

**Antinociceptive activity of extracts and secondary metabolites from wild growing and  
micropaginated plants of *Renealmia alpinia***

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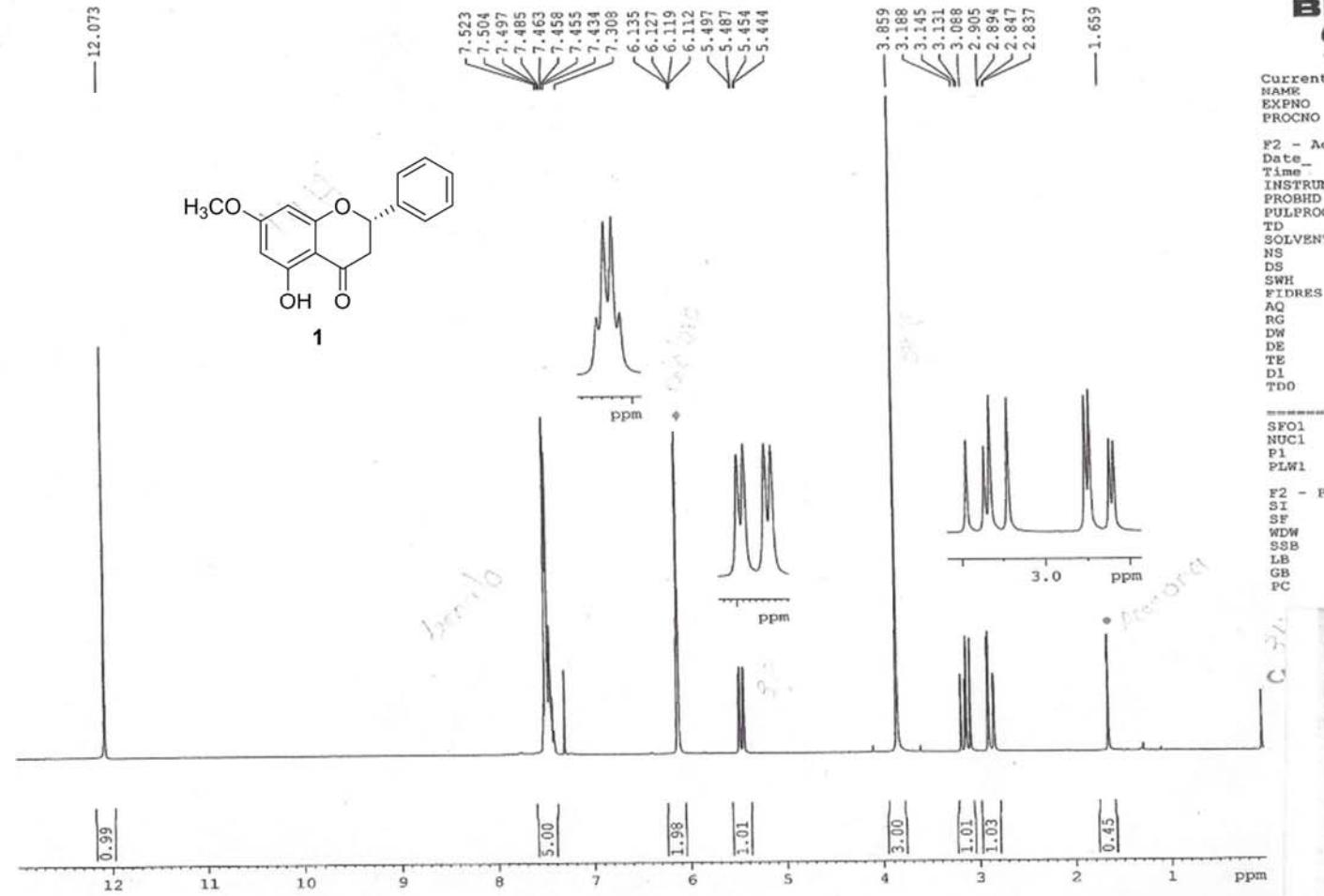
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R-9-4-3  
Proton



Current Data Parameters  
NAME GISEB-R-9-4-3  
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PROCNO 1

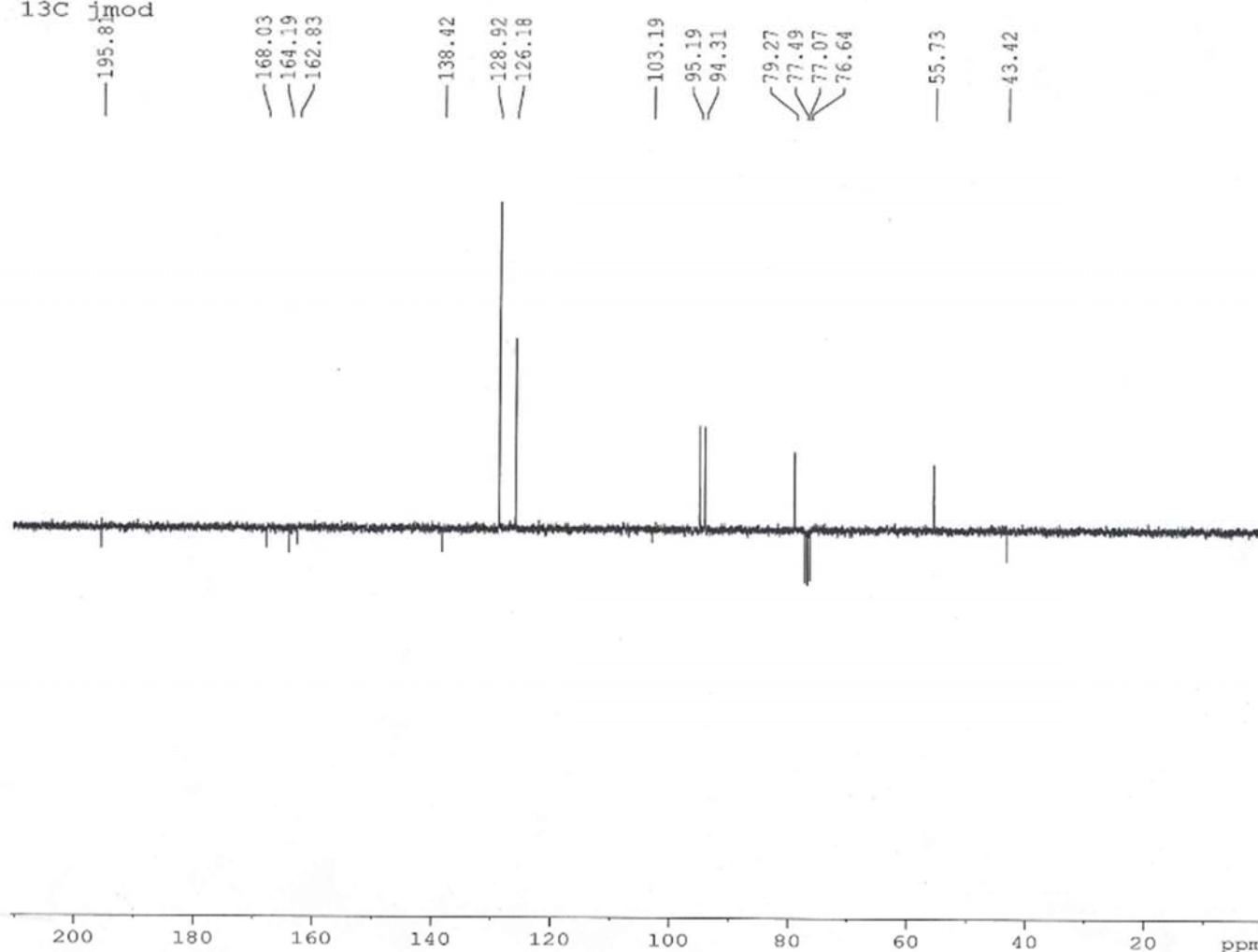
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SOLVENT CDCl3  
NS 16  
DS 0  
SWH 6103.516 Hz  
FIDRES 0.093132 Hz  
AQ 5.3687091 sec  
RG 31.623  
DW 81.920 usec  
DE 6.50 usec  
TE 296.2 K  
D1 1.0000000 sec  
TDO 1

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NUC1 1H  
P1 12.50 usec  
PLW1 11.99499989 W

F2 - Processing parameters  
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SF 300.1680000 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

Fig. 1S  $^1\text{H}$  NMR of compound 1 in  $\text{CDCl}_3$ .

R-9-4-3  
13C jmod



Current Data Parameters  
NAME GISB-R-9-4-3  
EXPNO 5  
PROCNO 1

F2 - Acquisition Parameters  
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PULPROG aptjdc  
TD 32768  
SOLVENT CDCl3  
NS 256  
DS 4  
SWH 24414.063 Hz  
FIDRES 0.745058 Hz  
AQ 0.6710886 sec  
RG 501.187  
DW 20.480 usec  
DE 6.50 usec  
TE 296.1 K  
CNST2 145.0000000  
D1 2.00000000 sec  
D2 0.00344828 sec  
D4 0.00172414 sec  
D11 0.03000000 sec  
D30 0.00001250 sec  
D33 0.00001250 sec  
D40 0.02432100 sec  
D42 0.00002500 sec  
D44 0.00002500 sec  
L4 17  
L5 49  
P1 12.50 usec  
P32 105.00 usec  
T0D 1

CHANNEL f1  
SF01 75.4848517 MHz  
NUC1 13C  
P0 12.50 usec  
P2 25.00 usec  
PLW1 25.00300026 W

CHANNEL f2  
SF02 300.1692007 MHz  
NUC2 1H  
CPDPG1[2] waltz16  
P3 12.50 usec  
P4 25.00 usec  
PCPD2 105.00 usec  
PLW2 11.99499989 W  
PLW12 0.17000000 W

F2 - Processing parameters  
ST 32768  
SF 75.4773040 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
FC 1.40

Fig. 2S  $^{13}\text{C}$  J-MOD experiment of compound **1** in  $\text{CDCl}_3$ .

RA-5-2  
Proton



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PROCNO 1

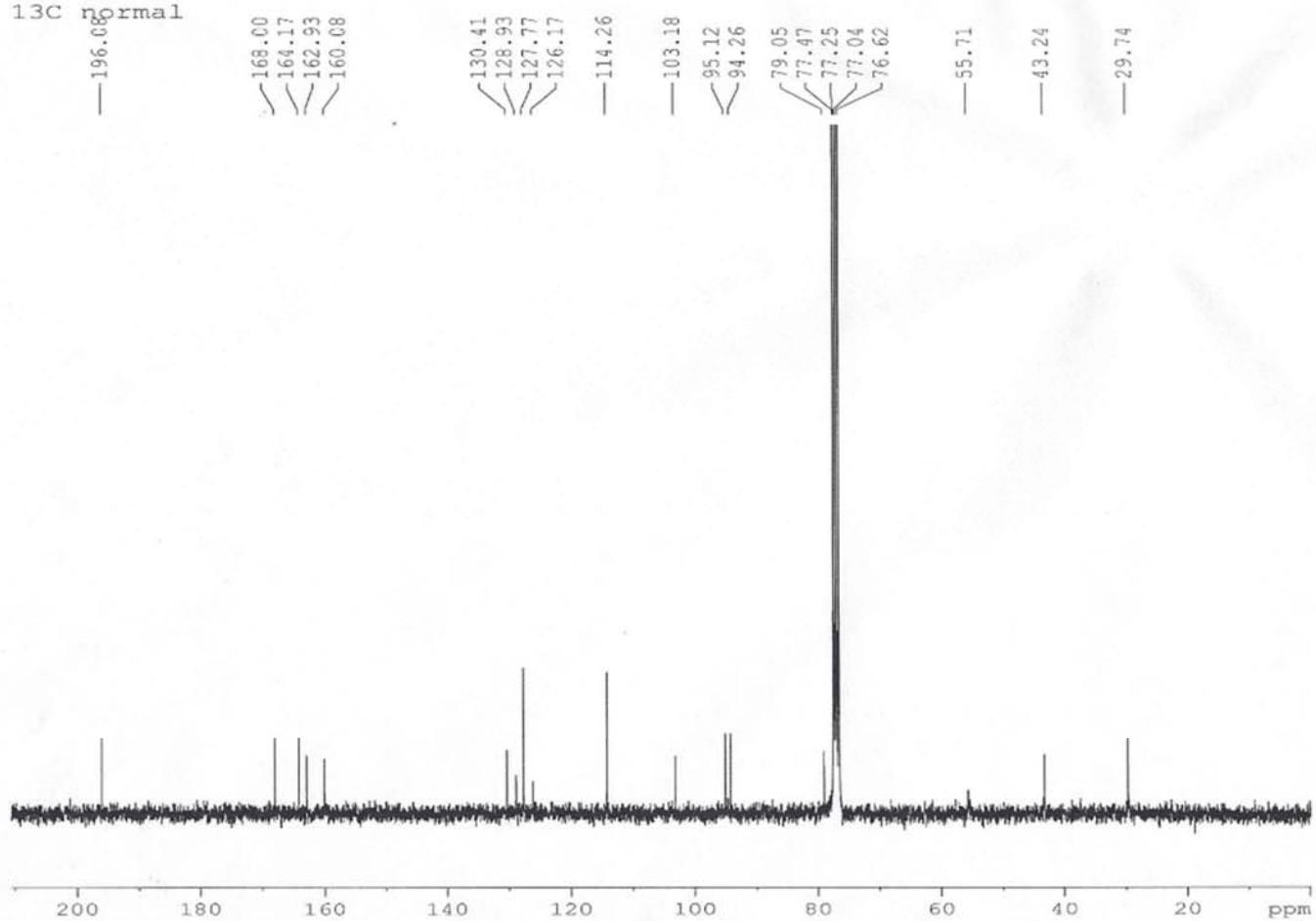
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TD 65536  
SOLVENT CDCl3  
NS 16  
DS 0  
SWH 6103.516 Hz  
FIDRES 0.093132 Hz  
AQ 5.3687091 sec  
RG 101.088  
DW 81.920 usec  
DE 6.50 usec  
TE 296.1 K  
D1 1.0000000 sec  
TDD 1

===== CHANNEL f1 =====  
SFO1 300.1699537 MHz  
NUC1 1H  
P1 12.50 usec  
PLW1 11.99499989 W

F2 - Processing parameters  
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SF 300.1680000 MHz  
WDW EM  
SSB 0 0.30 Hz  
LB 0  
GB 0  
PC 1.00

Fig. 3S <sup>1</sup>H NMR of compound **2** in CDCl<sub>3</sub>.

RA-5-2  
<sup>13</sup>C normal



Current Data Parameters  
NAME GISB-RA-5-2  
EXPNO 6  
PROCNO 1

F2 - Acquisition Parameters  
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PULPROG zpgq30  
TD 32768  
SOLVENT CDCl3  
NS 11910  
DS 4  
SWH 24414.063 Hz  
FIDRES 0.745058 Hz  
AQ 0.6710886 sec  
RG 501.187  
DW 20.480 usec  
DE 6.50 usec  
TE 296.2 K  
D1 2.00000000 sec  
D11 0.03000000 sec  
D31 0.00001250 sec  
D40 0.02432300 sec  
L4 18  
L5 49  
P32 105.00 usec  
TDO 1

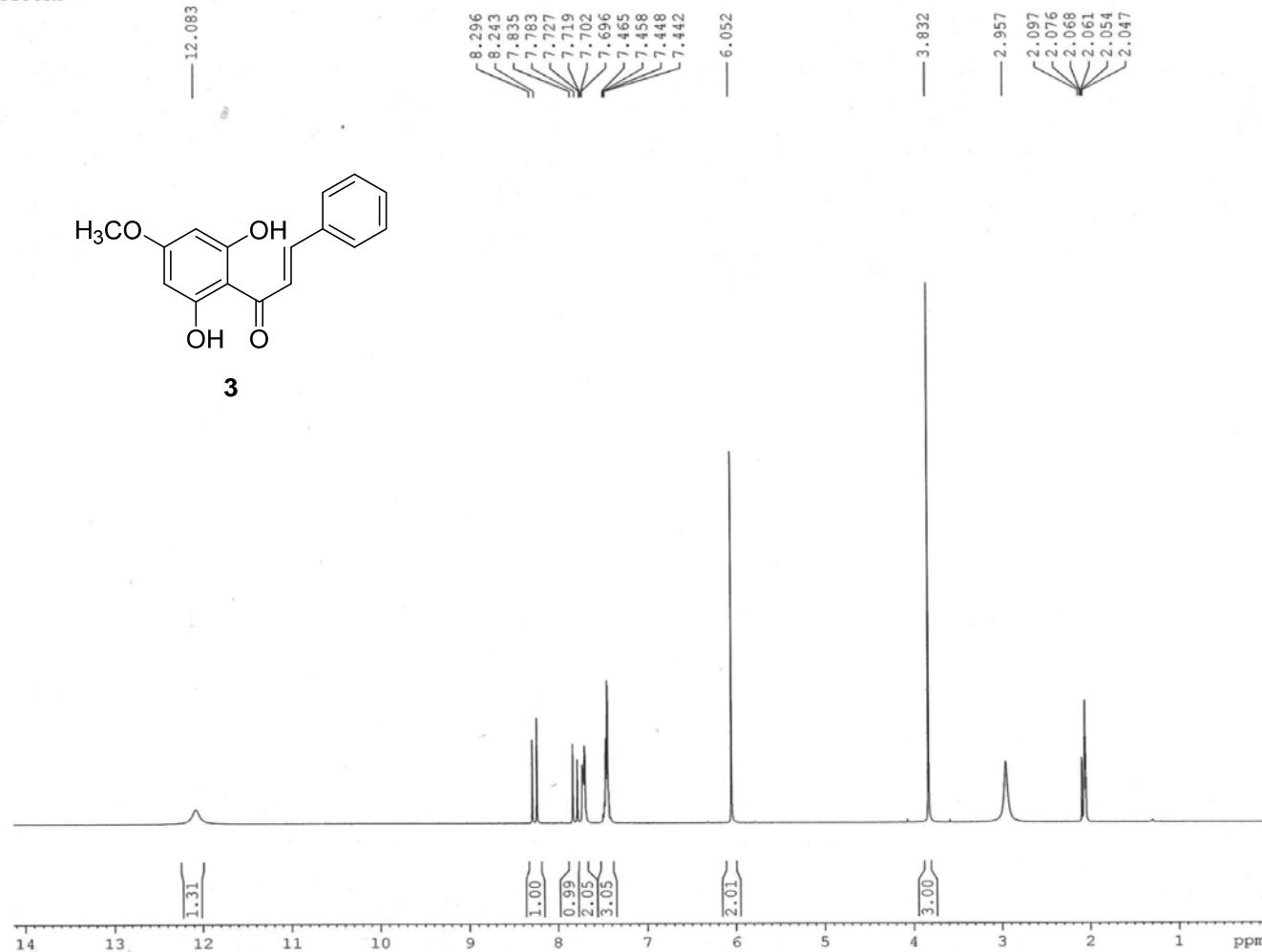
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NUC1 <sup>13</sup>C  
P1 12.50 usec  
PLW1 25.00300026 W

----- CHANNEL f2 -----  
SF02 300.1692007 MHz  
NUC2 <sup>1</sup>H  
CPDPG[2] waltz16  
PCPD2 105.00 usec  
PLW2 11.99499989 W  
PLW12 0.17000000 W  
PLW13 0.18742000 W

F2 - Processing parameters  
SI 32768  
SF 75.4773040 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

Fig. 4S <sup>13</sup>C NMR of compound 2 in CDCl<sub>3</sub>.

R.A.G  
Proton



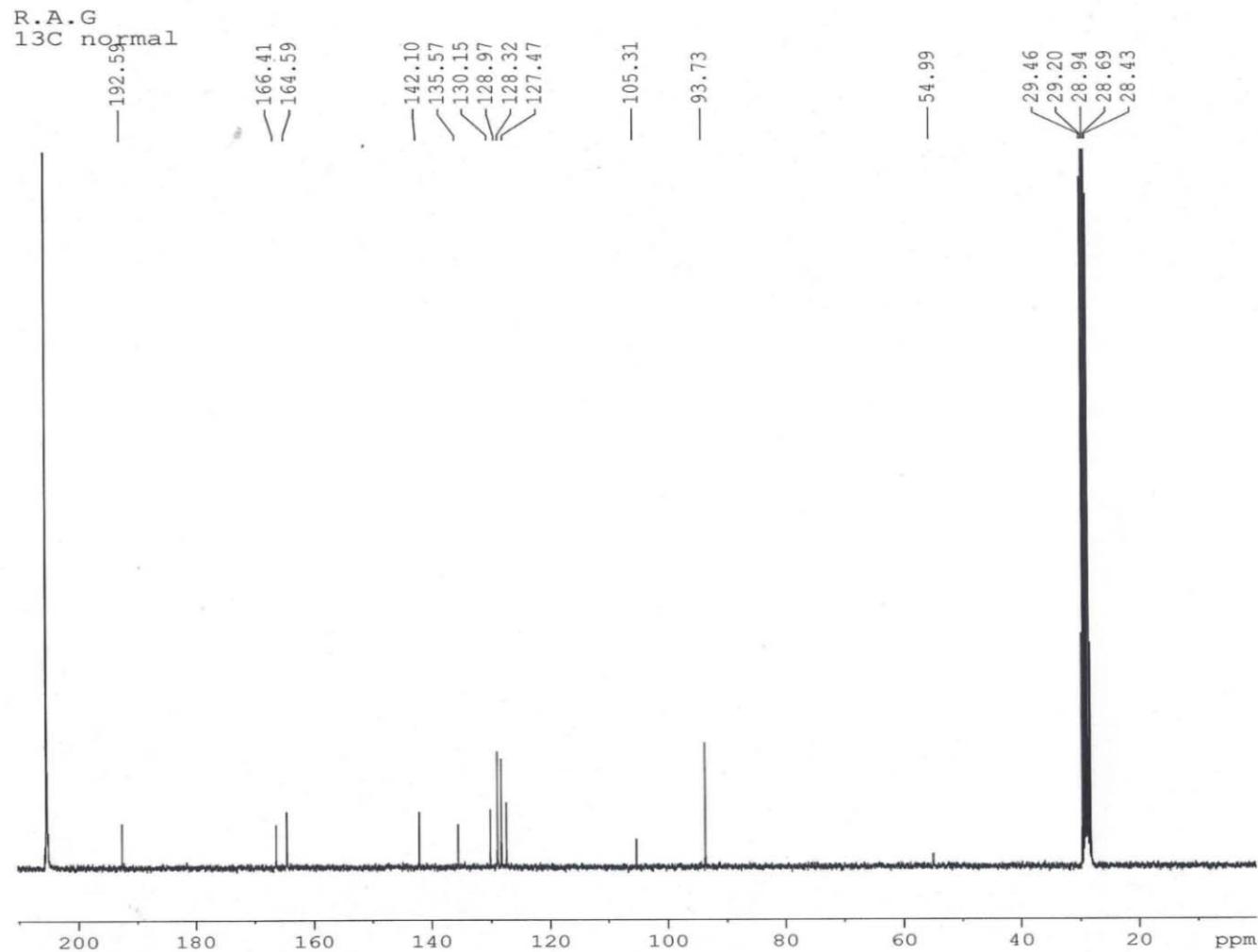
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PROBHD 5 mm DUL 13C-1  
PULPROG zg30  
TD 65536  
SOLVENT Acetone  
NS 16  
DS 0  
SWH 6103.516 Hz  
FIDRES 0.093132 Hz  
AQ 5.3687091 sec  
RG 67.2057  
DW 81.920 usec  
DE 6.50 usec  
TE 296.1 K  
D1 1.0000000 sec  
TDO 1

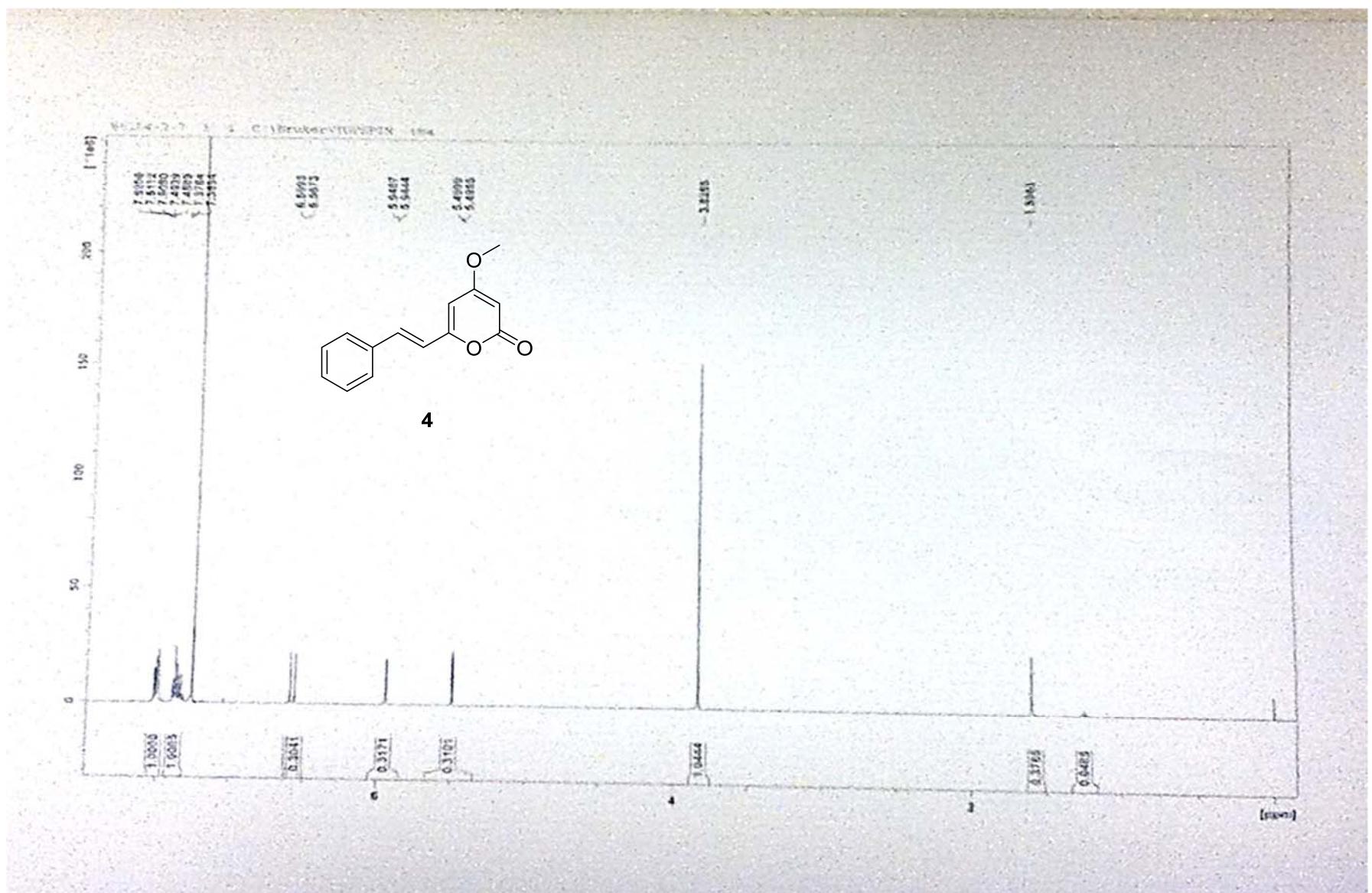
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NUC1 1H  
P1 12.50 usec  
PLW1 11.99499989 W

F2 - Processing parameters  
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SF 300.1680000 MHz  
WDW EM  
SSB 0 0.30 Hz  
LB 0  
GB 0  
PC 1.00

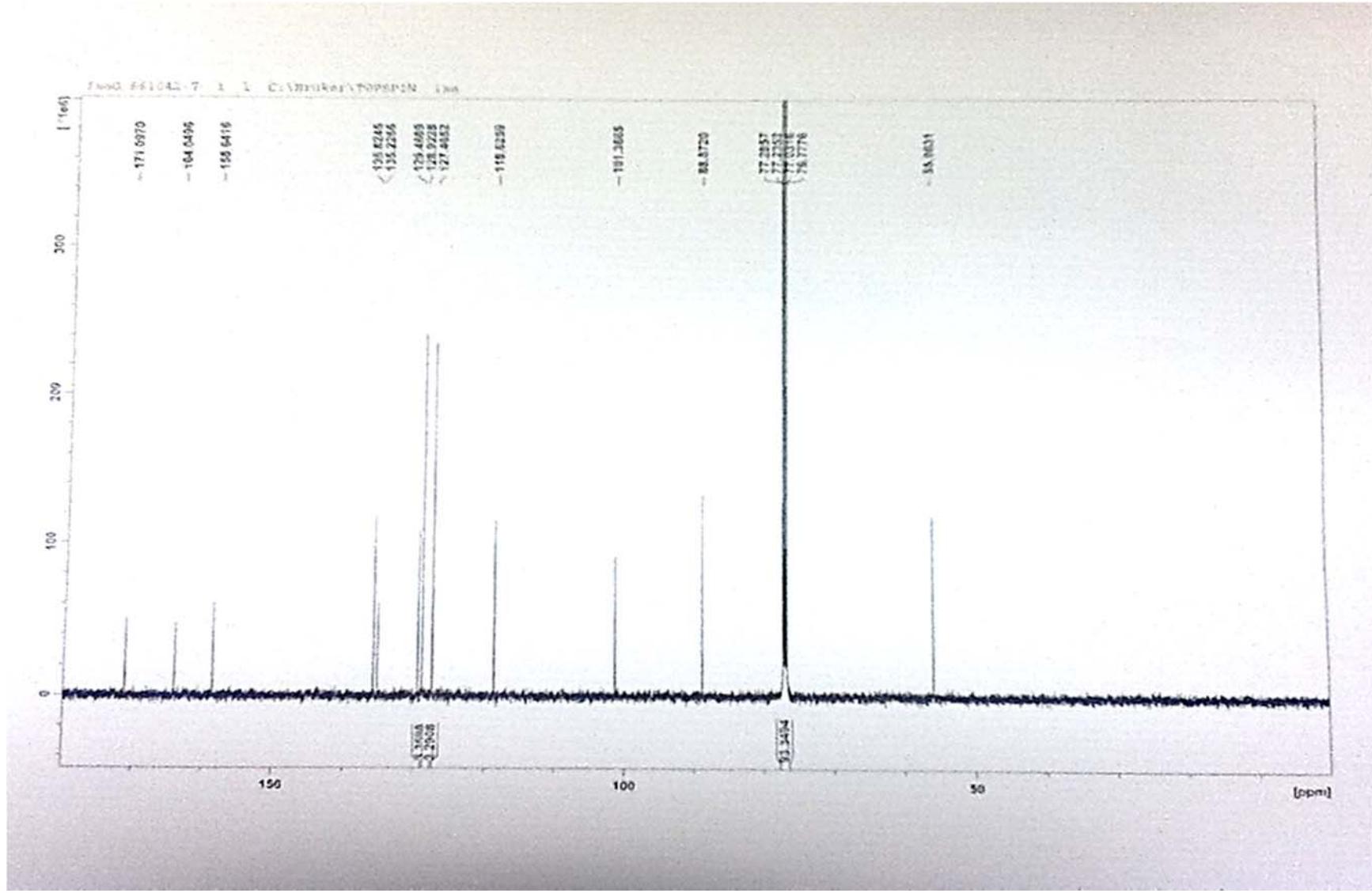
**Fig. 5S**  $^1\text{H}$  NMR of compound 3 in  $\text{CD}_3\text{COCD}_3$ .



**Fig. 6S**  $^{13}\text{C}$  NMR of compound **3** in  $\text{CD}_3\text{COCD}_3$ .

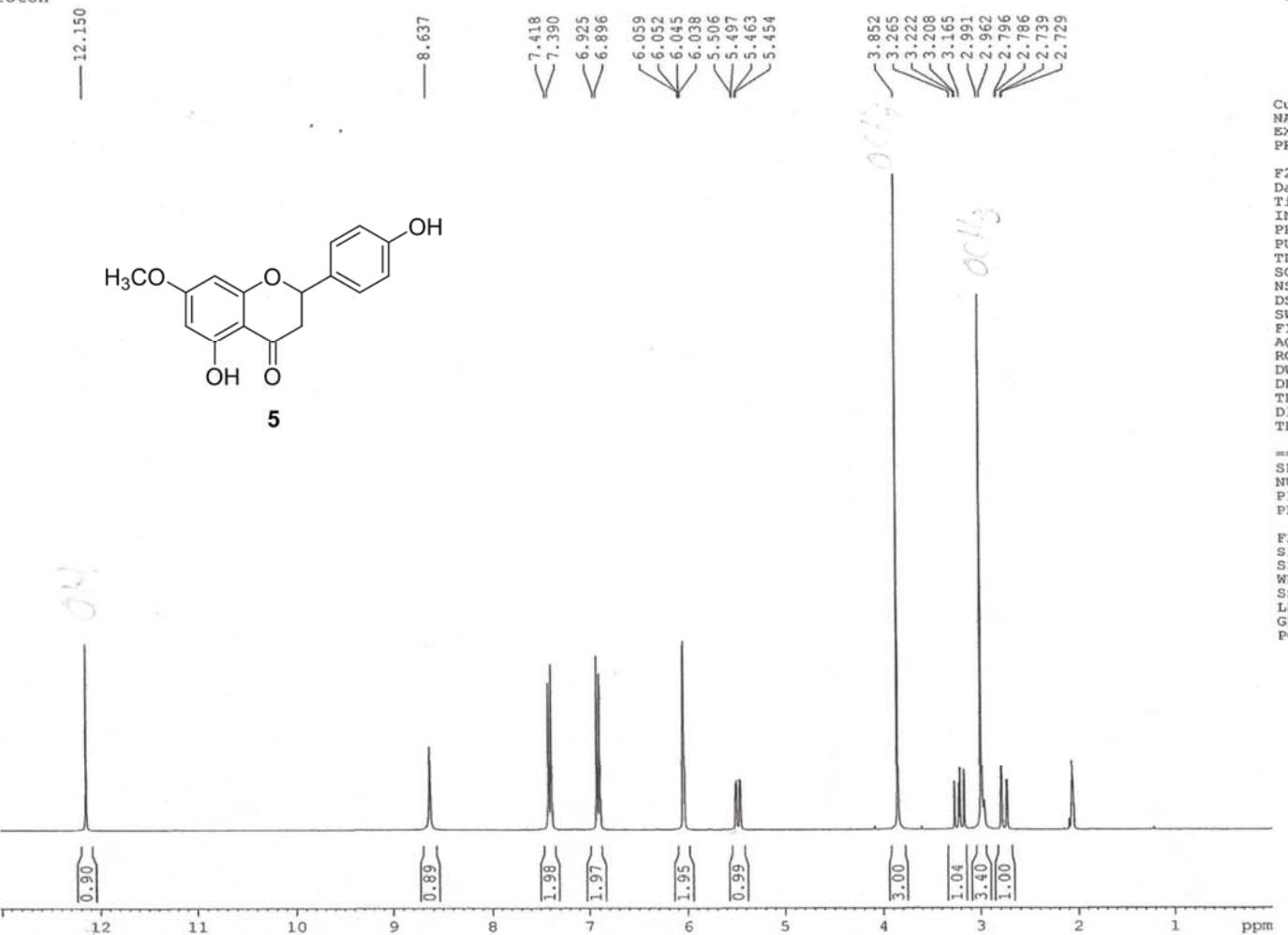


**Fig. 7S**  $^1\text{H}$  NMR of compound **4** in  $\text{CDCl}_3$ .



**Fig. 8S**  $^{13}\text{C}$  NMR of compound 4 in  $\text{CDCl}_3$ .

RA-6-6-13  
Proton



Current Data Parameters  
NAME GISB-RA-6-6-13  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20130613  
Time 16.17  
INSTRUM FOURIER300  
PROBHD 5 mm DUL 13C-1  
PULPROG zg30  
TD 65536  
SOLVENT Acetone  
NS 16  
DS 0  
SWH 6103.516 Hz  
FIDRES 0.093132 Hz  
AQ 5.3687091 sec  
RG 31.623  
DW 81.920 usec  
DE 6.50 usec  
TE 296.1 K  
D1 1.00000000 sec  
TD0 1

===== CHANNEL f1 =====  
SF01 300.1698537 MHz  
NUC1 1H  
P1 12.50 usec  
PLW1 11.99499989 W

F2 - Processing parameters  
SI 65536  
SF 300.1680000 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

Fig. 9S  $^1\text{H}$  NMR of compound 5 in  $\text{CD}_3\text{COCD}_3$ .

RA-6-6-13  
13C normal

— 205.46  
— 196.76

— 167.96  
— 164.10  
— 163.30  
— 157.87

— 129.74  
— 128.16

— 115.30

— 102.84  
— 94.57  
— 93.67

— 79.15

— 42.59  
— 29.73  
— 29.48  
— 28.45  
— 28.20

— 55.34

200 180 160 140 120 100 80 60 40 20 ppm



Current Data Parameters  
NAME GISB-RA-6-6-13  
EXPNO 7  
PROCNO 1

F2 - Acquisition Parameters  
Date 20130614  
Time 9.46  
INSTRUM FOURIER300  
PROBHD 5 mm DUL 13C-1  
PULPROG zgpg30  
TD 65536  
SOLVENT Acetone  
NS 2048  
DS 4  
SWH 24414.063 Hz  
FIDRES 0.372529 Hz  
AQ 1.3421773 sec  
RG 501.187  
DW 20.480 usec  
DE 6.50 usec  
TE 296.1 K  
D1 2.0000000 sec  
D11 0.03000000 sec  
D31 0.00001250 sec  
D40 0.02432300 sec  
L4 34  
L5 49  
P32 105.00 usec  
TDO 1

----- CHANNEL f1 -----  
SFO1 75.4848517 MHz  
NUC1 13C  
P1 12.50 usec  
PLW1 25.00300026 W

----- CHANNEL f2 -----  
SFO2 300.1692007 MHz  
NUC2 1H  
CPDPRG[2] waltz16  
PCPD2 105.00 usec  
PLW2 11.99499989 W  
PLW12 0.17000000 W  
PLW13 0.18742000 W

F2 - Processing parameters  
SI 32768  
SF 75.4773040 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40

Fig. 10S  $^{13}\text{C}$  NMR of compound 5 in  $\text{CD}_3\text{COCD}_3$ .

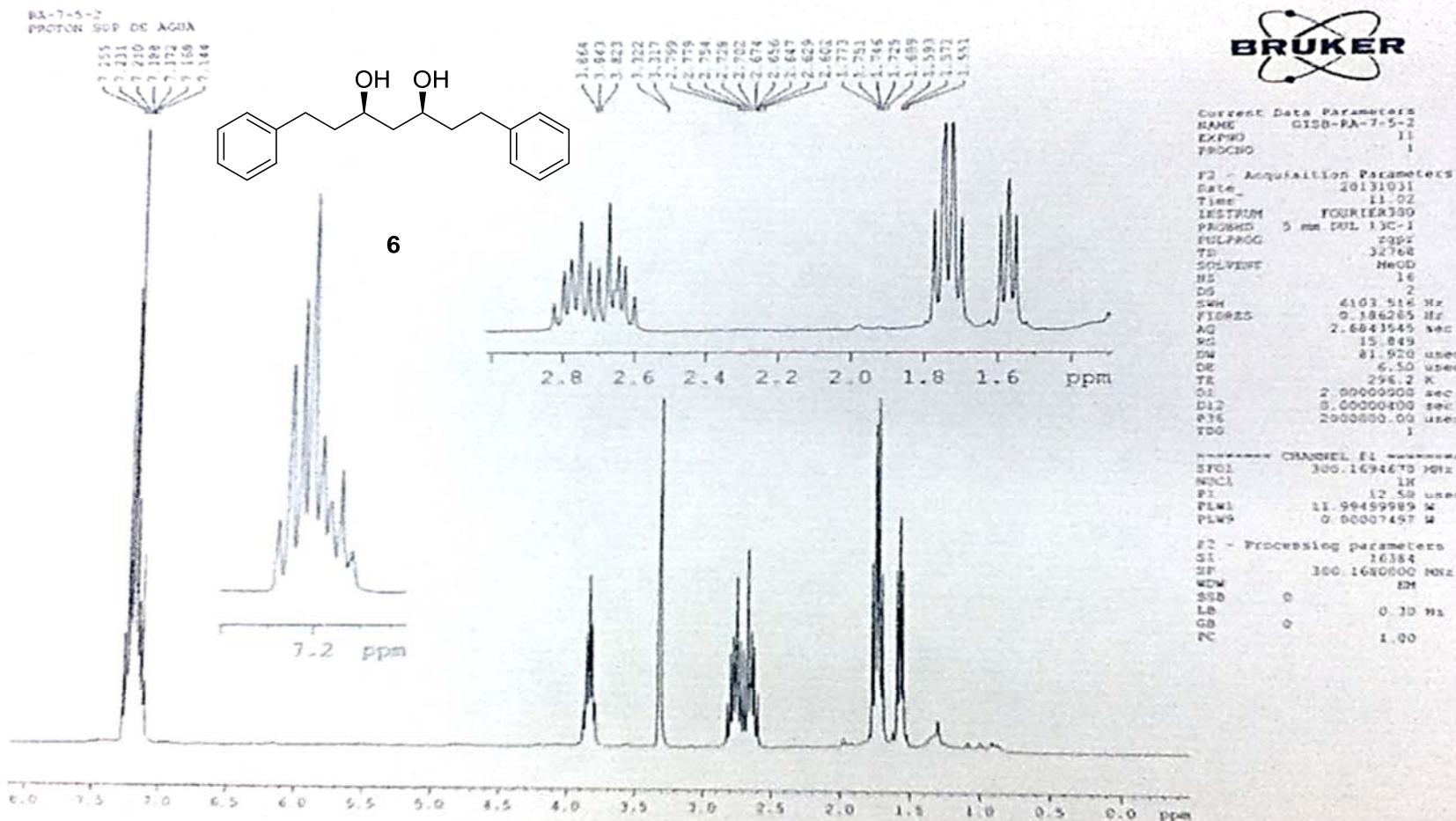


Fig. 11S  $^1\text{H}$  NMR of compound 6 in MeOD.

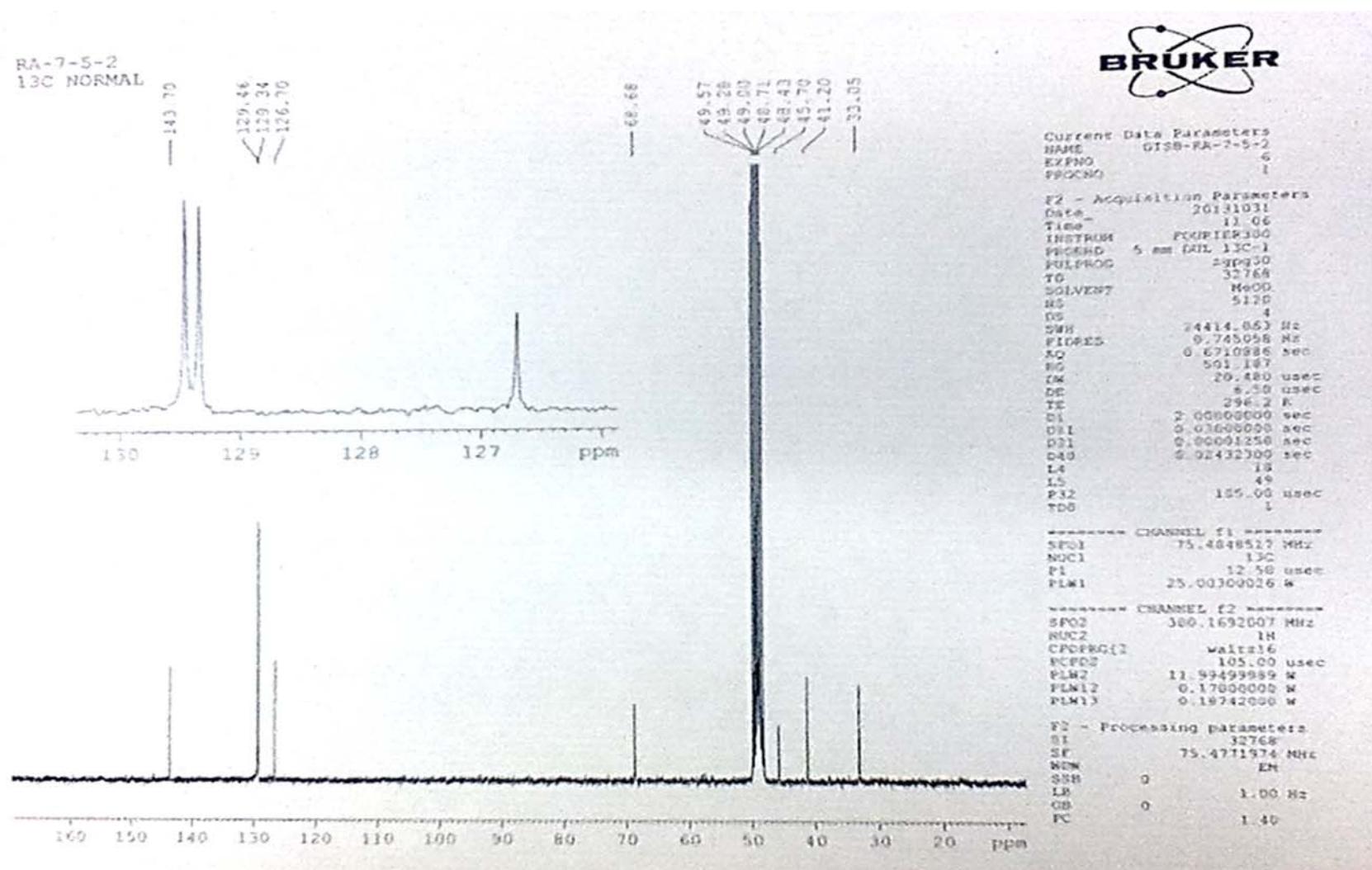


Fig. 12S <sup>13</sup>C NMR of compound 6 in MeOD.