

EUDESMANE AND REARRANGED EUDESMANE SESQUITERPENES FROM *Nectandra cissiflora*

Fernanda R. Garcez*, Walmir S. Garcez, Lidilhone Hamerski e Ana Carolina de M. Miranda

Departamento de Química, Centro de Ciências Exatas e Tecnologia, Universidade Federal de Mato Grosso do Sul, Av. Senador Filinto Muller, 1555, 79074-900 Campo Grande - MS, Brasil

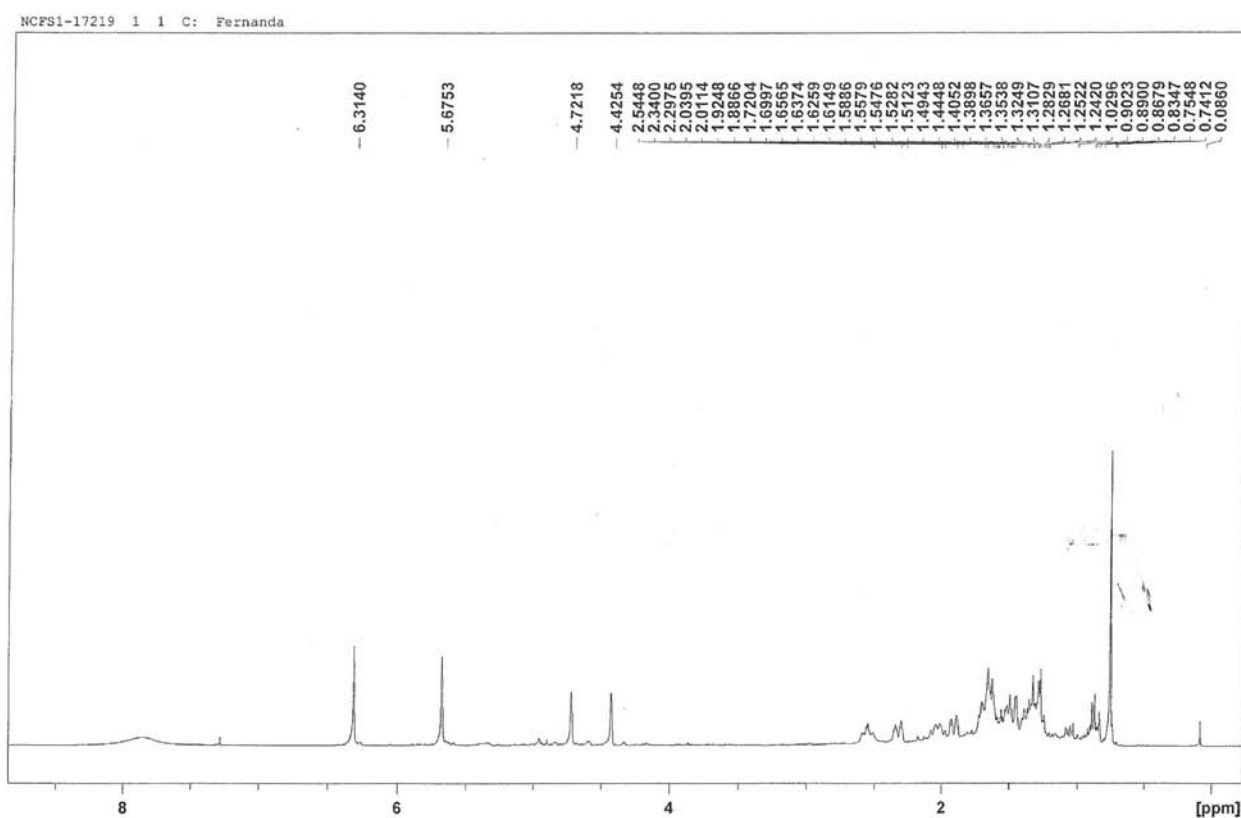


Figure 1S. ^1H NMR (300 MHz, CDCl_3) of compound 1 (cistic acid)

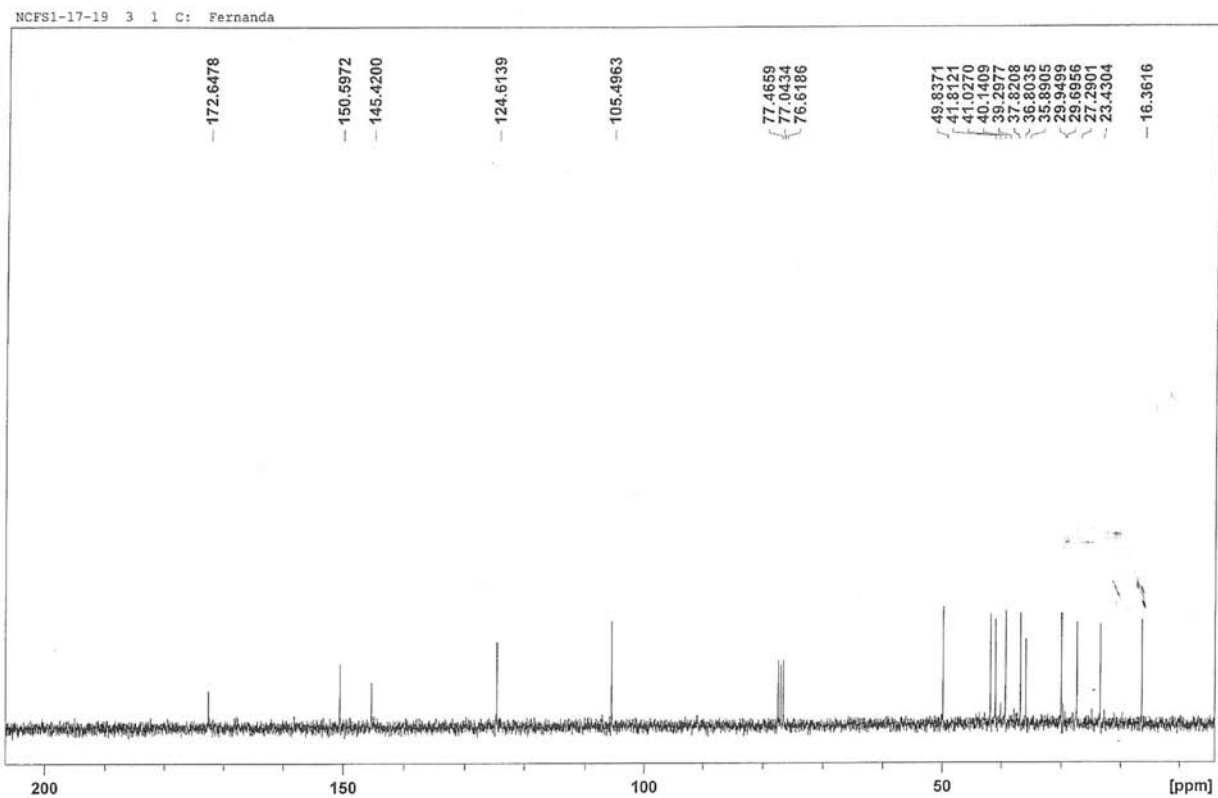


Figure 2S. ¹³C NMR (75 MHz, CDCl₃) of compound **1** (costic acid)

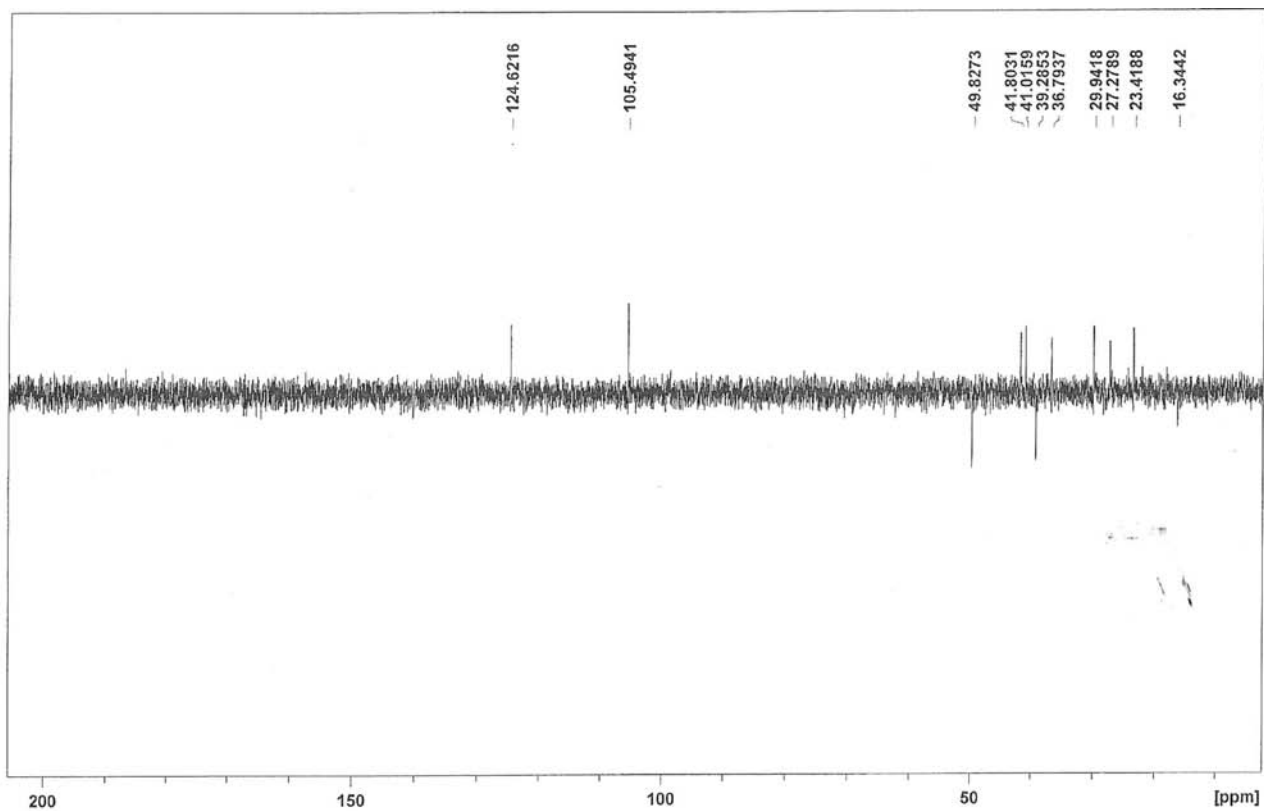


Figure 3S. DEPT 135° (75 MHz, CDCl₃) of compound **1** (costic acid)

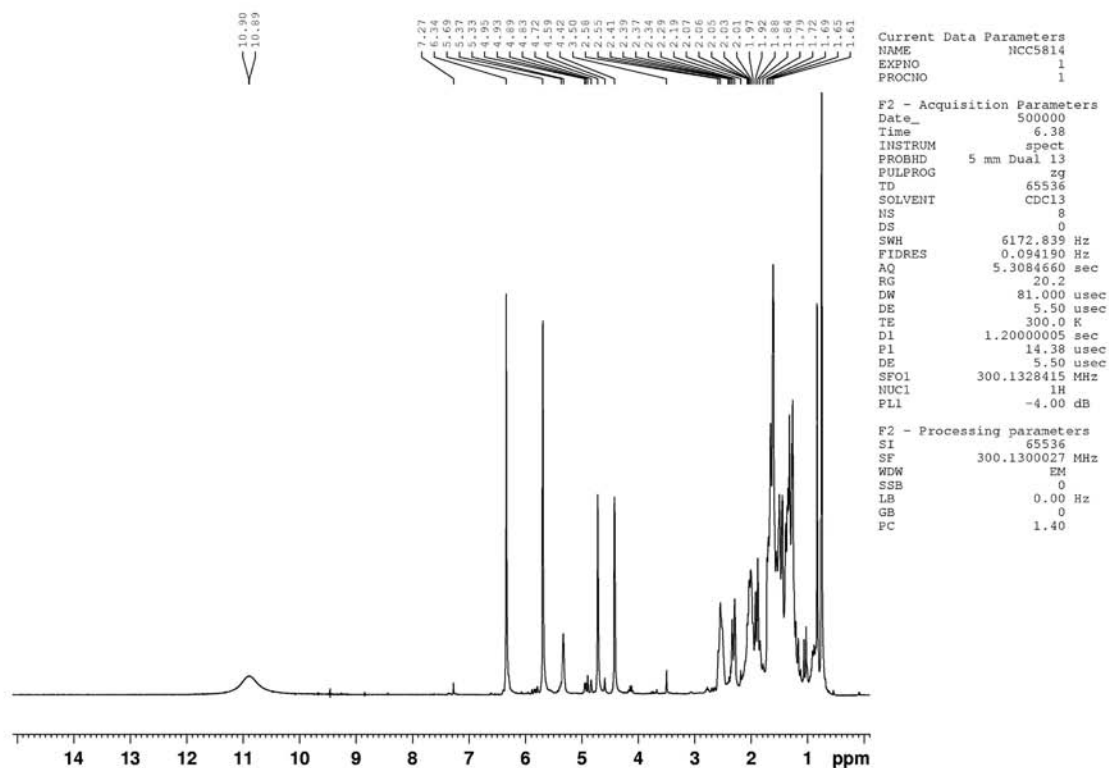


Figure 4S. ^1H NMR (300 MHz, CDCl_3) of compounds **1** + **2** [costic acid and eudesma-3,11 (13)-dien-12-oic acid]

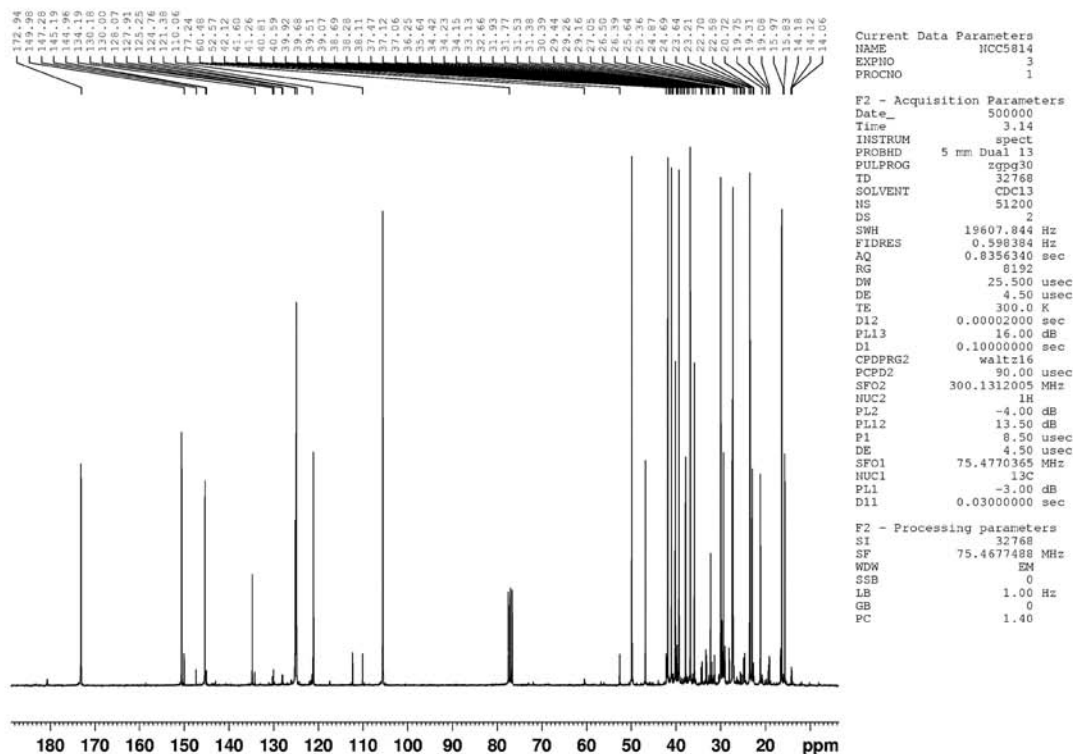


Figure 5S. ^{13}C NMR (75 MHz, CDCl_3) of compounds **1** + **2** [costic acid and eudesma-3,11 (13)-dien-12-oic acid]

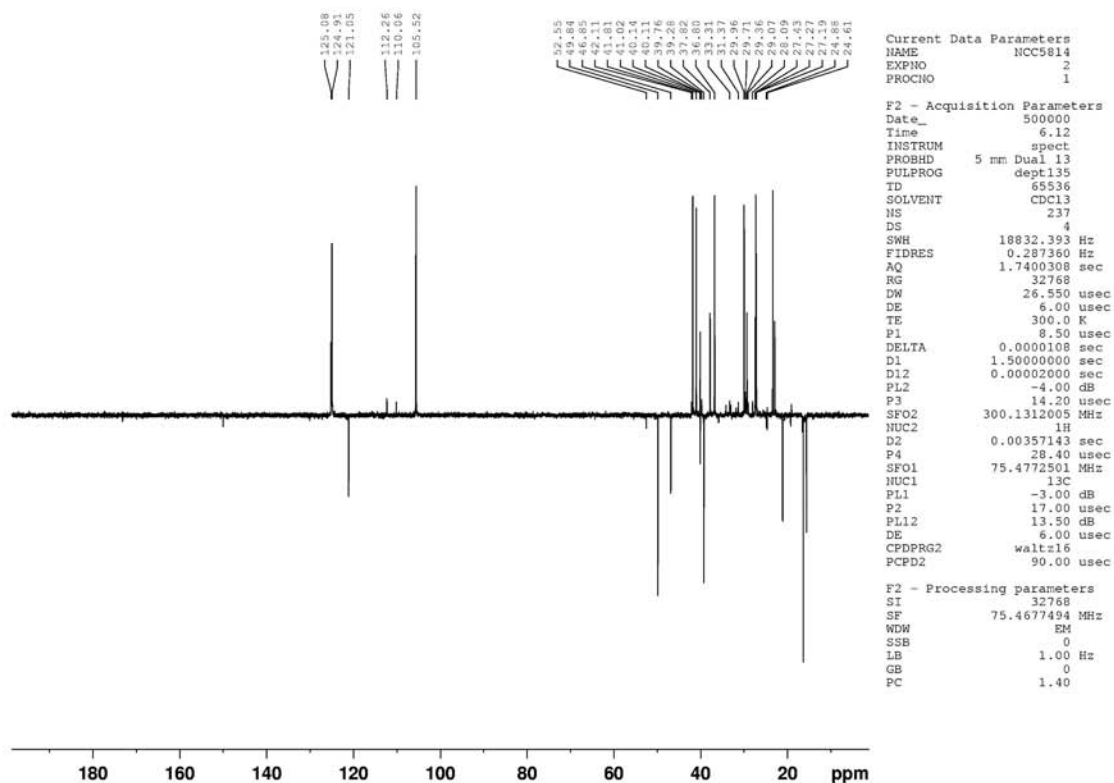


Figure 6S, DEPT 135° (75 MHz, CDCl₃) of compounds 1 + 2 [costic acid and eudesma-3,11 (13)-dien-12-oic acid]

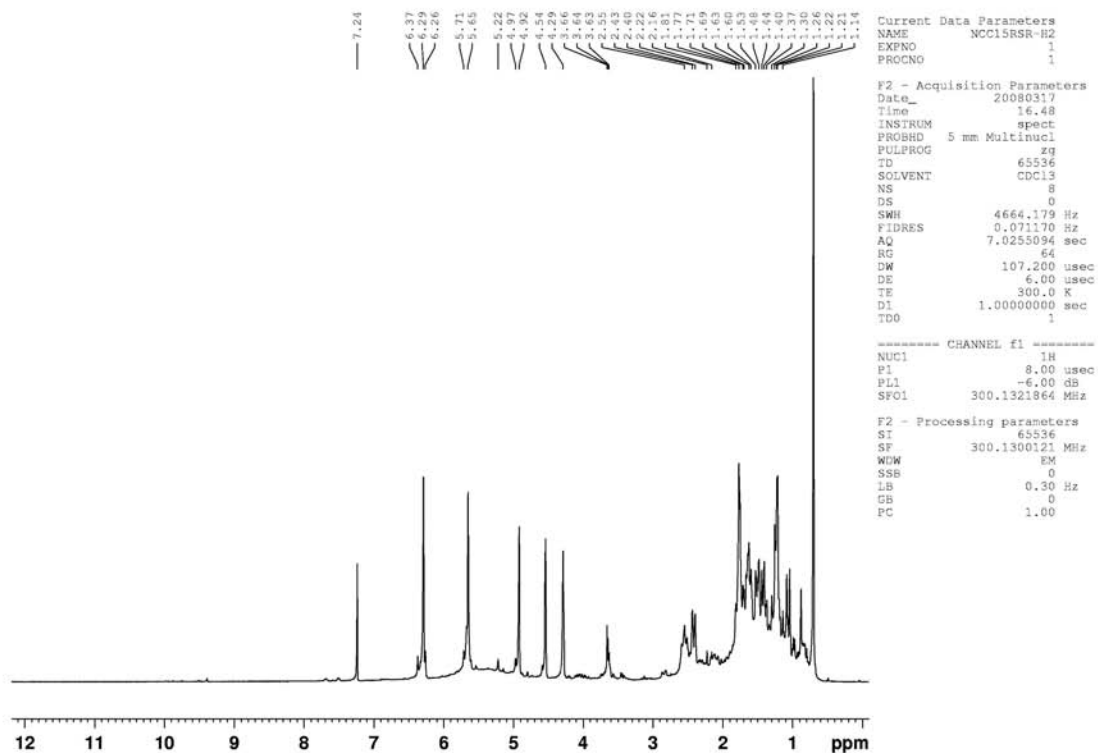
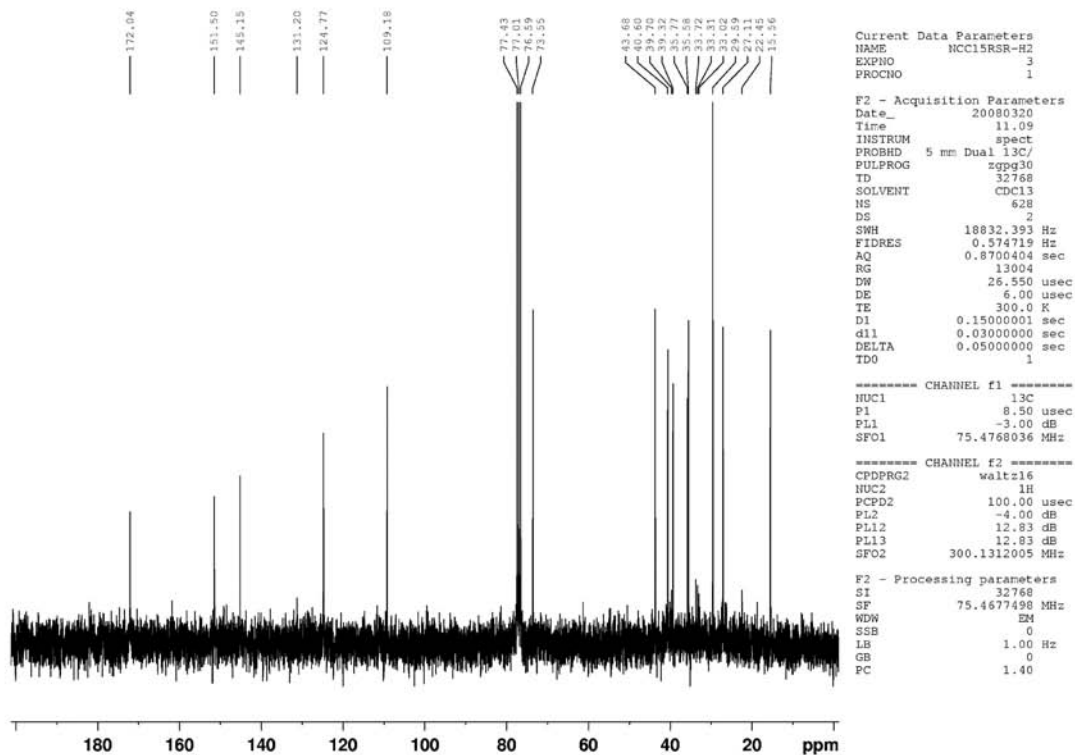
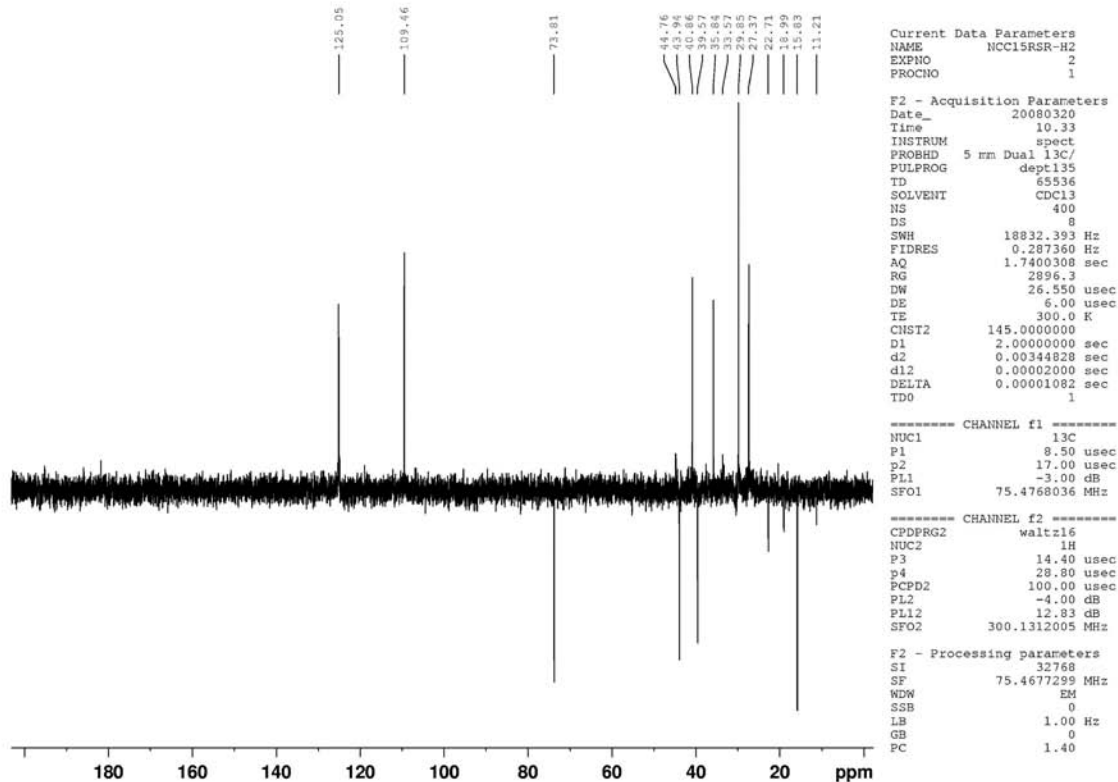
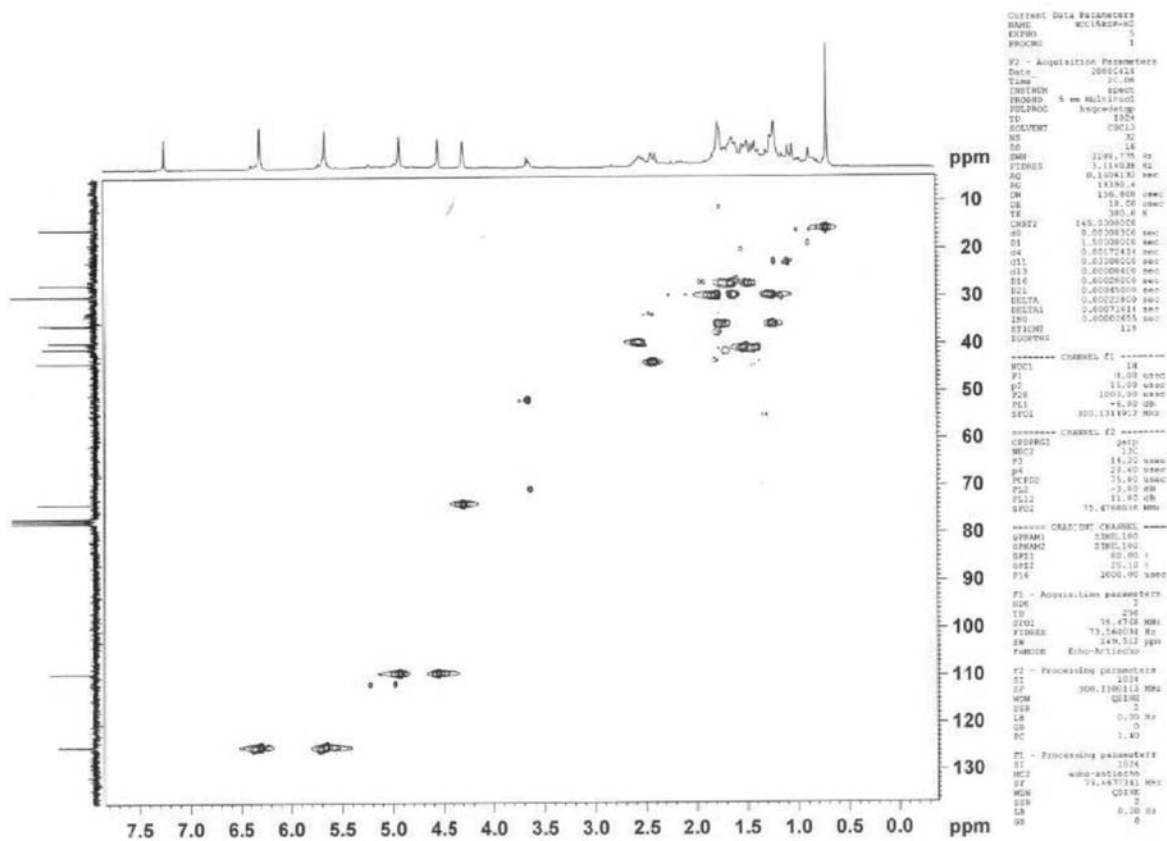
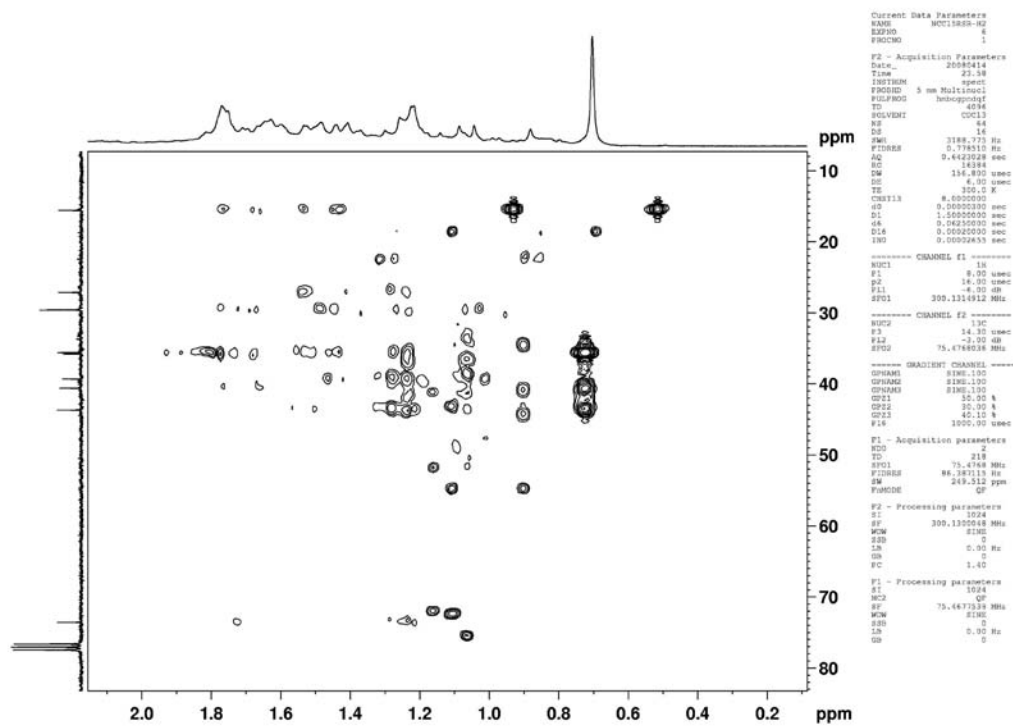
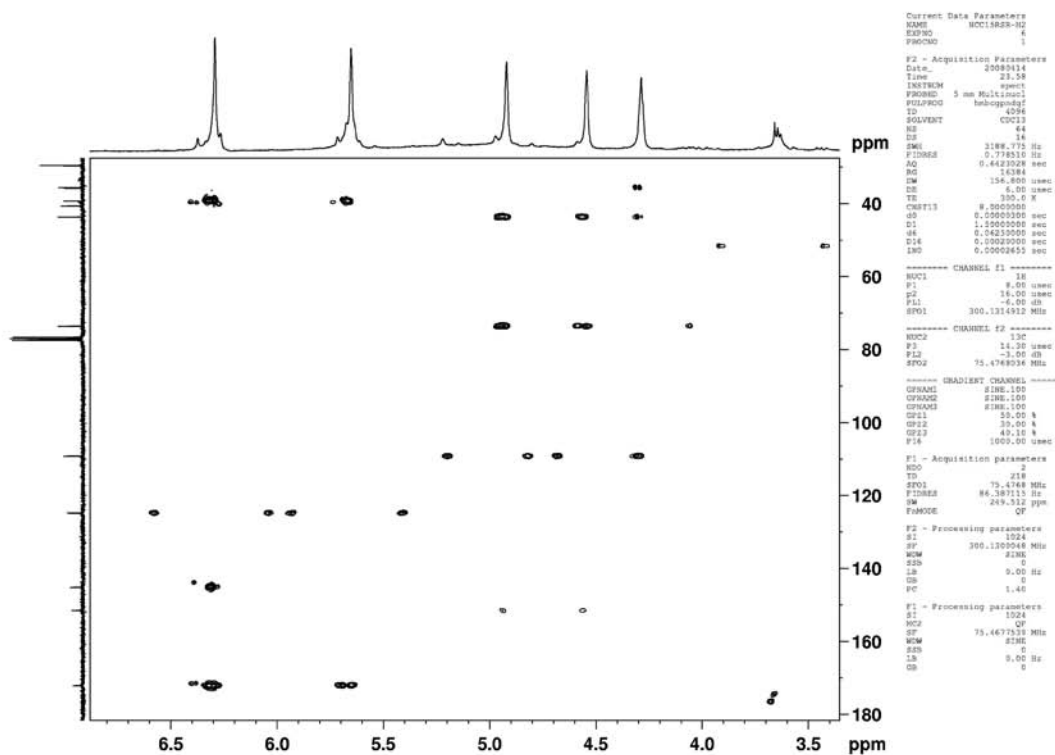
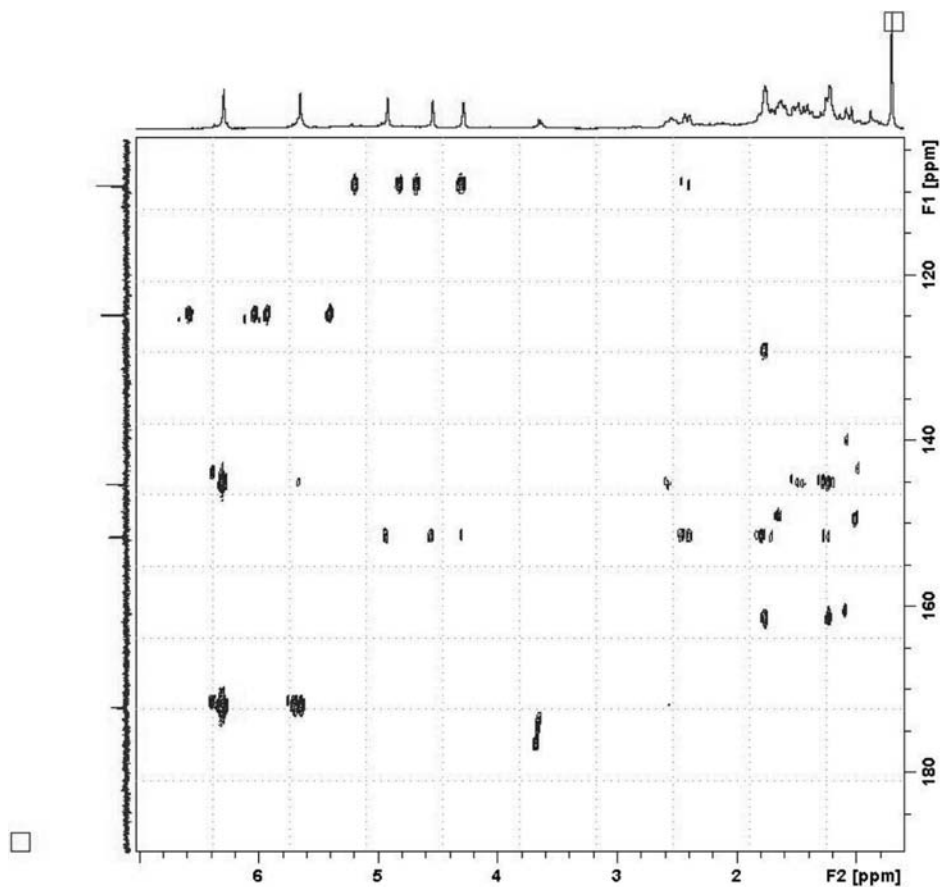


Figure 7S. ¹H NMR (300 MHz, CDCl₃) of compound 3 (viscic acid)

Figure 8S. ^{13}C NMR (75 MHz, CDCl_3) of compound 3 (viscic acid)Figure 9S. DEPT 135° (75 MHz, CDCl_3) of compound 3 (viscic acid)

Figure 10S. HSQC (300/75 MHz, CDCl₃) of compound 3 (visic acid)Figure 11S. HMBC (300/75 MHz, CDCl₃) of compound 3 (visic acid)

Figure 12S. HMBC (300/75 MHz, CDCl₃) of compound 3 (viscic acid)Figure 13S. HMBC (300/75 MHz, CDCl₃) of compound 3 (viscic acid)

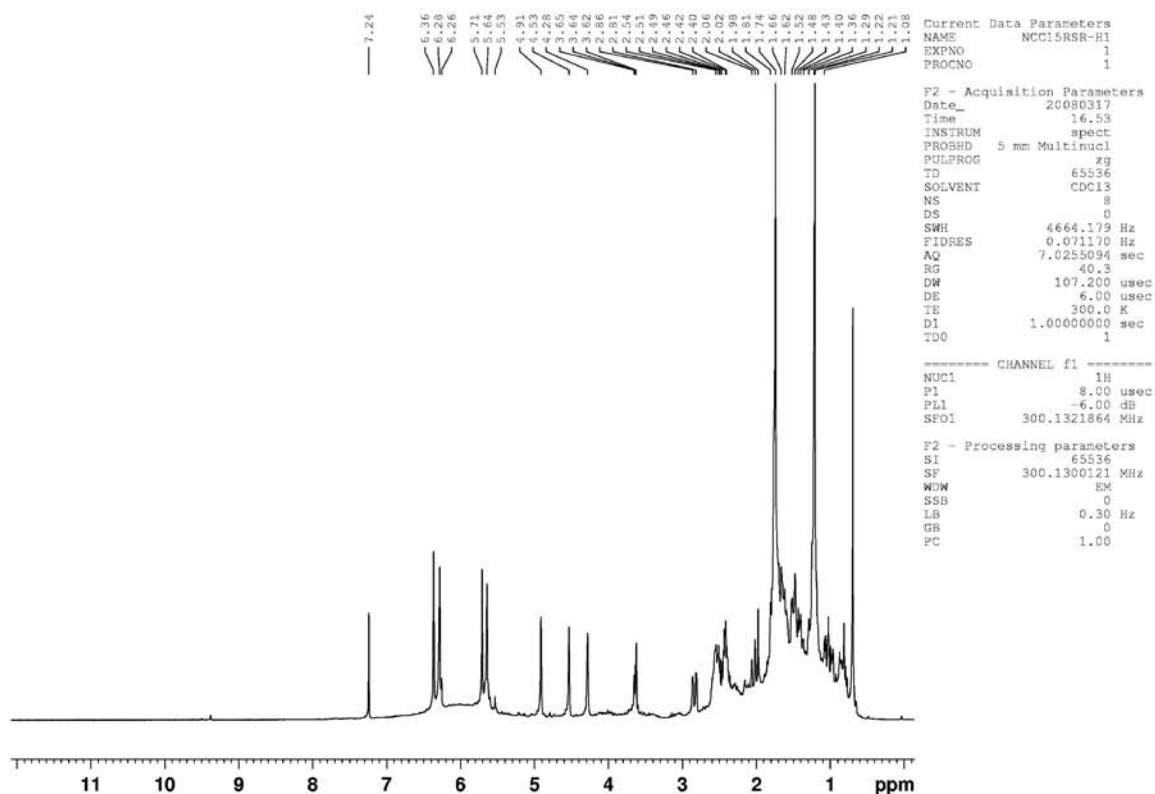


Figure 14S. ^1H NMR (300 MHz, CDCl_3) of compounds **3** + **4** (3-oxo- γ -costic acid)

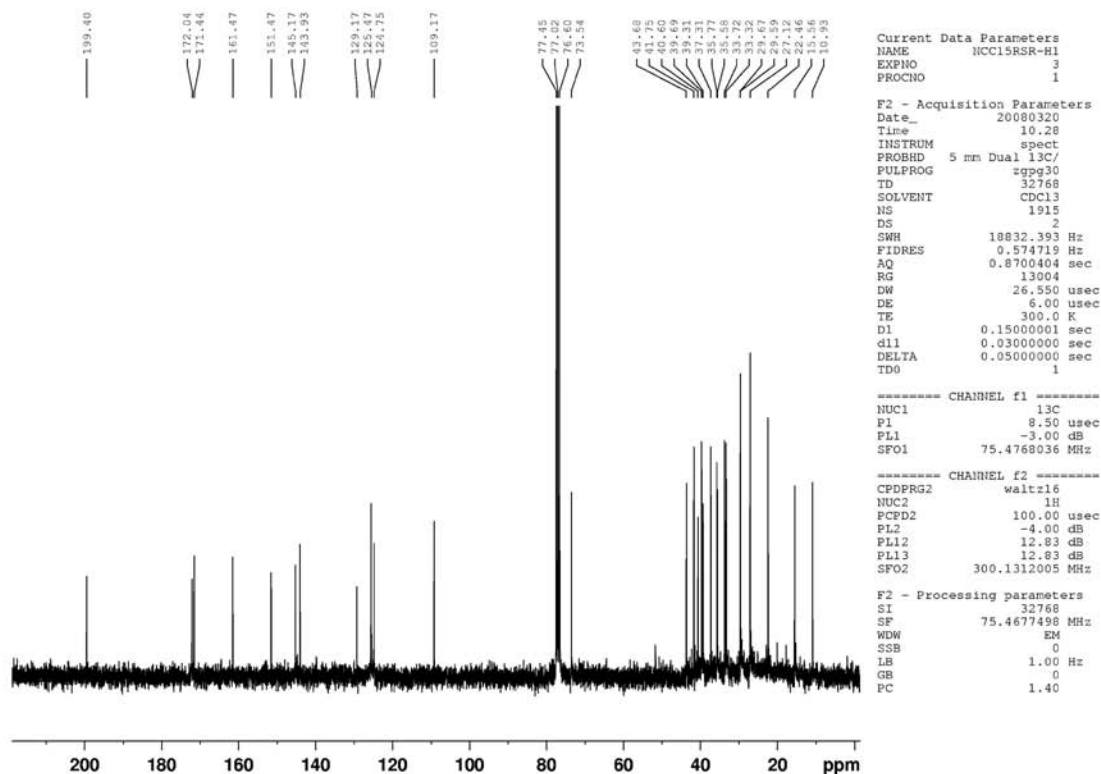
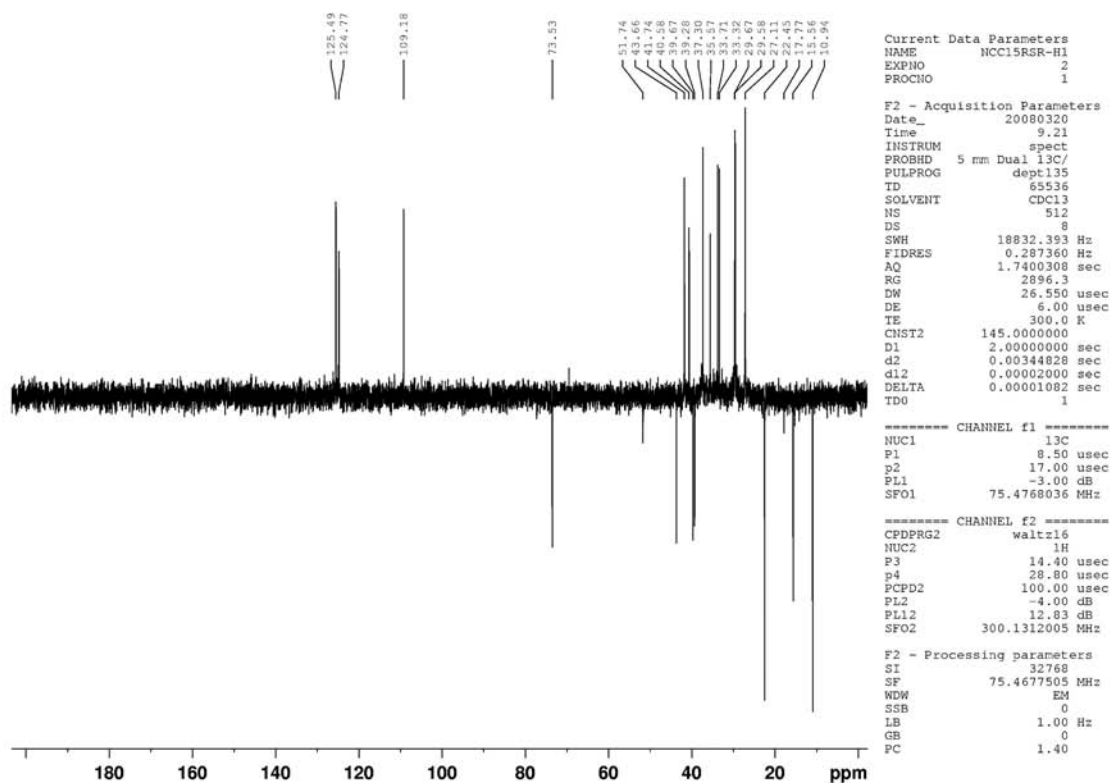
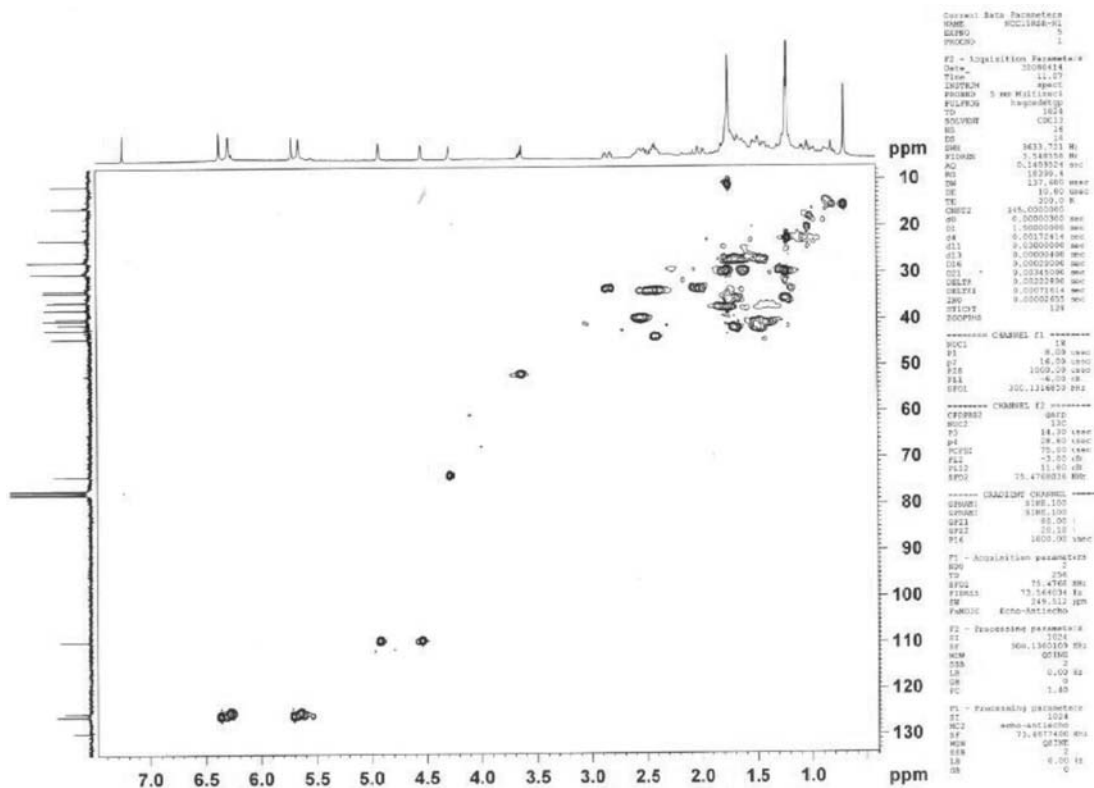
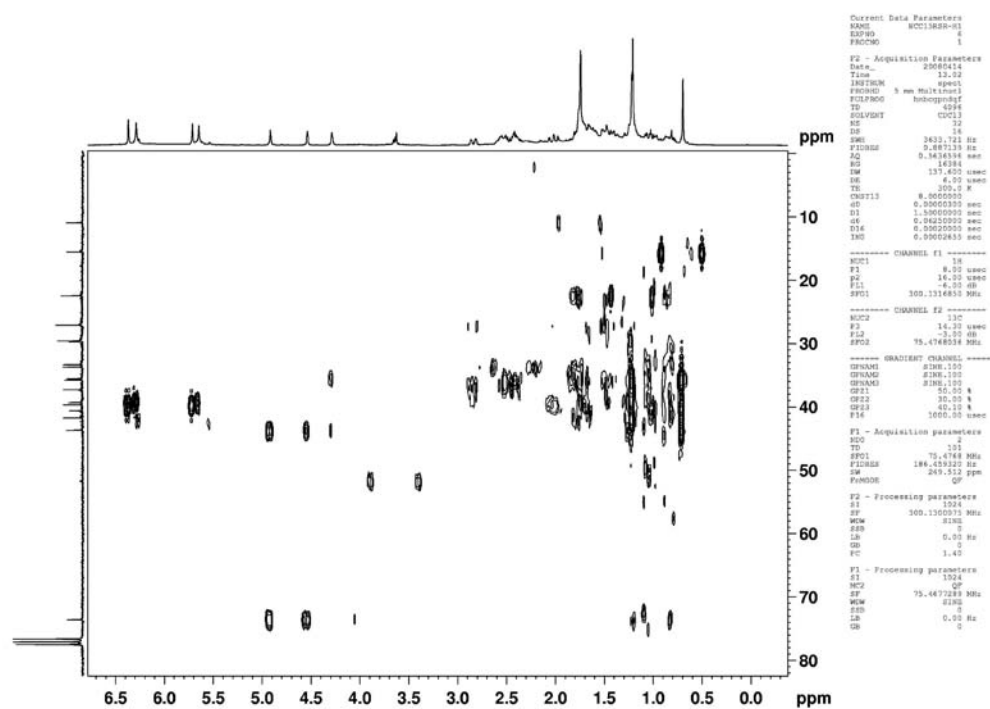
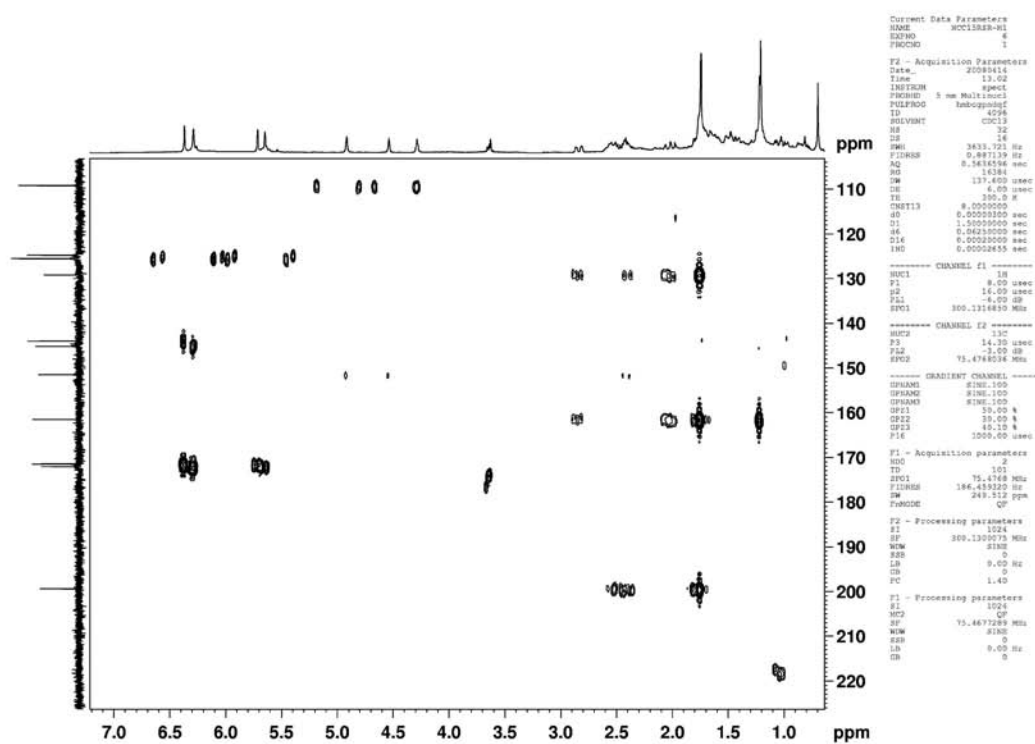


Figure 15S. ^{13}C NMR (75 MHz, CDCl_3) of compounds **3** + **4** (3-oxo- γ -costic acid)

Figure 16S. DEPT 135° (75 MHz, CDCl₃) of compounds 3 + 4 (3-oxo- γ -costic acid)Figure 17S. HSQC (300/75 MHz, CDCl₃) of compounds 3 + 4 (3-oxo- γ -costic acid)

Figure 18S. HMBC (300/75 MHz, CDCl₃) of compounds 3 + 4 (3-oxo-γ-costic acid)Figure 19S. HMBC (300/75 MHz, CDCl₃) of compounds 3 + 4 (3-oxo-γ-costic acid)

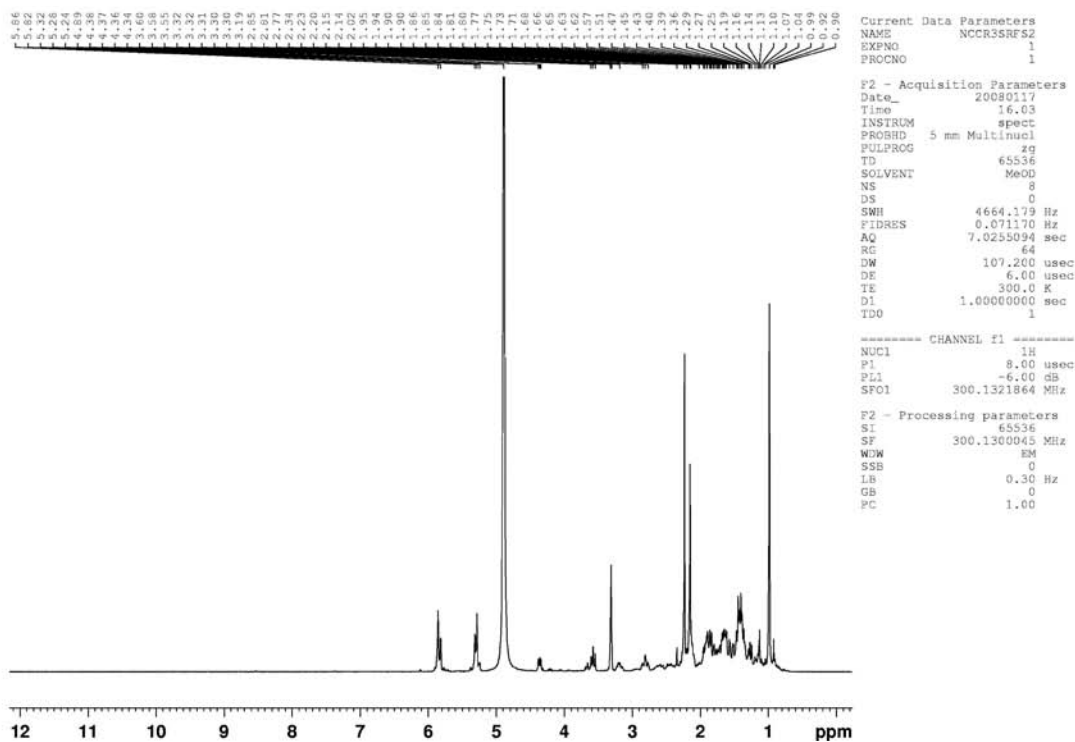


Figure 20S. ^1H NMR (300 MHz, CD_3OD) of compounds **5** (5β -hydroxy-4-oxo-11(13)-dehydroiphonian-12-oic acid) + **6** (3α -hydroxyisophion-11(13)-en-12-oic acid)

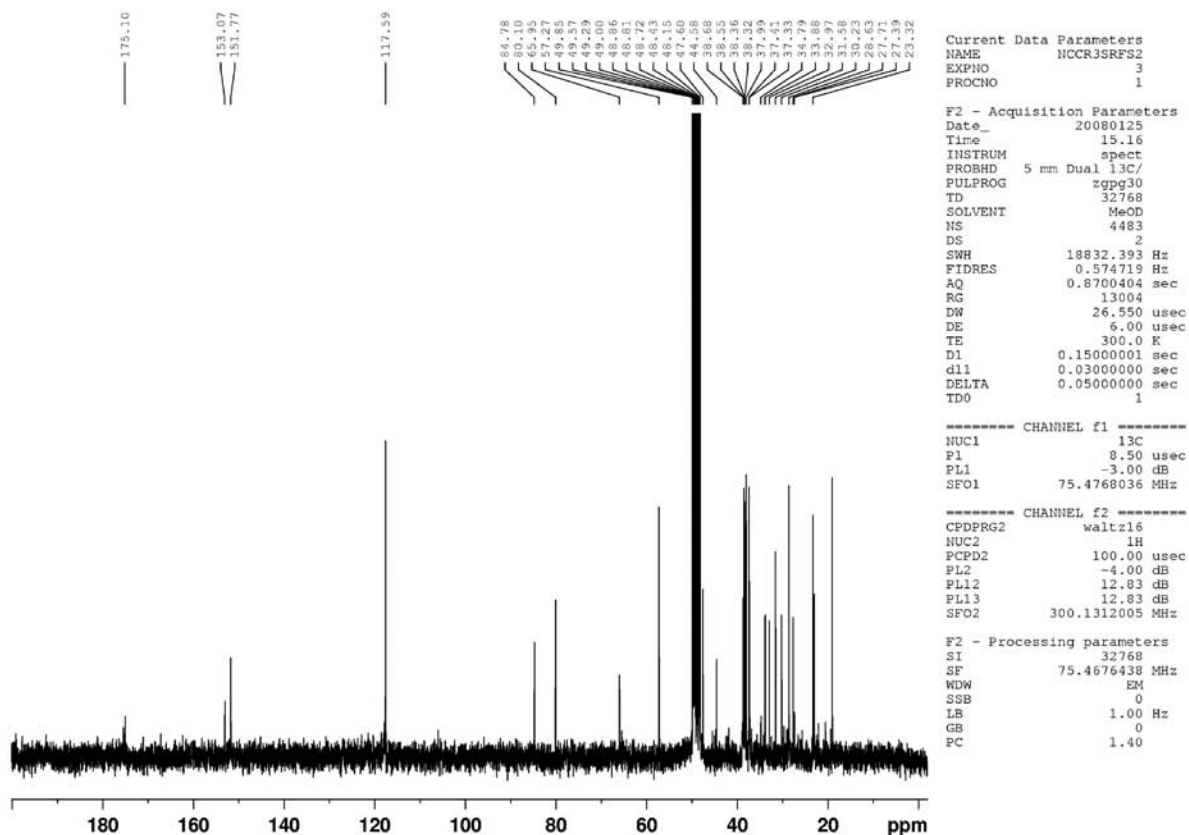


Figure 21S. ^{13}C NMR (75 MHz, CD_3OD) of compounds **5** (5β -hydroxy-4-oxo-11(13)-dehydroiphonian-12-oic acid) + **6** (3α -hydroxyisophion-11(13)-en-12-oic acid)

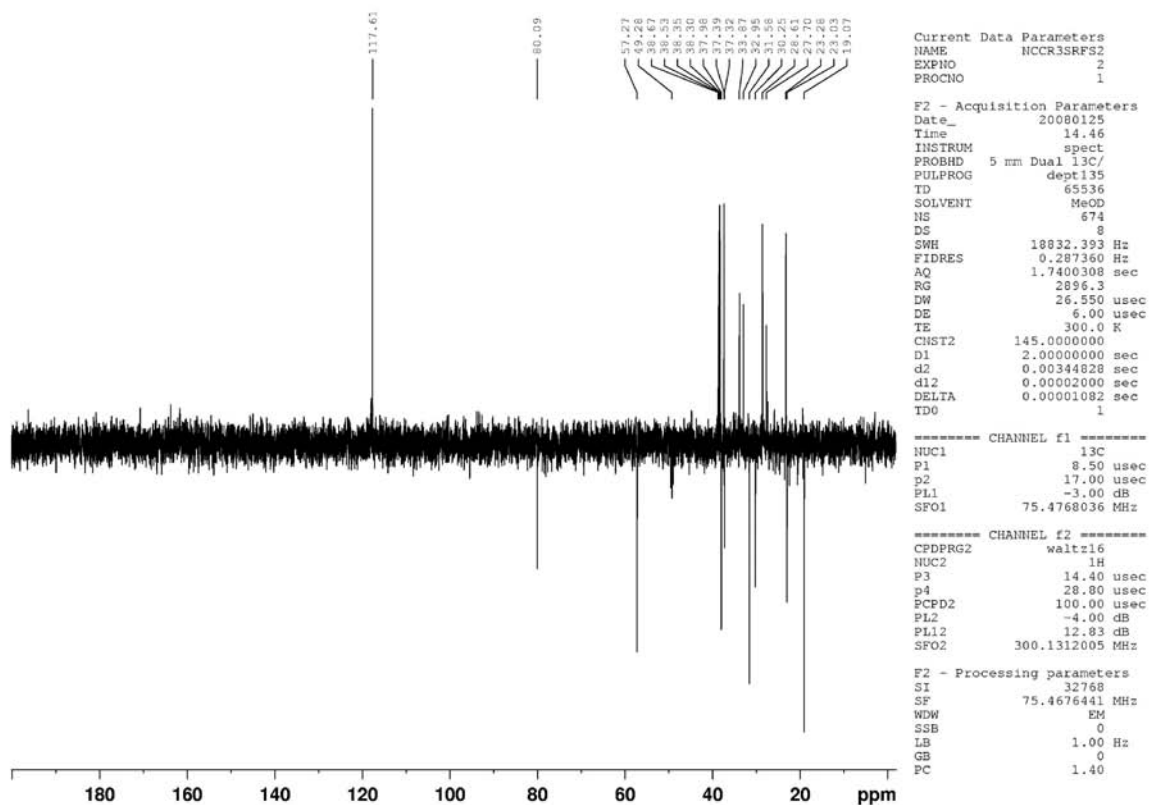


Figure 22S. DEPT 135° (75 MHz, CD₃OD) of compounds **5** (5 β -hydroxy-4-oxo-11(13)-dehydroiphonan-12-oic acid) + **6** (3 α -hydroxyisophion-11(13)-en-12-oic acid)

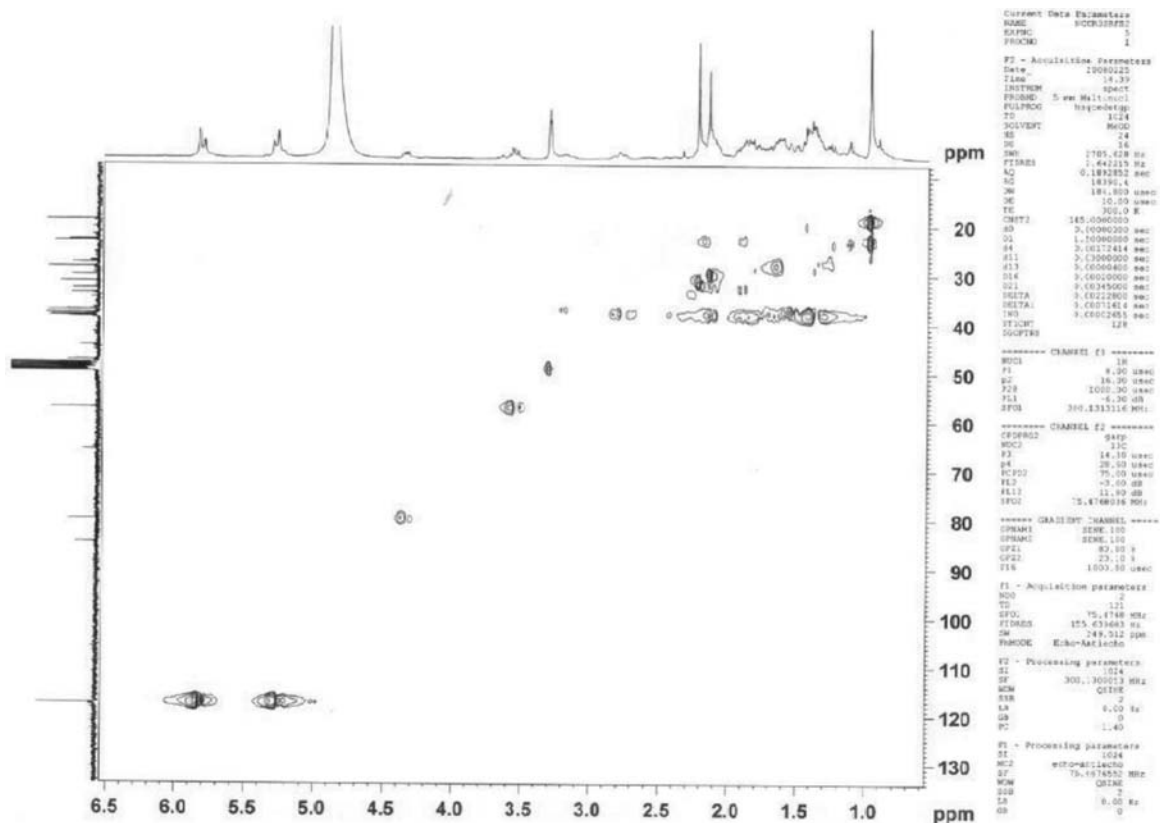


Figure 23S. HSQC (300/75 MHz, CD₃OD) of compounds **5** (5 β -hydroxy-4-oxo-11(13)-dehydroiphonan-12-oic acid) + **6** (3 α -hydroxyisophion-11(13)-en-12-oic acid)

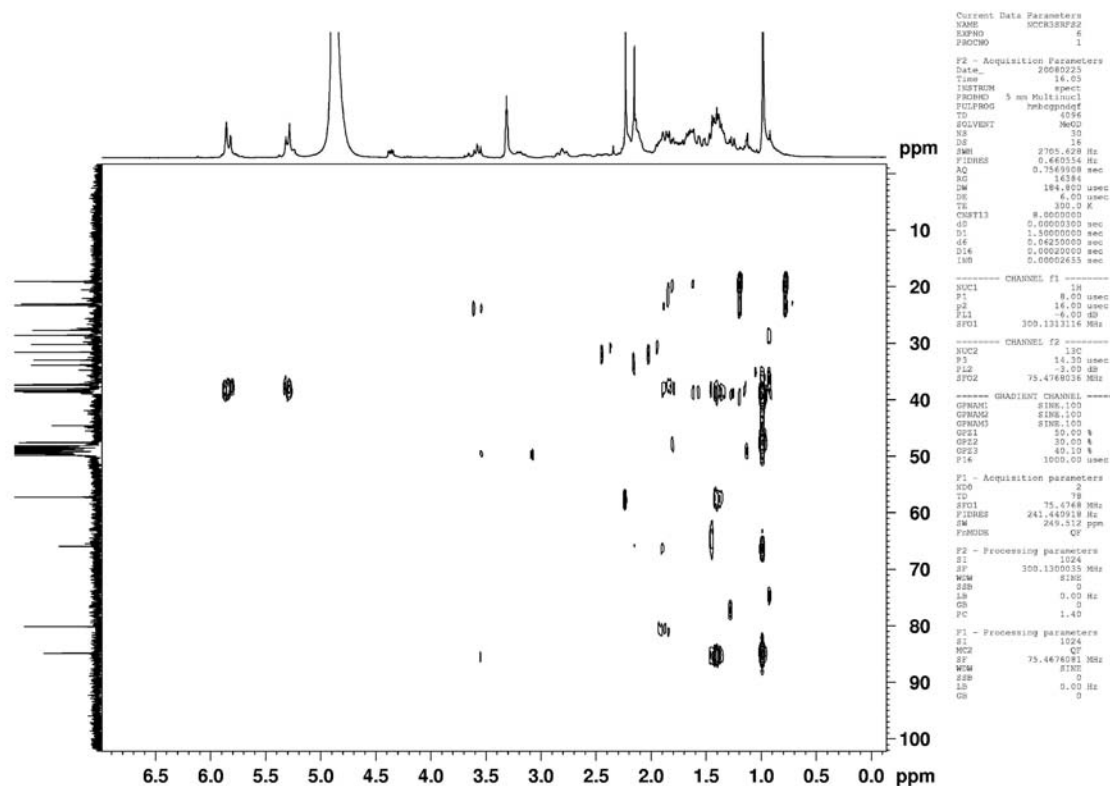


Figure 24S. HMBC (300/75 MHz, CD_3OD) of compounds **5** (5β -hydroxy-4-oxo-11(13)-dehydroiphonan-12-oic acid) + **6** (3α -hydroxyisophion-11(13)-en-12-oic acid)

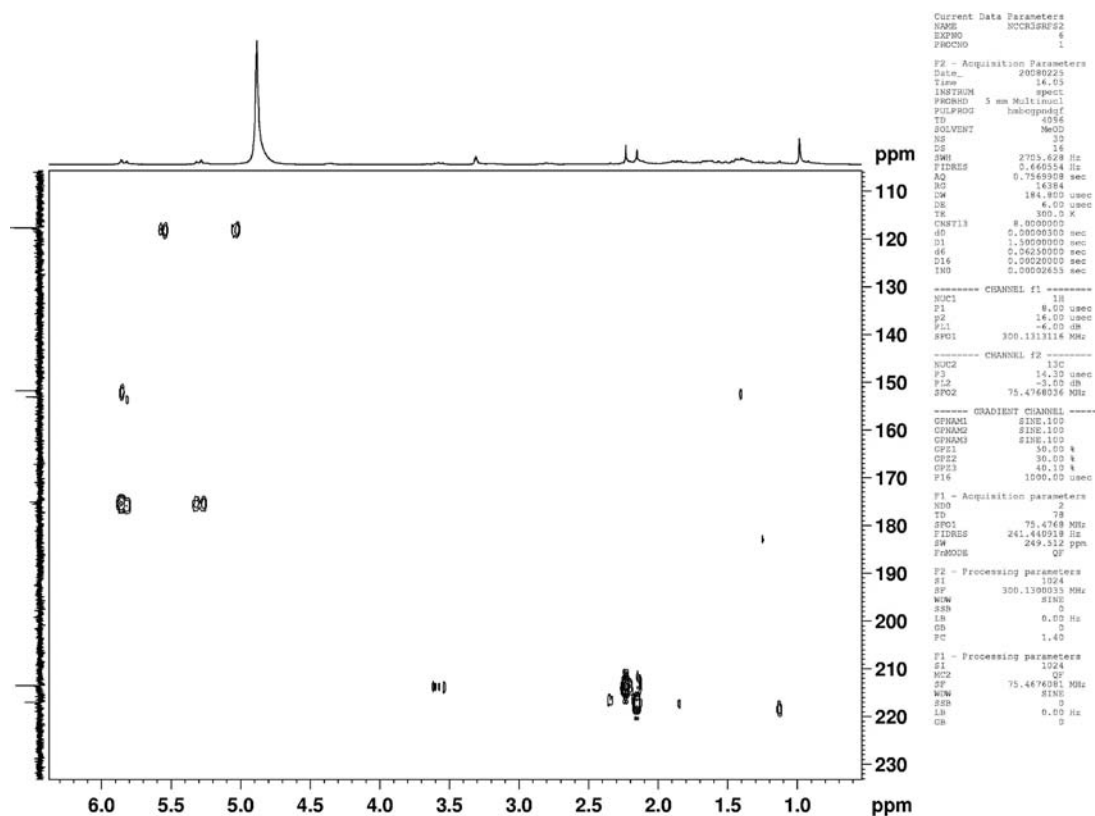


Figure 25S. HMBC (300/75 MHz, CD_3OD) of compounds **5** (5β -hydroxy-4-oxo-11(13)-dehydroiphonan-12-oic acid) + **6** (3α -hydroxyisophion-11(13)-en-12-oic acid)