Synthesis of Trichodermin Derivatives and Their Antimicrobial and Cytotoxic Activities.

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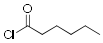
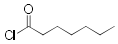
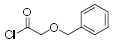
PART A : PREPARATION OF COMPOUNDS **7–15**

Table S1. Reaction condition data for preparation of **7–15.**

Entry	acyl halide (mmol)	Trichodermol (mmol)	Pyridine (μL)	CH_2Cl_2 (mL)	time (h)	yield (%)
7	 0.14	0.04	100	4	15	85
8	 0.1	0.04	100	2	2	44.5
9	 0.2	0.08	200	4	2	91.7
10	 0.2	0.08	200	4	2	91.9
11	 0.2	0.08	200	4	2	81.8
12	 0.24	0.08	200	3	1	47.7
13	 0.1	0.04	100	2	2	62
14	 0.2	0.08	200	4	2	56.3
15	 0.2	0.08	200	4	2	94

PART B: BIOLOGICAL ACTIVITIES

Table S2. Antimicrobial activity of compounds **1**-**16**. The results are expressed as MIC in μg/mL.

Entry	*A. baumannii* MB5973	*E.coli* MB2884	*E.coli* MB5746	*P. aeruginosa* MB5919	*S. aureus* EPI167	*MRSA* 5393	*C. albicans* MY1055	*B. subtilis* MB964
1	>64	>64	>64	>64	>64	>64	<4	no halo
2	>64	>64	>64	>64	>64	>64	8-16	no halo
3	>64	>64	>64	>64	>64	>64	>64	no halo
4	>64	>64	>64	>64	>64	>64	>64	no halo
5	>64	>64	>64	>64	>64	>64	>64	no halo
6	>64	>64	>64	>64	>64	>64	>64	no halo
7	>64	>64	>64	>64	>64	>64	16-32	no halo
8	>64	>64	nd	>64	>64	nd	nd	nd
9	>64	>64	64	>64	>64	>64	4–8	no halo
10	>64	>64	32	>64	>64	>64	8	no halo
11	>64	>64	32	>64	>64	>64	>64	no halo
12	>64	>64	>64	>64	>64	>64	4	no halo
13	>64	>64	>64	>64	>64	>64	4	no halo
14	>64	>64	>64	>64	>64	>64	8–16	no halo
15	>64	>64	>64	>64	>64	>64	8	no halo
16	>64	>64	>64	>64	>64	>64	>64	no halo

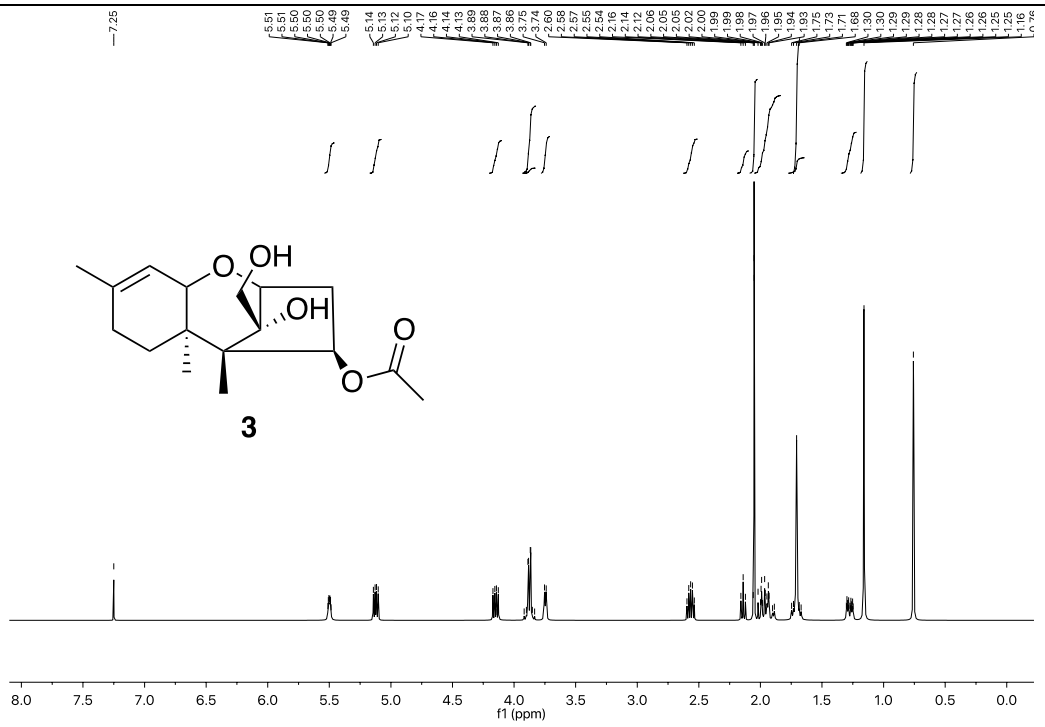
Nd = no data; MRSA= Methicillin-resistant *S. aureus;* MIC= minimal inhibitory concentration

Table S3. Cytotoxicity of compounds **1**-**16** in different human cell lines, measured at 24 hours of incubation. IC_{50} (μg/mL).

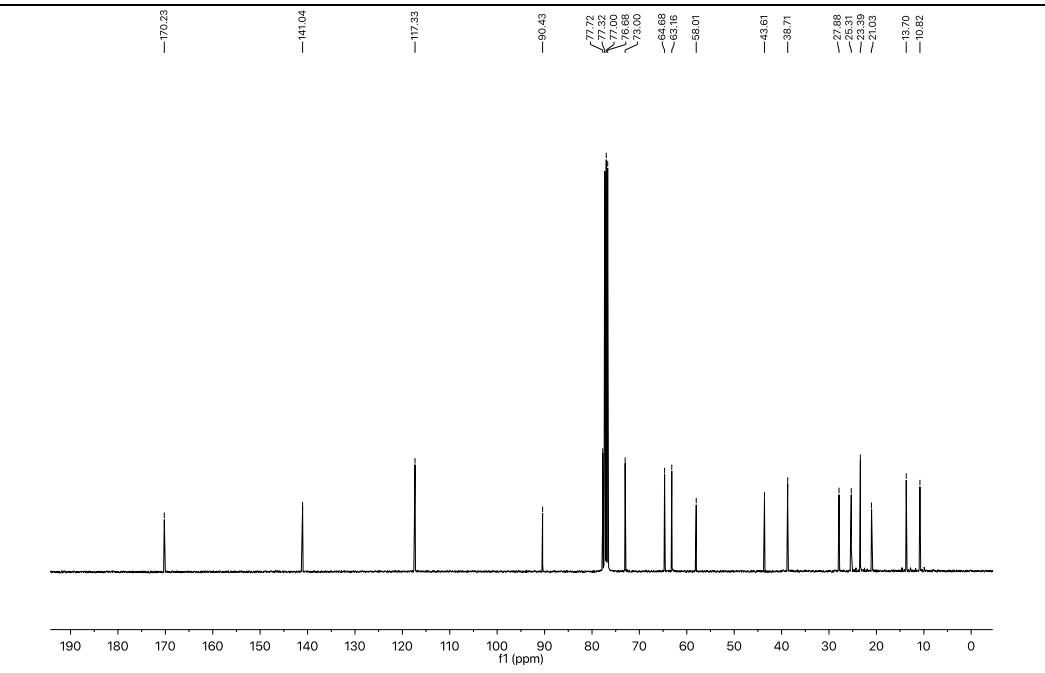
Entry	*A549*	*HepG2*	*HT29*	*MCF-7*	*RCC4-VA*	*RCC4-VHL*	*Fa2N4*
1	>20	>20	>20	<1.25	14.19	>20	12.09
2	>20	>20	>20	4.42	>20	>20	>20
3	>20	>20	>20	>20	>20	>20	>20
5	>20	>20	>20	>20	>20	>20	>20
6	>20	>20	>20	>20	>20	>20	>20
7	>20	>20	>20	13.52	>20	>20	>20
9	>20	>20	>20	1.93	>20	>20	>20
10	>20	14.20	>20	3.59	>20	>20	>20
11	>20	>20	>20	11.26	>20	>20	>20
12	>20	>20	>20	3.78	6.02	8.00	>20
13	>20	17.48	>20	2.15	>20	>20	>20
14	>20	>20	>20	5.22	>20	>20	>20
15	>20	>20	>20	2.03	17.14	>20	>20
16	>20	>20	>20	>20	>20	>20	>20

A549 = adenocarcinomic alveolar basal epithelial cells (CCL-185); HepG2= liver hepatocellular (CCL-8065); HT29= colorectal adenocarcinoma (HTB-38); MCF-7= breast carcinoma (HTB-22); RCC4-VA and RCC4-VHL = renal carcinoma; Fa2N4= immortalized human hepatocytes

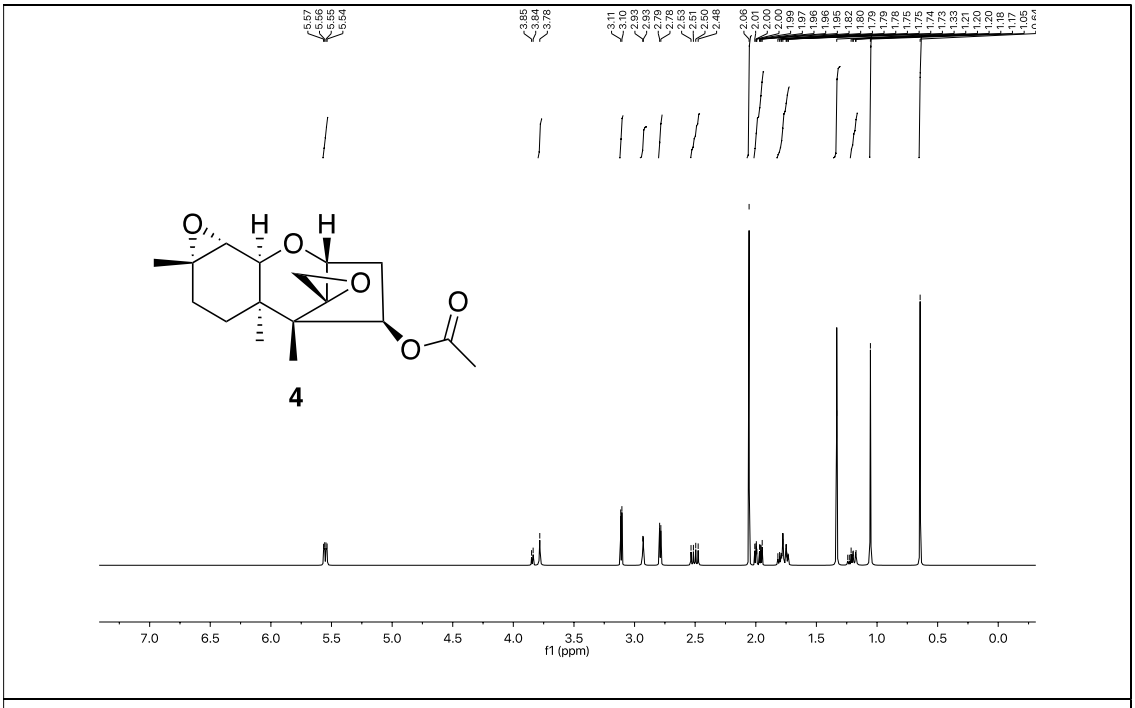
PART C: ^{1}H AND ^{13}C-NMR SPECTRA



400 MHz ^{1}H NMR of compound **3** in $CDCl_3$



100 MHz ^{13}C NMR of compound **3** in $CDCl_3$



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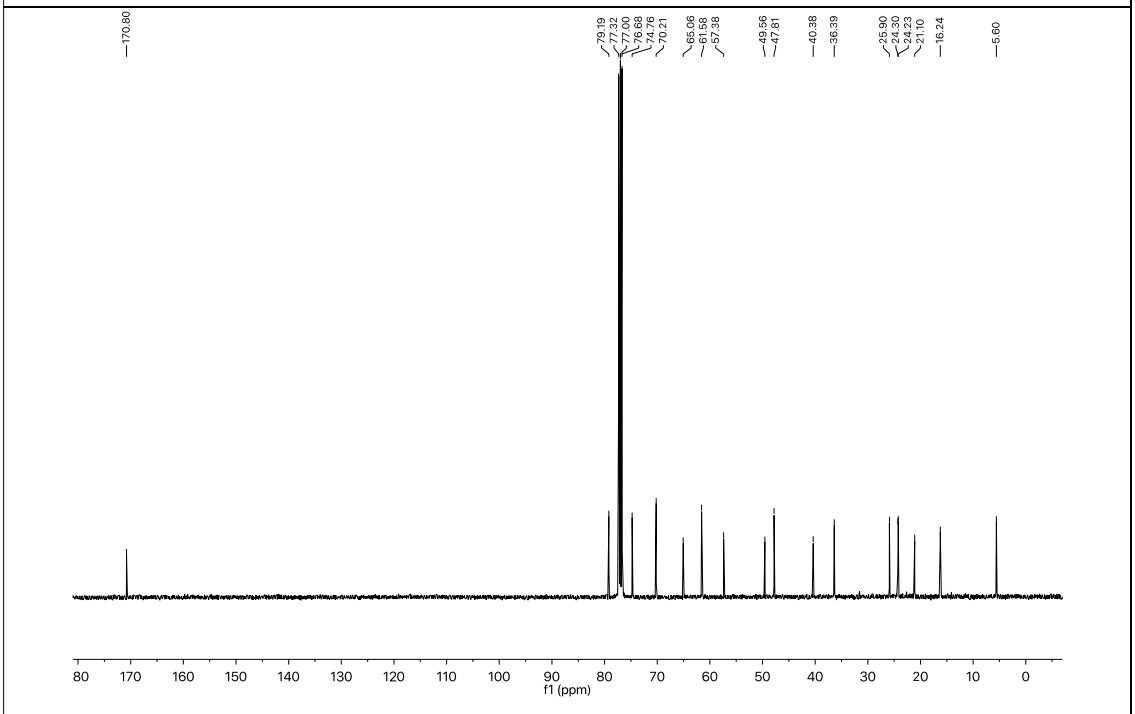
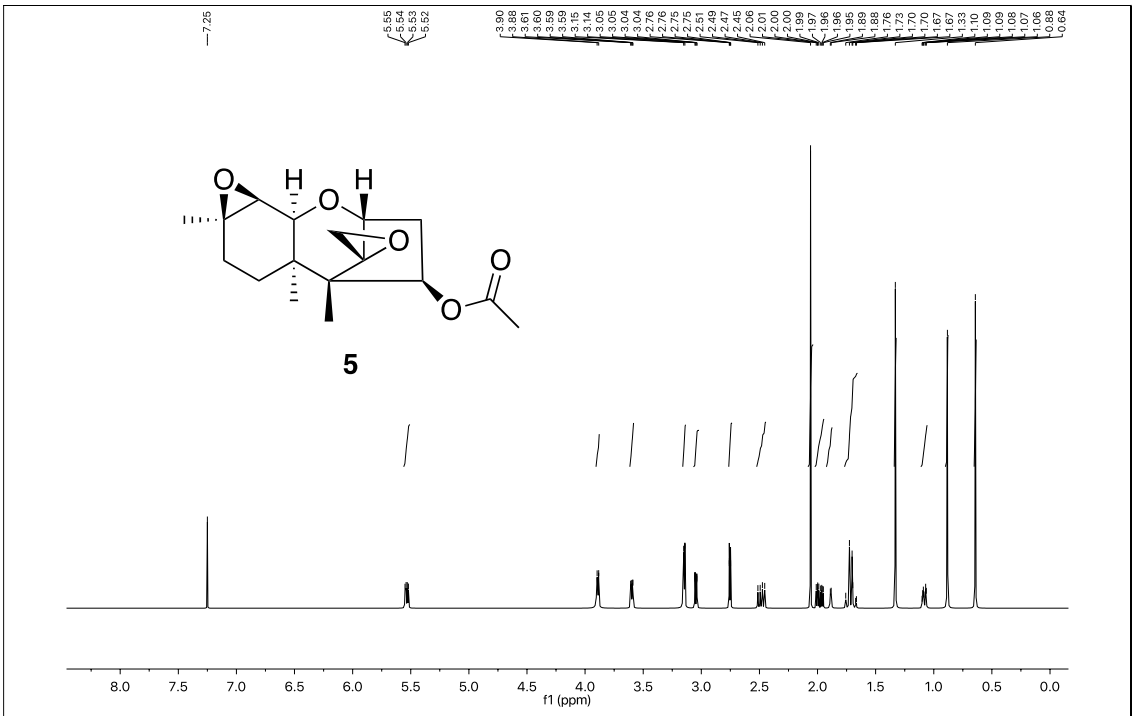


100 MHz ^{13}C NMR of compound **4** in $CDCl_3$



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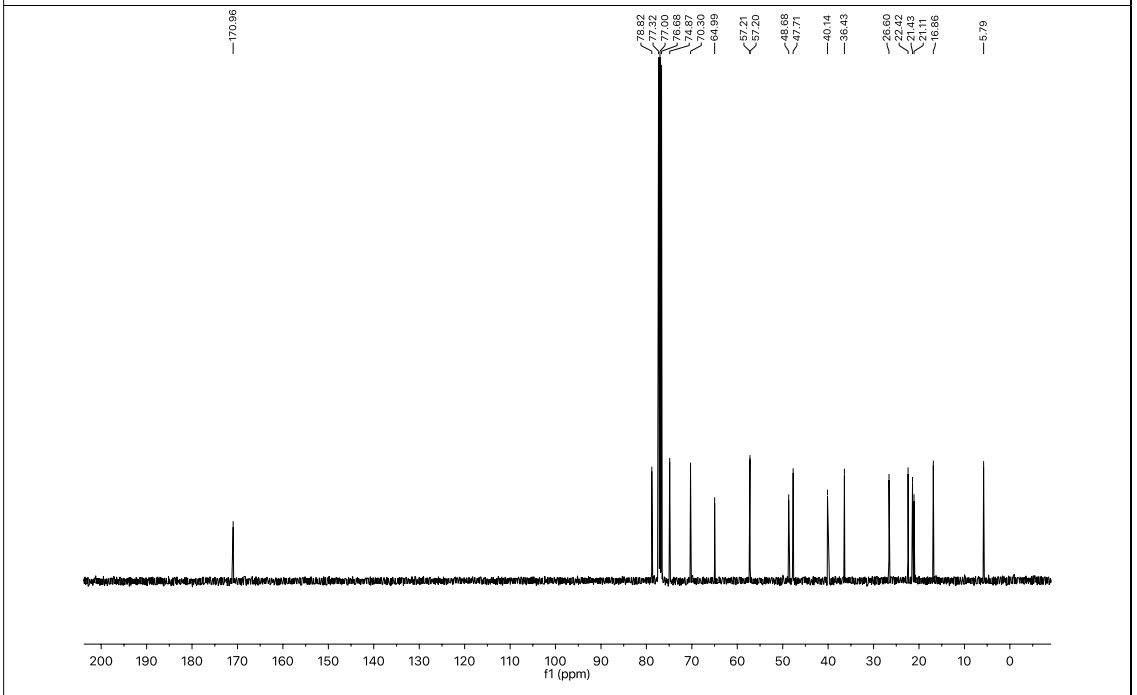
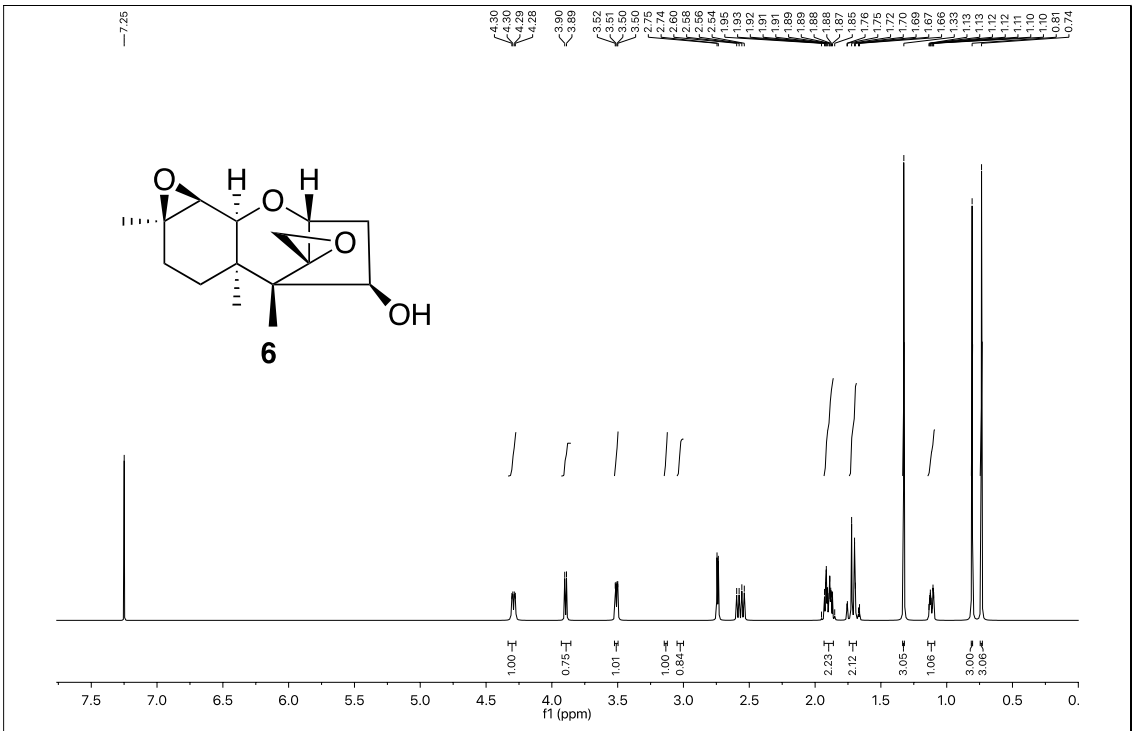


100 MHz ^{13}C NMR of compound **5** in $CDCl_3$



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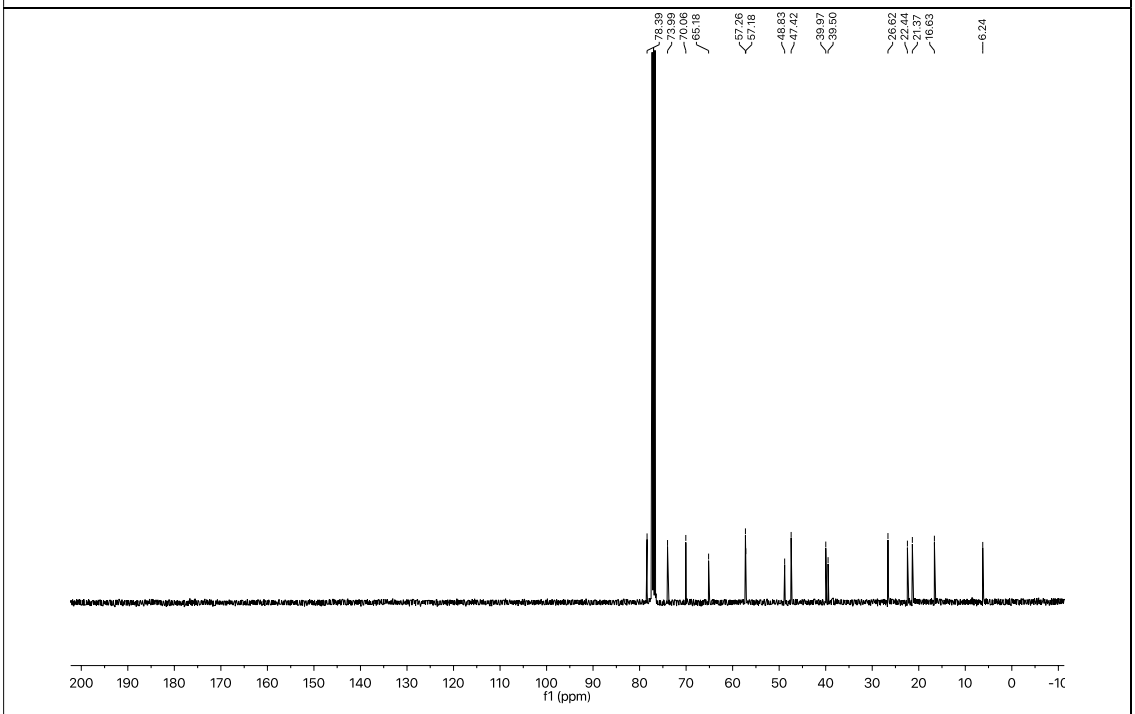

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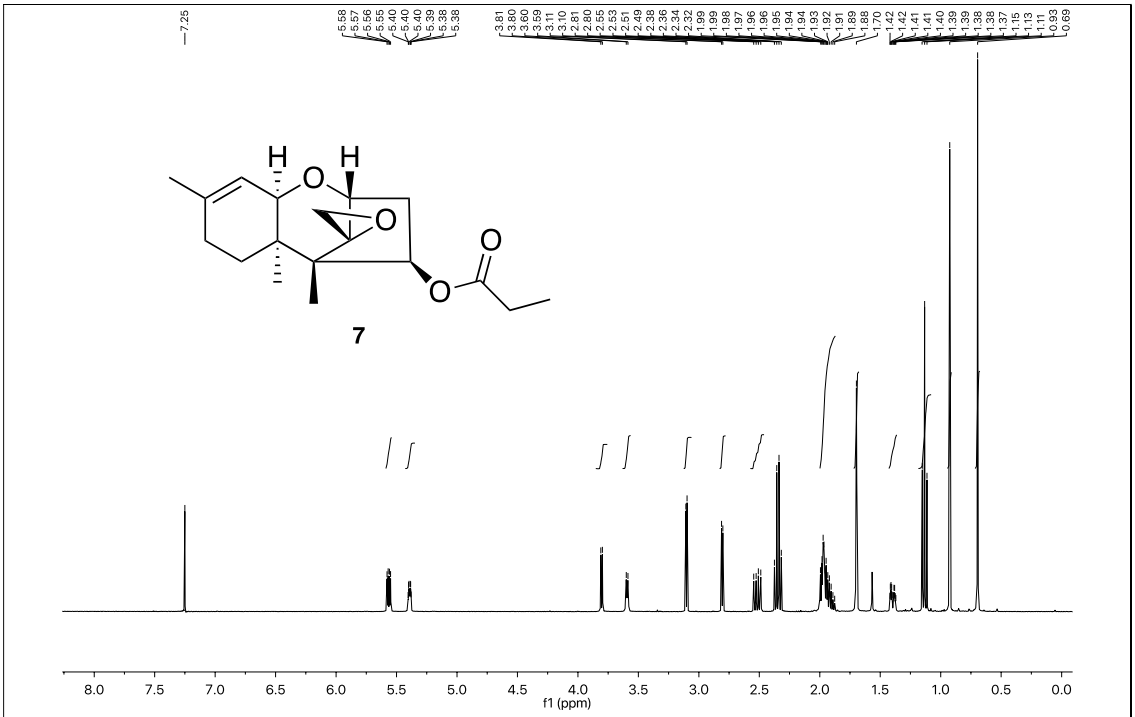

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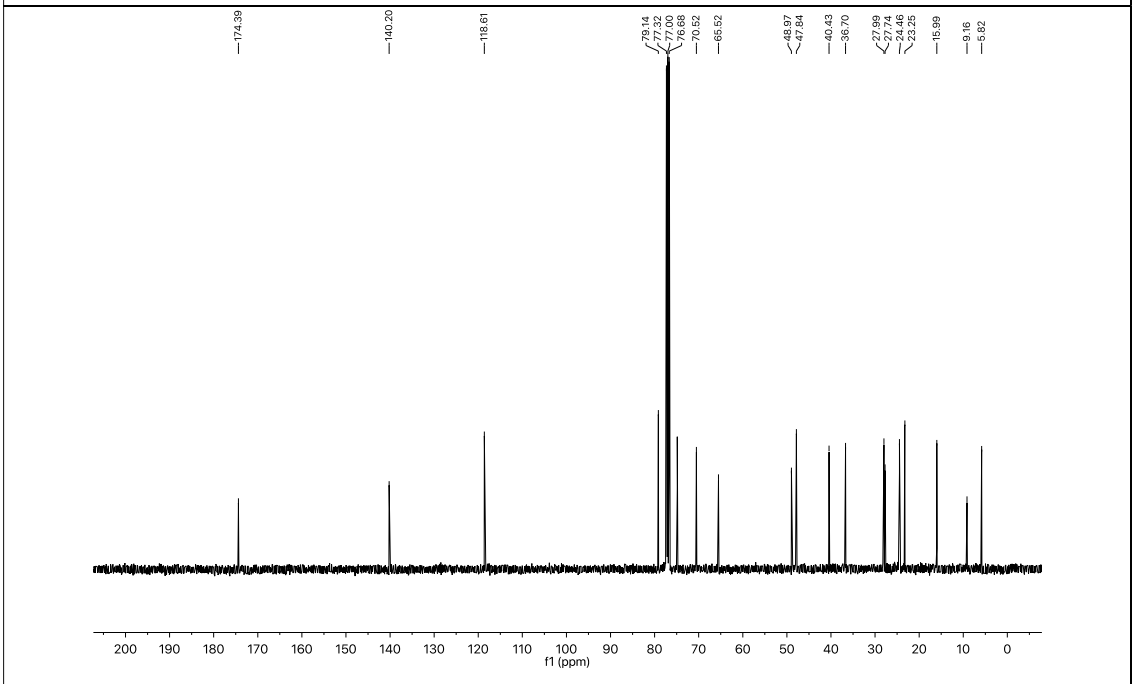

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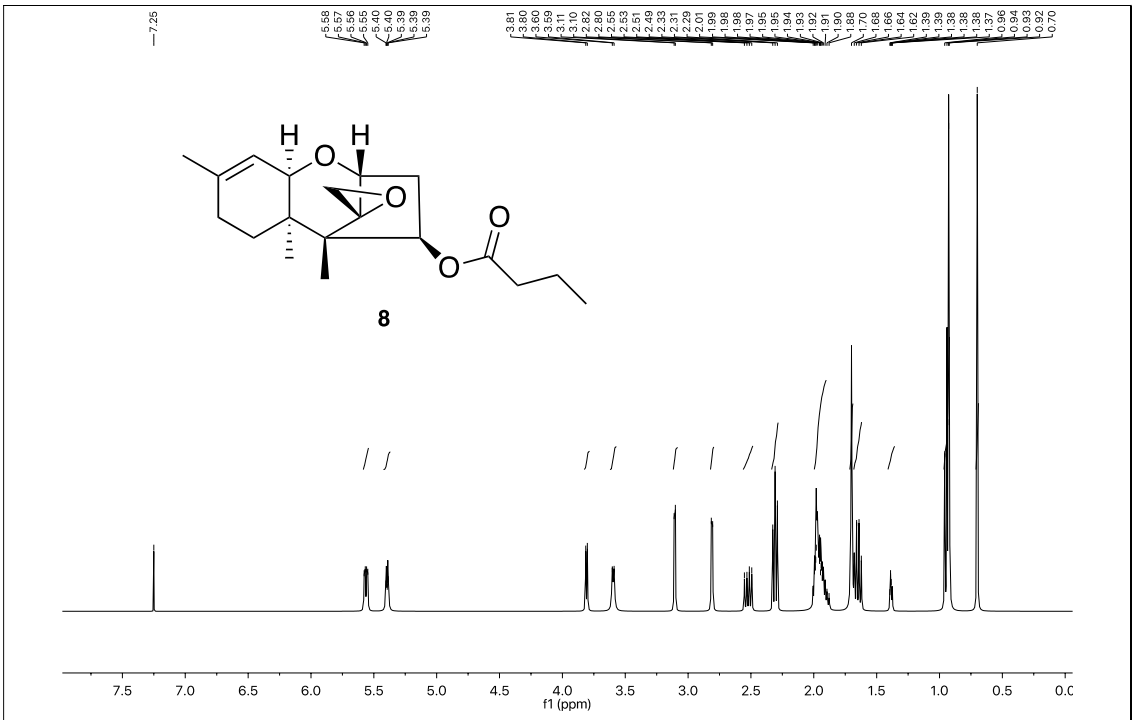

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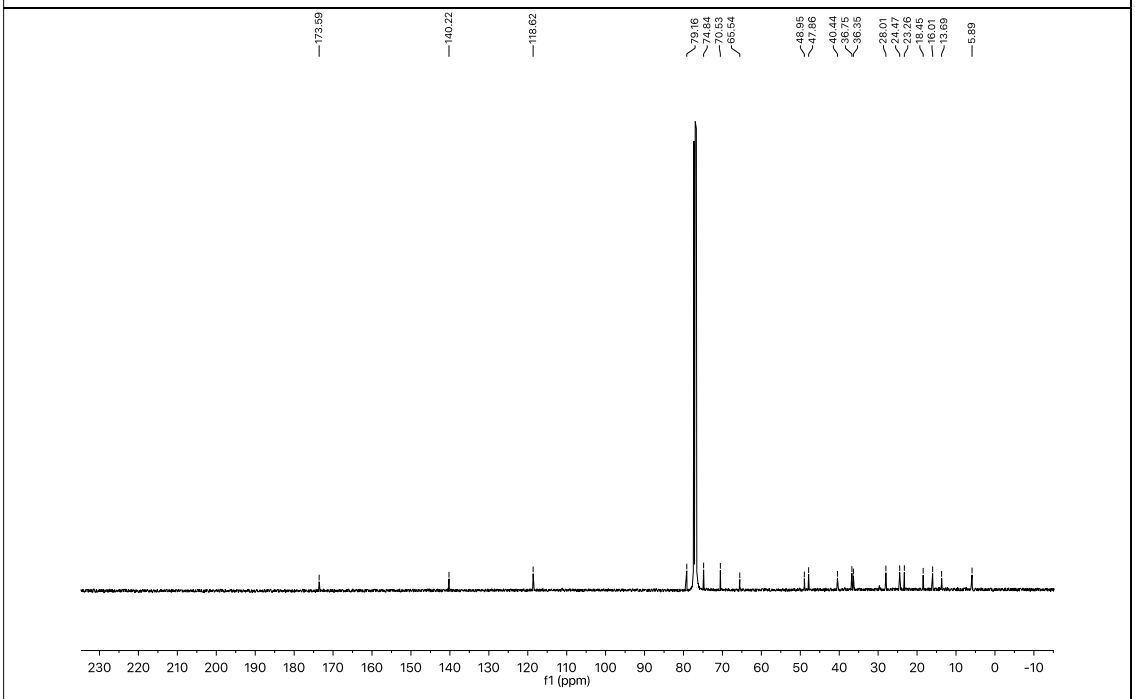

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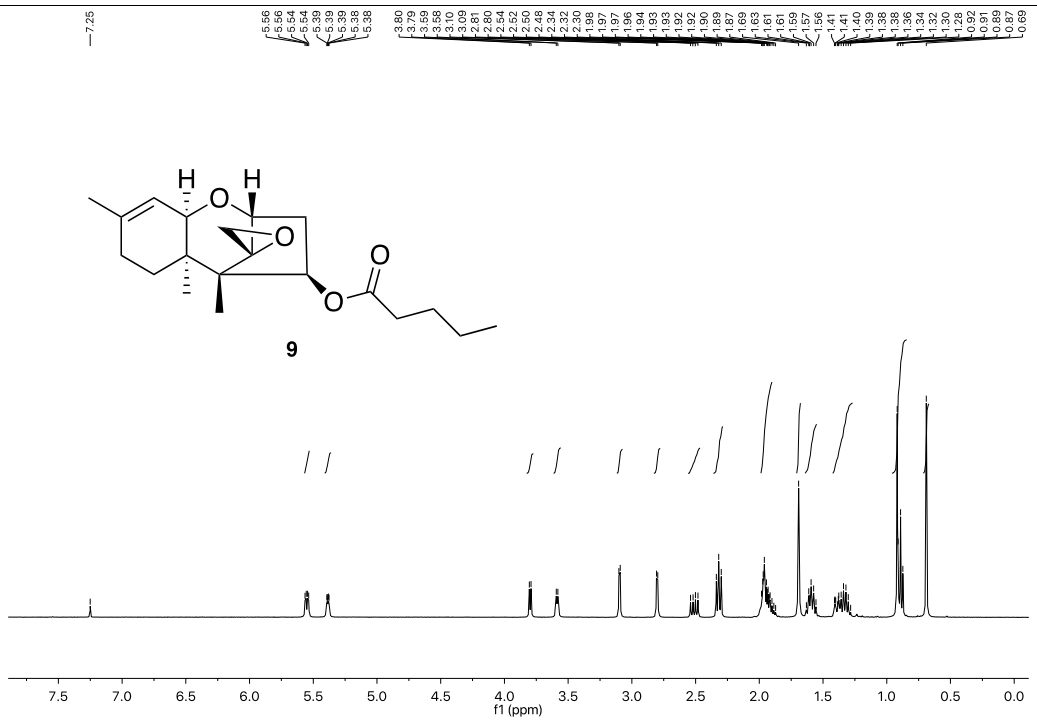
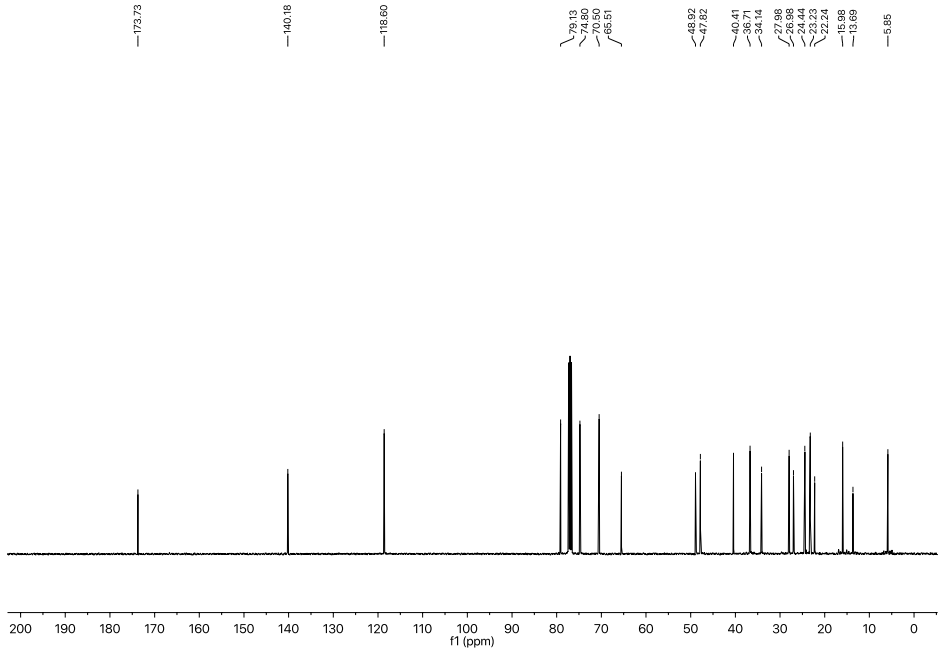
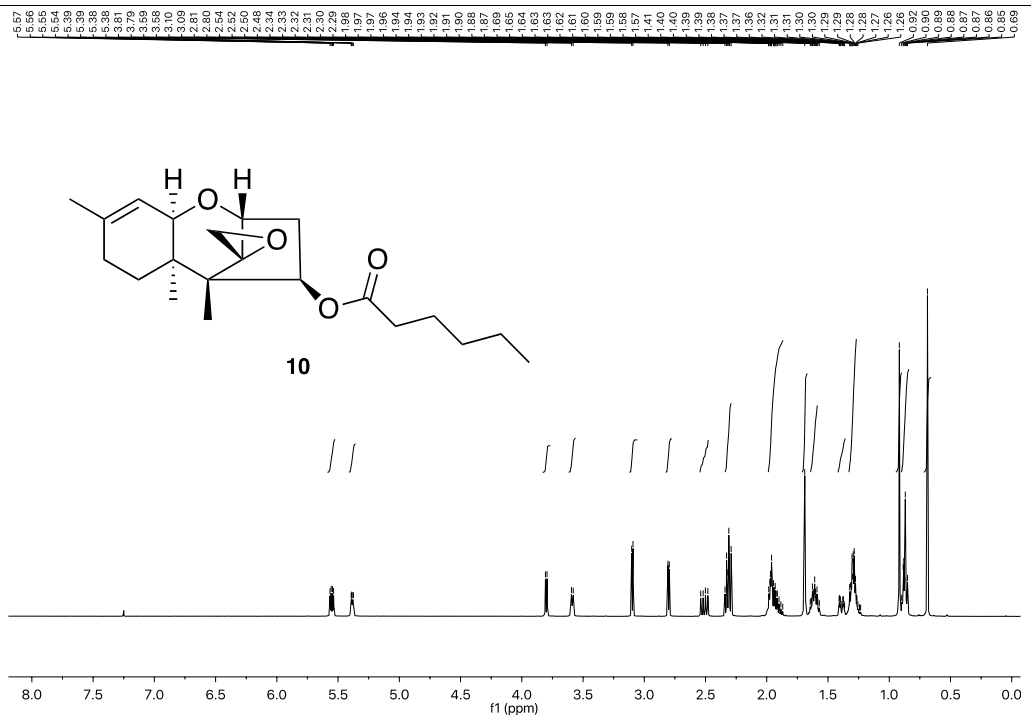


400 MHz ^{1}H NMR of compound **9** in $CDCl_3$



100 MHz ^{13}C NMR of compound **9** in $CDCl_3$



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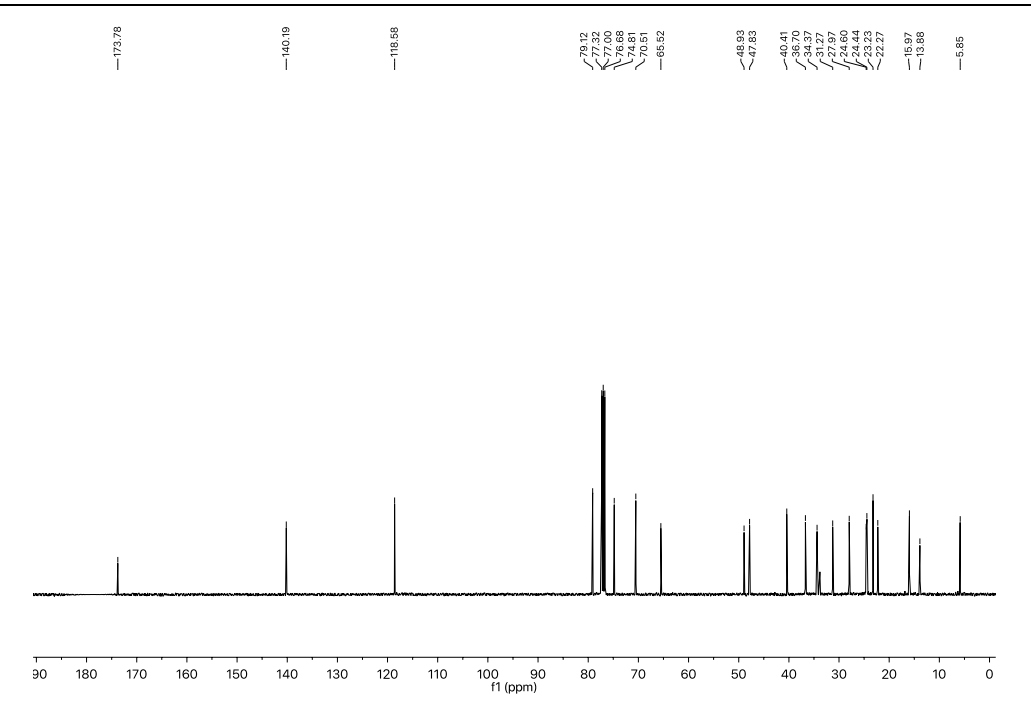
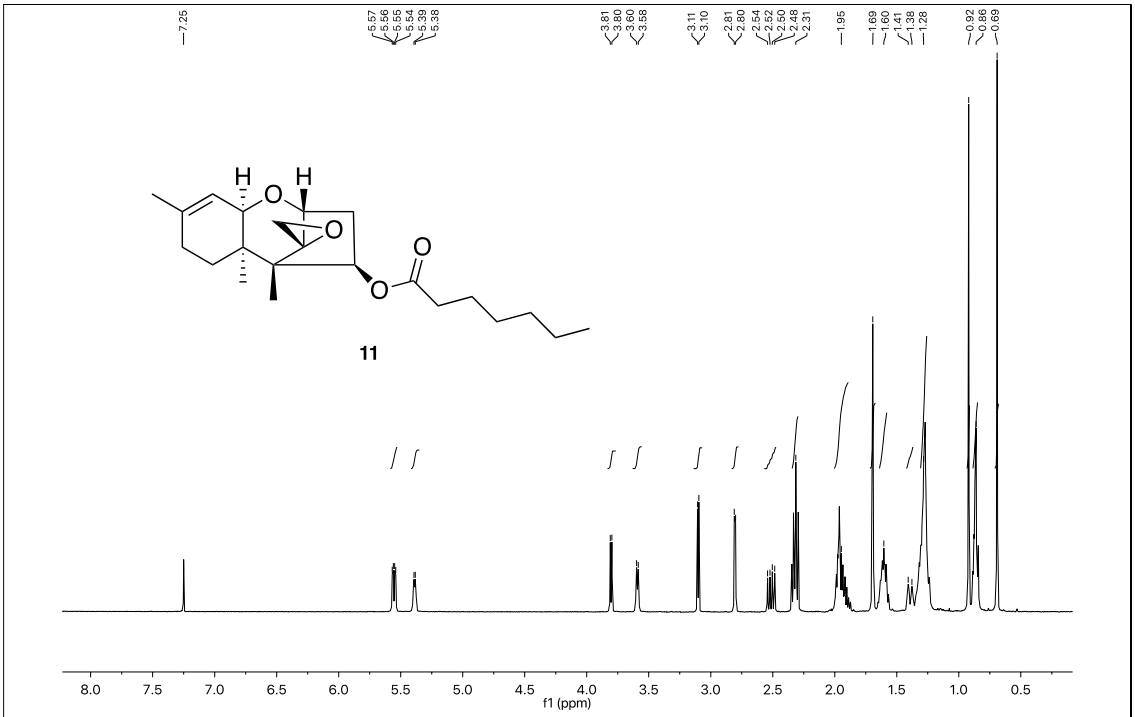
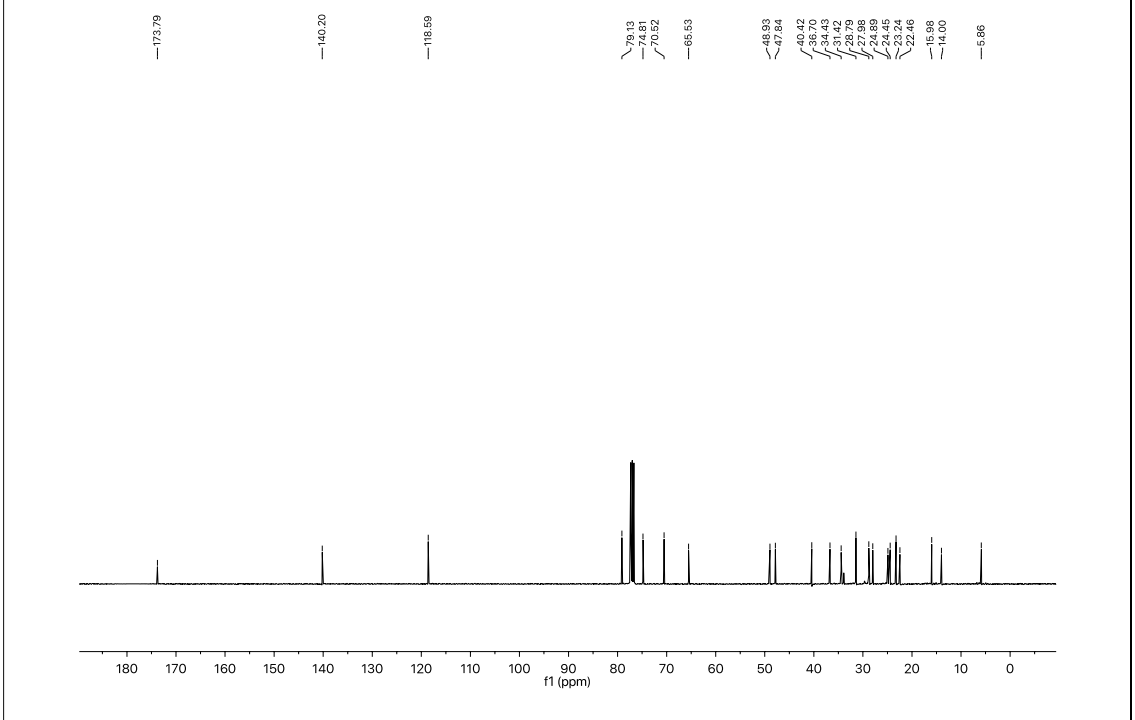


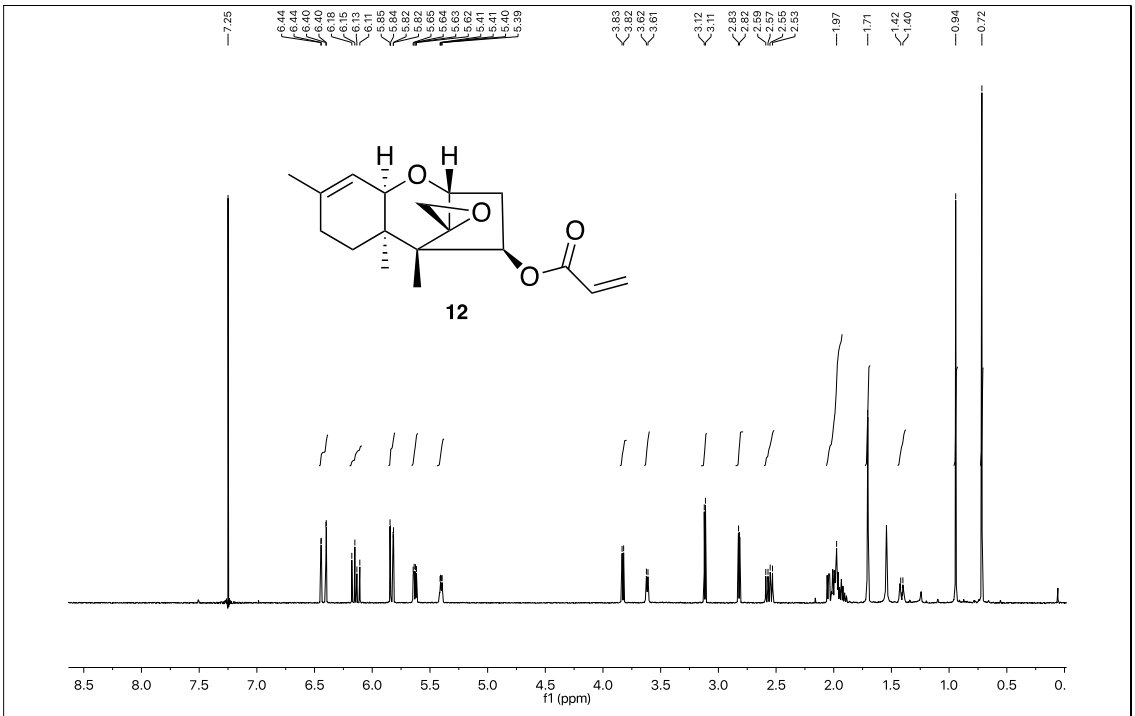
100 MHz ^{13}C NMR of compound **10** in $CDCl_3$



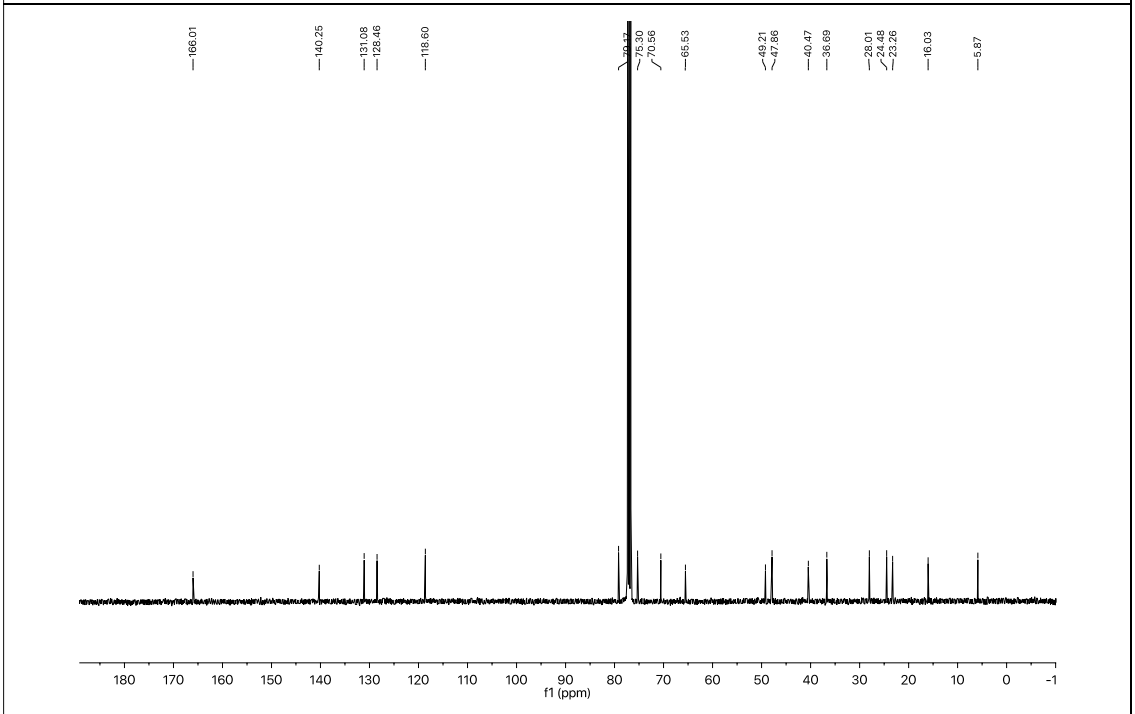
400 MHz ^{1}H NMR of compound **11** in $CDCl_3$



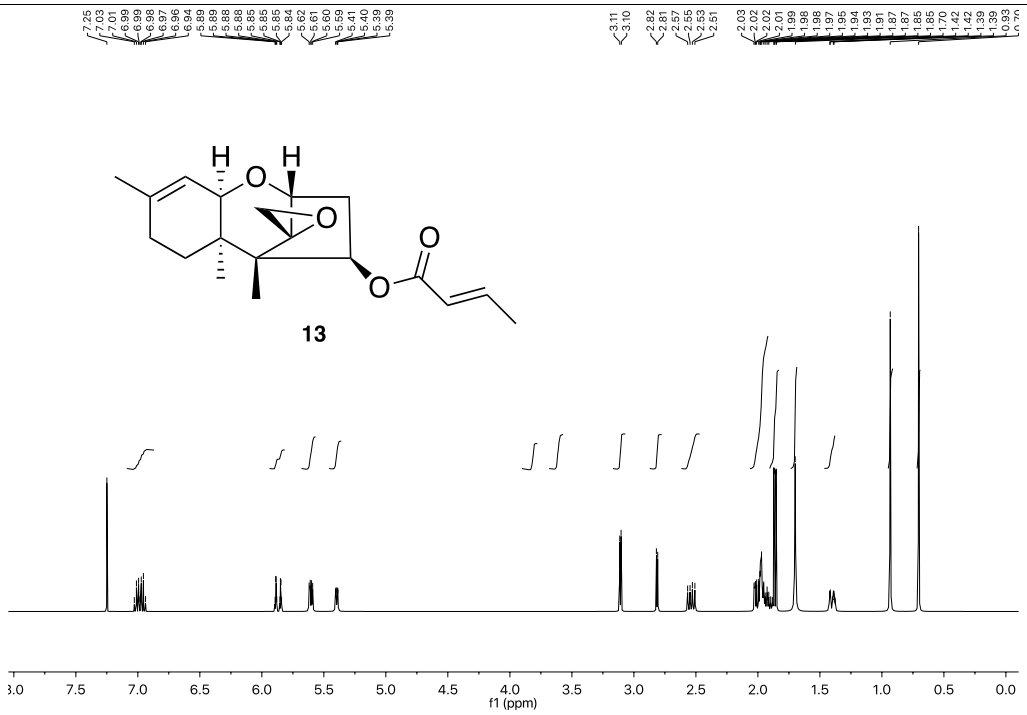
100 MHz ^{13}C NMR of compound **11** in $CDCl_3$



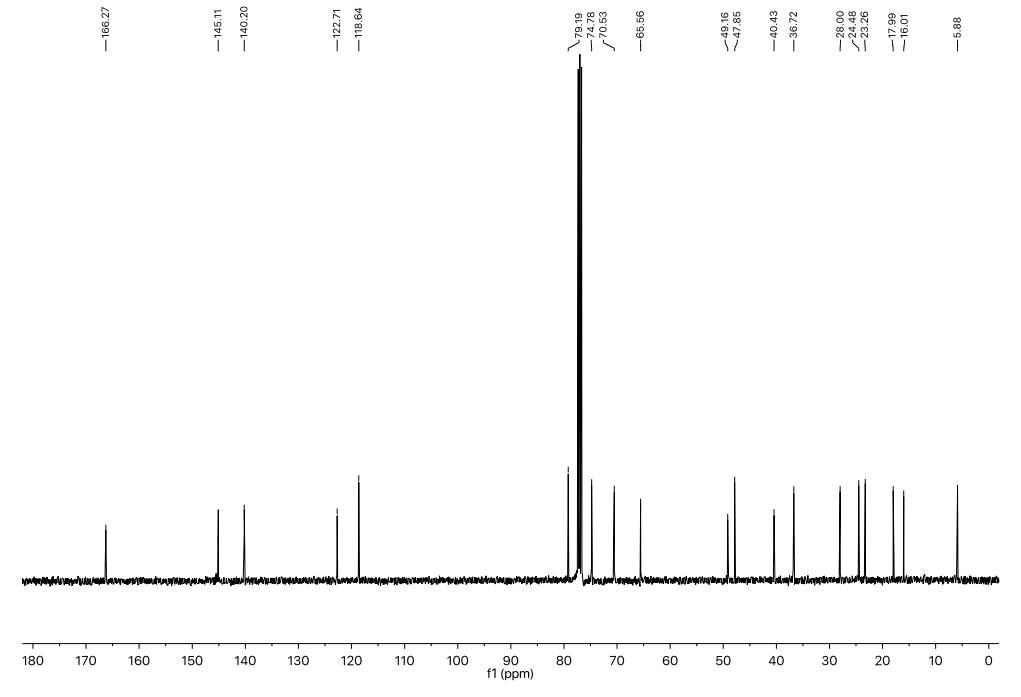
400 MHz ^{1}H NMR of compound **12** in $CDCl_3$



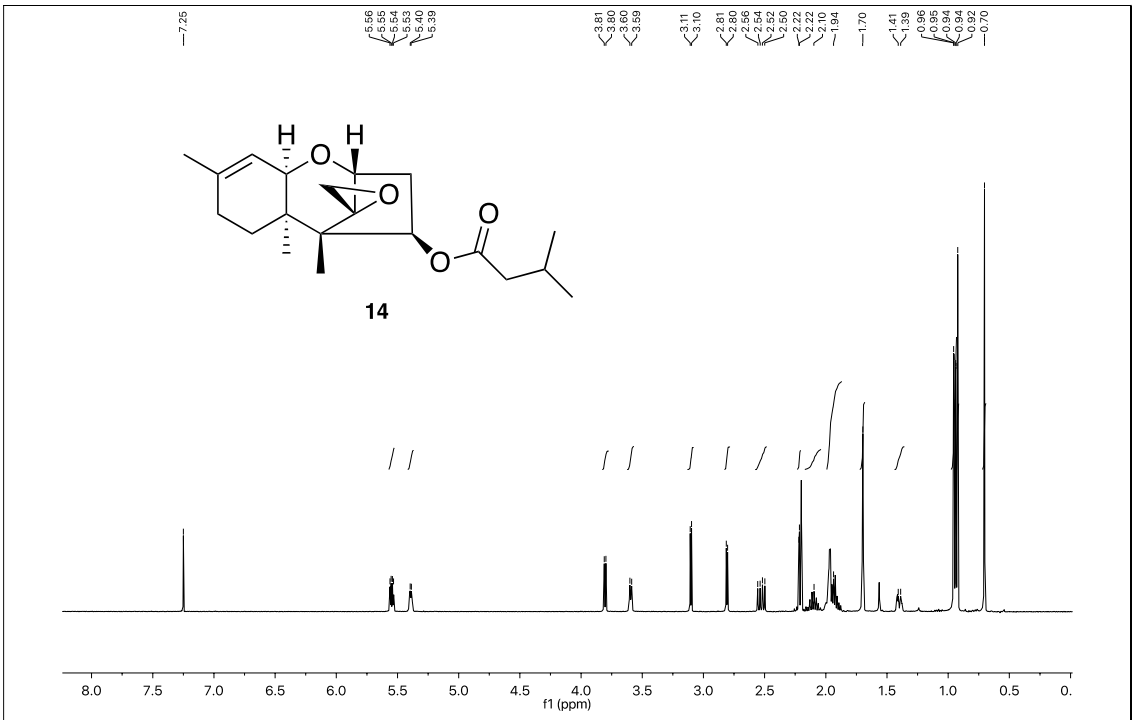
100 MHz ^{13}C NMR of compound **12** in $CDCl_3$



400 MHz ^{1}H NMR of compound **13** in $CDCl_3$



100 MHz ^{13}C NMR of compound **13** in $CDCl_3$



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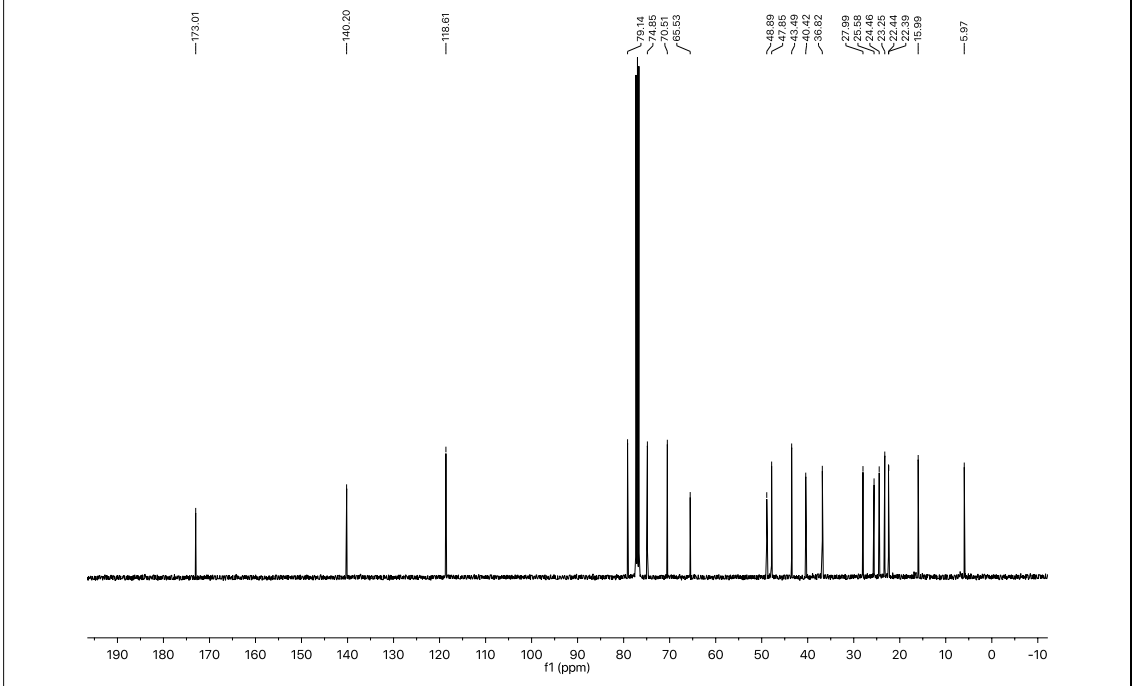
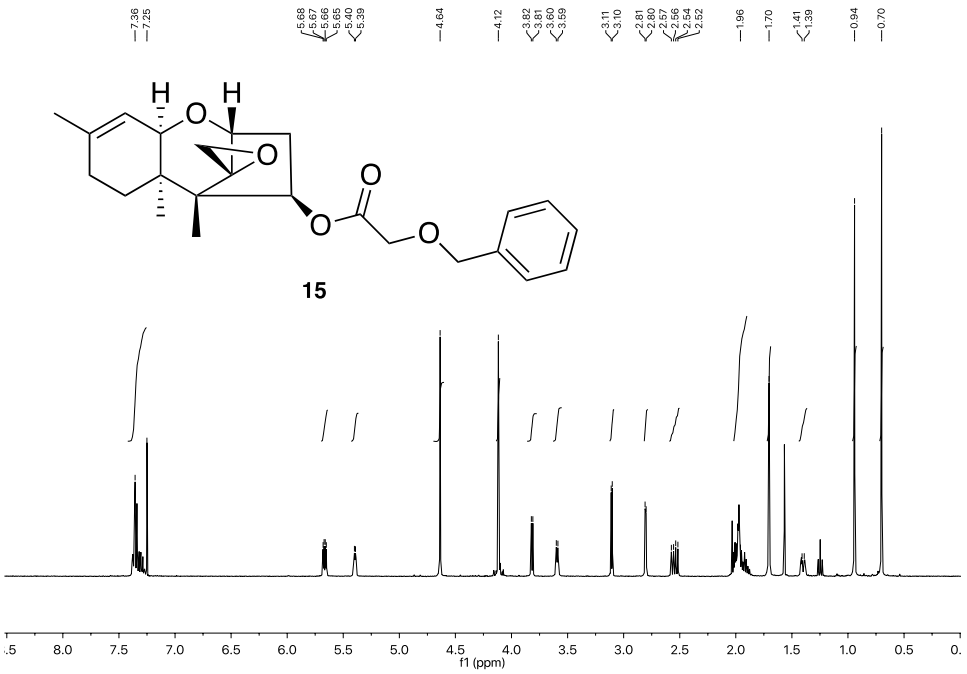


100 MHz ^{13}C NMR of compound **14** in $CDCl_3$



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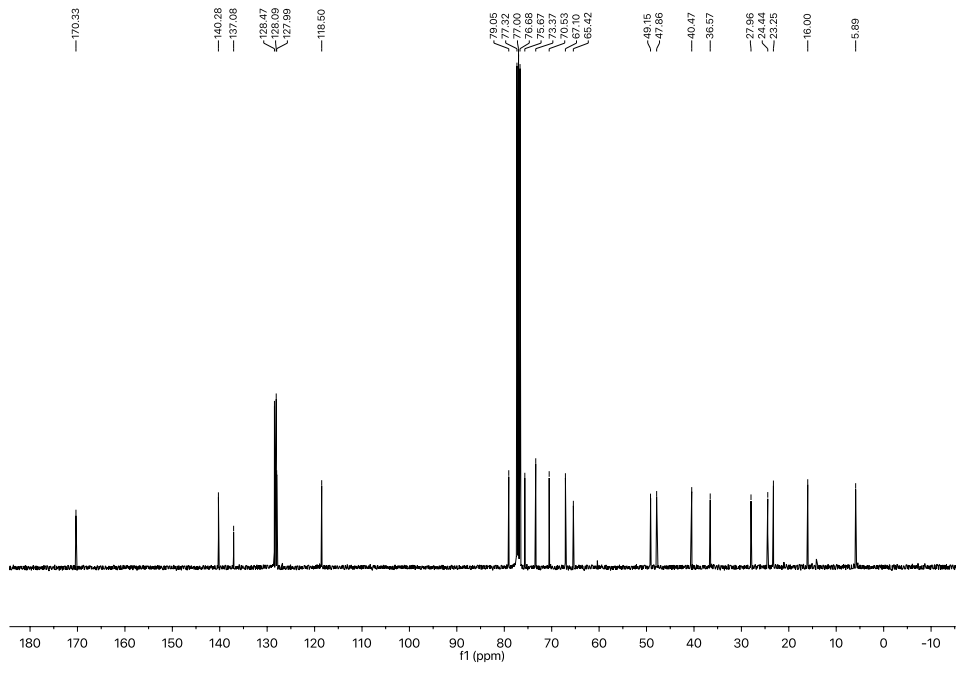
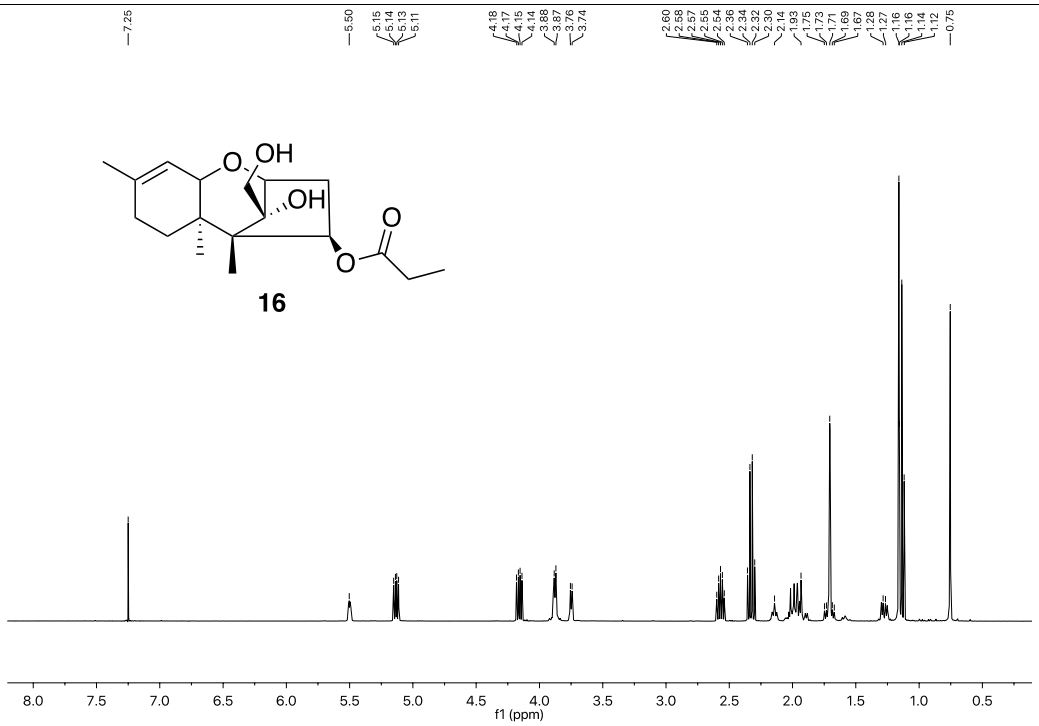


100 MHz ^{13}C NMR of compound **15** in $CDCl_3$



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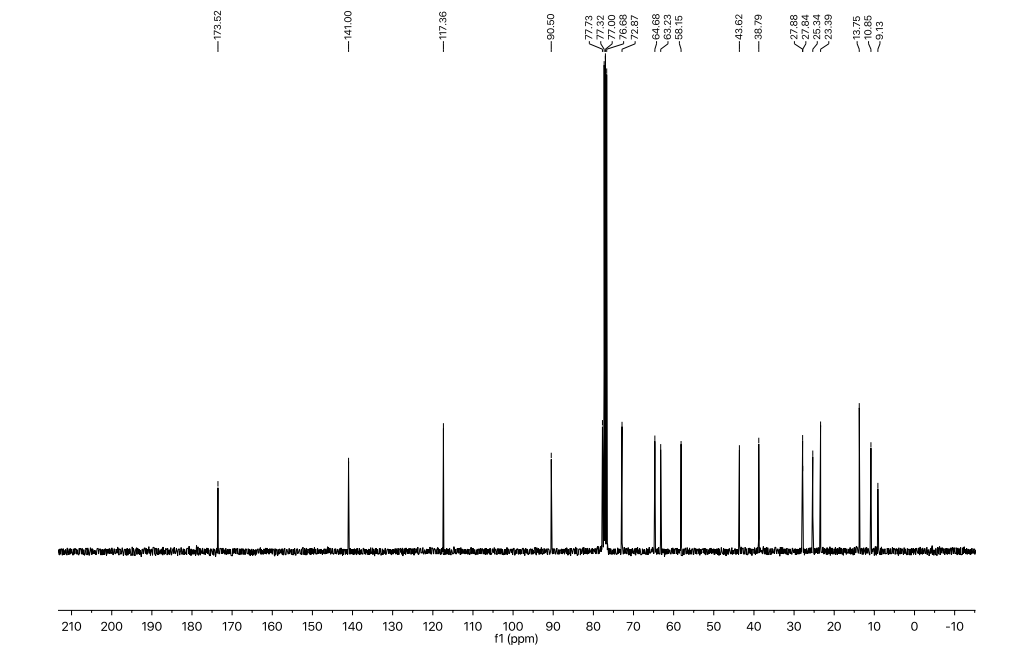

100 MHz ^{13}C NMR of compound **16** in $CDCl_3$