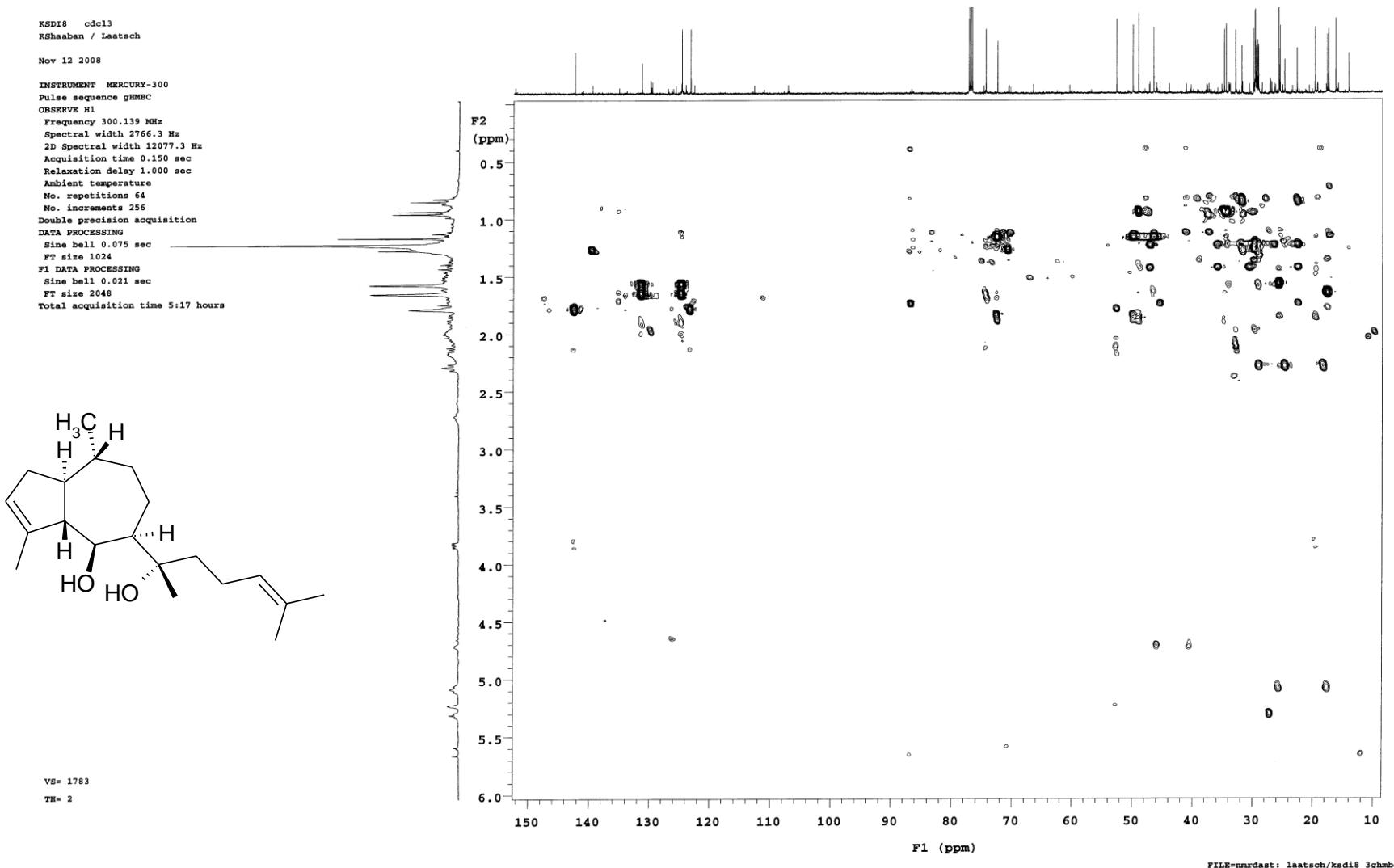
Figure S16. HMBC spectrum (CDCl_3 , 300 MHz) of pachydictyol C (2).

Figure S17. ^1H NMR spectrum (CDCl_3 , 300 MHz) of pachydictyol A (**3**).

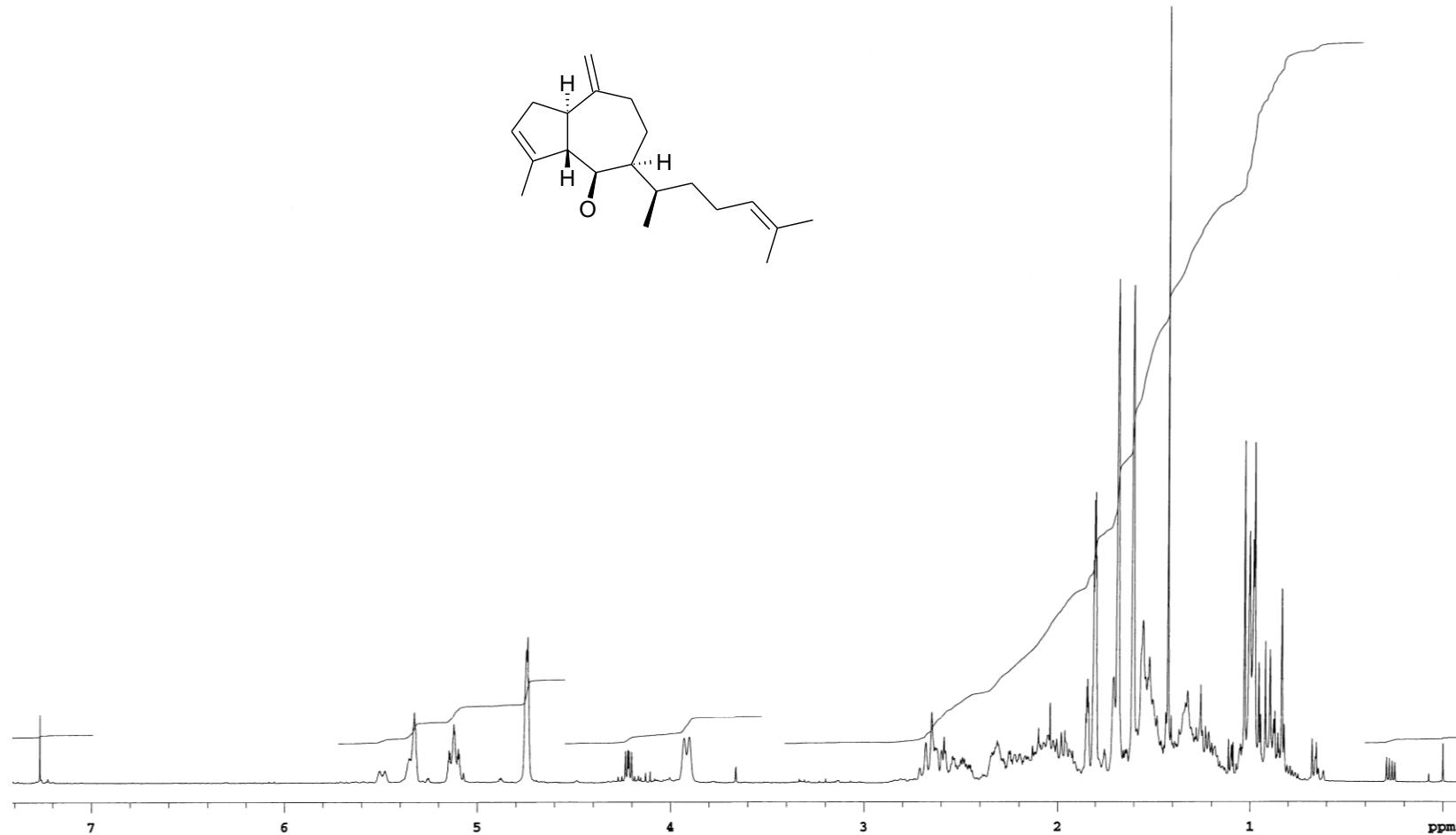


Figure S18. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of pachydictyol A (3).

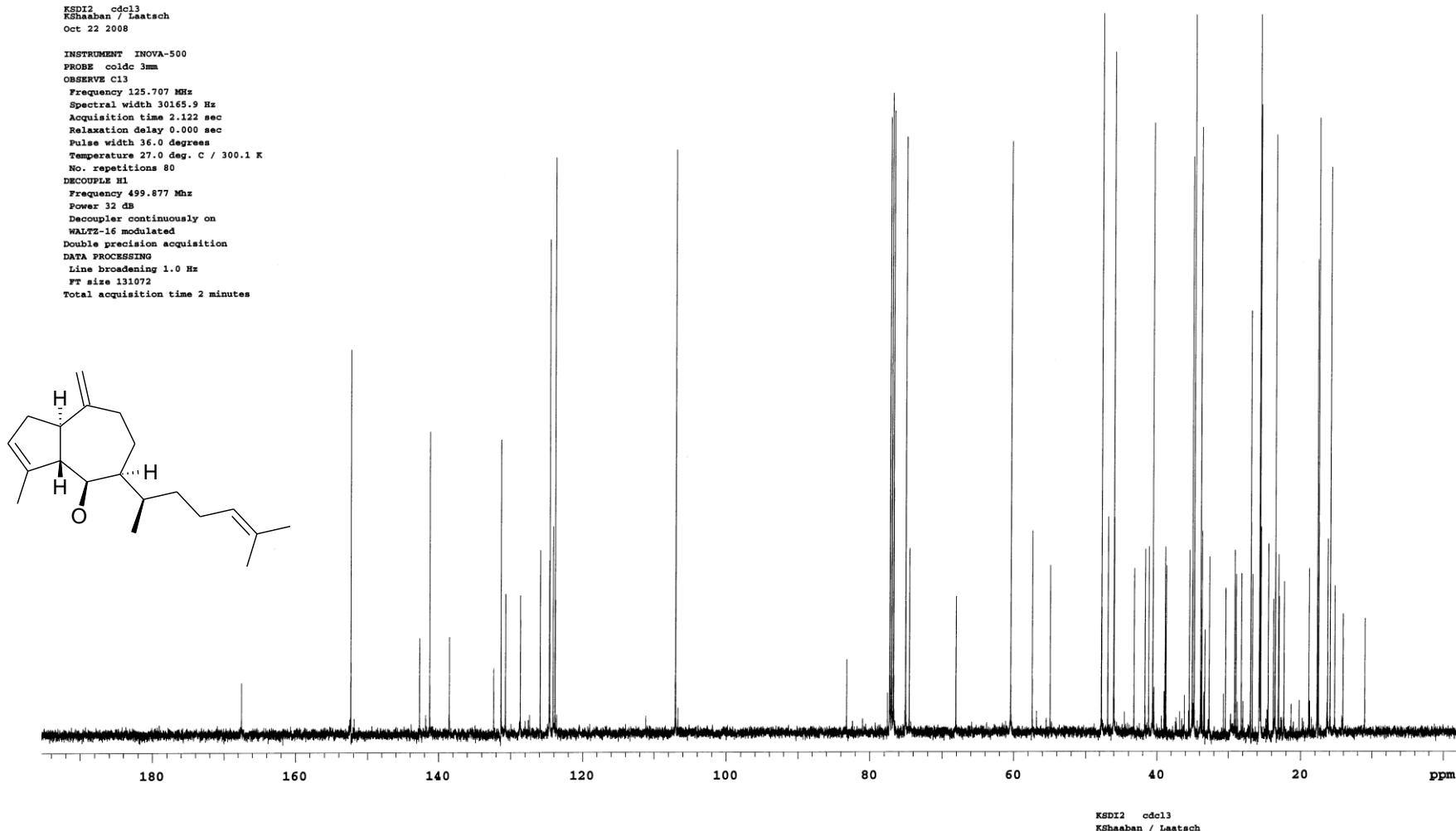


Figure S19. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of pachydictyol A (3).

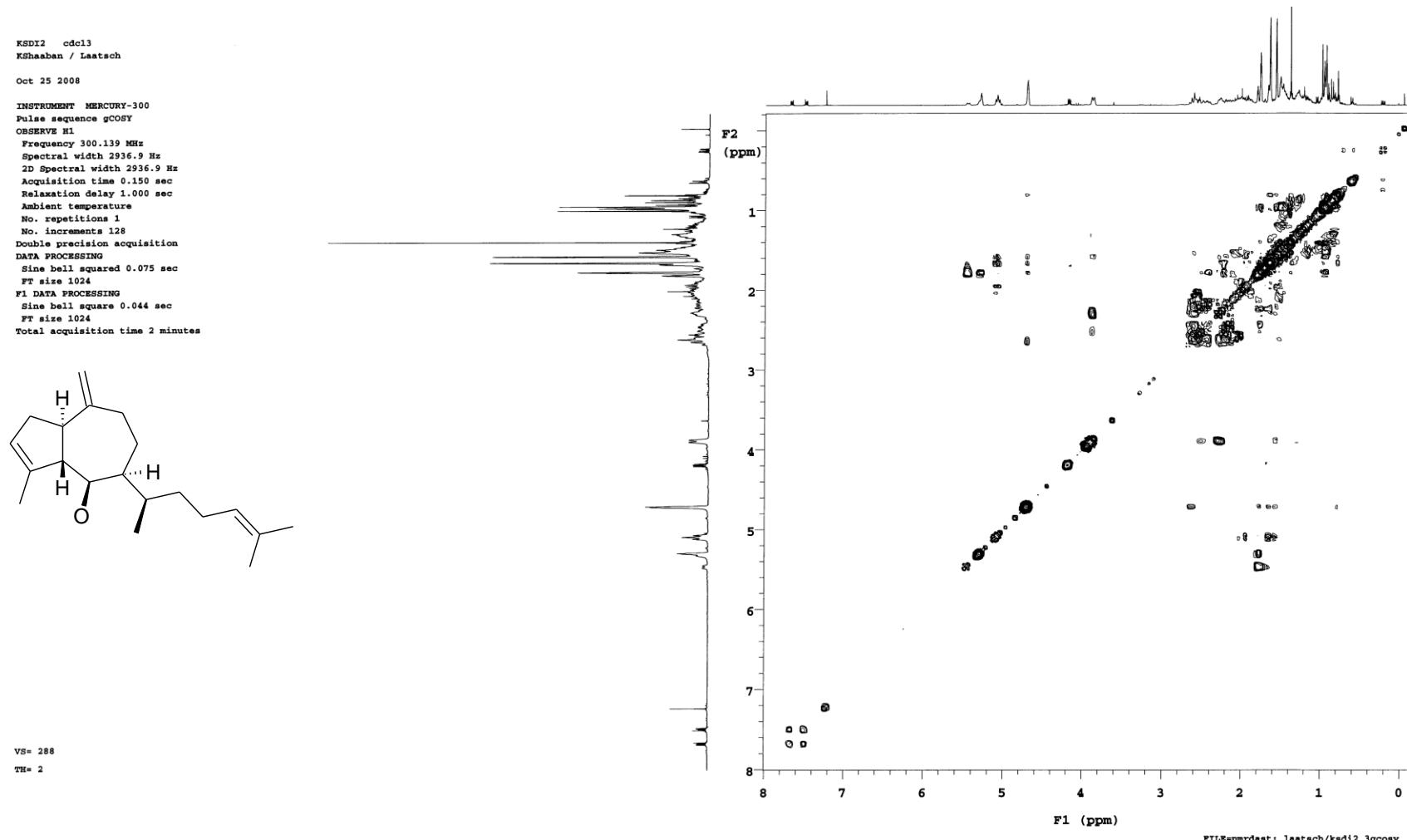


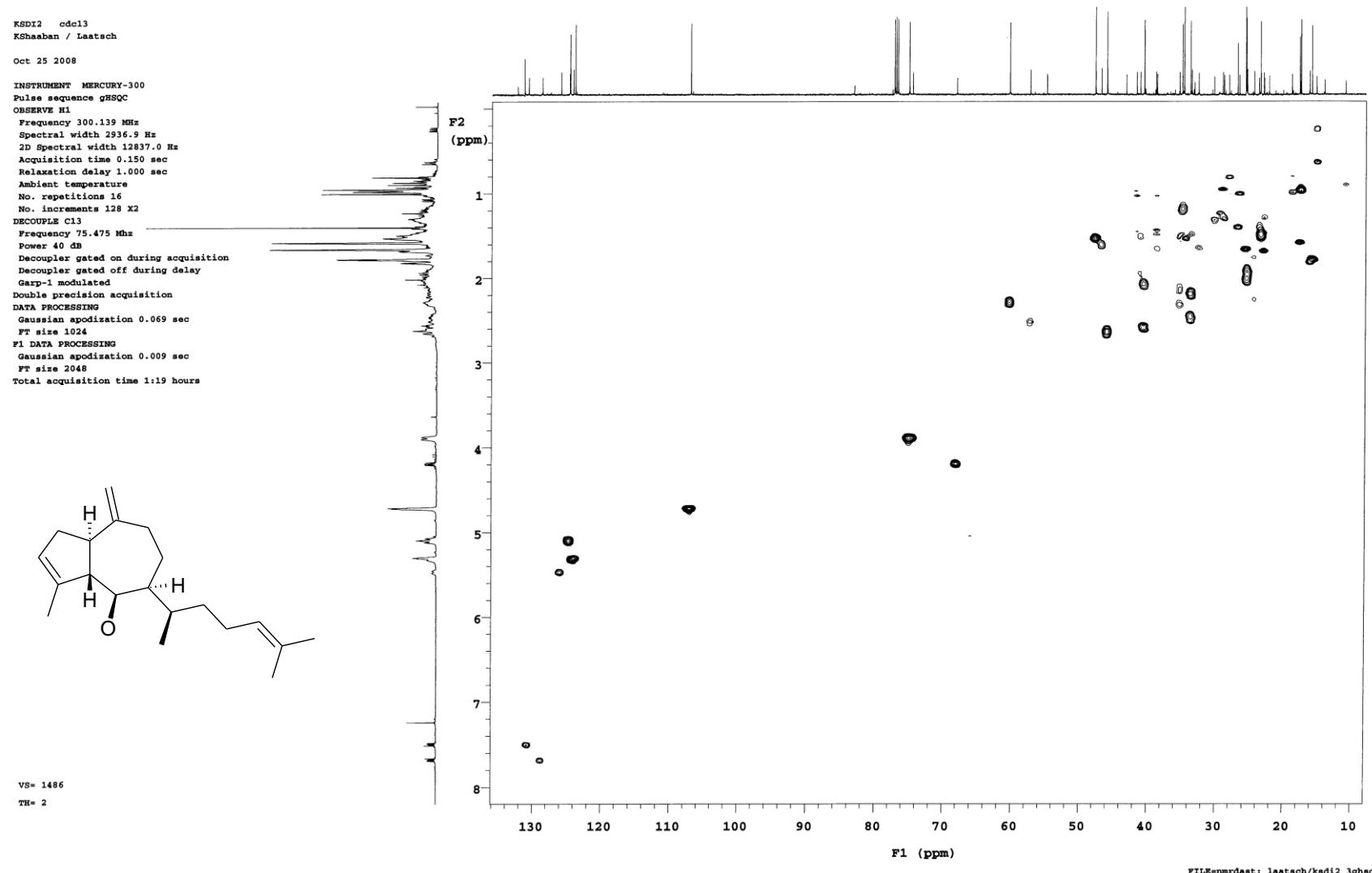
Figure S20. HSQC spectrum (CDCl_3 , 300 MHz) of pachydictyol A (3).

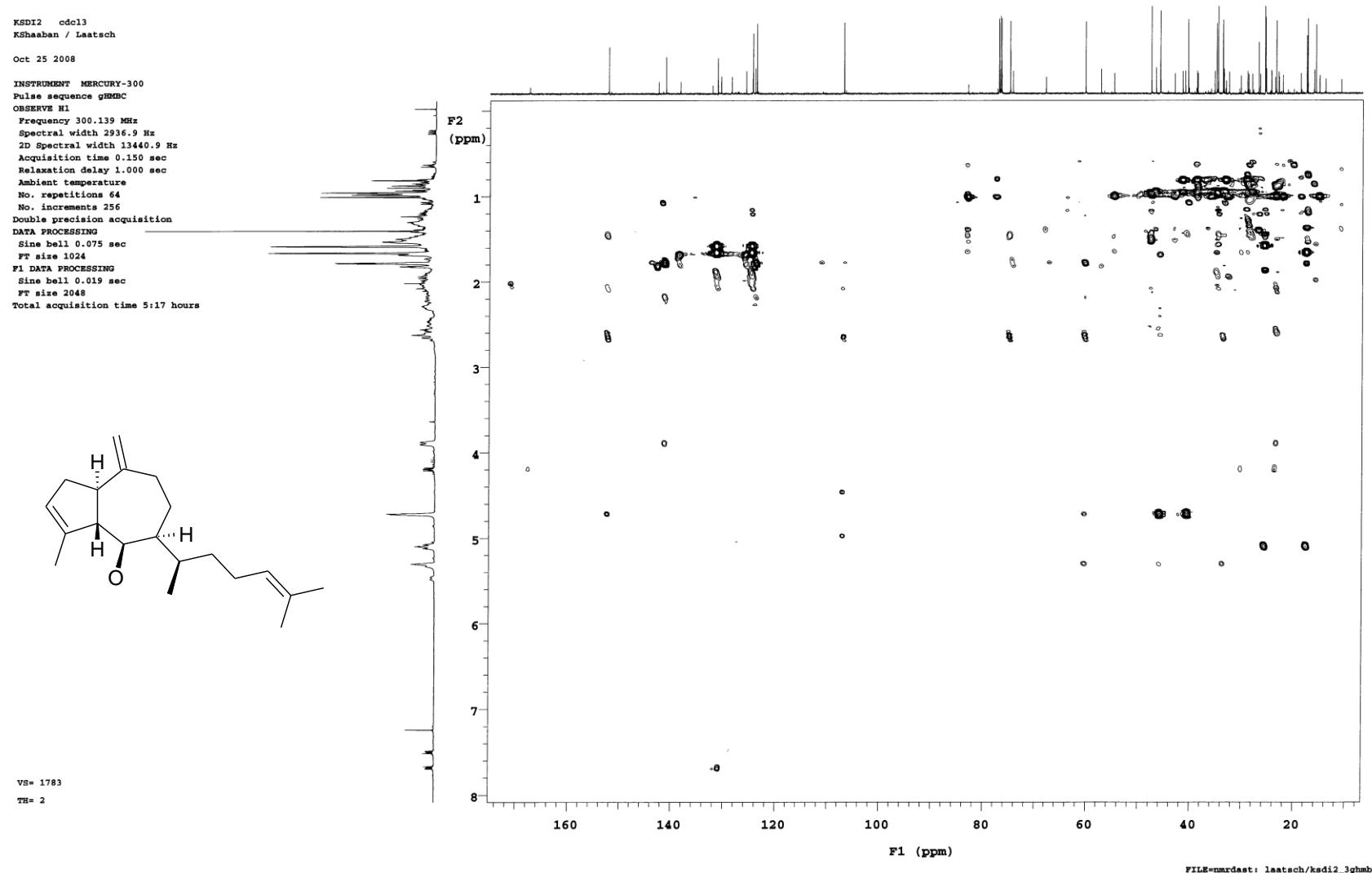
Figure S21. HMBC spectrum (CDCl_3 , 300 MHz) of pachydictyol A (3).

Figure S22. ^1H NMR spectrum (CDCl_3 , 300 MHz) of dictyol E (4).

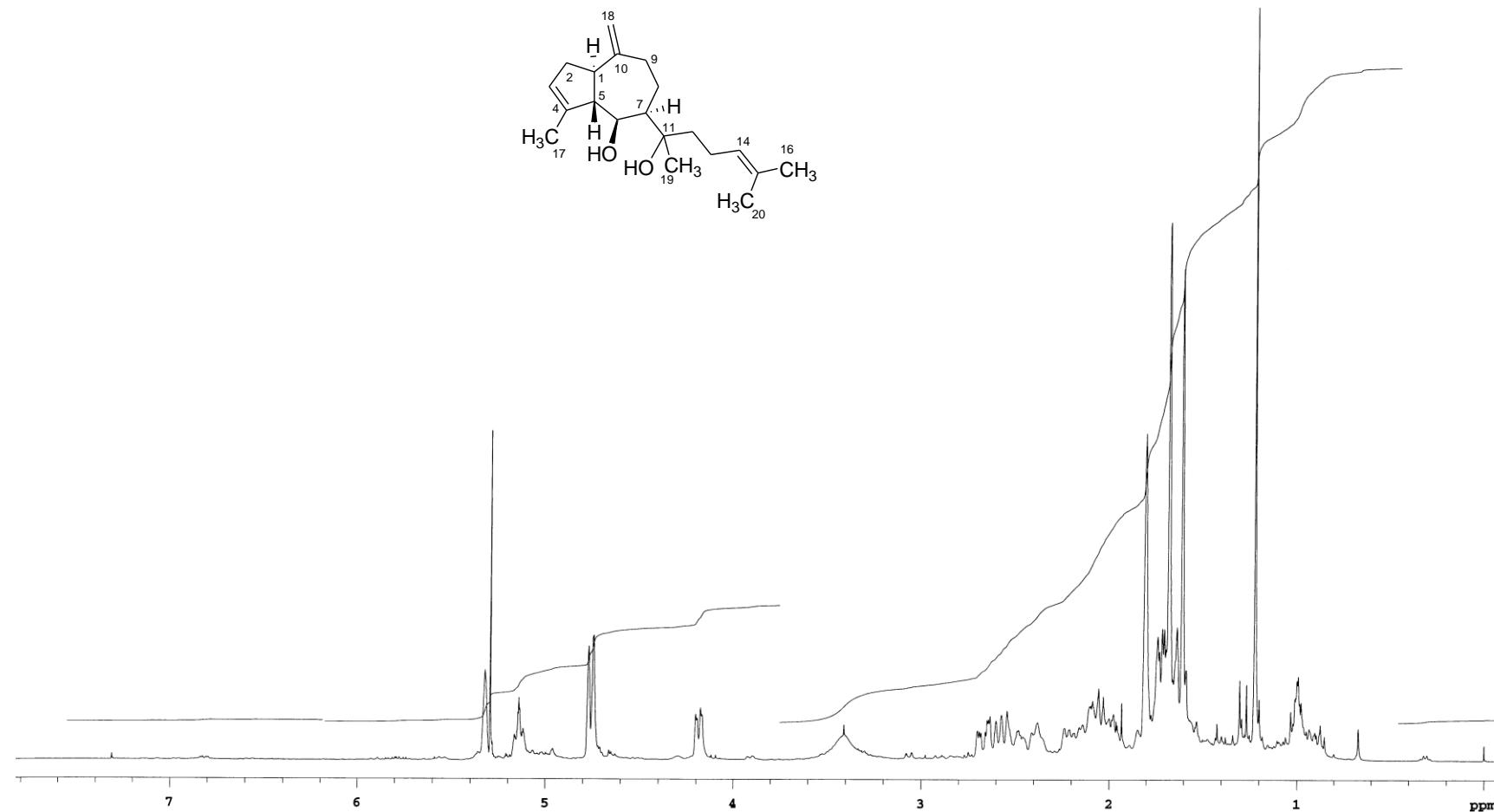


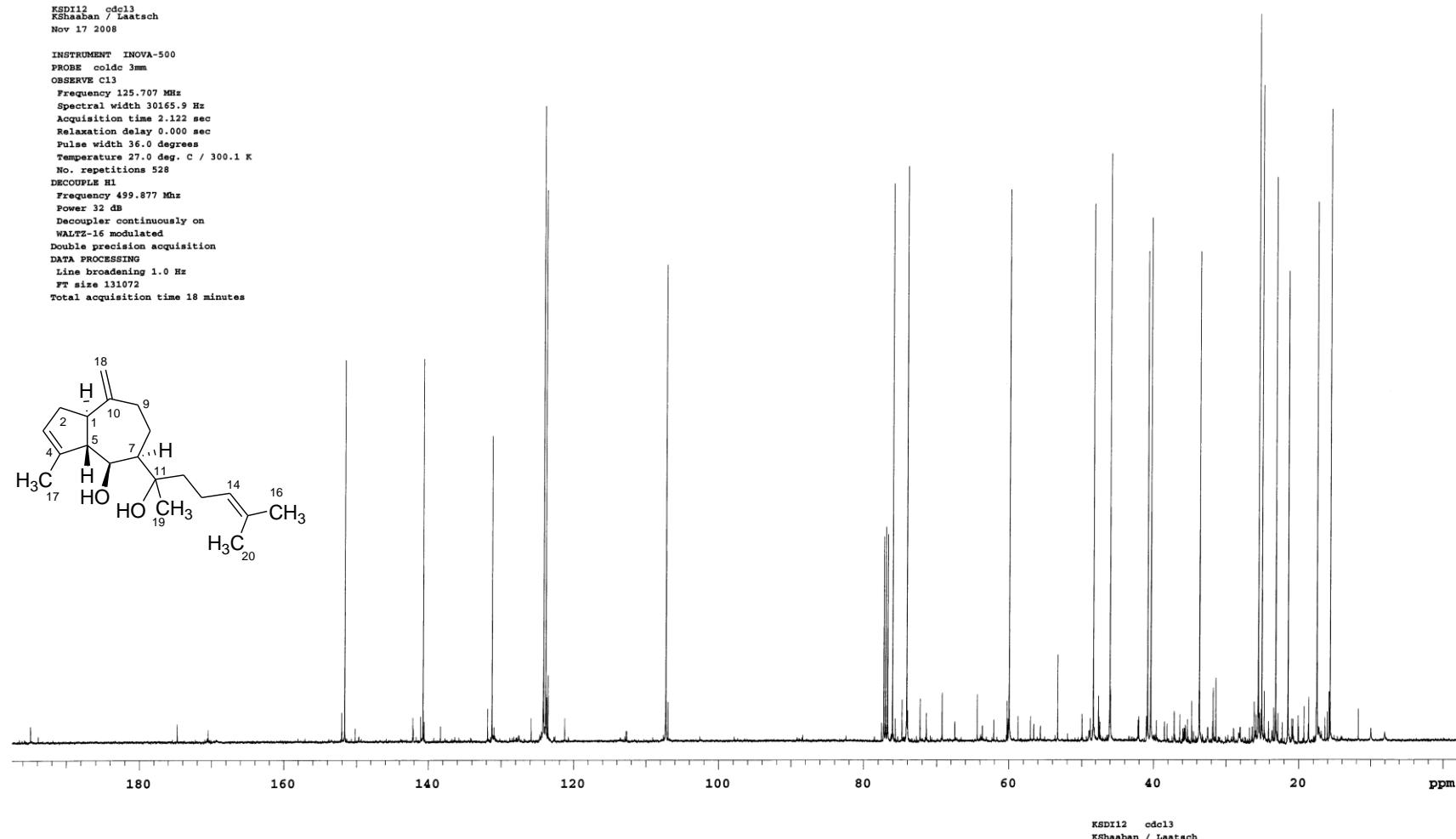
Figure S23. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of dictyol E (**4**).

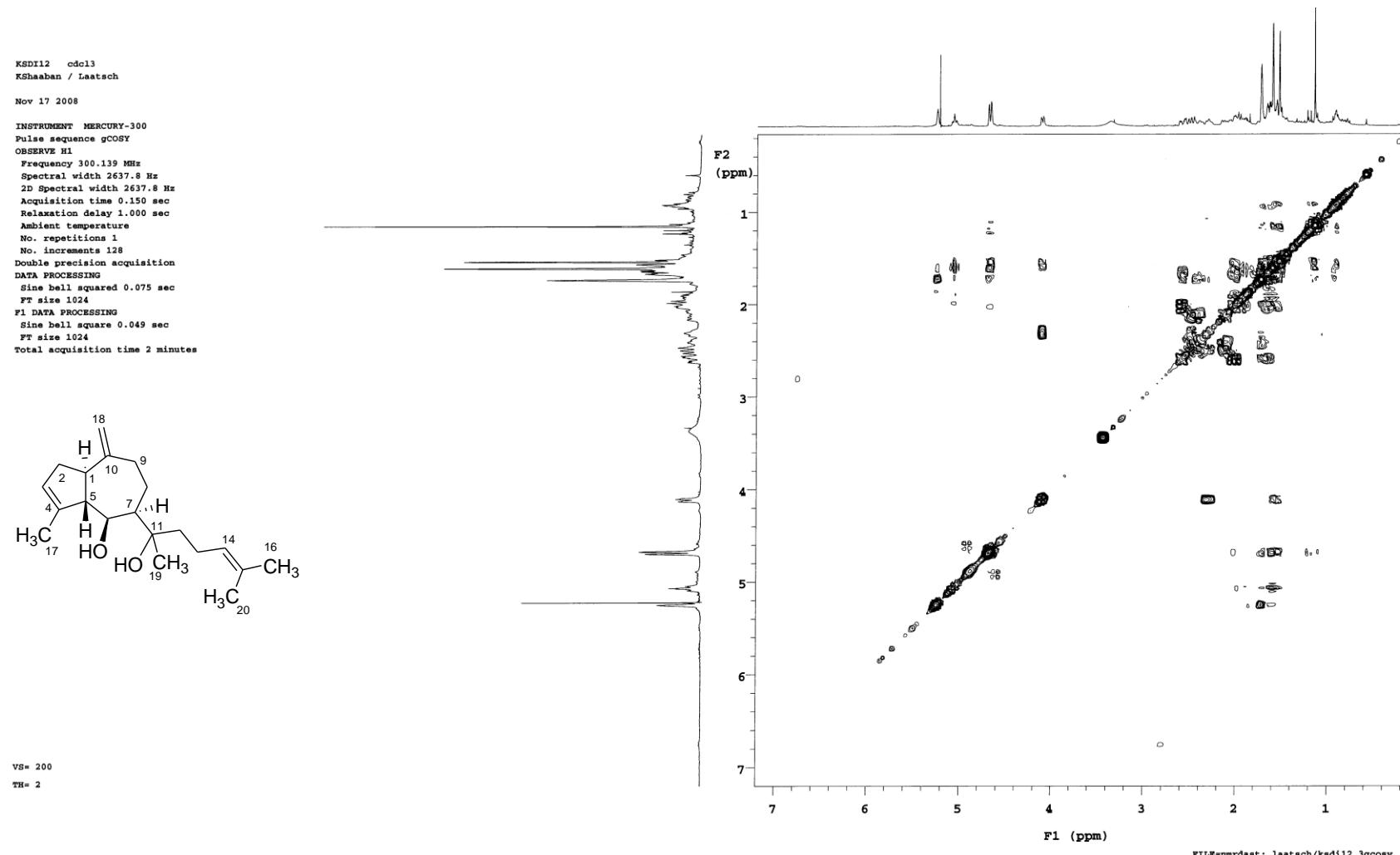
Figure S24. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of dictyol E (**4**).

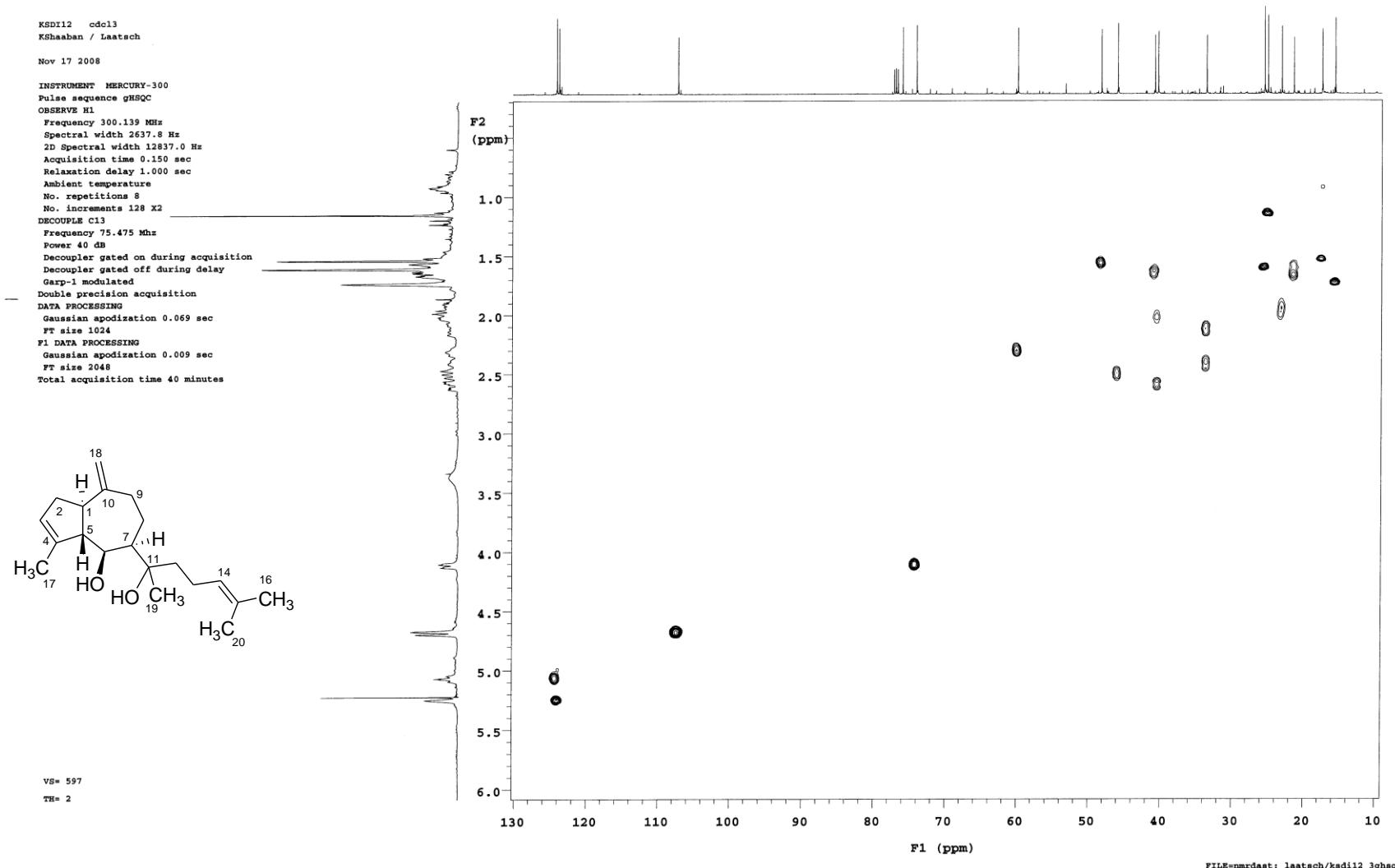
Figure S25. HSQC spectrum (CDCl_3 , 300 MHz) of dictyol E (4).

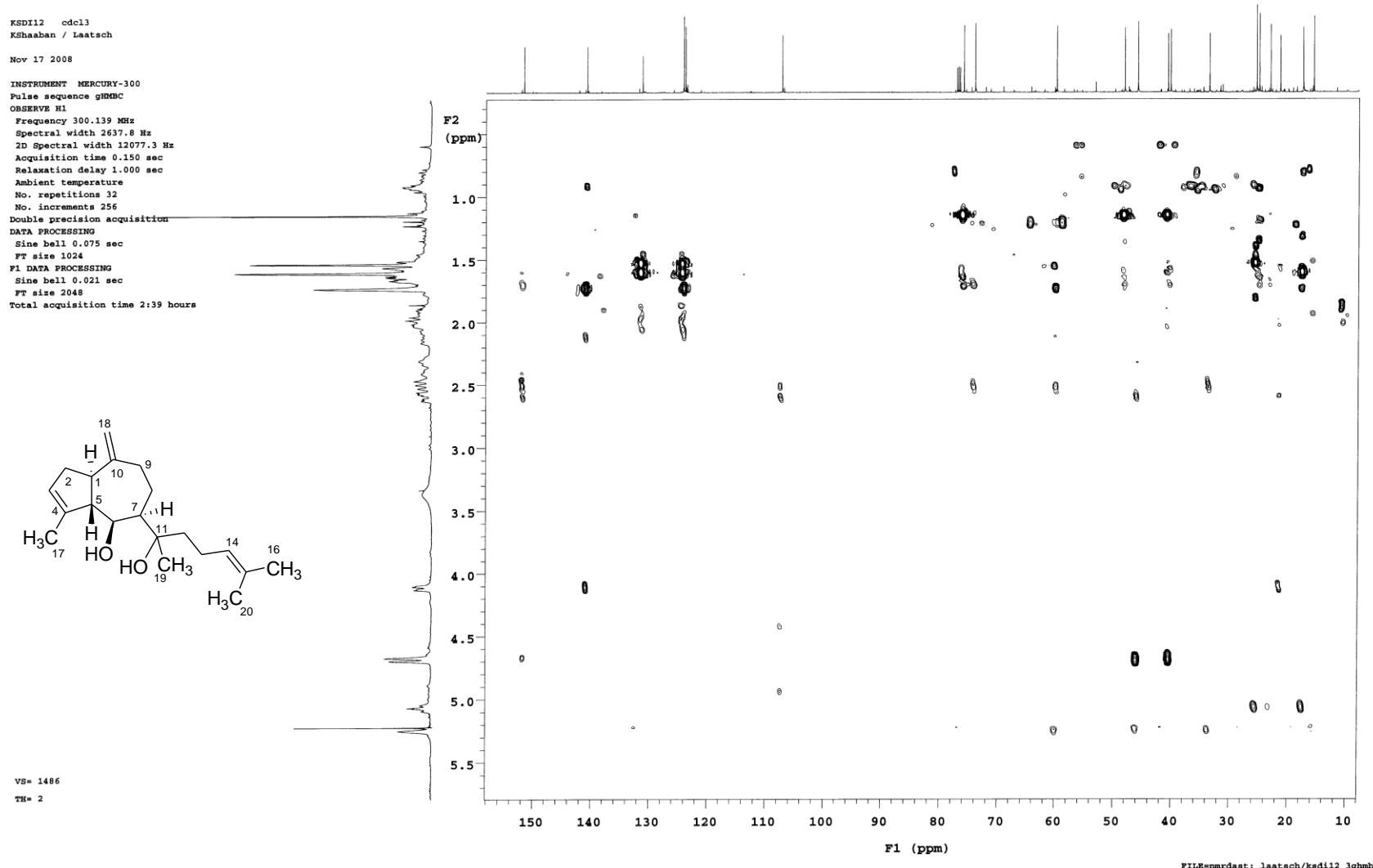
Figure S26. HMBC spectrum (CDCl_3 , 300 MHz) of dictyol E (4).

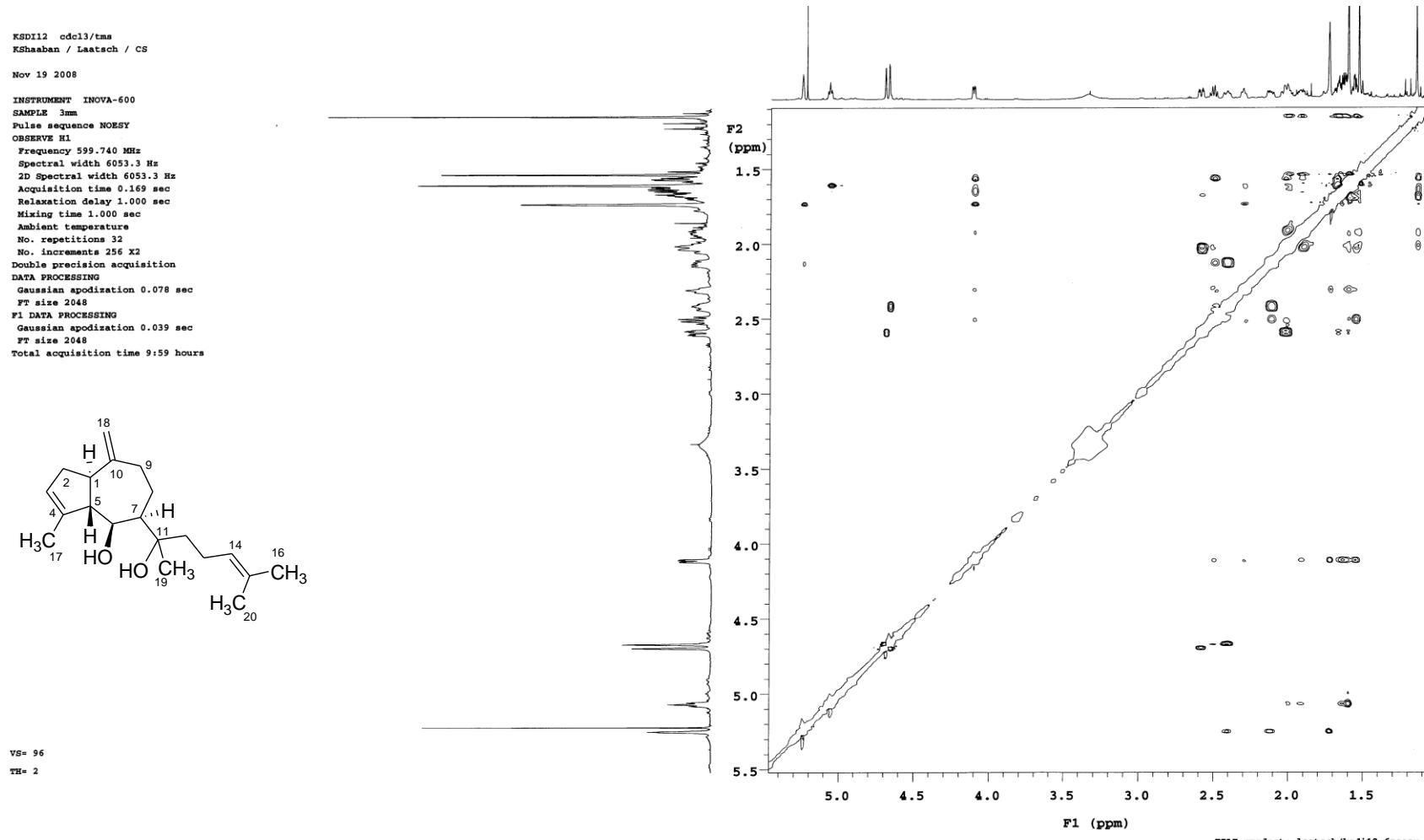
Figure S27. NOESY spectrum (CDCl_3 , 600 MHz) of dictyol E (4).

Figure S28. ^1H NMR spectrum (CDCl_3 , 300 MHz) of *cis*-africanan-1 α -ol (**5a**).

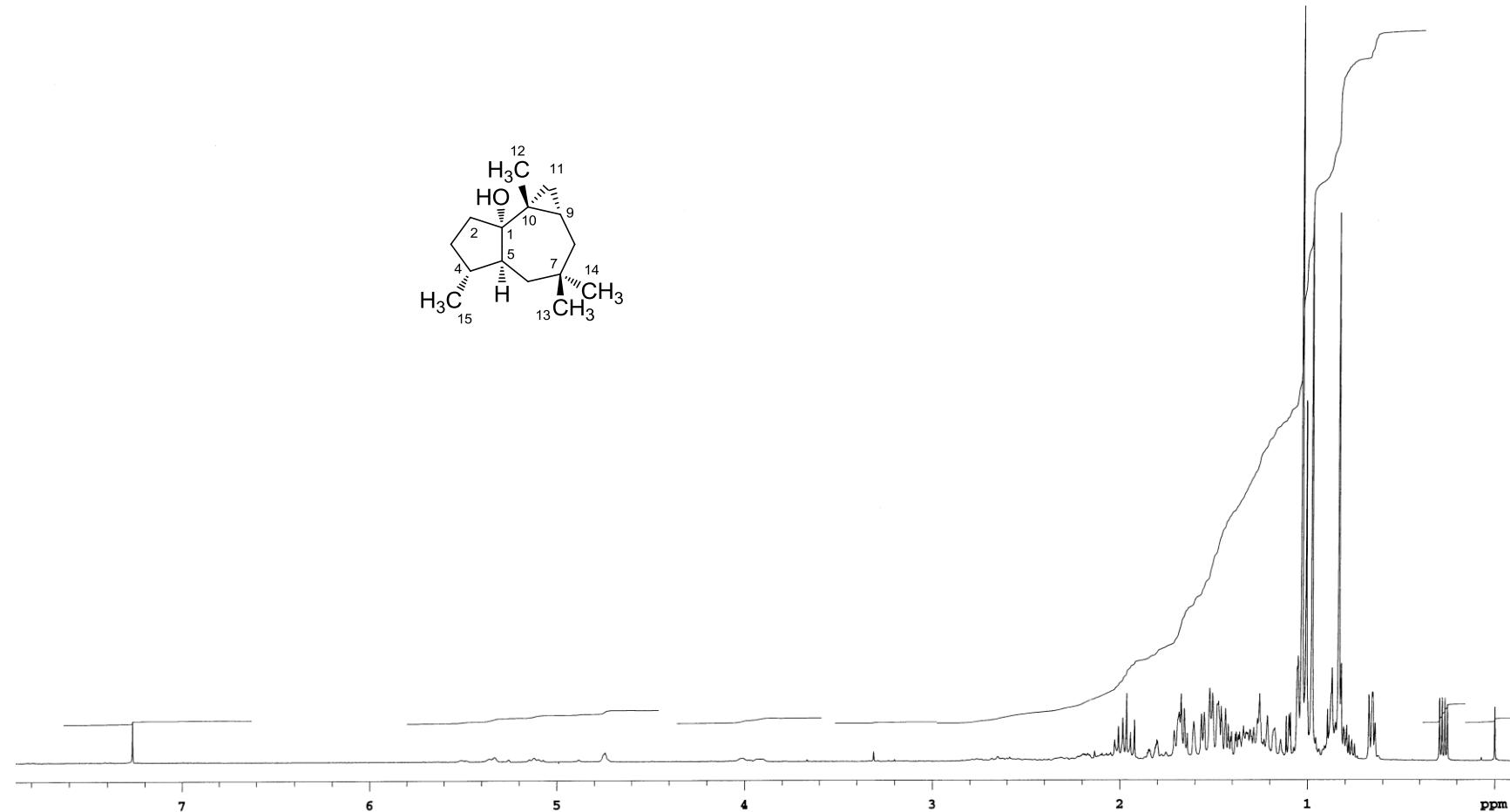


Figure S29. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of *cis*-africanan-1 α -ol (**5a**).

INDEX	FREQ	PPM	HEIGHT	INDEX	FREQ	PPM	HEIGHT
1	19156.3	152.41	7.2	46	4462.3	35.50	6.6
2	17825.6	141.82	5.6	47	4409.9	35.08	10.0
3	17759.3	141.29	5.7	48	4391.0	34.93	3.2
4	17422.9	138.61	6.5	49	4375.8	34.81	13.3
5	16518.4	131.42	4.4	50	4260.7	33.90	11.1
6	16515.6	131.40	3.2	51	4237.3	33.71	7.0
7	15831.2	125.95	6.5	52	4229.0	33.65	3.2
8	15673.3	124.69	6.1	53	4202.3	33.43	17.3
9	15665.5	124.63	9.8	54	4188.5	33.32	102.6
10	15609.8	124.19	6.6	55	4127.2	32.84	3.2
11	15573.4	123.90	10.3	56	4111.1	32.71	180.6
12	15544.9	123.67	3.5	57	4019.5	31.98	3.1
13	13975.3	111.19	3.6	58	3860.3	30.71	17.4
14	13457.0	107.06	11.2	59	3740.1	29.76	12.6
15	13415.5	106.73	3.4	60	3734.6	29.71	5.7
16	10468.7	83.29	4.5	61	3697.3	29.42	3.0
17	10462.7	83.24	72.3	62	3667.9	29.18	175.8
18	9756.7	77.62	16.1	63	3616.8	28.77	12.3
19	9710.2	77.25	149.4	64	3551.9	28.26	180.8
20	9704.2	77.21	13.6	65	3521.0	28.01	17.8
21	9695.4	77.14	3.4	66	3361.8	26.75	166.3
22	9678.4	77.00	156.4	67	3240.3	25.78	15.0
23	9646.6	76.75	155.3	68	3226.9	25.67	10.5
24	9450.6	75.19	3.5	69	3212.6	25.56	6.7
25	9438.1	75.09	10.0	70	3105.8	24.71	3.2
26	9372.8	74.57	6.7	71	3085.6	24.55	6.6
27	7599.2	60.46	11.8	72	2962.7	23.57	91.5
28	7221.8	57.46	7.0	73	2907.9	23.13	6.8
29	7144.9	56.84	3.3	74	2860.0	22.75	4.8
30	6908.3	54.96	172.2	75	2814.9	22.40	4.1
31	6008.0	47.80	11.2	76	2807.6	22.34	150.0
32	5897.1	46.92	6.8	77	2686.1	21.37	14.4
33	5894.8	46.90	4.6	78	2544.3	20.24	14.4
34	5793.0	46.09	11.4	79	2378.6	18.92	169.6
35	5787.5	46.04	7.5	80	2361.5	18.79	17.2
36	5438.2	43.27	175.1	81	2329.8	18.54	3.2
37	5247.1	41.75	200.0	82	2232.7	17.76	12.4
38	5184.5	41.25	180.6	83	2213.3	17.61	7.7
39	5110.0	40.65	11.7	84	2211.0	17.59	11.8
40	5088.8	40.49	16.1	85	2062.4	16.41	3.6
41	4910.2	39.06	15.8	86	2058.2	16.37	14.0
42	4894.1	38.94	189.7	87	2050.4	16.31	8.0
43	4632.2	36.85	3.7	88	2006.7	15.96	12.0
44	4548.0	36.18	16.7	89	1923.3	15.30	145.6
45	4475.7	35.61	9.1	90	1783.9	14.19	4.1

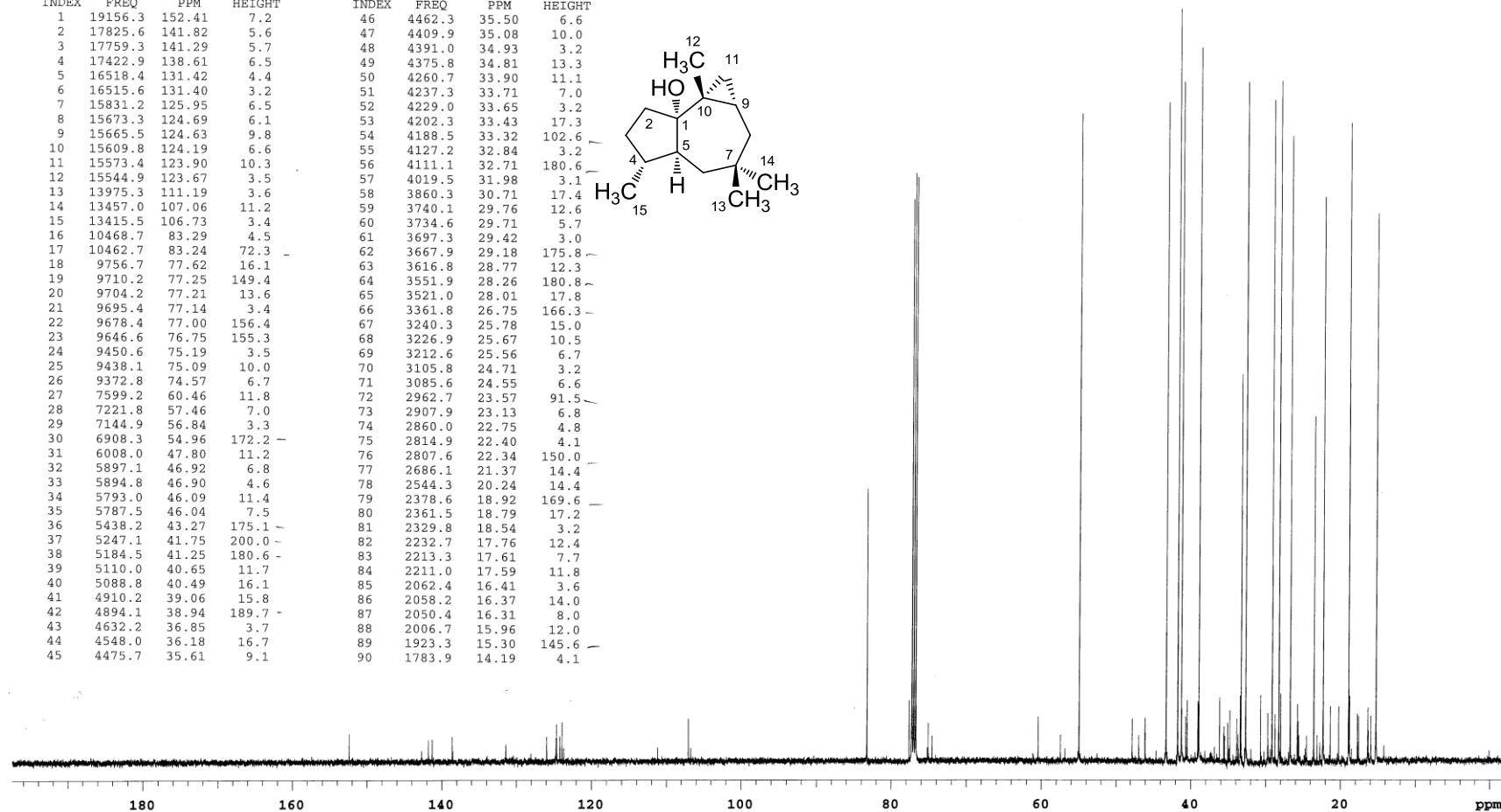
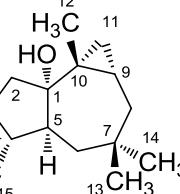


Figure S30. ^1H - ^1H -COSY spectrum (CDCl_3 , 300 MHz) of *cis*-africanan-1 α -ol (**5a**).

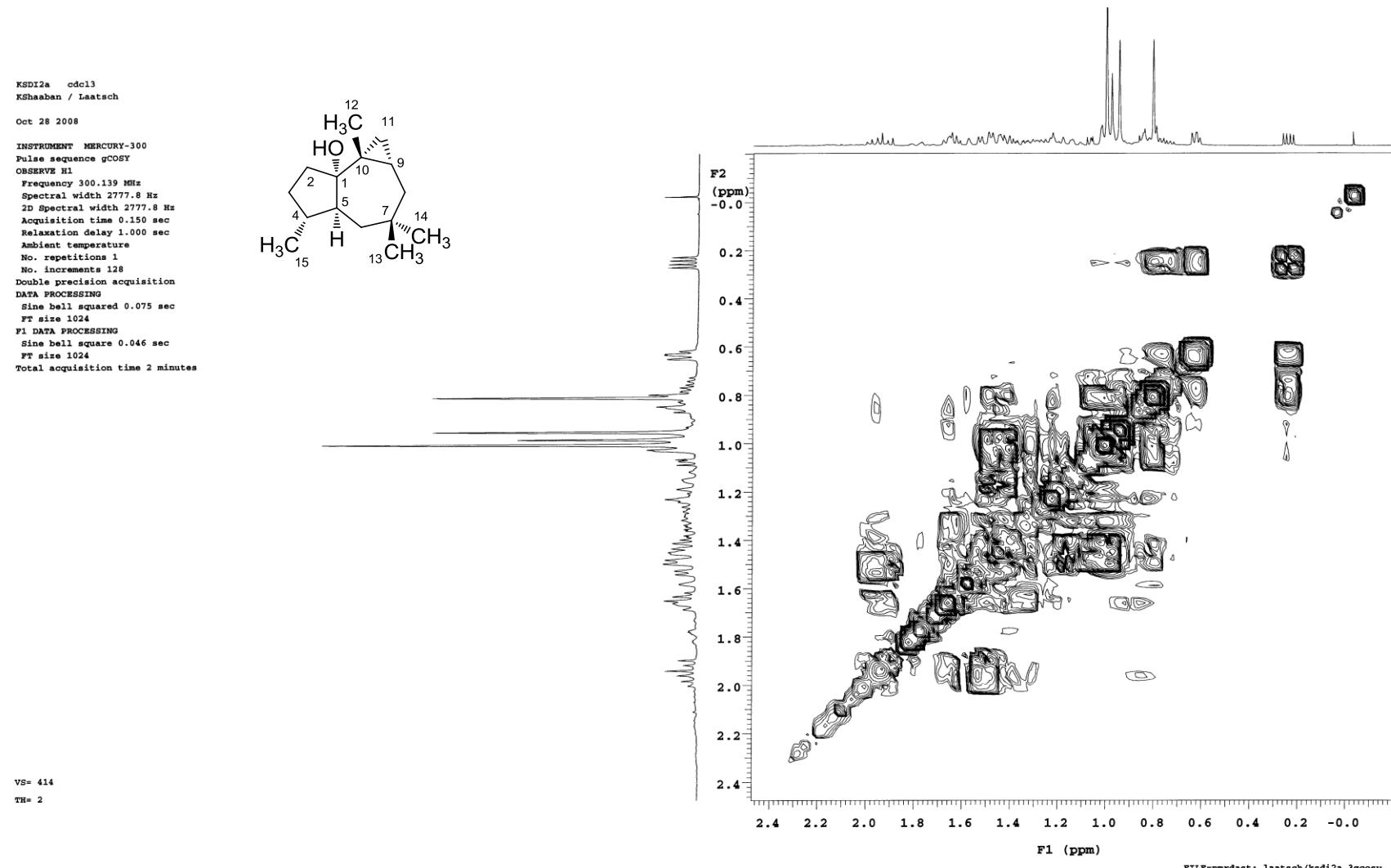


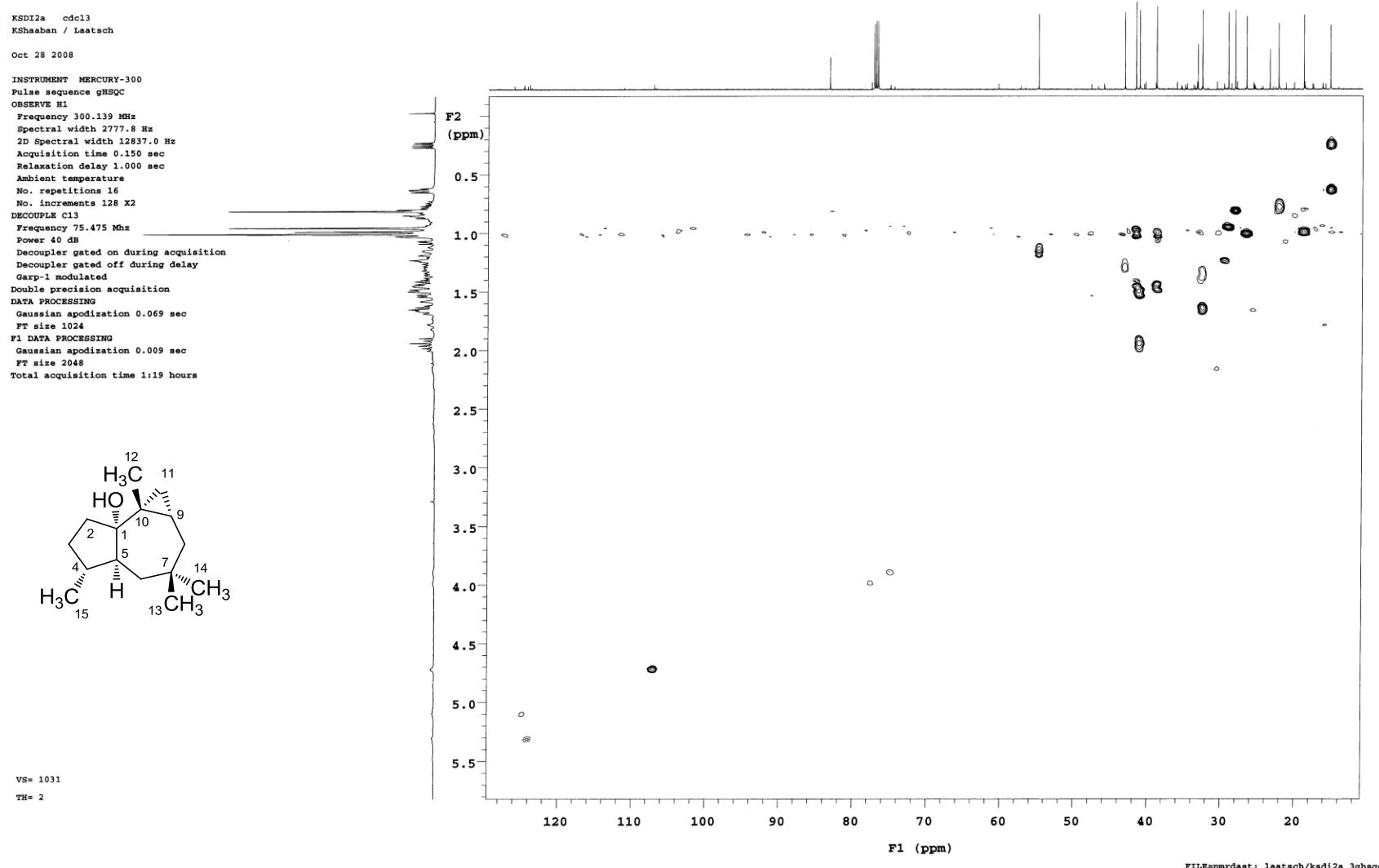
Figure S31. HSQC spectrum (CDCl_3 , 300 MHz) of *cis*-africanan-1 α -ol (**5a**).

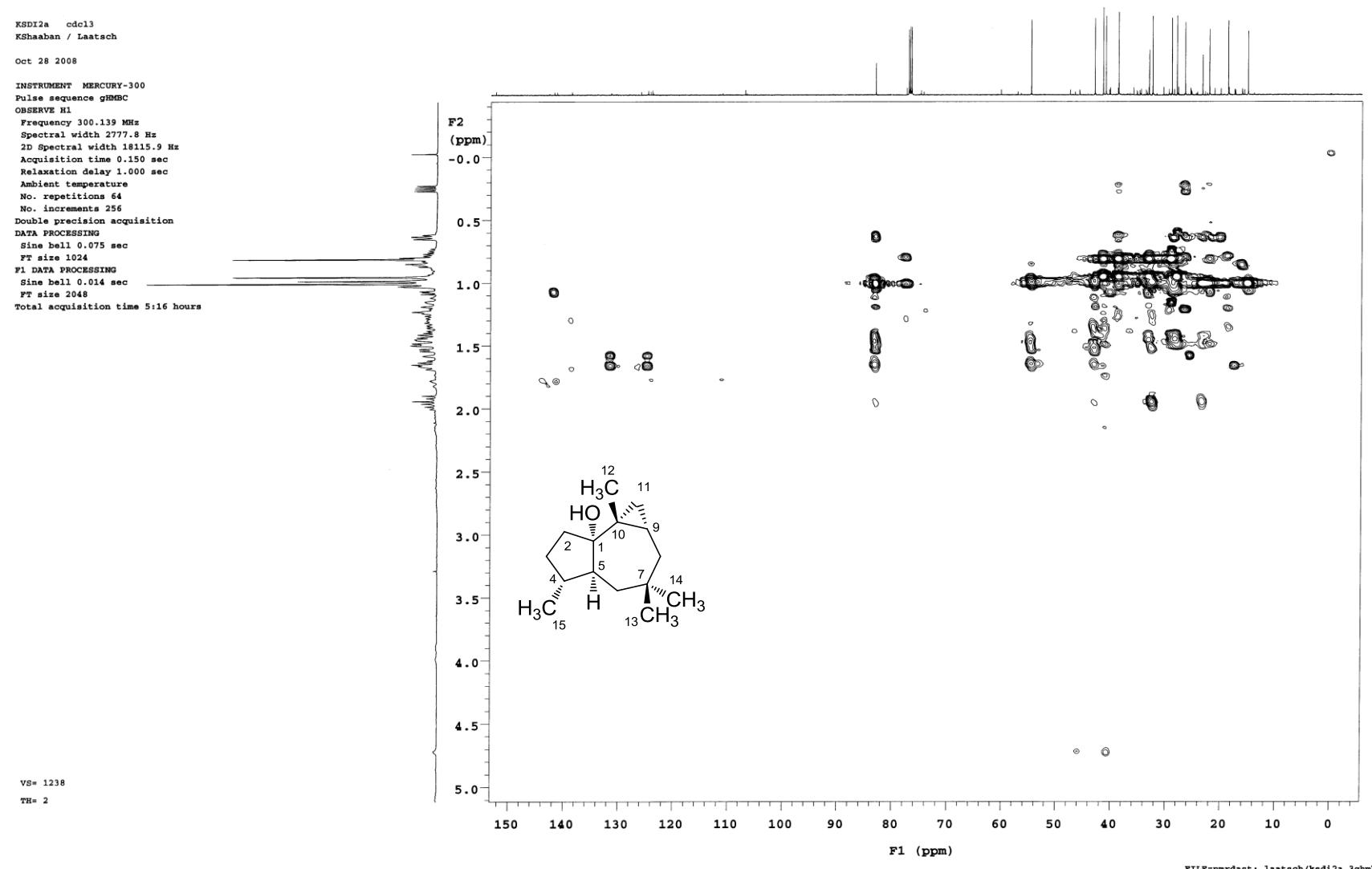
Figure S32. HMBC spectrum (CDCl_3 , 300 MHz) of *cis*-africanan-1 α -ol (**5a**).

Figure S33. ^1H NMR spectrum (CDCl_3 , 300 MHz) of fucosterol (**6**).

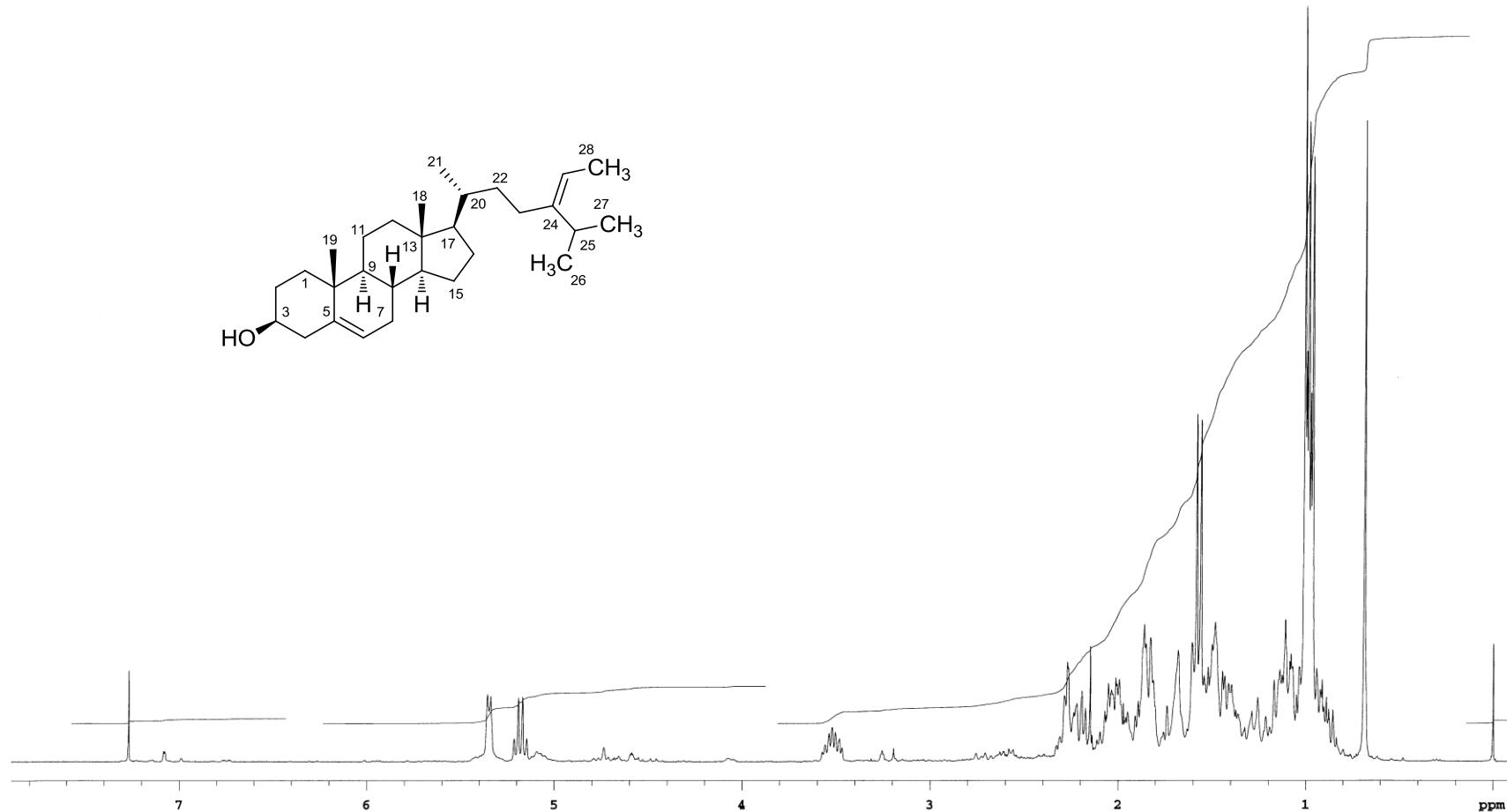


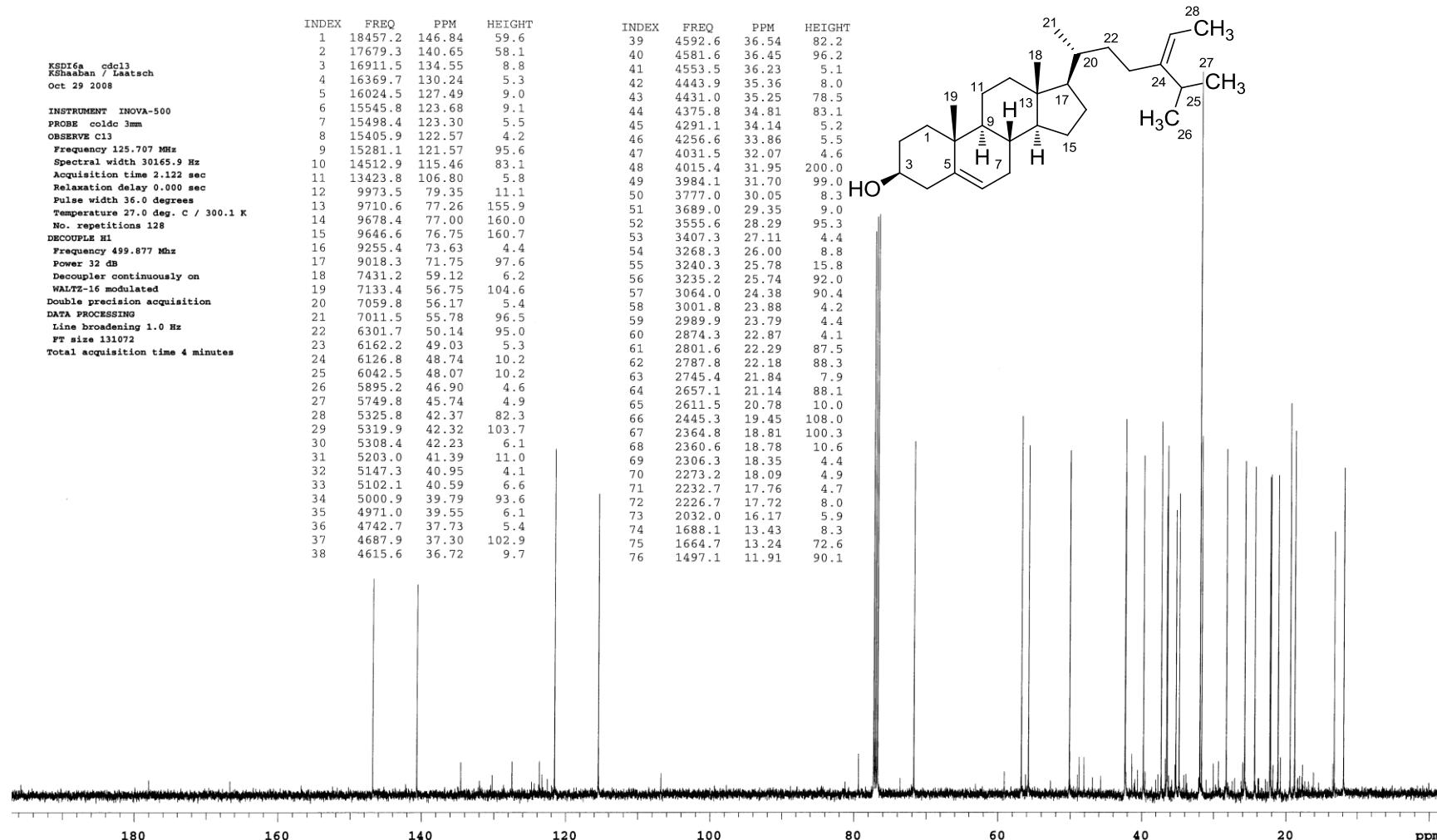
Figure S34. ^{13}C NMR spectrum (CDCl_3 , 125 MHz) of fucosterol (6).

Table S1. GC-MS analysis of the nonpolar fraction I.

Name	R _t (min)	Formula	Mol.Wt.
Nonanal	9.35	C ₉ H ₁₈ O	142
Tetrahydrothiophen-1,1-dioxide	11.05	C ₄ H ₈ O ₂ S	120
β-Bourbonene	13.58	C ₁₅ H ₂₄	204
Pentadecane	14.84	C ₁₅ H ₃₂	212
Hexadecane	14.86	C ₁₆ H ₃₄	226
Heptadecane	17.21	C ₁₇ H ₃₆	240
Tetradecanoic acid	17.86	C ₁₄ H ₂₈ O ₂	228
Hexadecanoic acid	19.96	C ₁₆ H ₃₂ O ₂	256
(9Z)-Octadecenoic acid methyl ester	21.27	C ₁₉ H ₃₆ O ₂	296
(9Z)-Octadecenoic acid	21.60	C ₁₈ H ₃₄ O ₂	282
Diisooctyl adipate	23.85	C ₂₂ H ₄₂ O ₄	370

Table S2. GC-MS analysis of the unsaponifiable part of the petroleum ether extract of *D. dichotoma*.

Name	R _t (min)	Formula	Mol.Wt.
2-Ethyl-1-hexanol	7.09	C ₈ H ₁₈ O	130
2,2,6,7-Tetramethyl-10-oxatricyclo[4.3.0.1(1,7)decan-5-one (7)	12.15	C ₁₃ H ₂₀ O ₂	208
1-Bromo-(4-bromomethyl)-decane	12.43	C ₁₁ H ₂₂ Br ₂	314
<i>N</i> -(4-Bromo- <i>n</i> -butyl)-piperidin-2-one (8)	13.37	C ₉ H ₁₆ BrNO	234
<i>tert</i> -Hexadecanethiol (9)	14.1	C ₁₆ H ₃₄ S	258
17-Pentatriacontene	16.1	C ₃₅ H ₇₀	490
1-Hexacosene	18.7	C ₂₆ H ₅₂	364
Tetrapentacontane	19.75	C ₅₄ H ₁₁₀	758