Supporting Information

Identification of *Rosellinia* species as producers of cyclodepsipeptide PF1022 A and resurrection of the genus *Dematophora* as inferred from polythetic taxonomy

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Table 1: Flanking positions of the calculated MAFFT alignments of ITS, LSU, RPB2 and TUB2, that have been rated as informative characters by Gblocks and were included for the phylogenetic analysis.

DNA locus	Flanking positions	Proportion of the original positions
ITS	[30-64], [84-100], [110-124], [234-244], [298-474], [476-485], [487-515], [546-582], [585-607], [613-627], [642-656], [675-700], [702-719], [722-732]	439/756 (58%)
LSU	[49-297], [299-384], [386-422], [424-484], [494-519], [521-562], [574-702], [705-1347]	1273/ 1373 (92%)
RPB2	[43-752], [754-858], [874-972], [989-1136], [1145-1158], [1172-1189]	1094/ 1250 (87%)
TUB	[82-94], [96-113], [123-138], [153-162], [167-191], [213-233], [257-269], [295-307], [312-321], [325-334], [349-359], [410-419], [441-485], [492-510], [526-544], [559-586], [653-701], [731-744], [757-772], [776-845], [861-873], [879-888], [895-916], [920-977], [987-1033], [1035-1151], [1153-1193], [1217-1758], [1762-1773], [1798-1822], [1825-1876]	1369/1932 (70%)

MAFFT alignments: Of the four gene loci: ITS, LSU, RPB2 and TUB (Fasta format)

Summary file: Cured MAFFT multigene alignment with indication of character partition (Nexus format)

Figure S1: HPLC-chromatogram, UV- and HR-MS spectrum of dematophorane A (1)

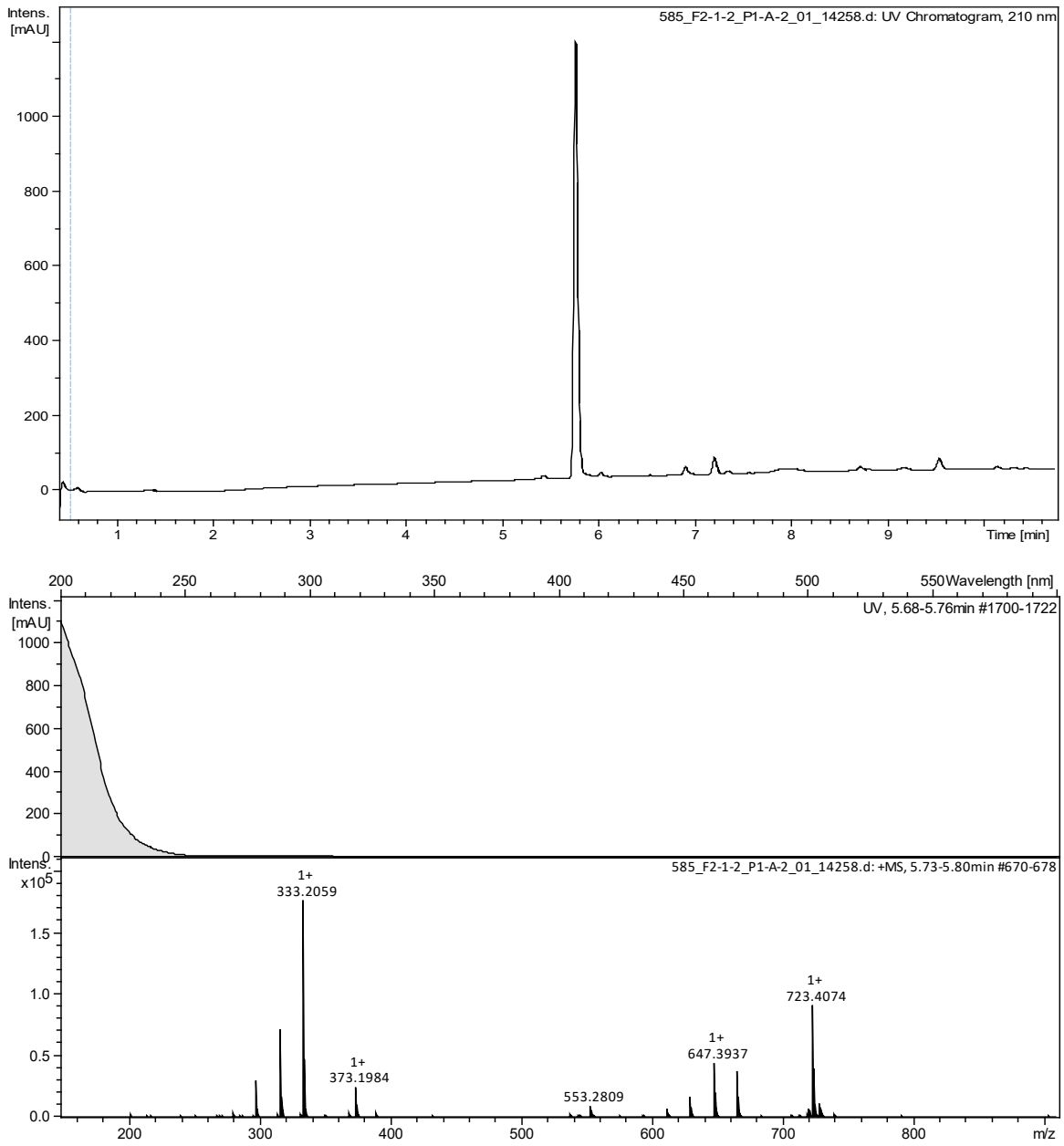

Figure S2: HPLC-chromatogram, UV- and HR-MS spectrum of dematophorane B (2)

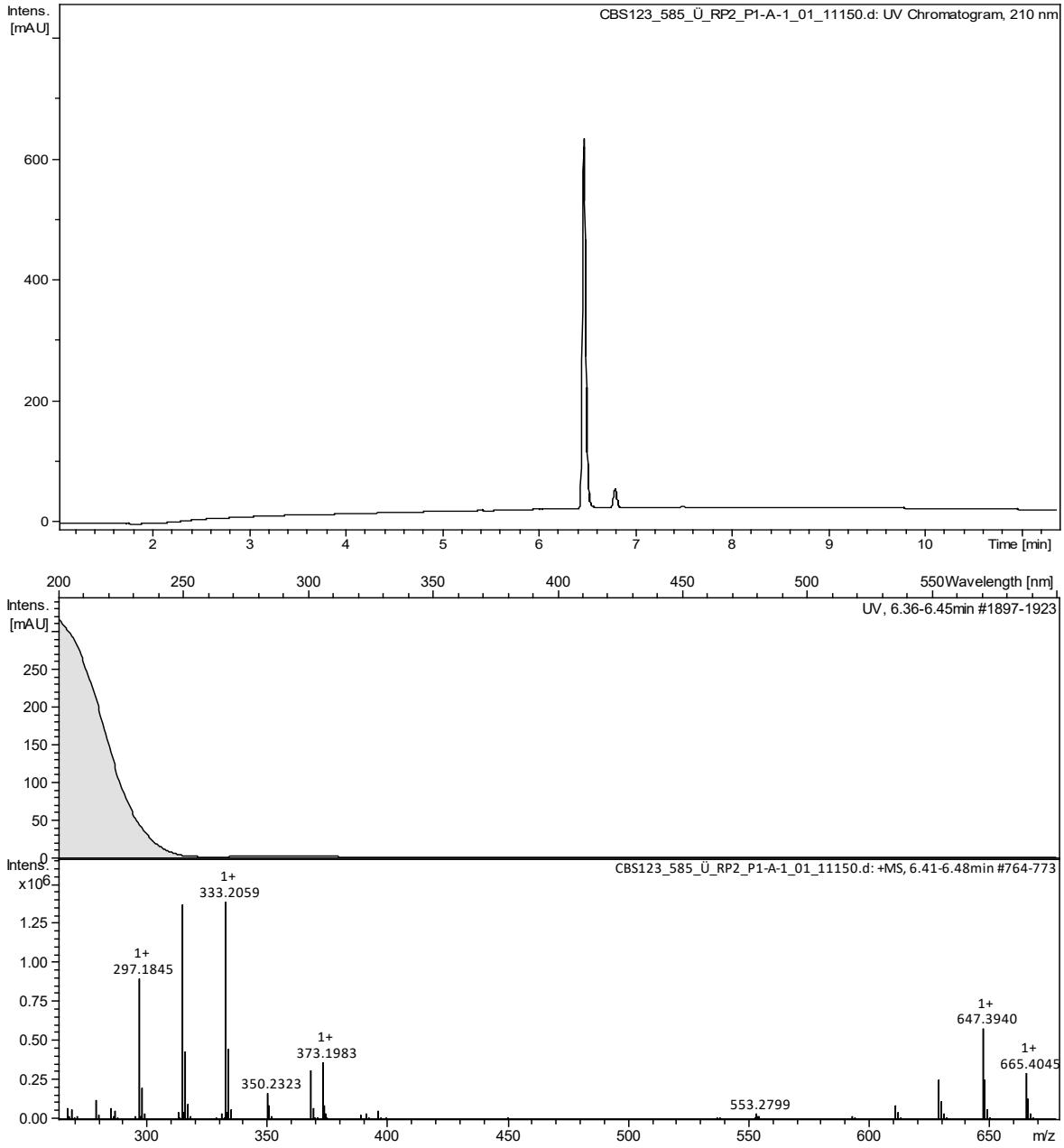

Figure S3: HPLC-chromatogram, UV- and HR-MS spectrum of dematophorane C (3)

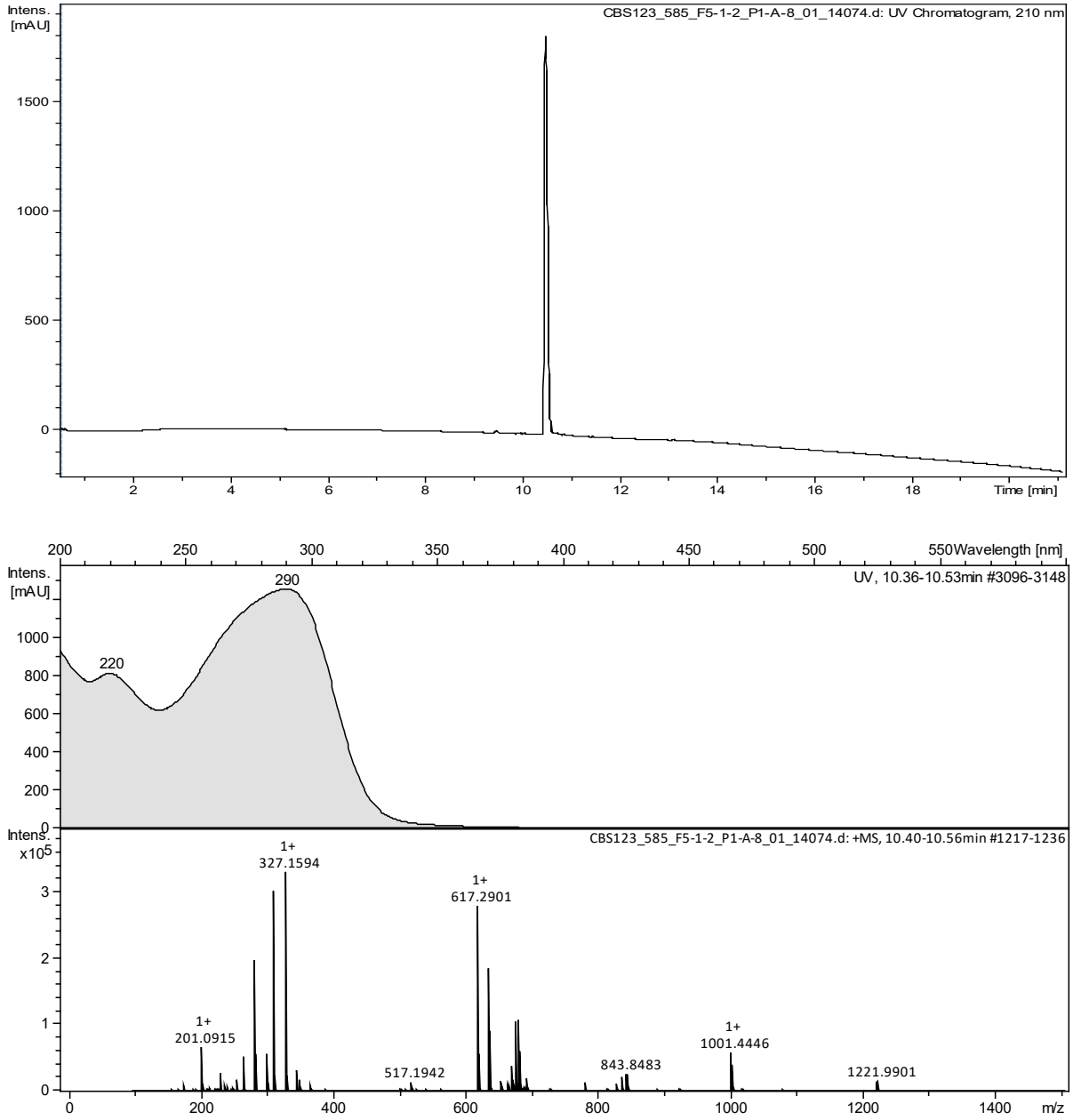

Figure S4: HPLC-chromatogram, UV- and HR-MS spectrum of dematophorane D (4)

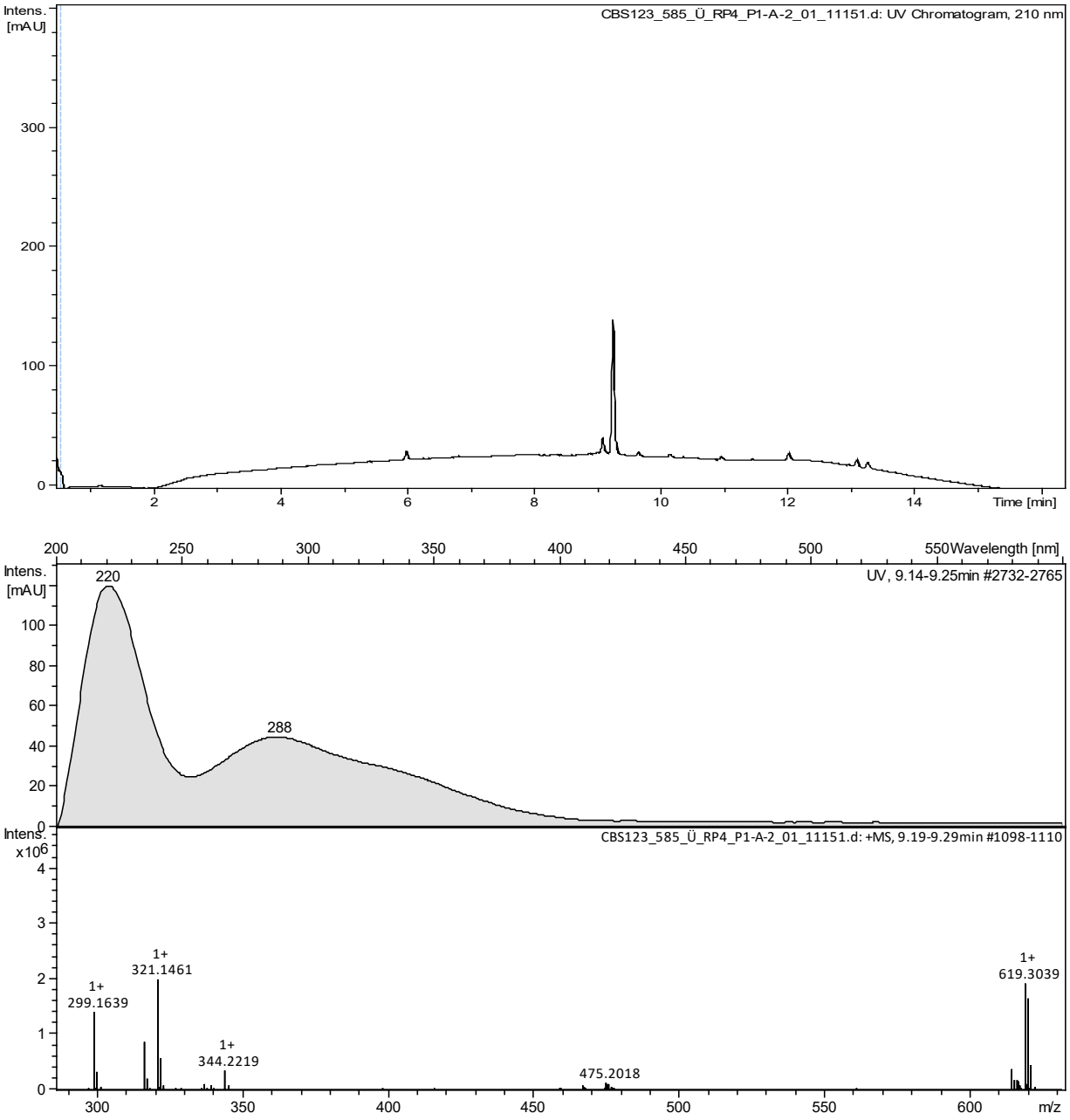

Figure S5: HPLC-chromatogram, UV- and HR-MS spectrum of PF1022A (12)

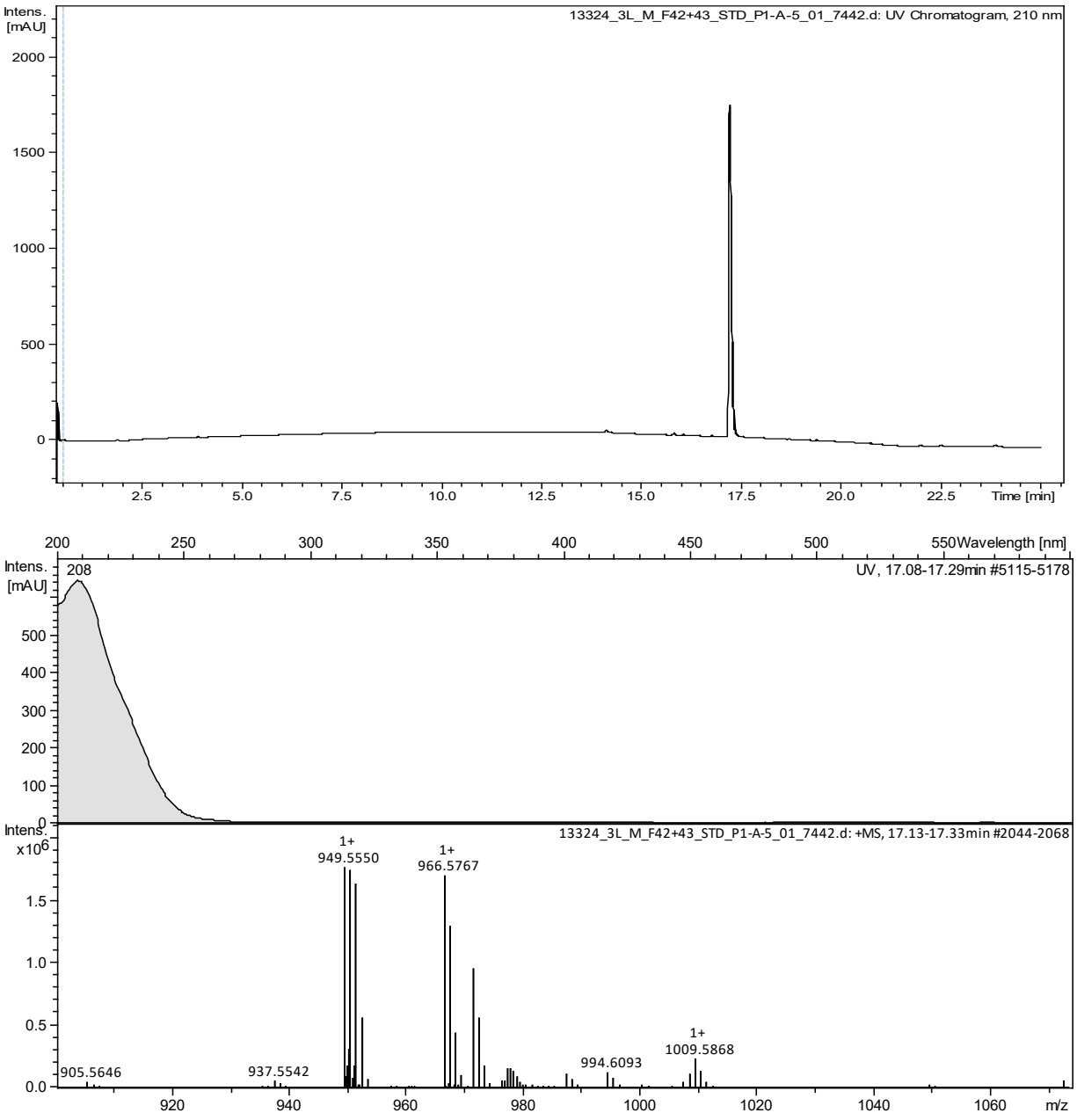

Figure S6: HPLC-chromatograms of *R. corticium* (STMA13324) extract (CS medium) and a fermentation sample of the original PF1022 producer strain; UV- and HR-MS spectra of compounds with the masses of PF1022C ($M+H^+$: 1025.577) and PF1022D ($M+H^+$: 873.515)

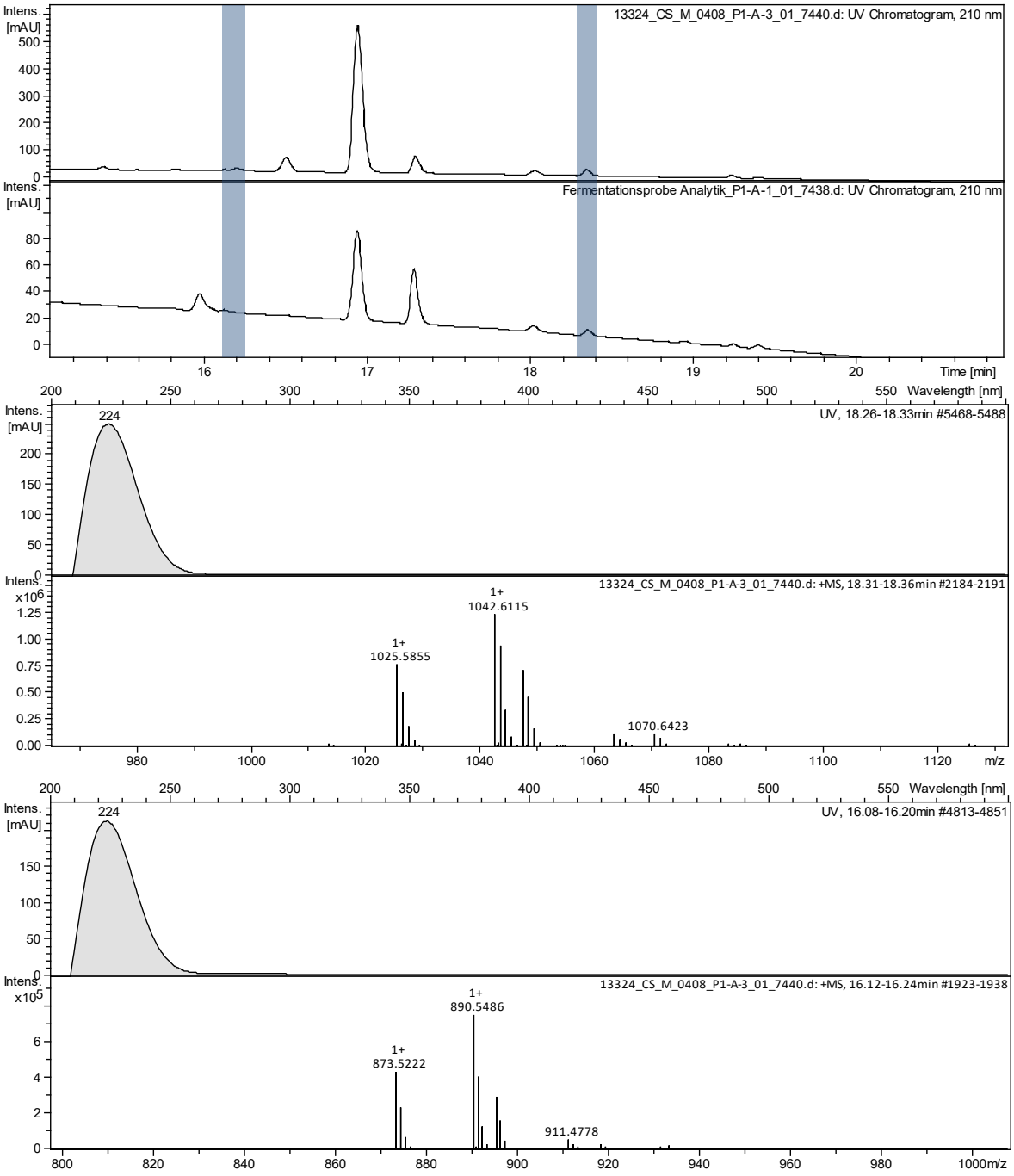

Figure S7: ^{1}H-NMR spectrum (500 MHz, MeOH-*d4*) of dematophorane A (1)

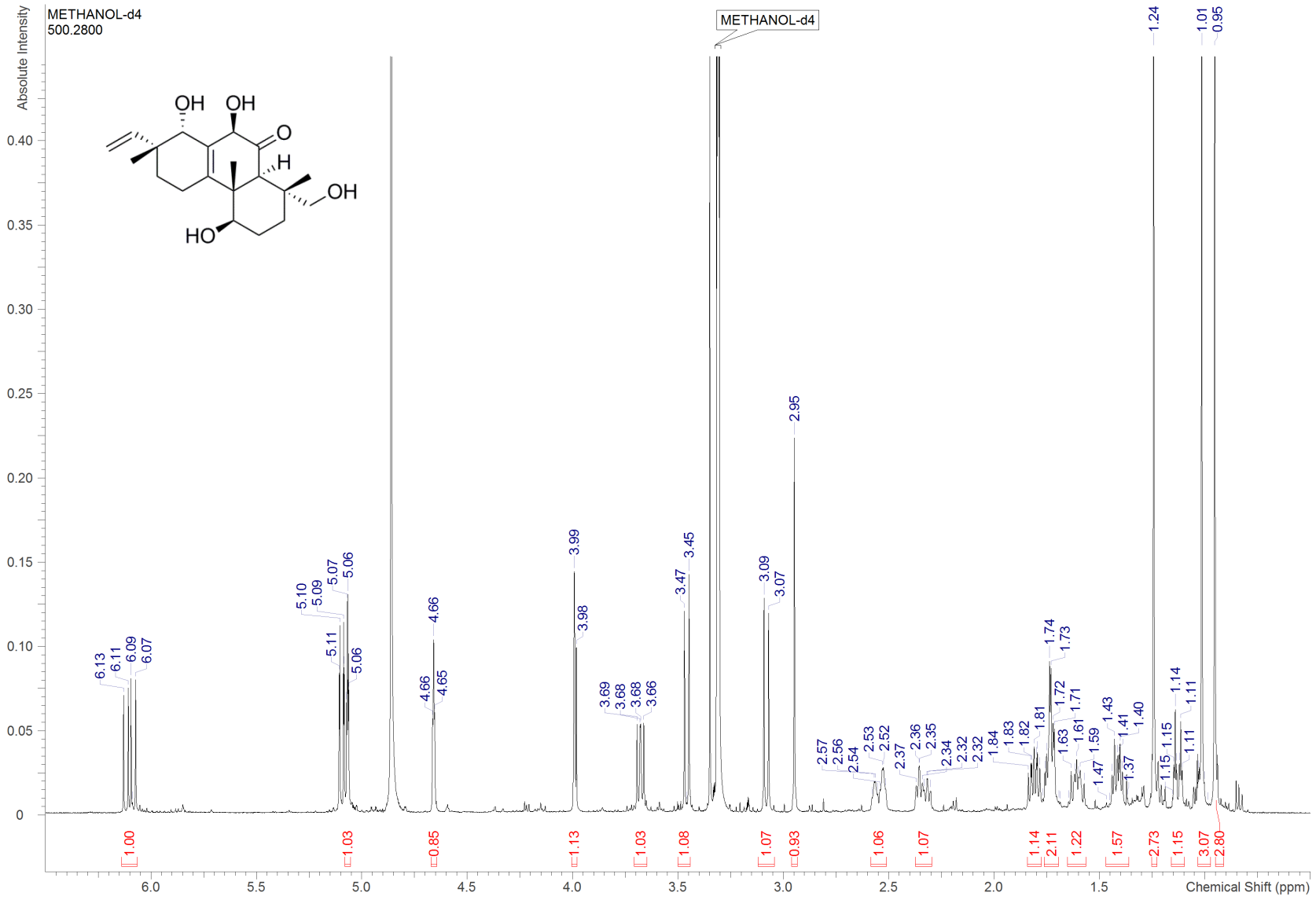

Figure S8: ^{13}C-NMR spectrum (125 MHz, MeOH-*d4*) of dematophorane A (1)

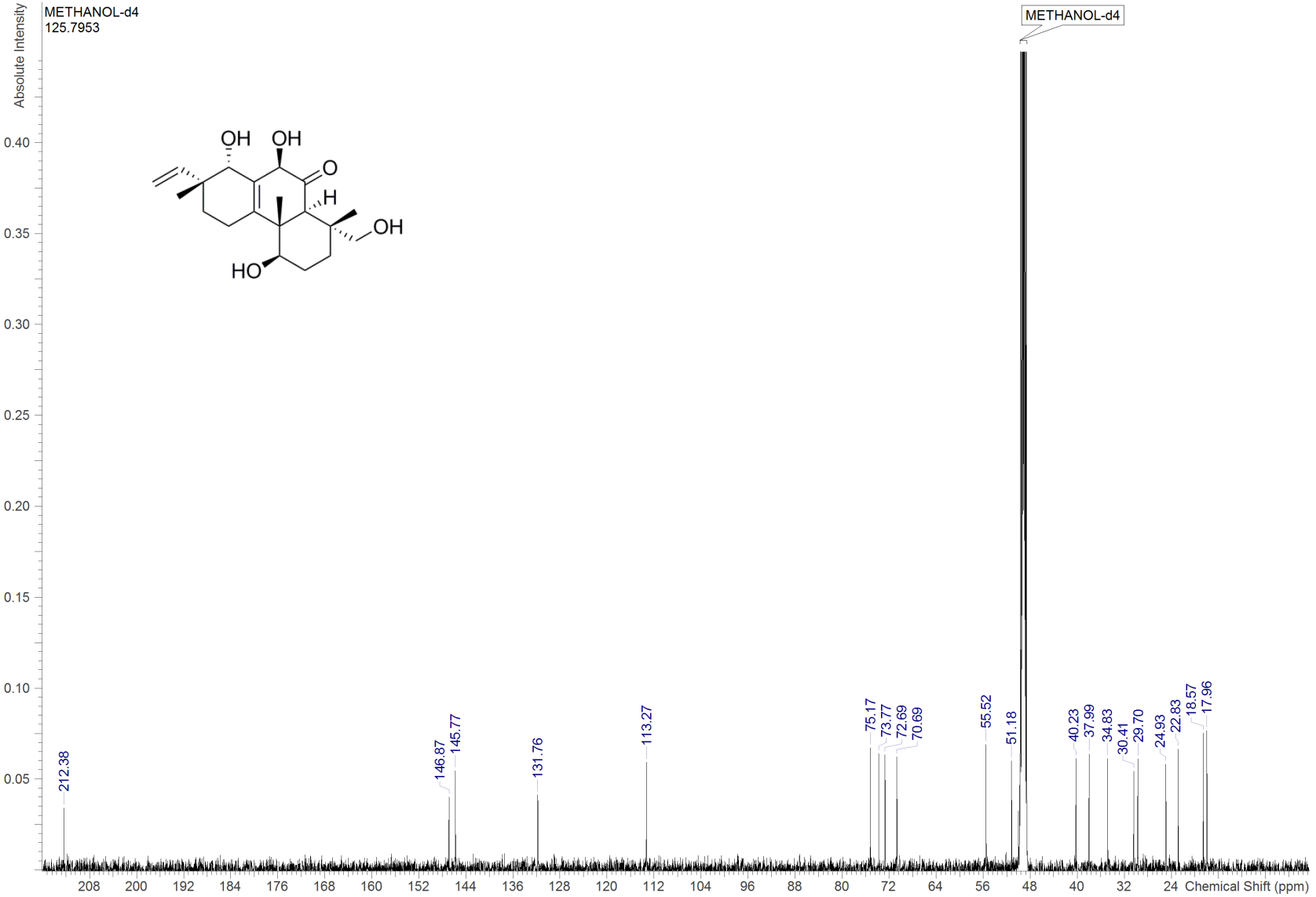

Figure S9: COSY spectrum (MeOH-*d4*) of dematophorane A (1)

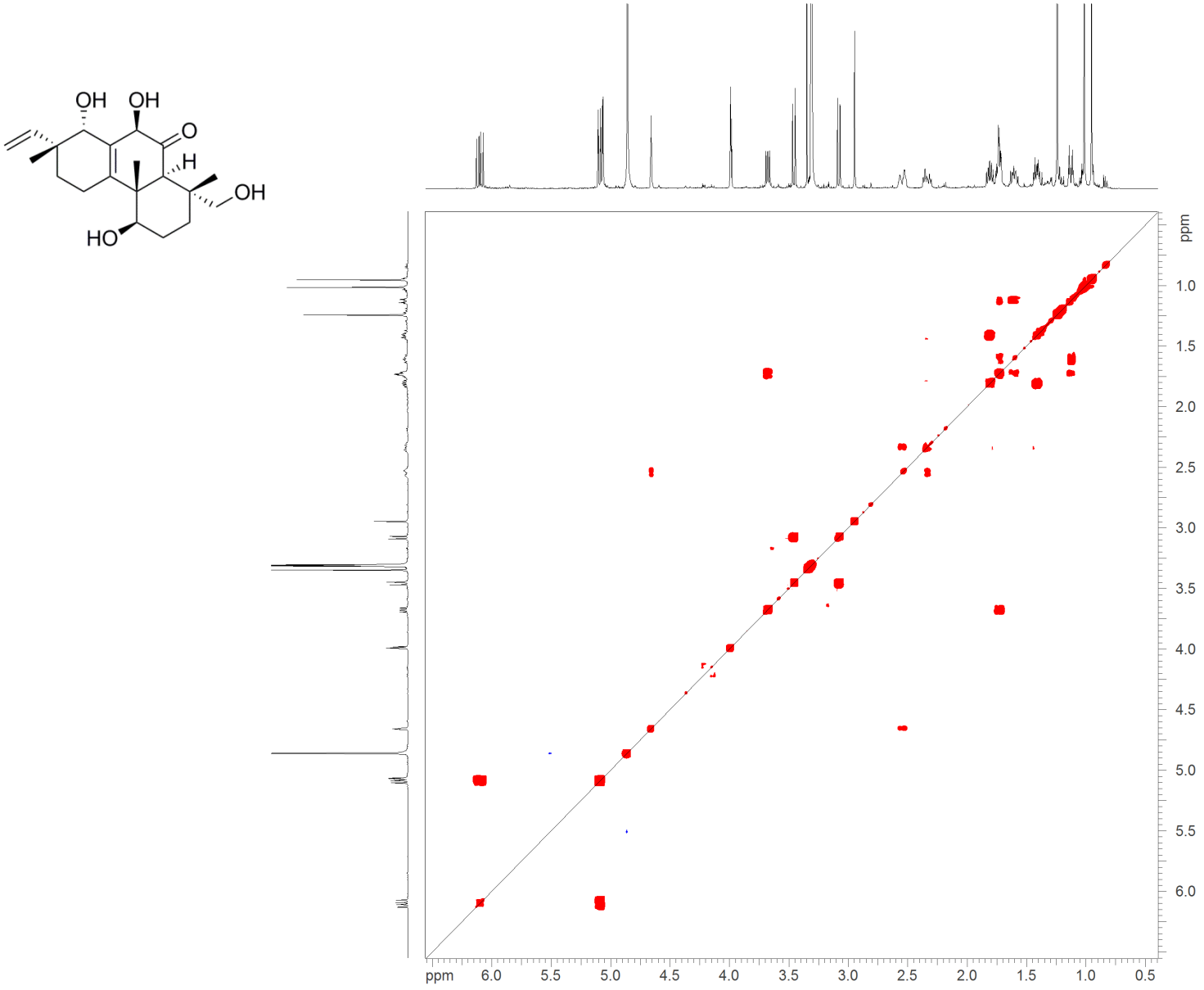

Figure S10: HSQC spectrum (MeOH-*d4*) of dematophorane A (1)

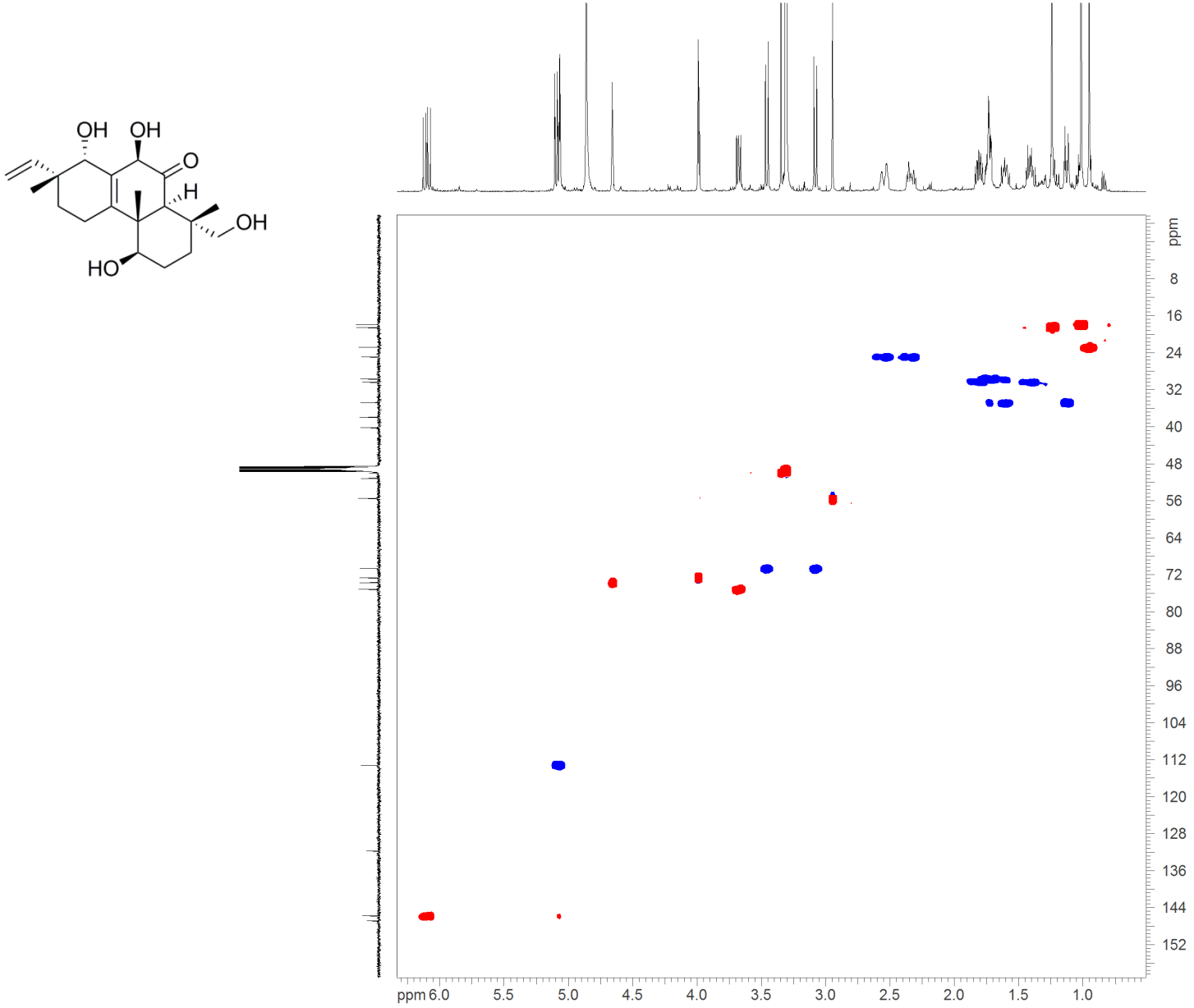

Figure S11: HMBC spectrum (MeOH-*d4*) of dematophorane A (1)

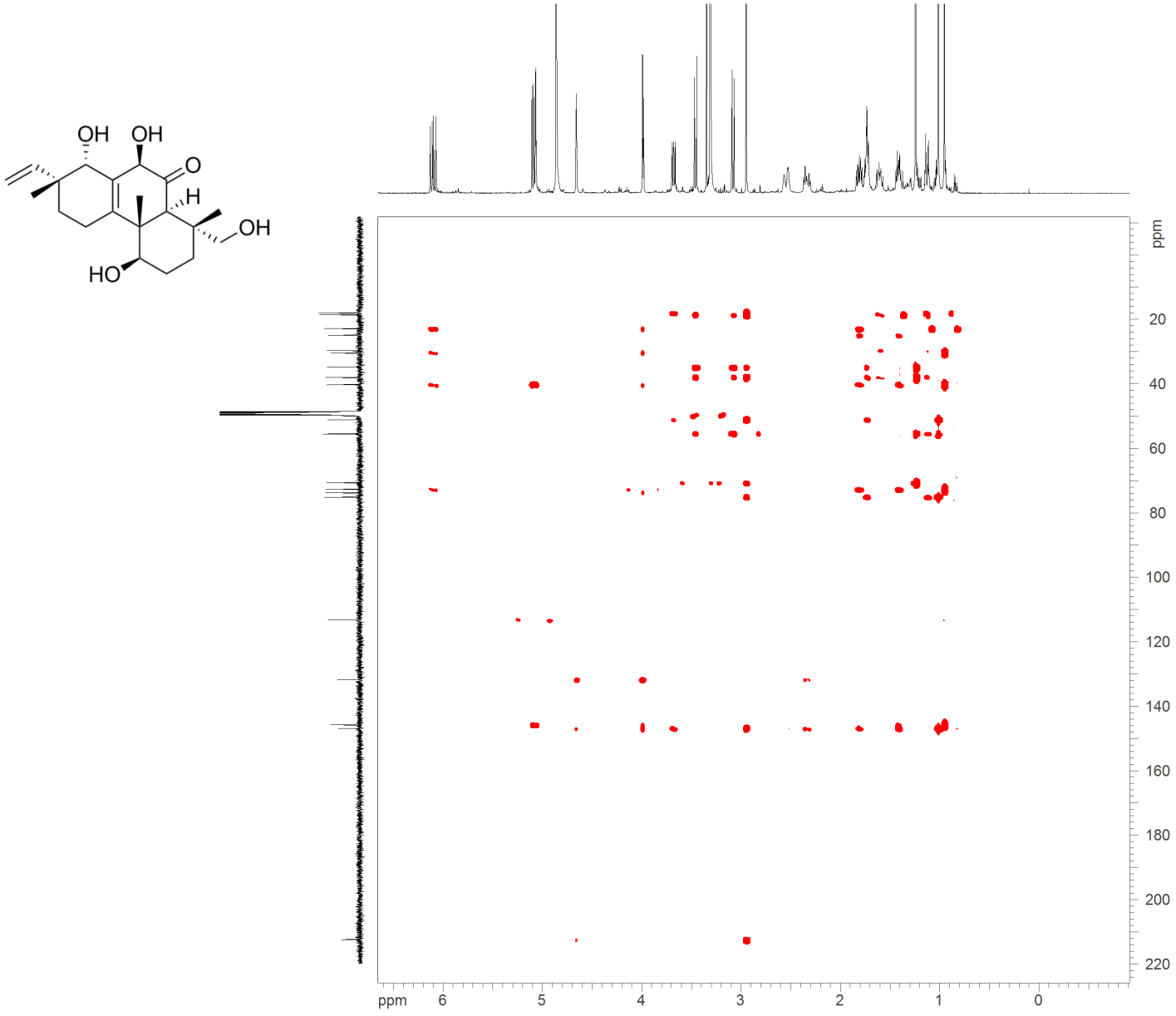

Figure S12: ROESY spectrum (MeOH-*d4*) of dematophorane A (1)

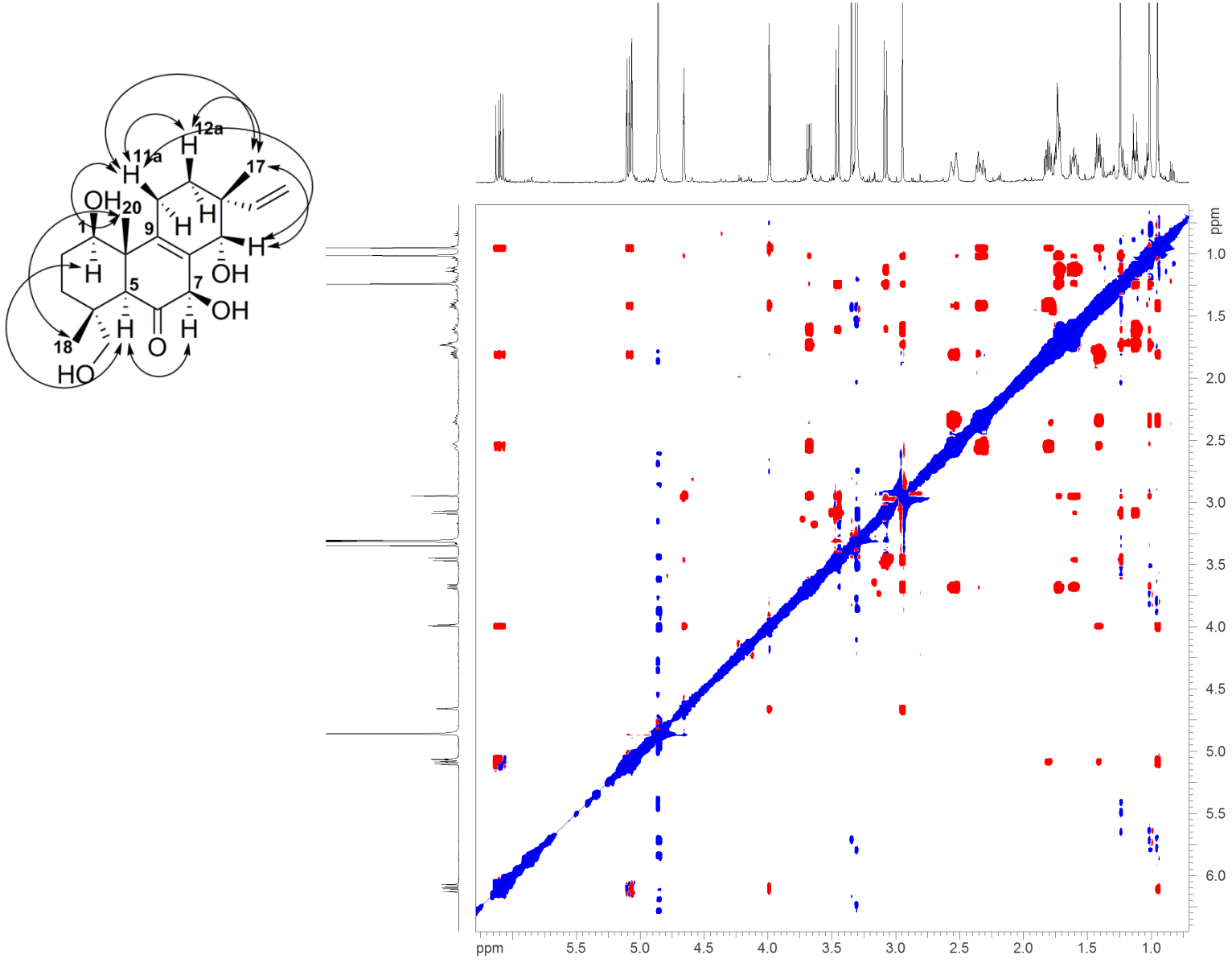

Figure S13: ^{1}H-NMR spectrum (700 MHz, acetone-*d6*) of dematophorane B (2)

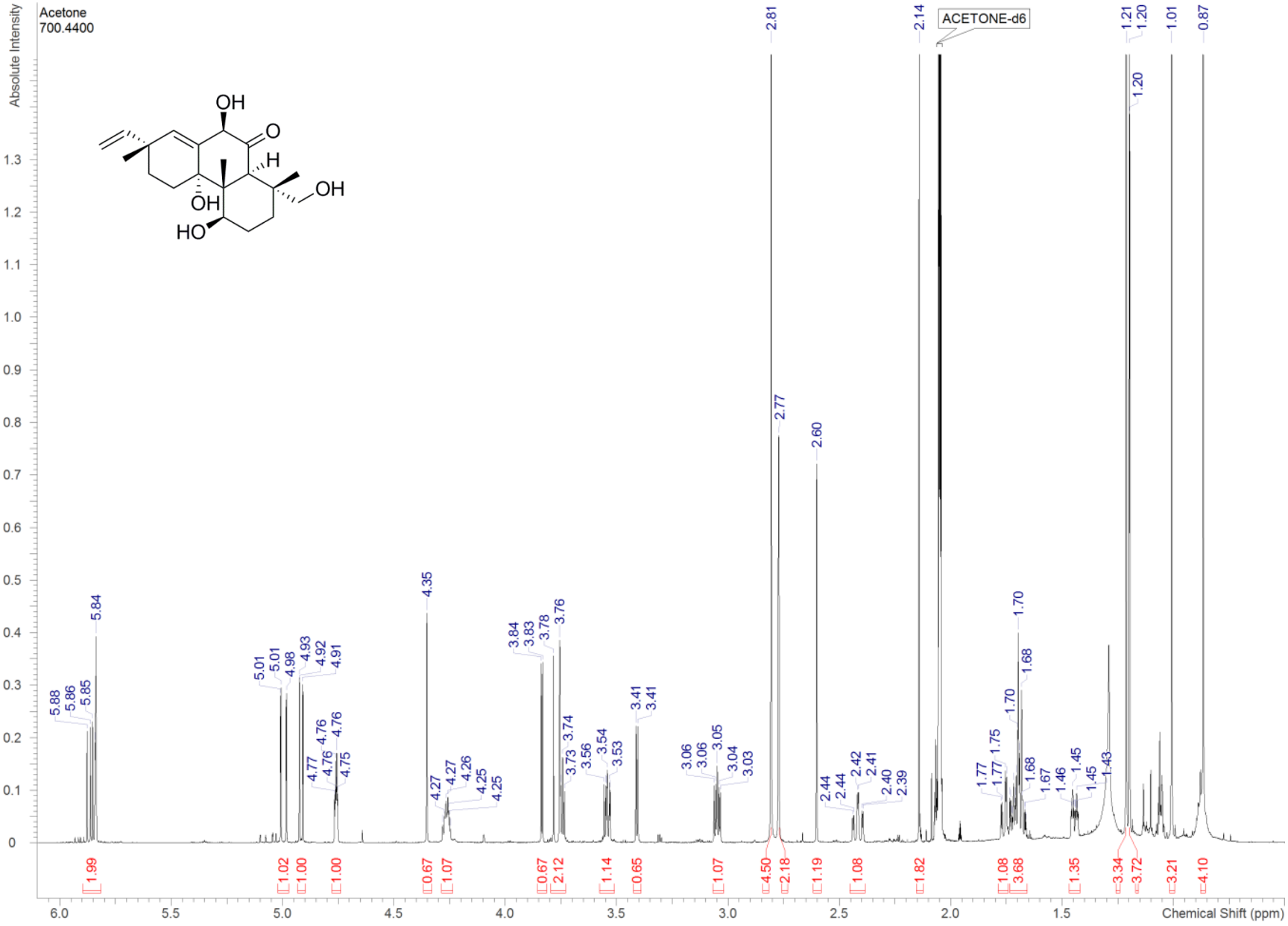

Figure S14: ^{13}C-NMR spectrum (175 MHz, acetone-*d6*) of dematophorane B (2)

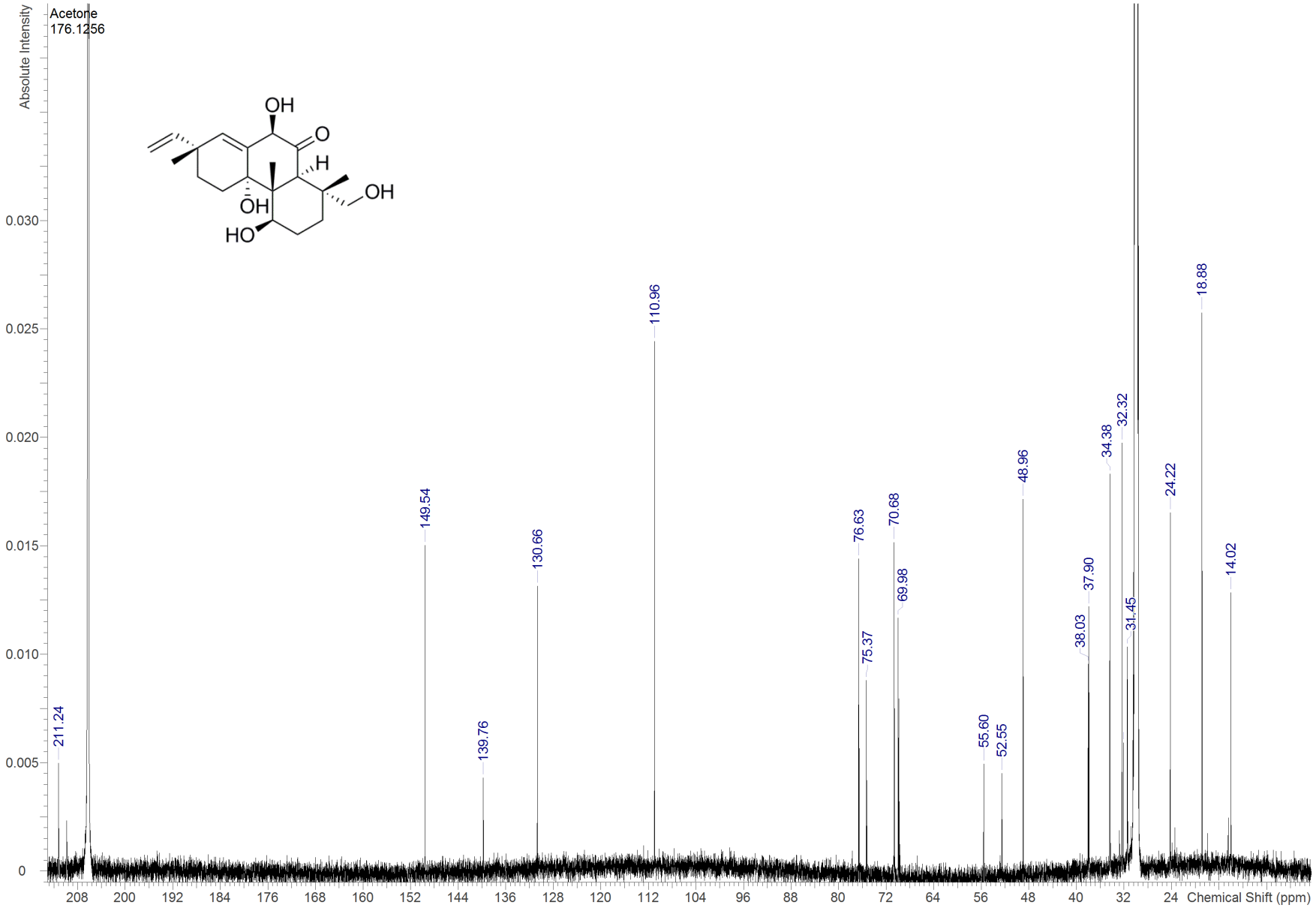

Figure S15: COSY spectrum (acetone-*d6*) of dematophorane B (2)

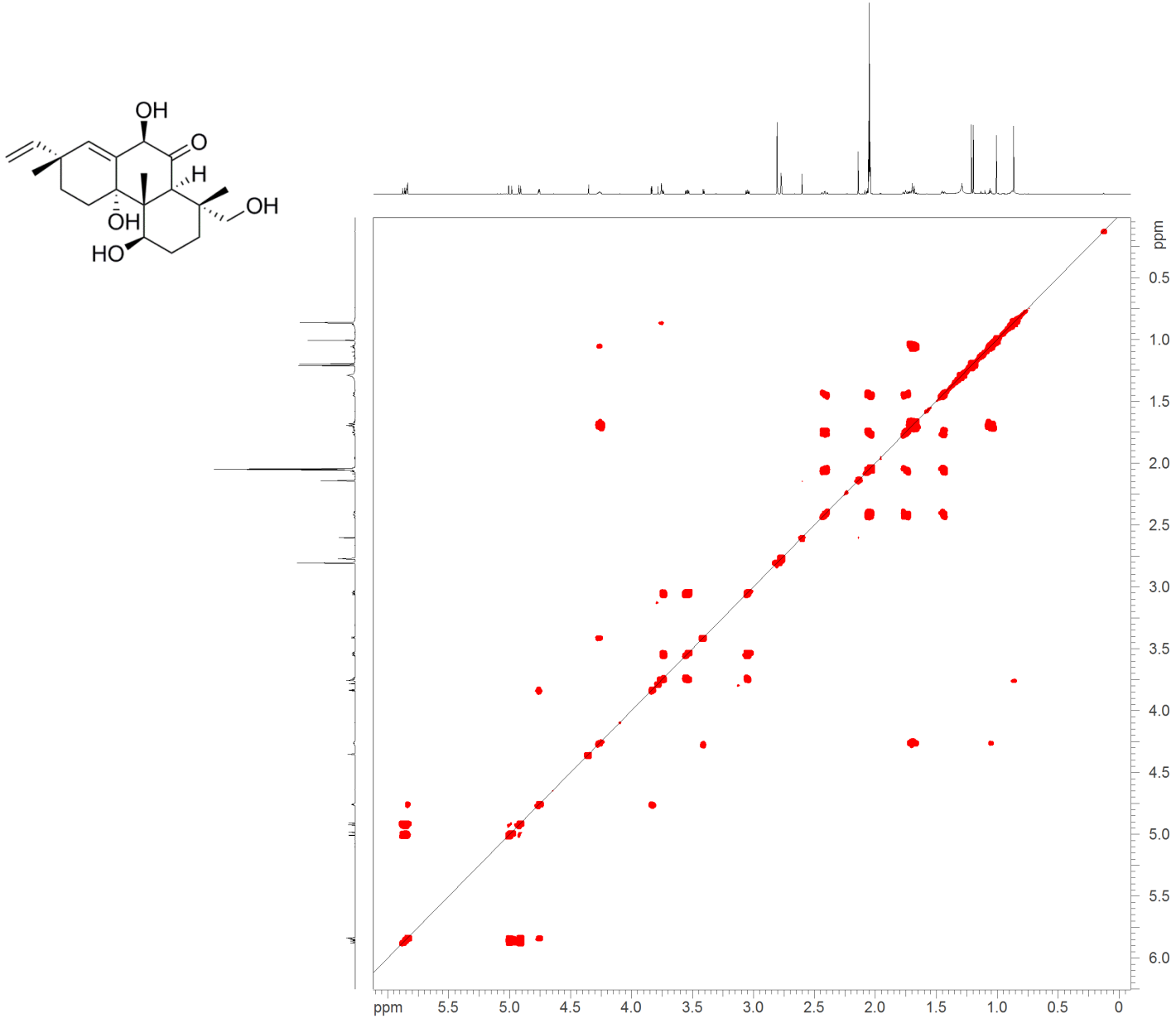

Figure S16: HSQC spectrum (acetone-*d6*) of dematophorane B (2)

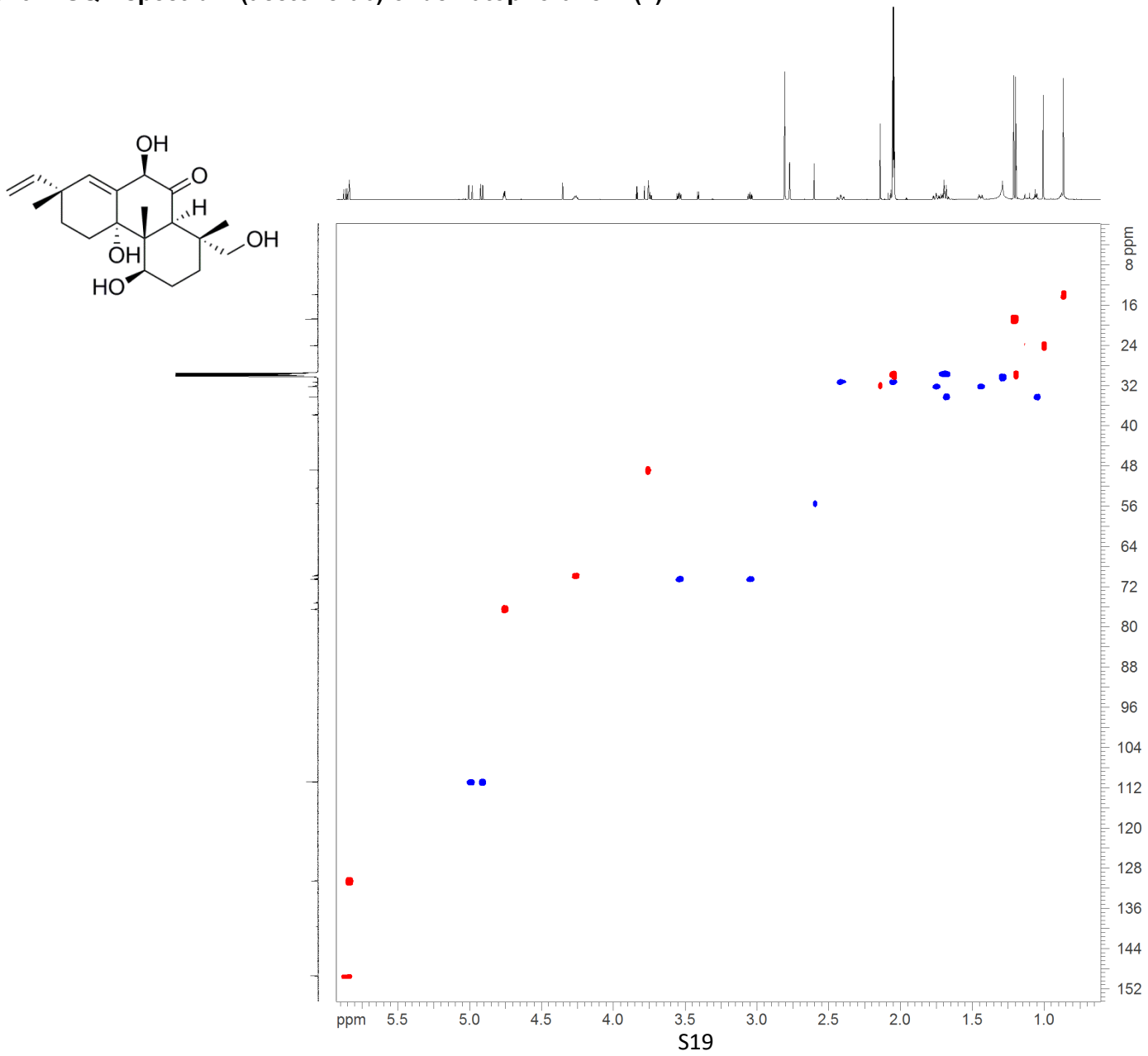

Figure S17: HMBC spectrum (acetone-*d6*) of dematophorane B (2)

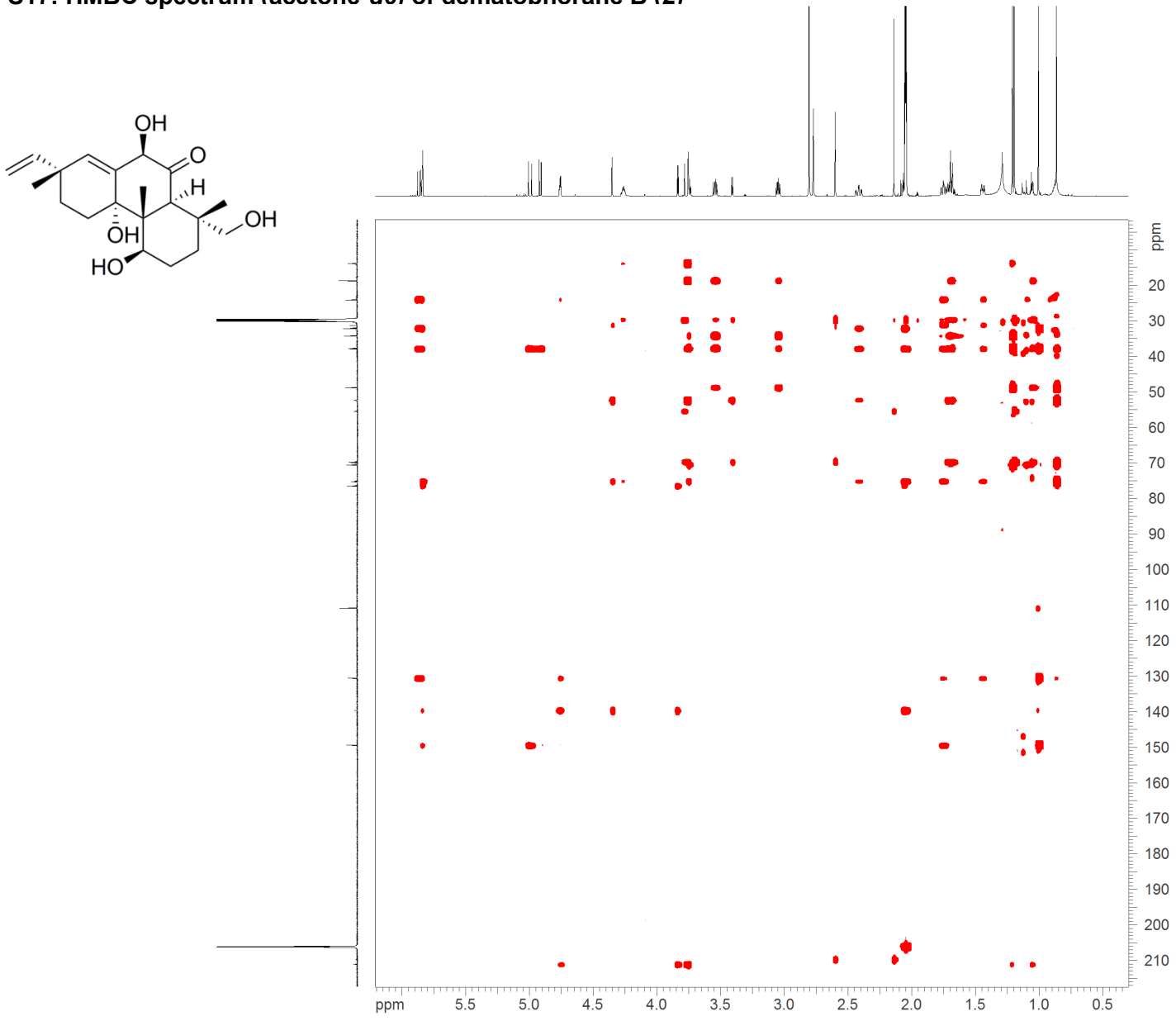

Figure S18: NOESY spectrum (acetone-*d6*) of dematophorane B (2)

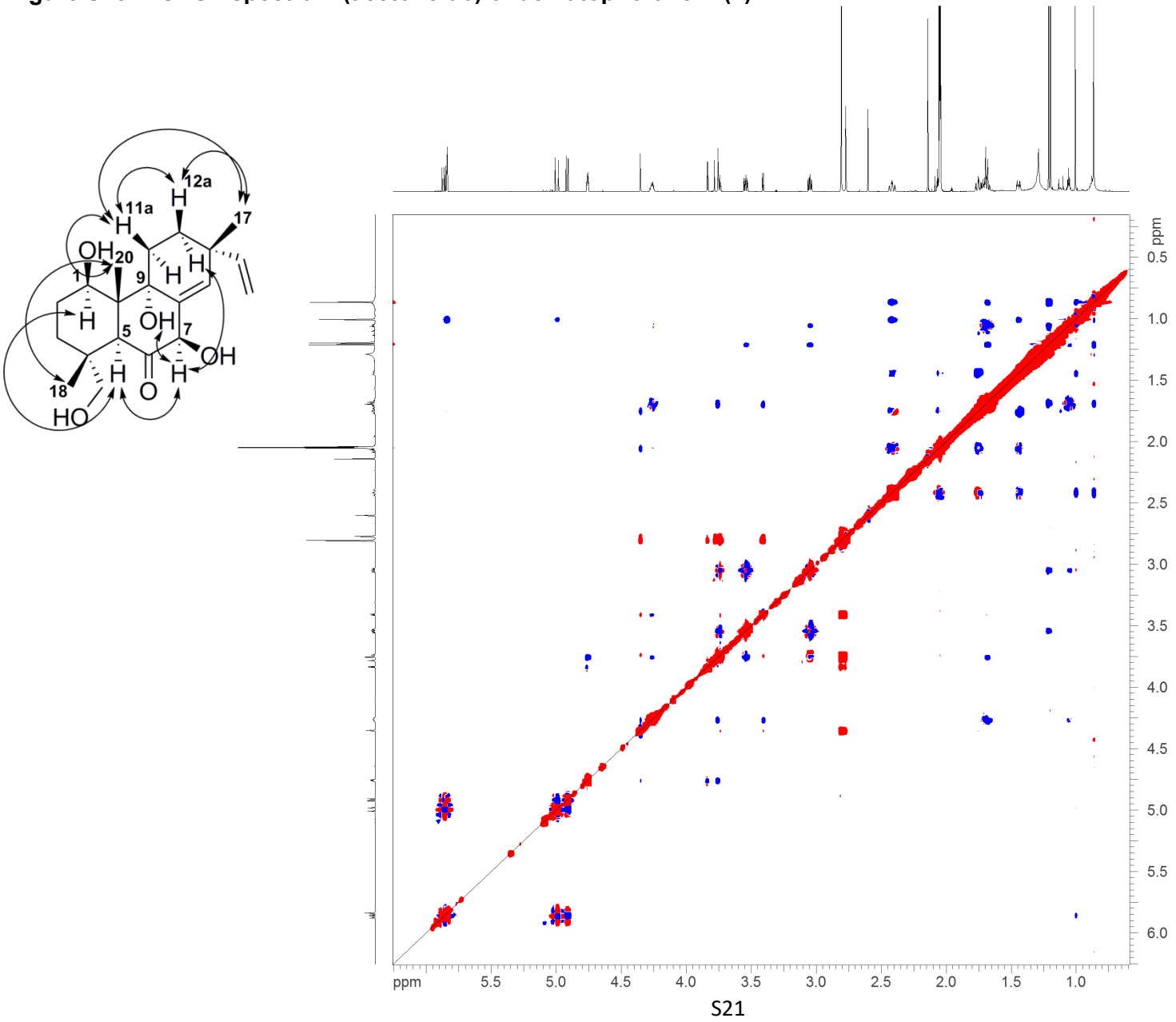

Figure S19: ^{1}H-NMR spectrum (500 MHz, acetone-*d6*) of dematophorane C (3)

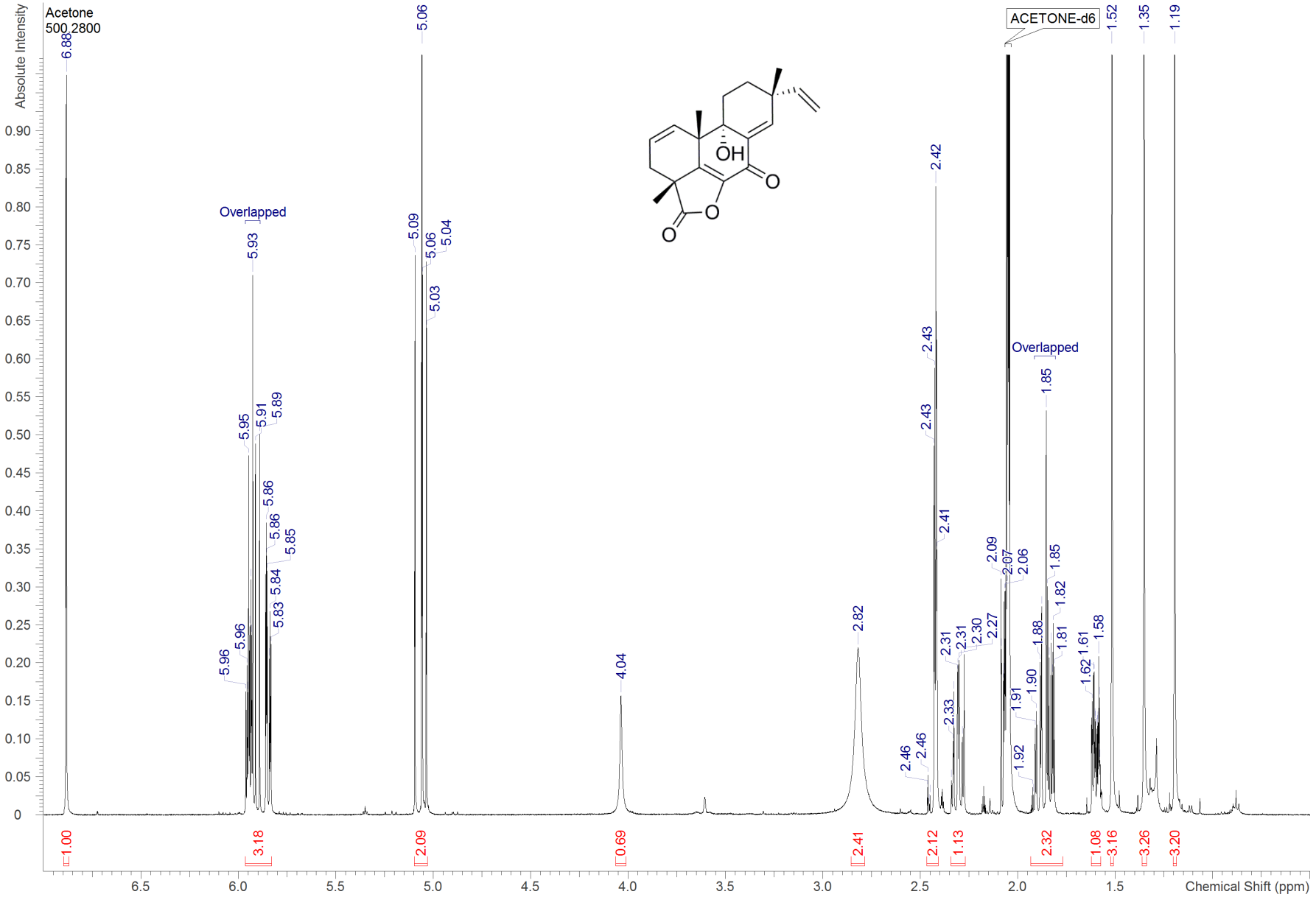

Figure S20: ^{13}C-NMR spectrum (125 MHz, acetone-*d6*) of dematophorane C (3)

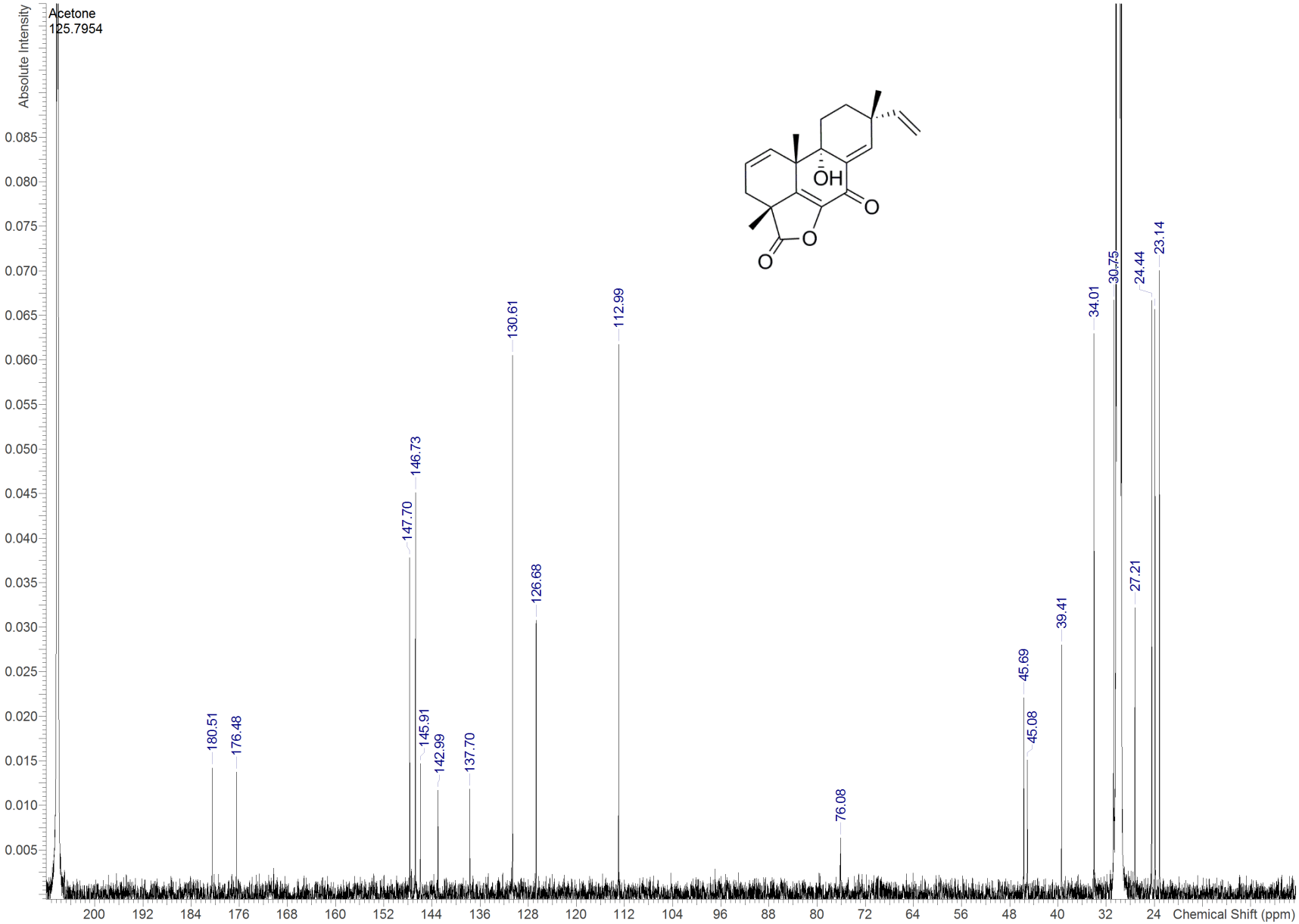

Figure S21: COSY spectrum (acetone-*d6*) of dematophorane C (3)

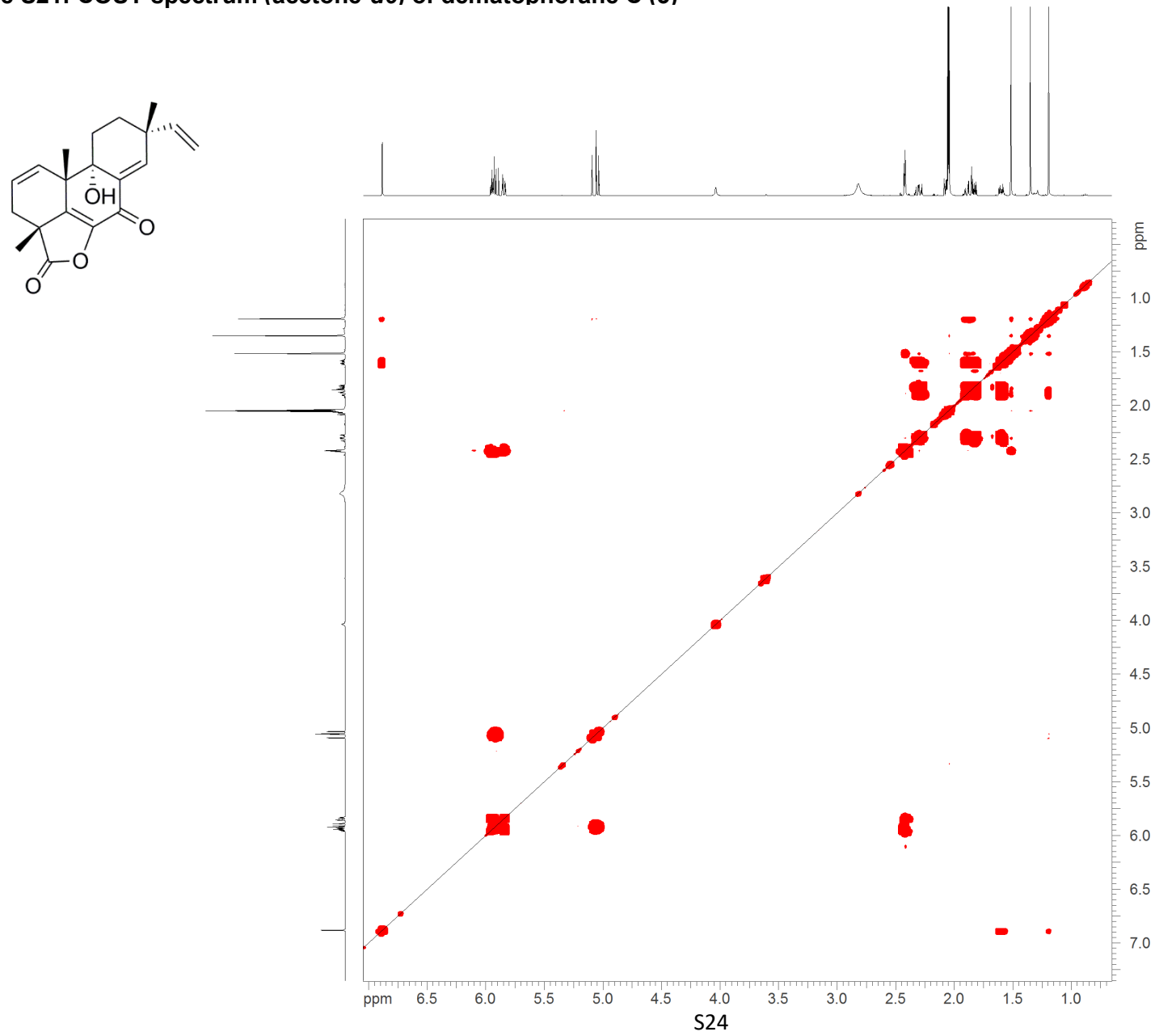

Figure S22: HSQC spectrum (acetone-*d6*) of dematophorane C (3)

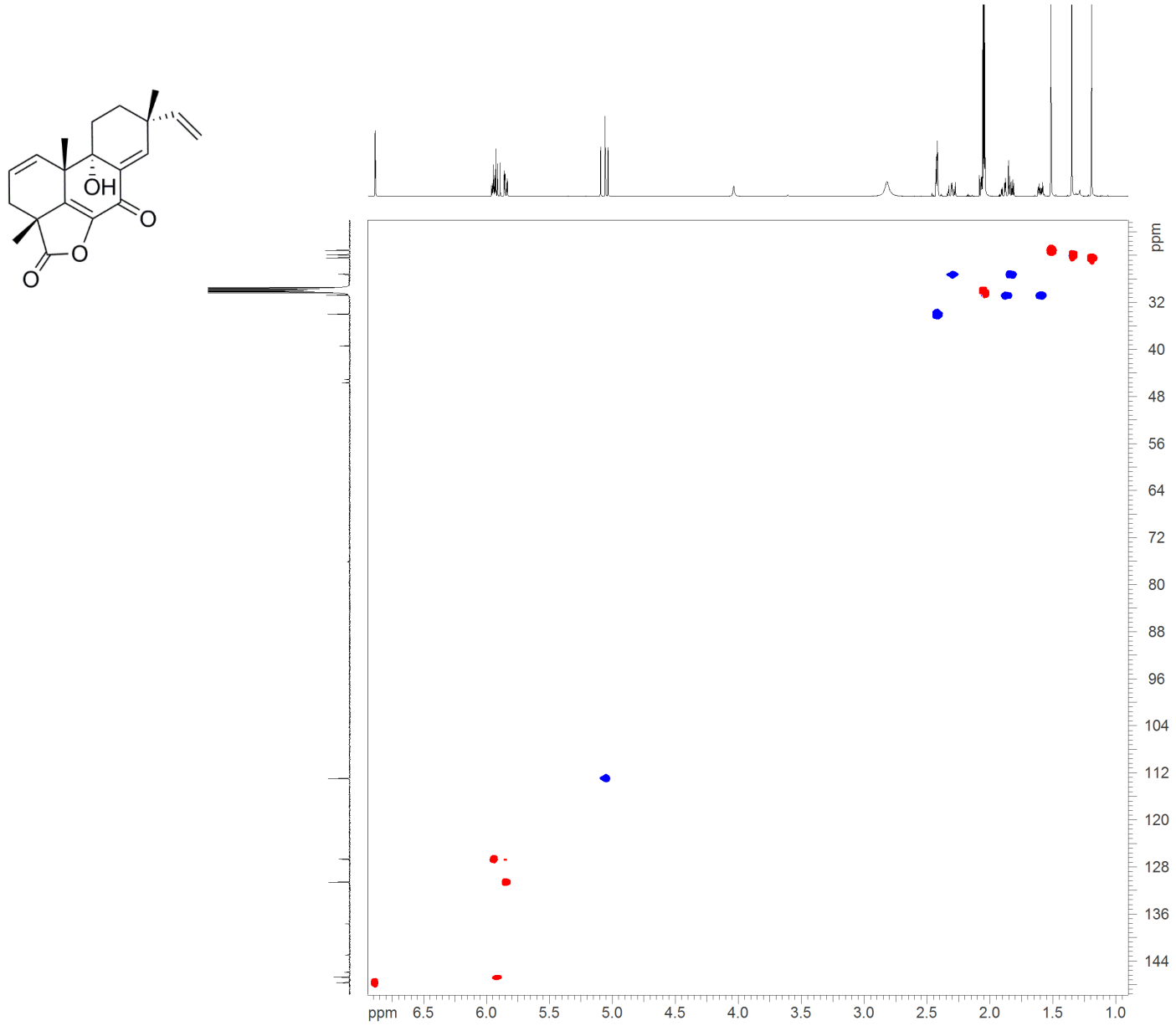

Figure S23: HMBC spectrum (acetone-*d6*) of dematophorane C (3)

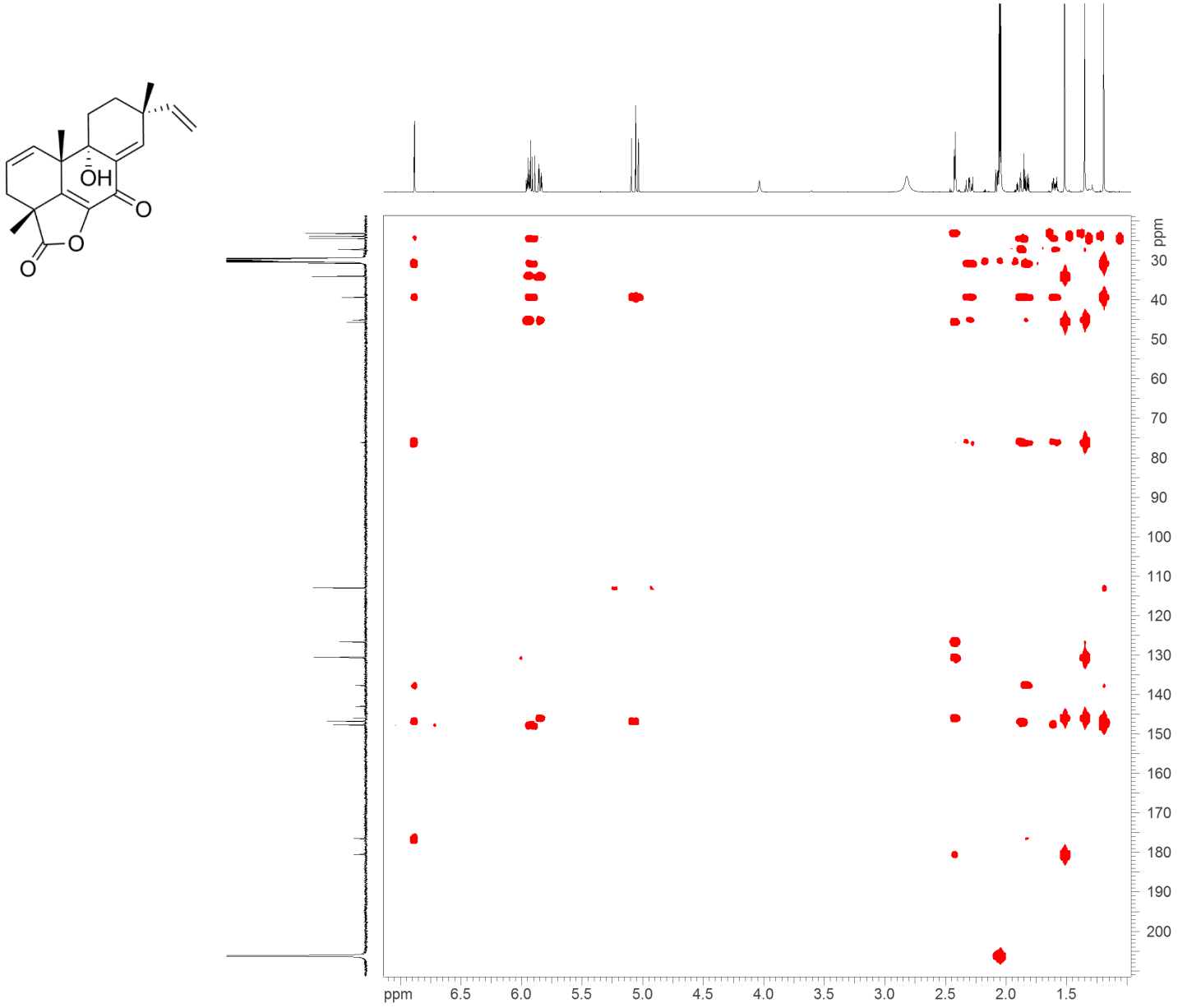

Figure S24: ROESY spectrum (acetone-*d6*) and significant correlations of dematophorane C (3)

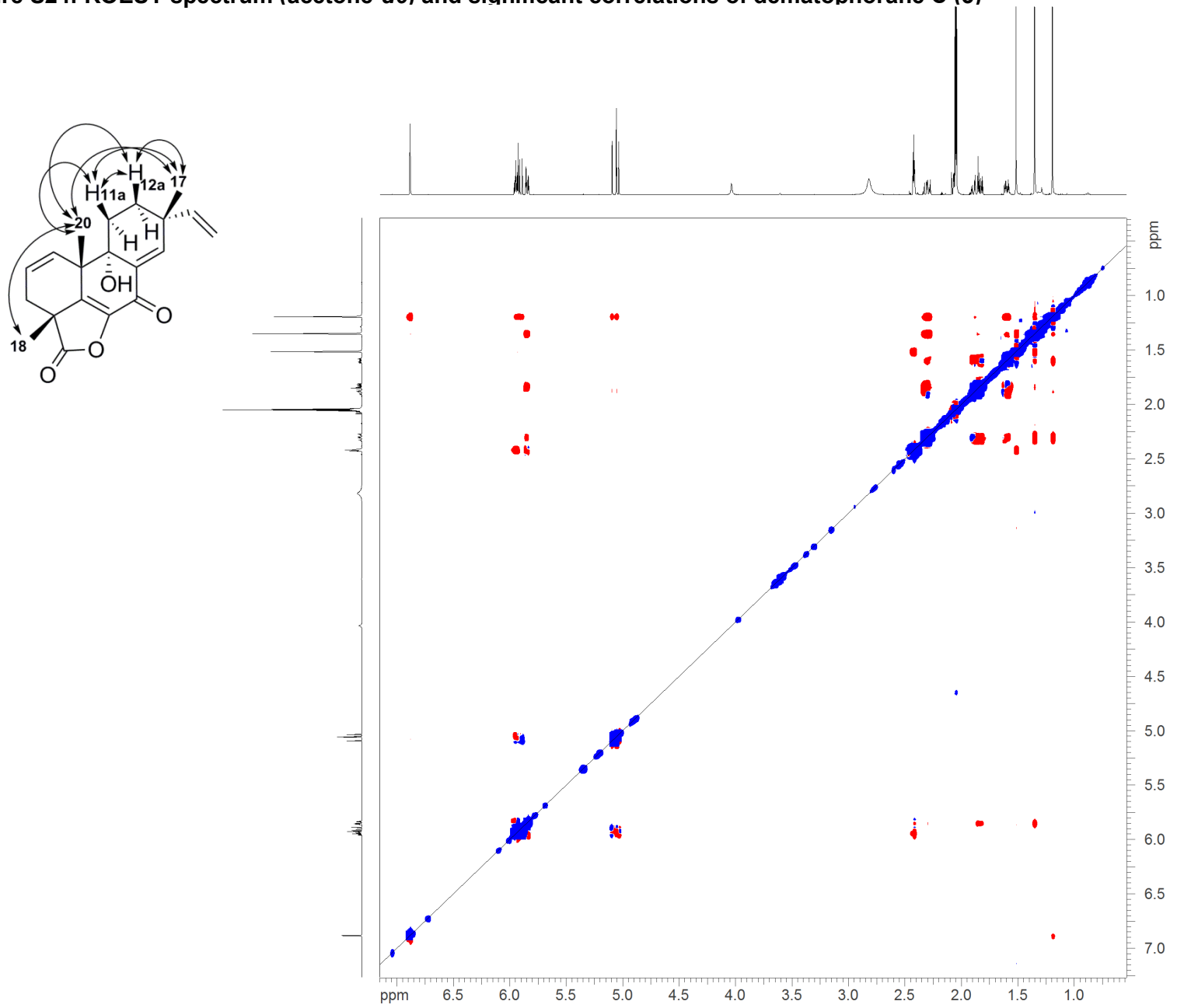

Figure S25: ^{1}H-NMR spectrum (700 MHz, $CDCl_3$) of dematophorane D (4)

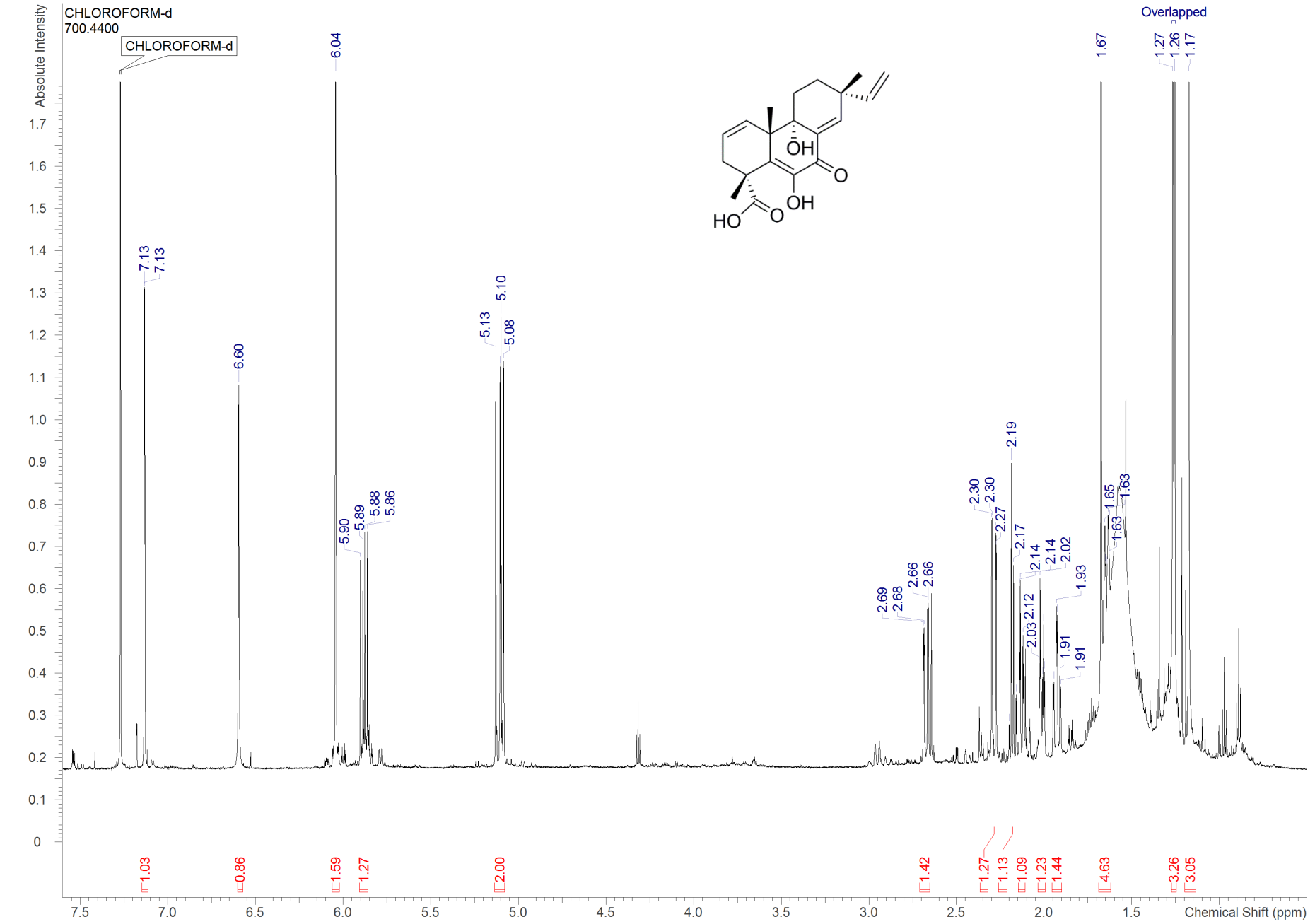

Figure S26: ^{13}C-NMR spectrum (175 MHz, $CDCl_3$) of dematophorane D (4)

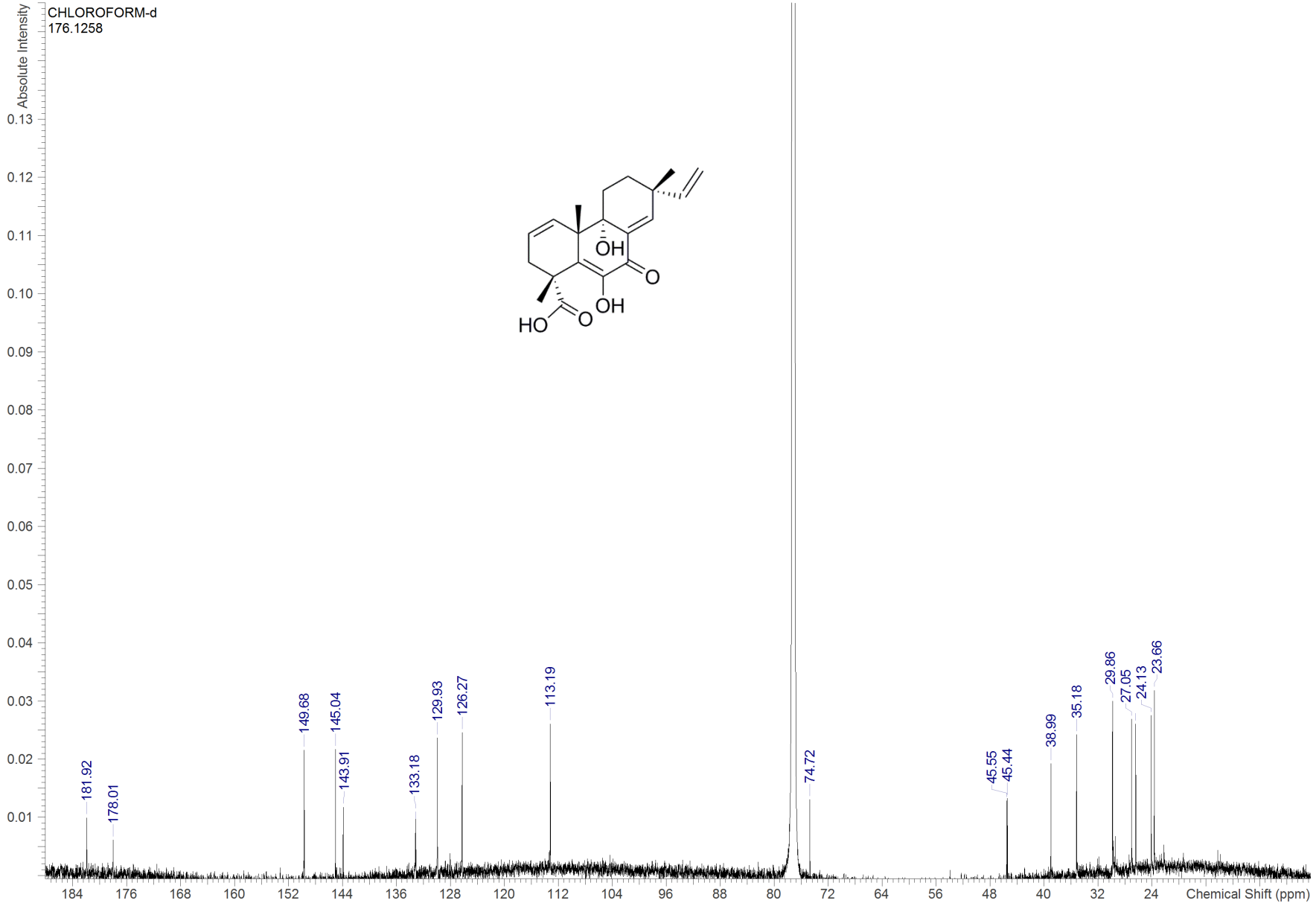

Figure S27: COSY spectrum ($CDCl_3$) of dematophorane D (4)

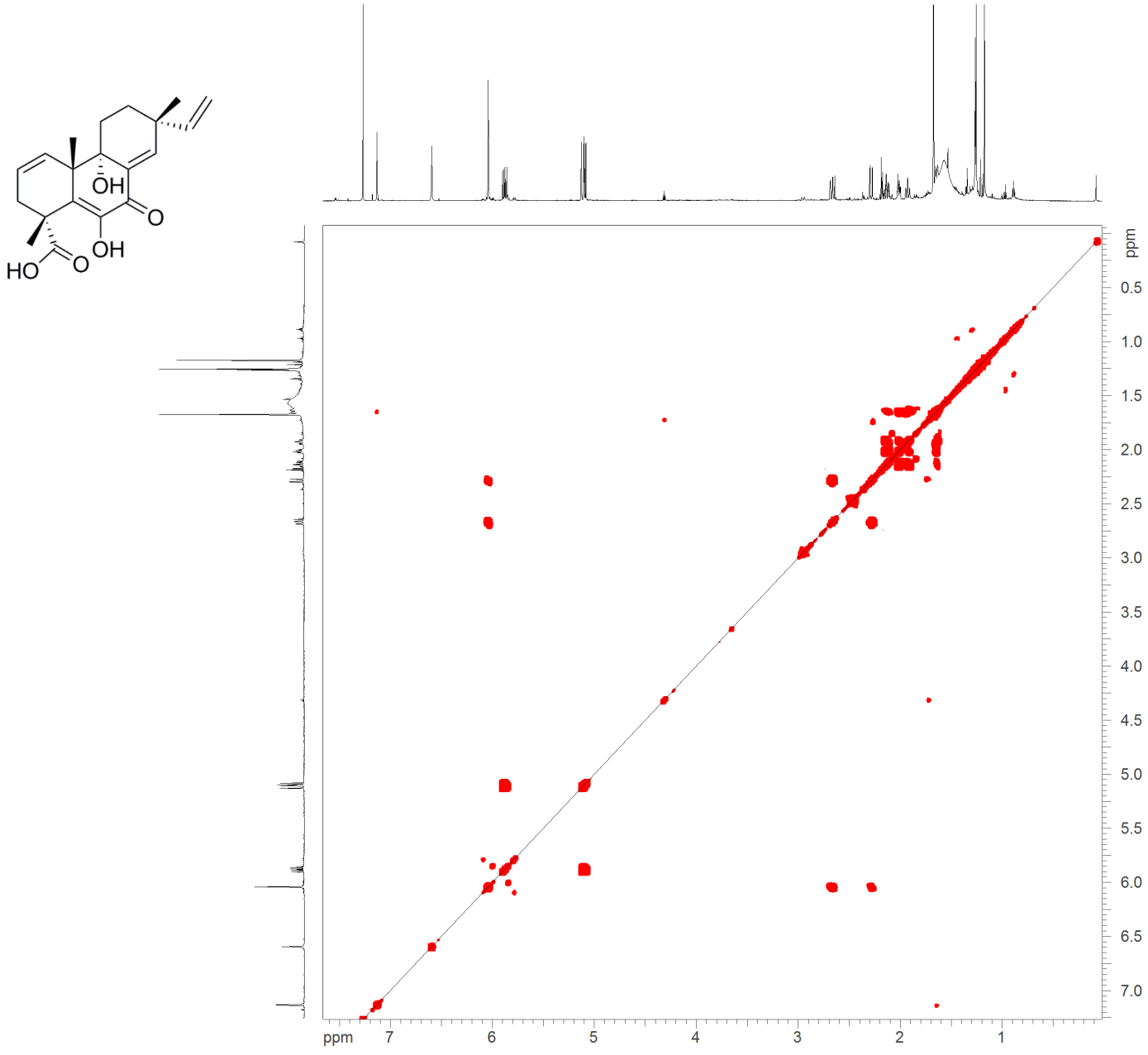

Figure S28: HSQC spectrum ($CDCl_3$) of dematophorane D (4)

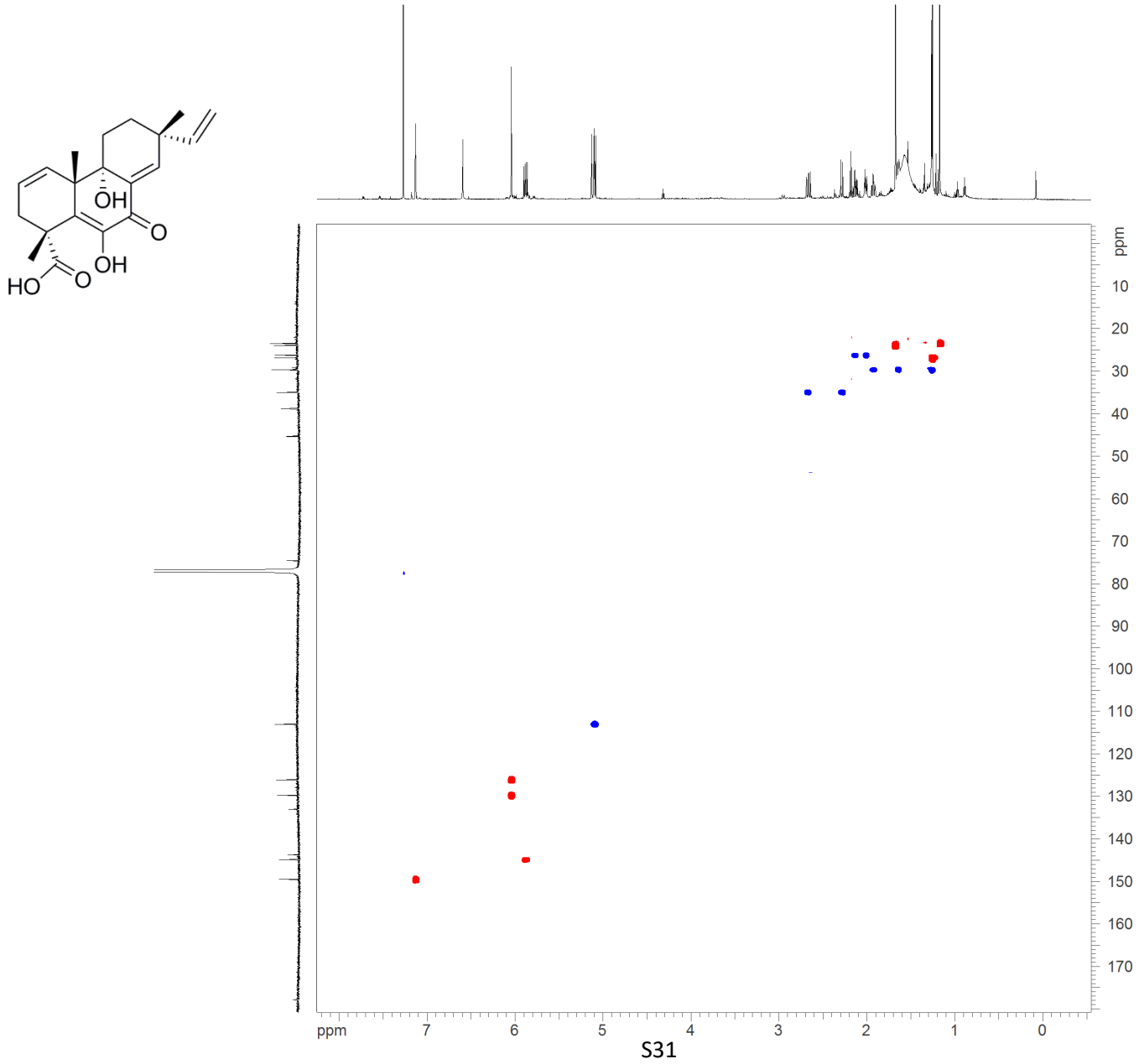

Figure S29: HMBC spectrum ($CDCl_3$) of dematophorane D (4)

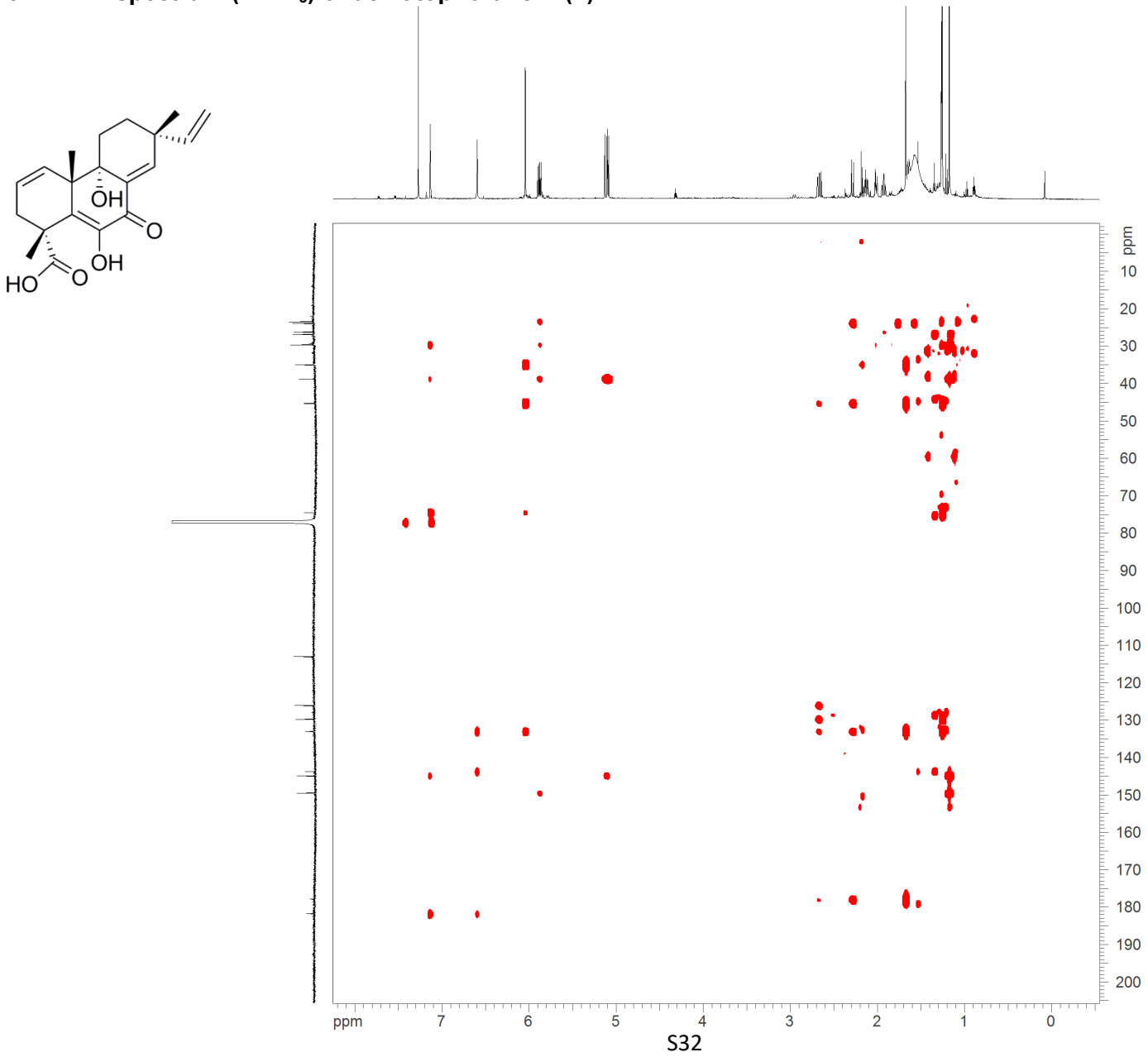

Figure S30: NOESY spectrum ($CDCl_3$) and significant correlations of dematophorane D (4)

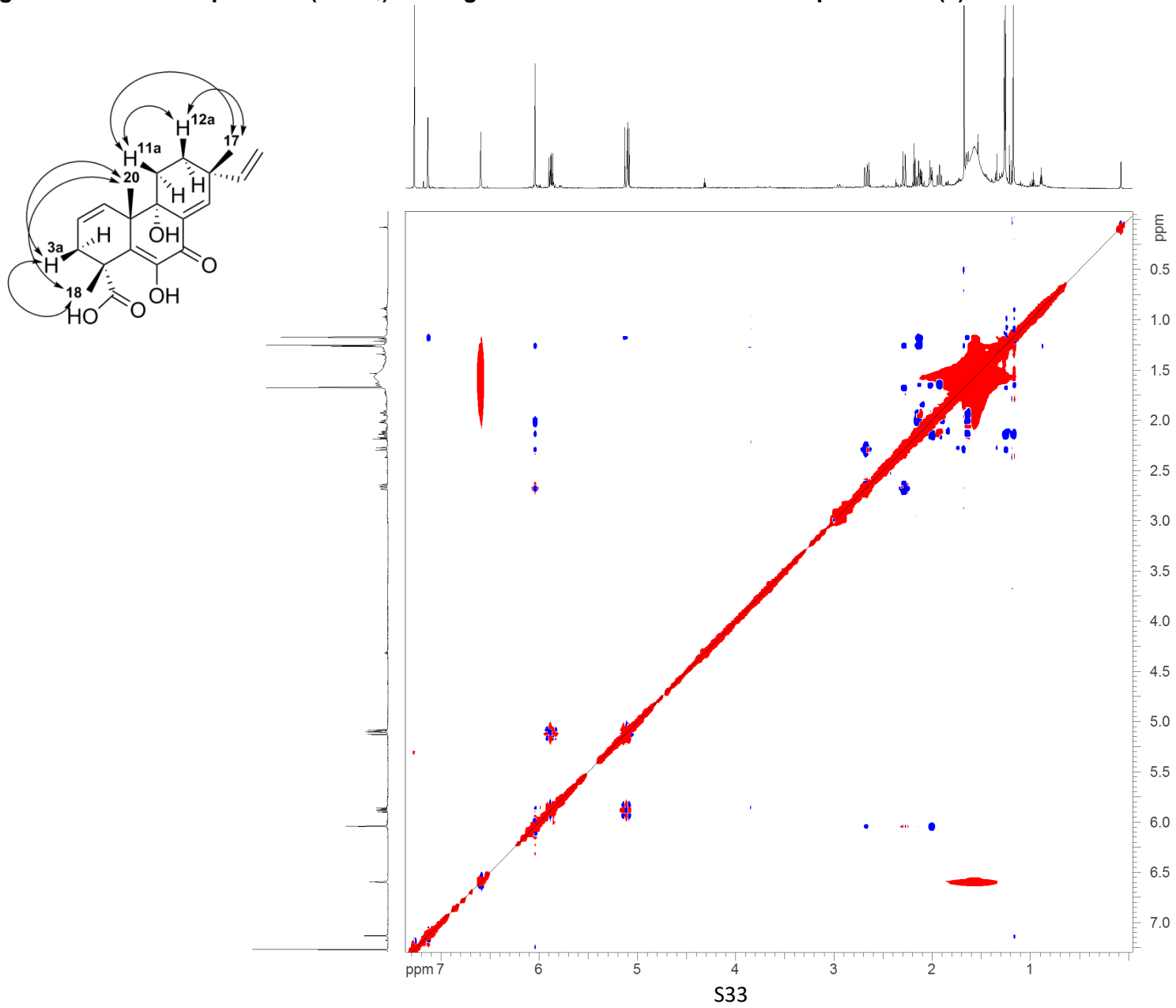

Figure S31: ^{1}H-NMR spectrum (700 MHz, DMSO-*d6*) of PF1022A (12)