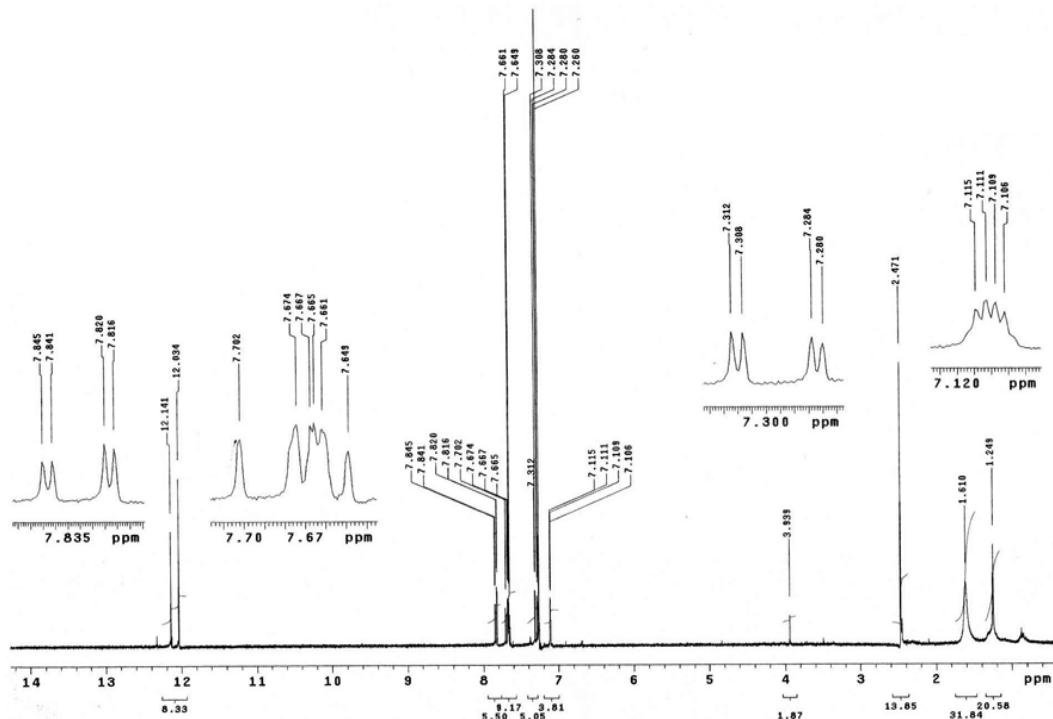


## **Estudo Químico e Avaliação do Potencial Antioxidante do Alburno de *Vatairea guianensis* Aubl.**

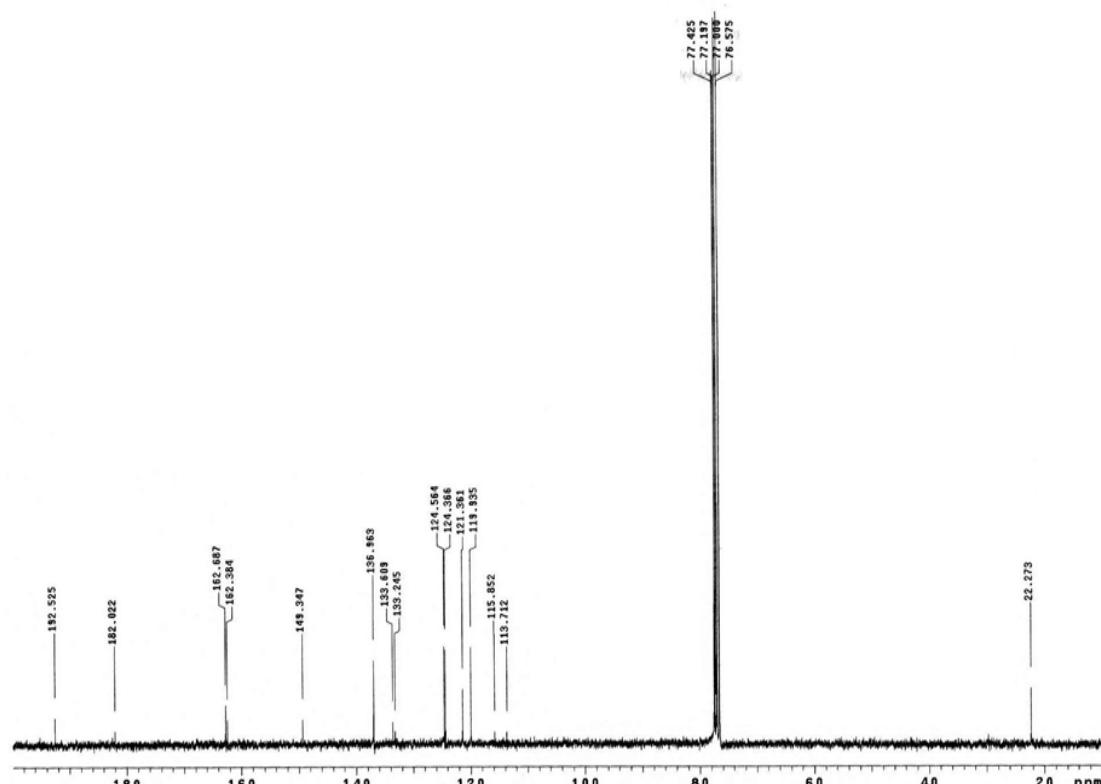
Souza, R. F.;\* Silva, J. K. R.; Silva, G. A.; Arruda, A. C.; Silva, M. N.; Arruda, M. S. P.

*Rev. Virtual Quim.*, 2015, 7 (5), S1-S14. Data de publicação na Web: 15 de setembro de 2015

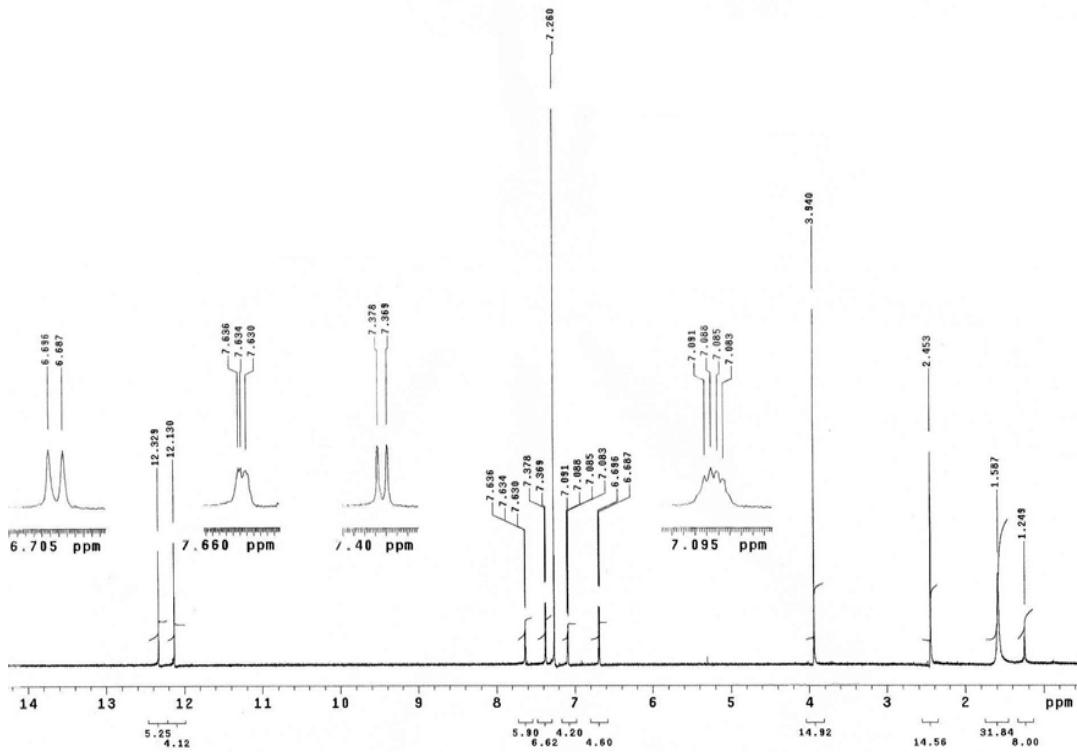
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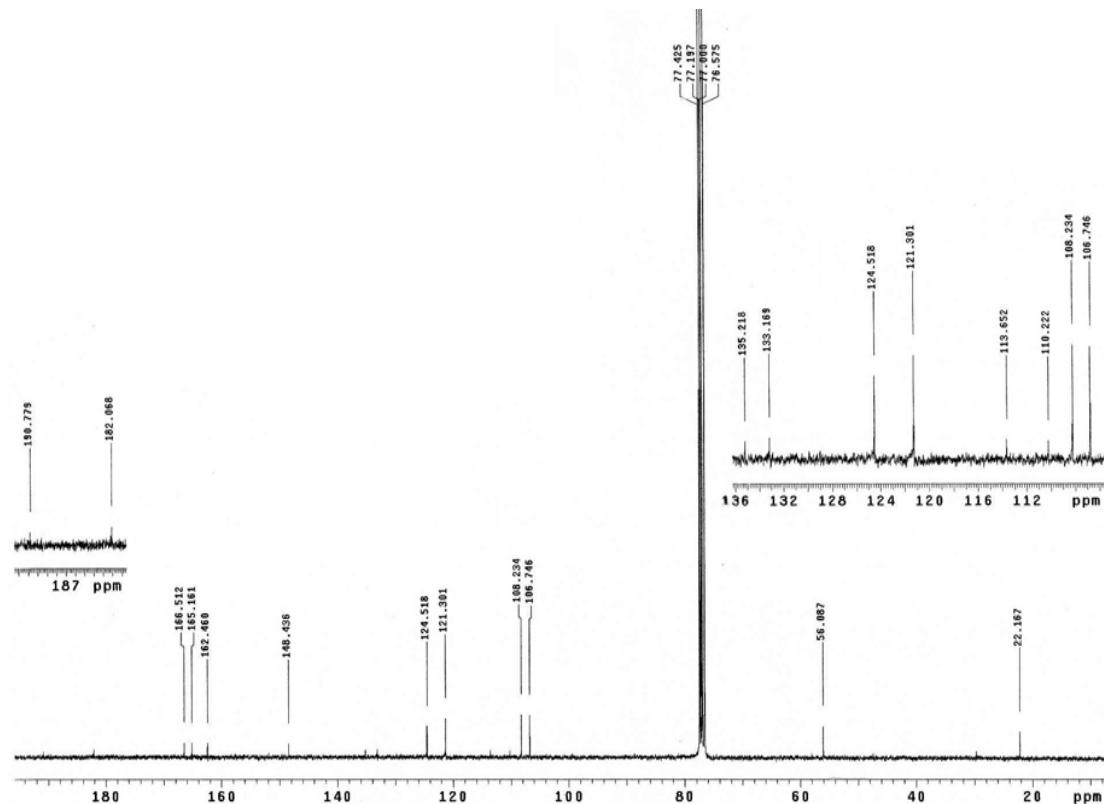
**Figura 1S.** Espectro de RMN  $^1H$  de **1**, 300 MHz,  $CDCl_3$



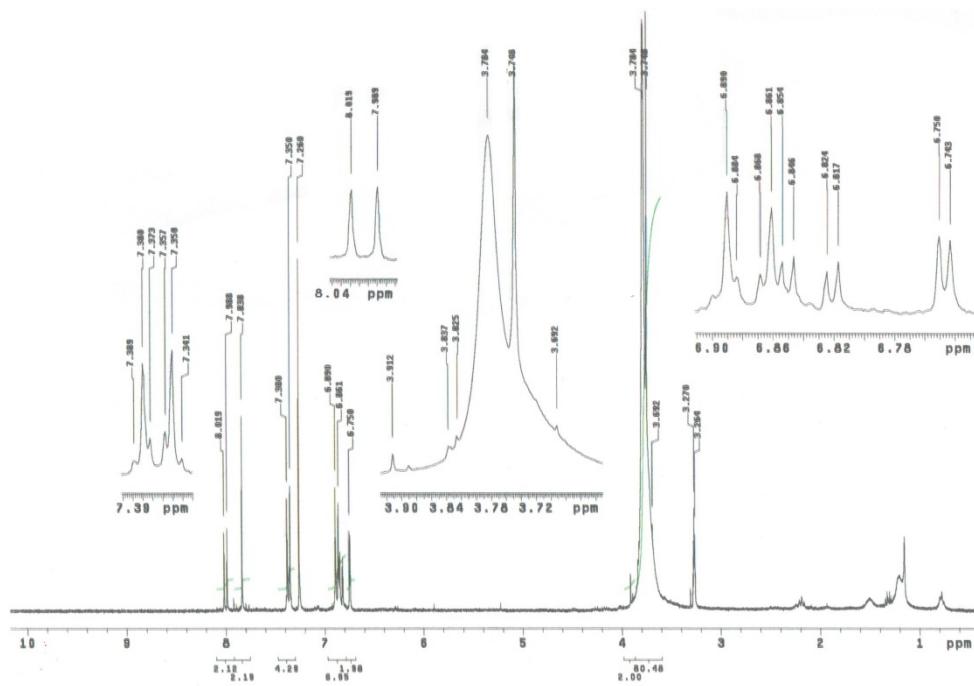
**Figura 2S.** Espectro de RMN  $^{13}\text{C}$  de **1**, 75 MHz,  $\text{CDCl}_3$



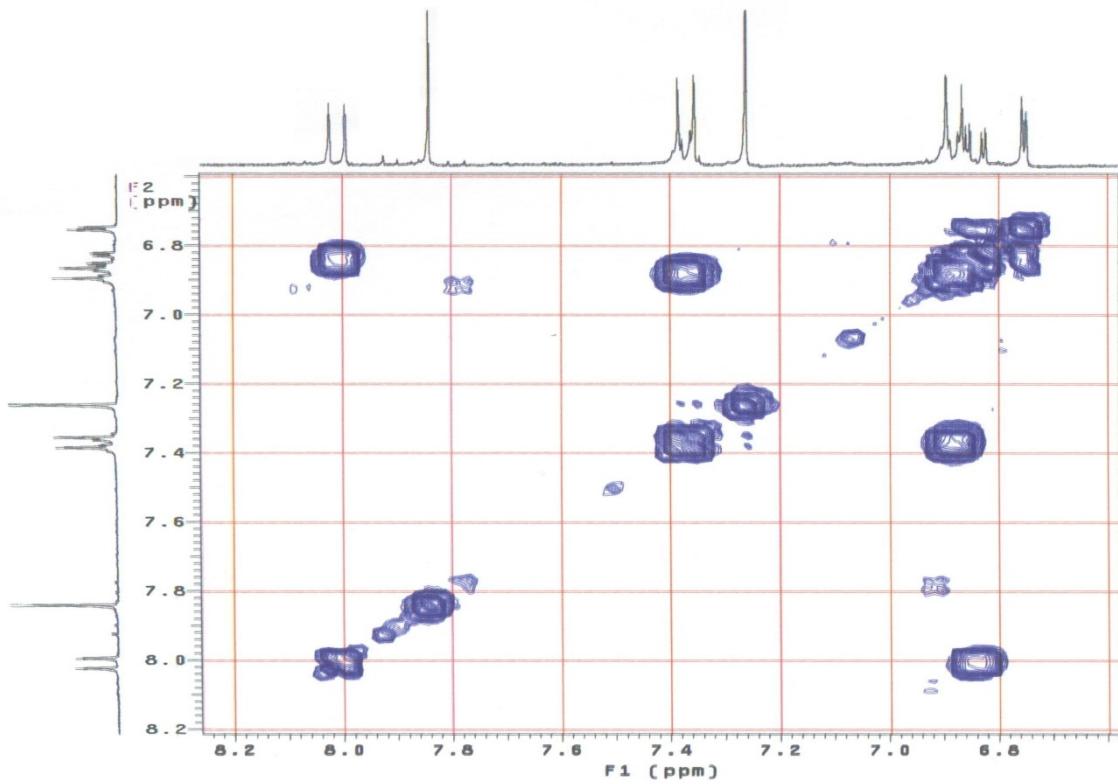
**Figura 3S.** Espectro de RMN  $^1\text{H}$  de **2**, 300 MHz,  $\text{CDCl}_3$



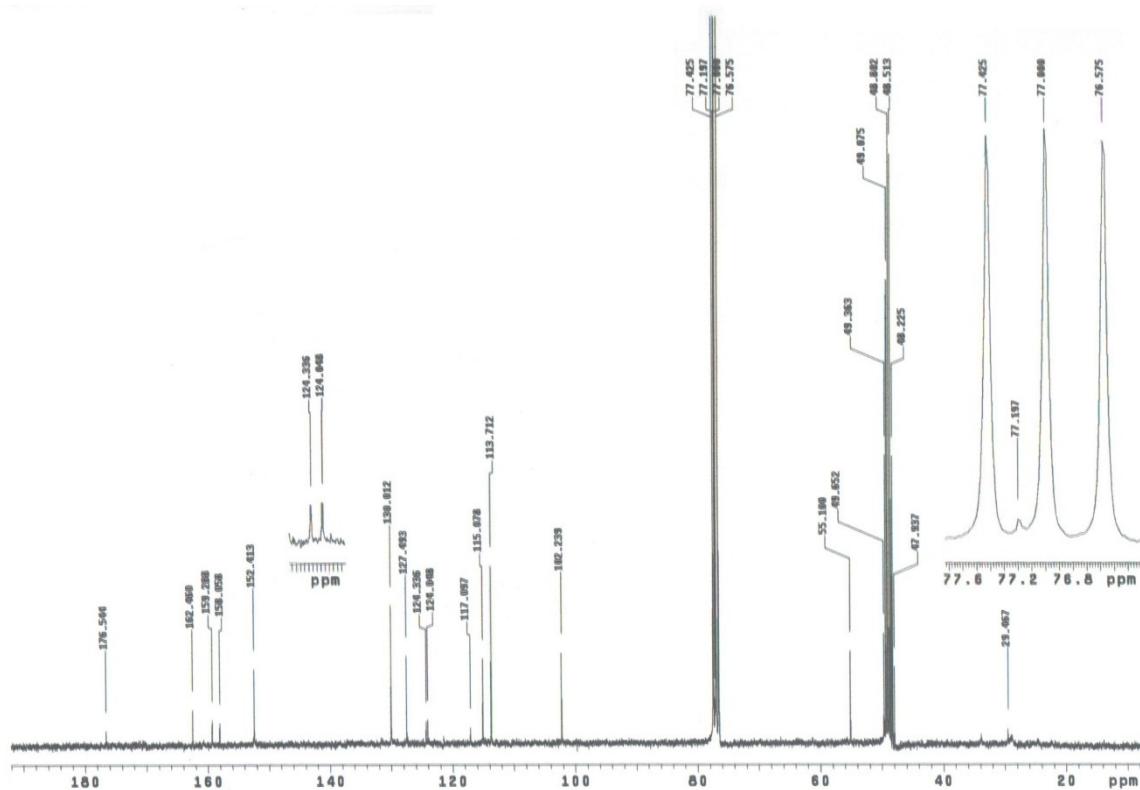
**Figura 4S.** Espectro de RMN  $^{13}\text{C}$  de **2**, 75 MHz,  $\text{CDCl}_3$



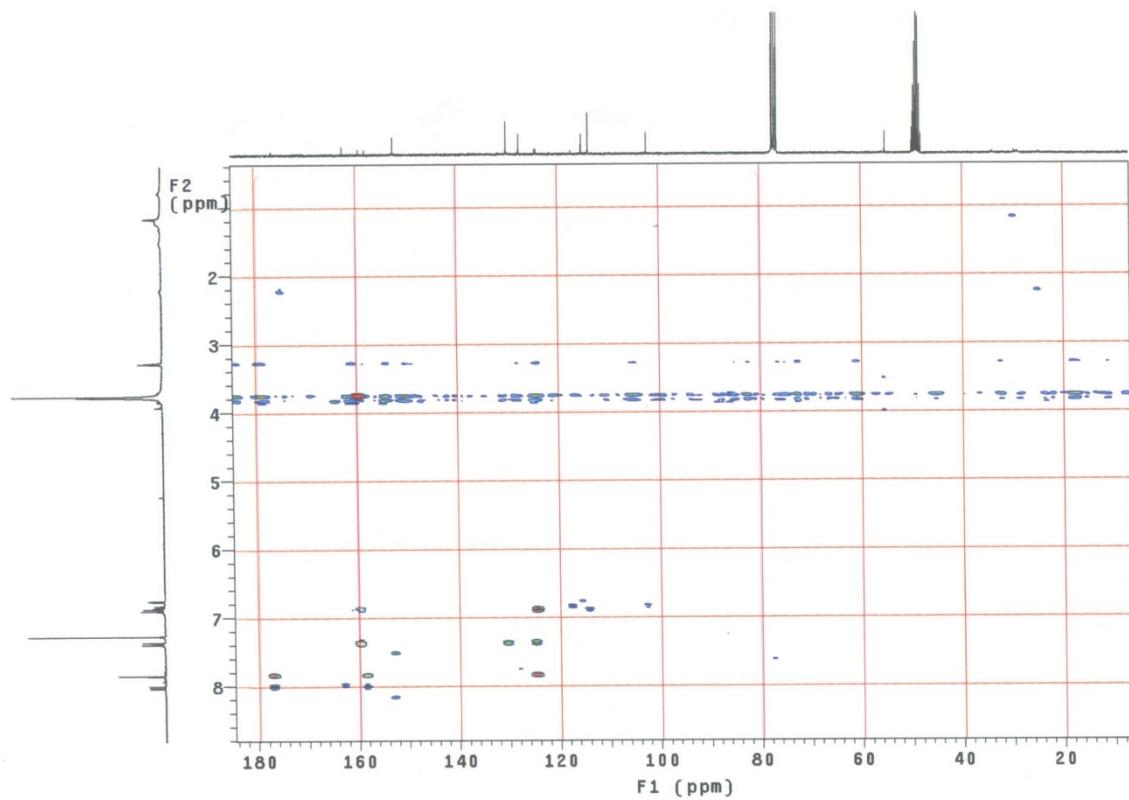
**Figura 5S.** Espectro de RMN  $^1\text{H}$  de **3**, 300 MHz,  $\text{CDCl}_3 + \text{gotas } \text{CD}_3\text{OD}$



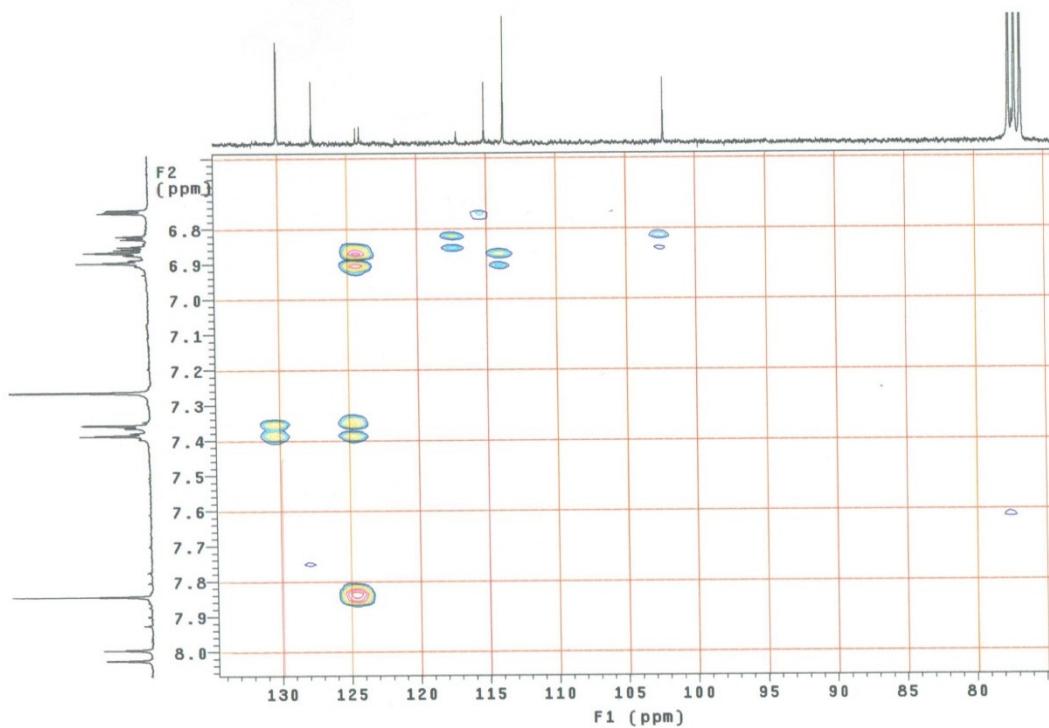
**Figura 6S.** Mapa de correlação homonuclear COSY -  $^1\text{H} \times ^1\text{H}$  de **3**, 300 MHz,  $\text{CDCl}_3 + \text{gotas de } \text{CD}_3\text{OD}$



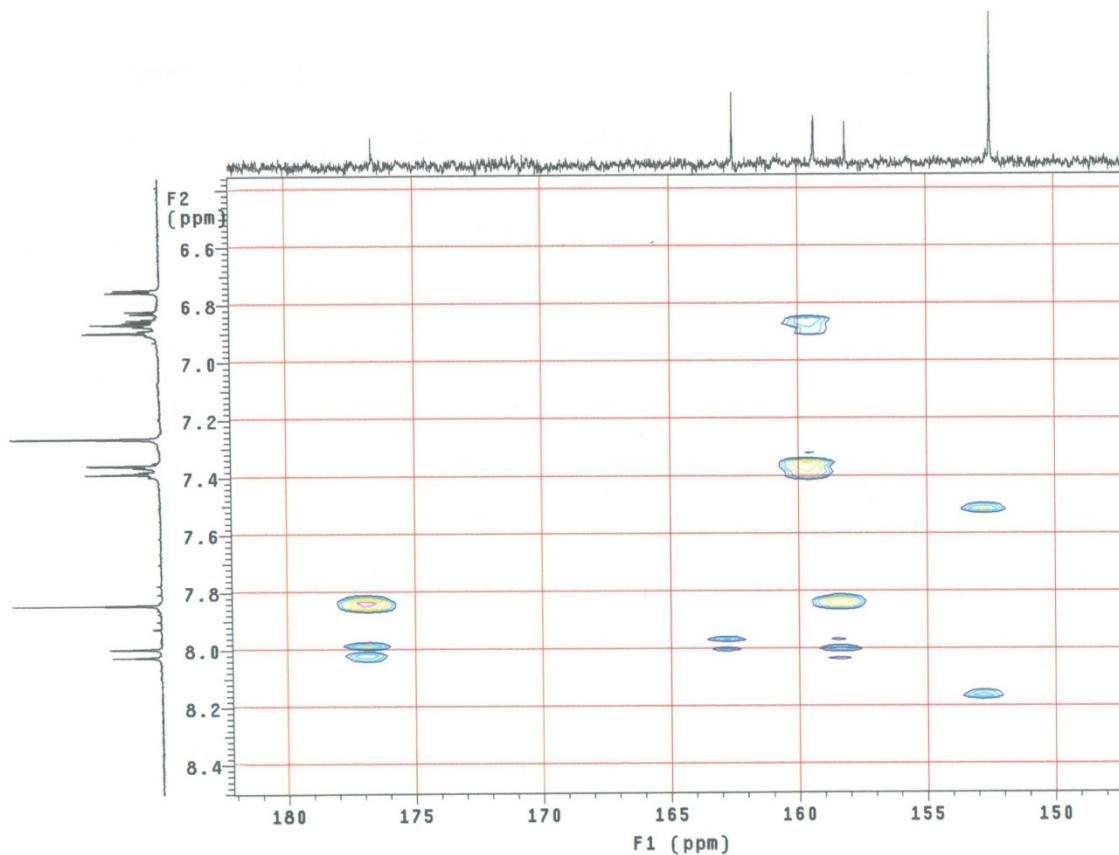
**Figura 7S.** Espectro de RMN  $^{13}\text{C}$  de **3**, 75 MHz,  $\text{CDCl}_3 +$  gotas  $\text{CD}_3\text{OD}$



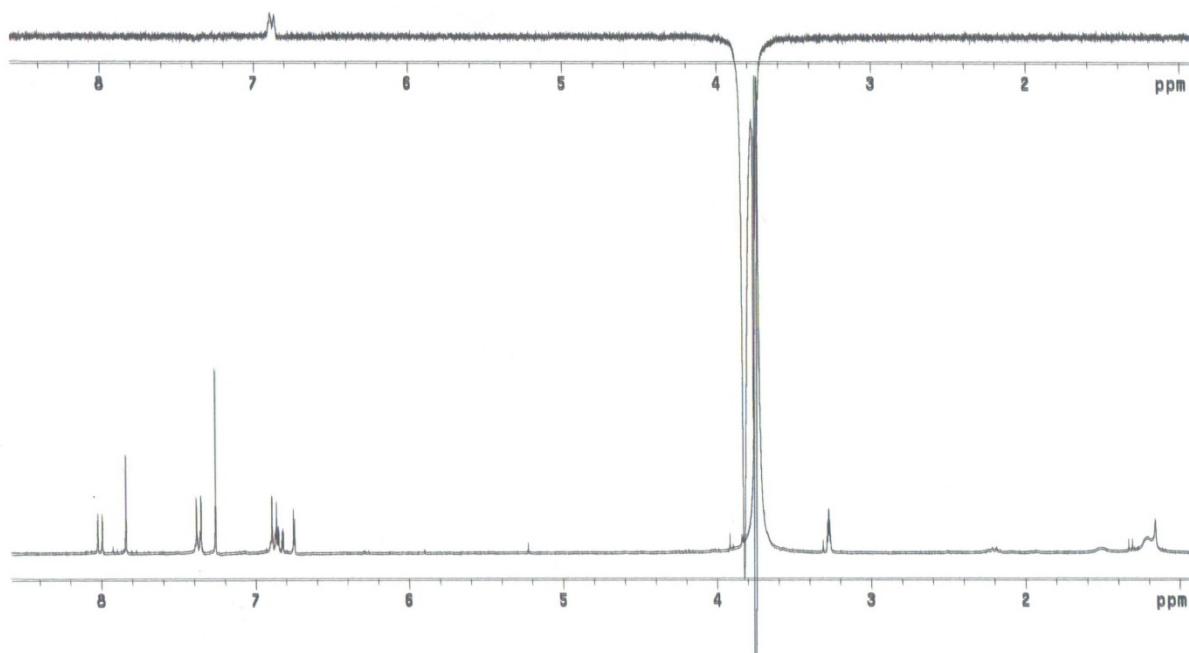
**Figura 8S.** Mapa de correlação heteronuclear HMBC de **3**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz,  $\text{CDCl}_3 +$  gotas de  $\text{CD}_3\text{OD}$



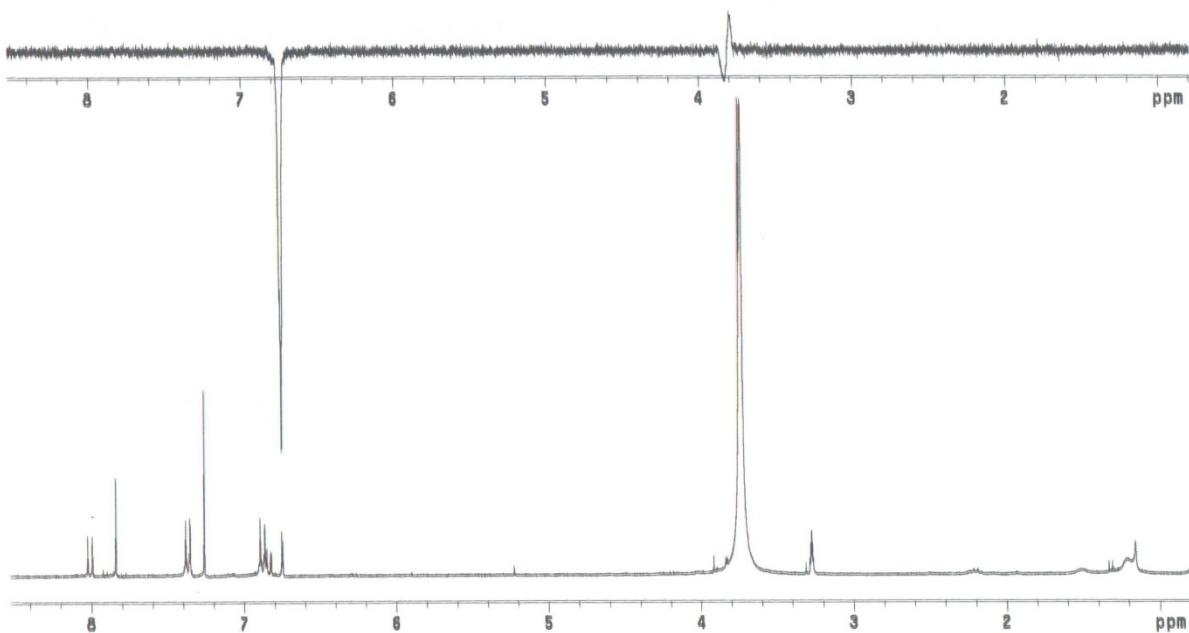
**Figura 9S.** Expansão 1 do mapa de correlação heteronuclear HMBC de **3**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz,  $\text{CDCl}_3 +$  gotas de  $\text{CD}_3\text{OD}$ , na região de (6,6-8,1 ppm) x (75,0-135,0 ppm)



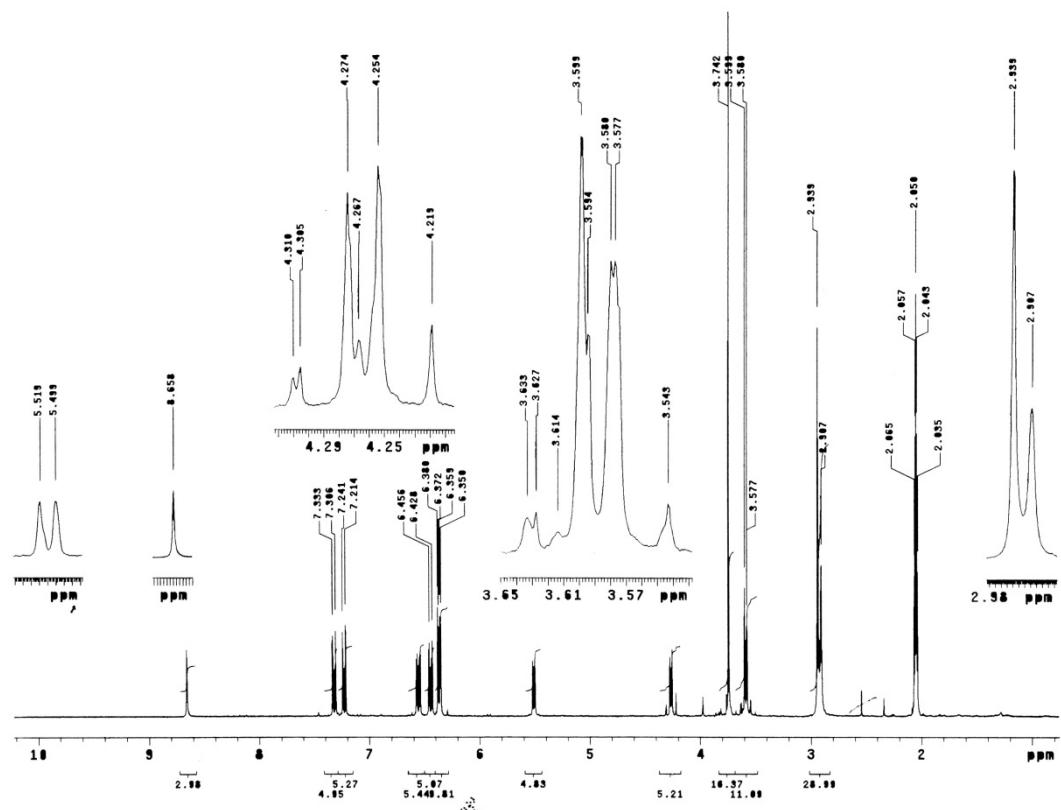
**Figura 10S.** Expansão 2 do mapa de correlação heteronuclear HMBC de **3**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz,  $\text{CDCl}_3 +$  gotas de  $\text{CD}_3\text{OD}$ , na região de (6,5-8,4 ppm) x (146,0-184,0 ppm)



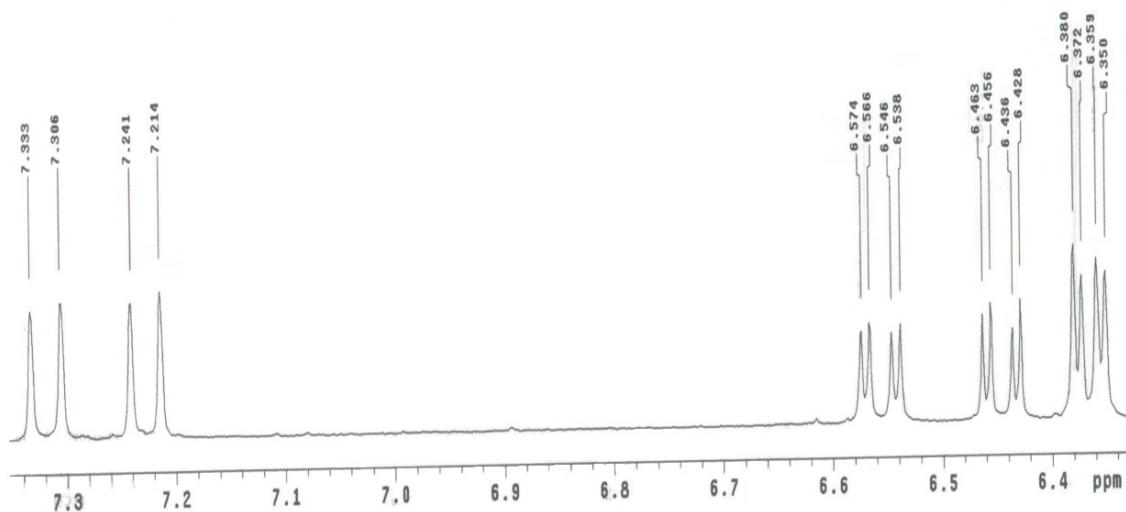
**Figura 11S.** Espectro de NOE diferencial ao irradiar os hidrogênios do grupo metoxílico ( $\delta_H$  3,75) de **3**, 300 MHz,  $CDCl_3 +$  gotas de  $CD_3OD$



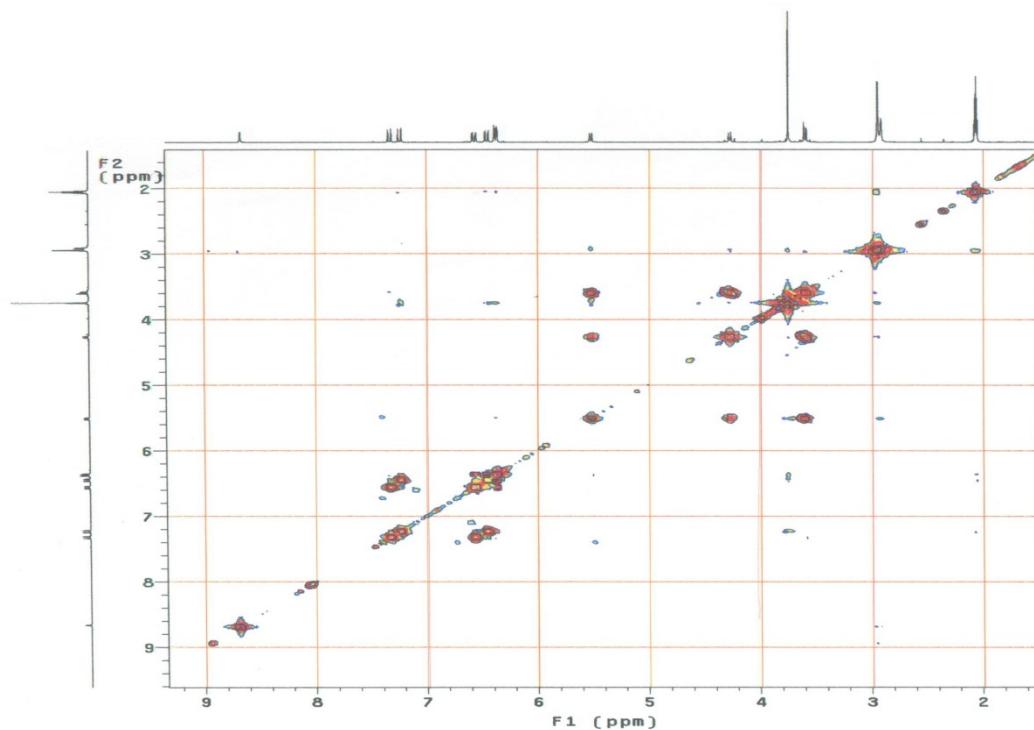
**Figura 12S.** Espectro de NOE diferencial ao irradiar o duploto em  $\delta_H$  6,87 ( $H-3'/5'$ ) de **3**, 300 MHz,  $CDCl_3 +$  gotas de  $CD_3OD$



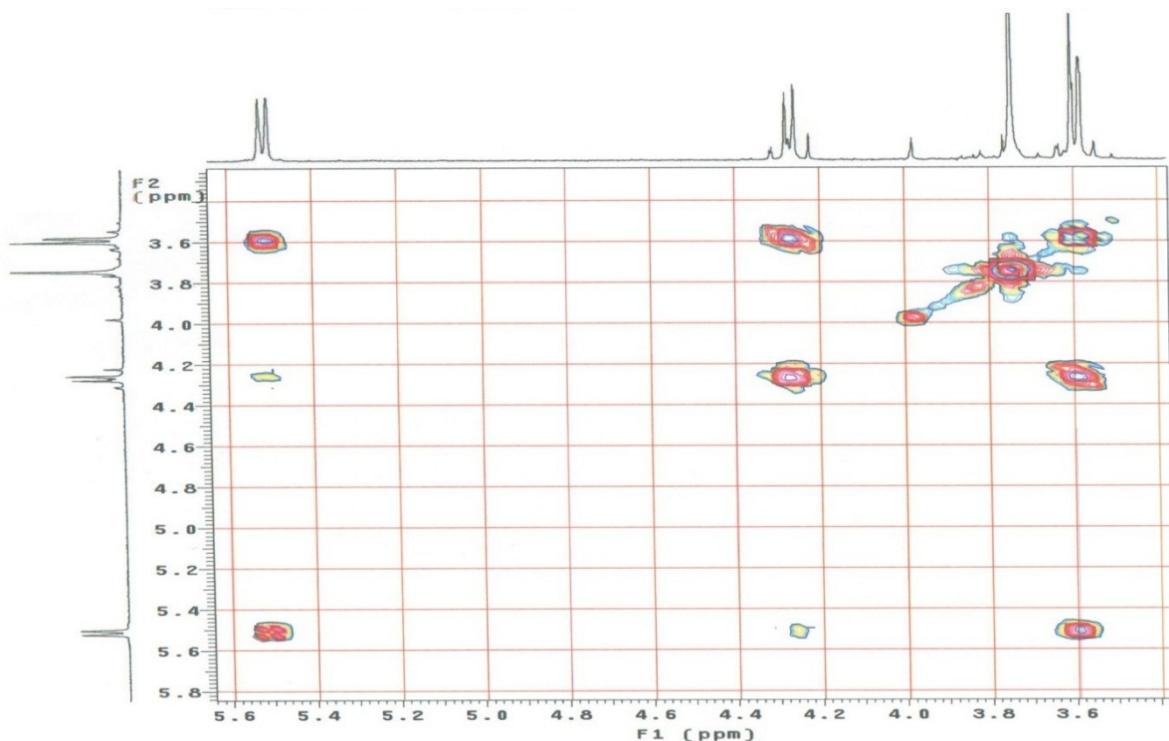
**Figura 13S.** Espectro de RMN  $^1H$  de **4**, 300 MHz, acetona  $d_6$



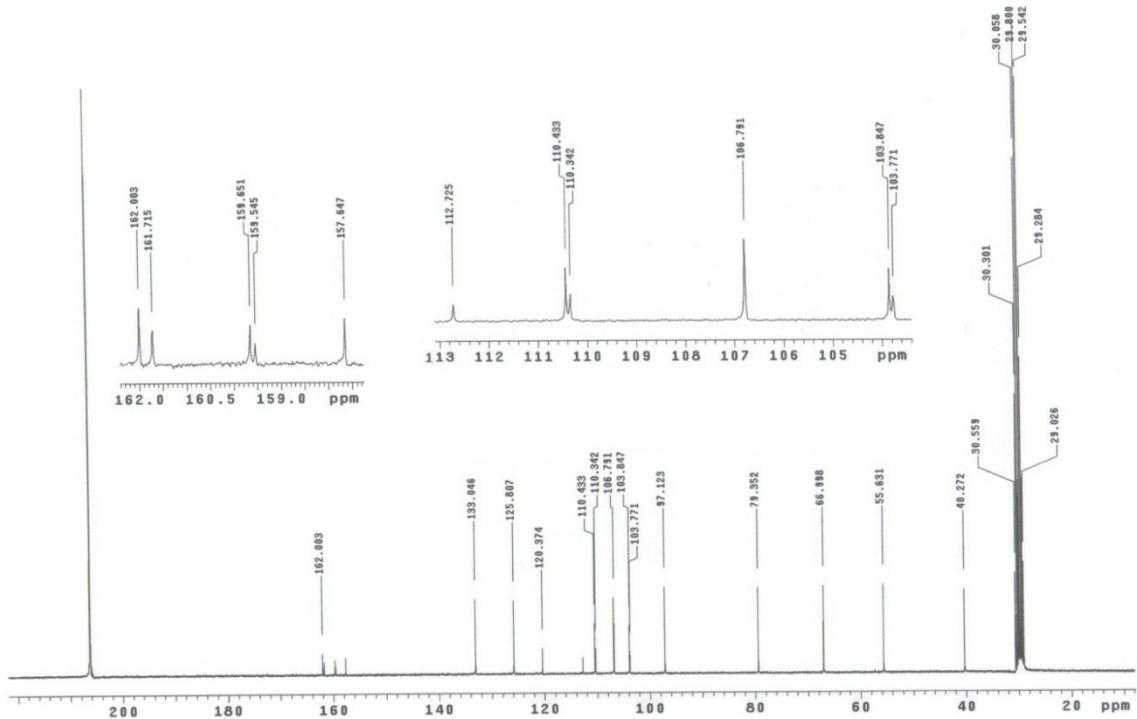
**Figura 14S.** Expansão do espectro de RMN  $^1H$  de **4**, 300 MHz, acetona  $d_6$



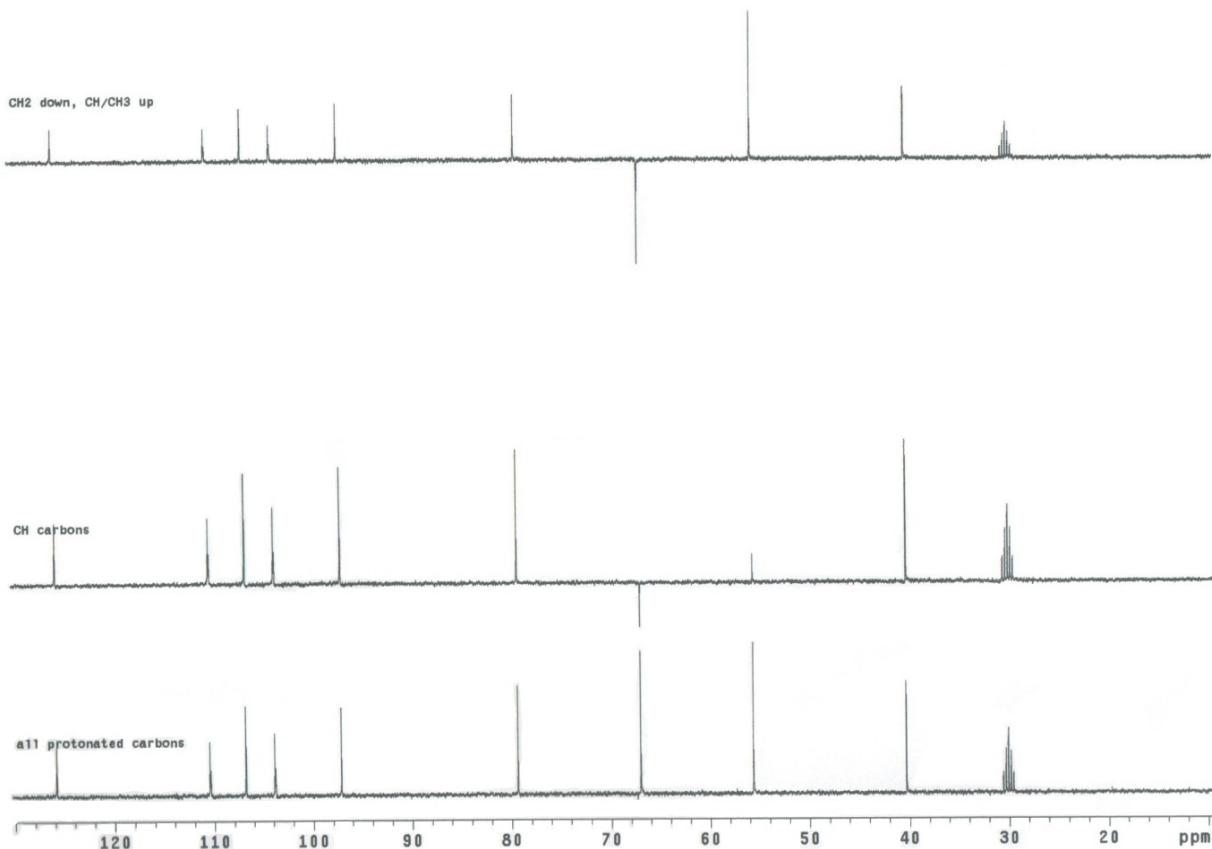
**Figura 15S.** Mapa de correlação homonuclear COSY -  $^1\text{H}$  x  $^1\text{H}$  de **4**, 300 MHz, acetona  $d_6$



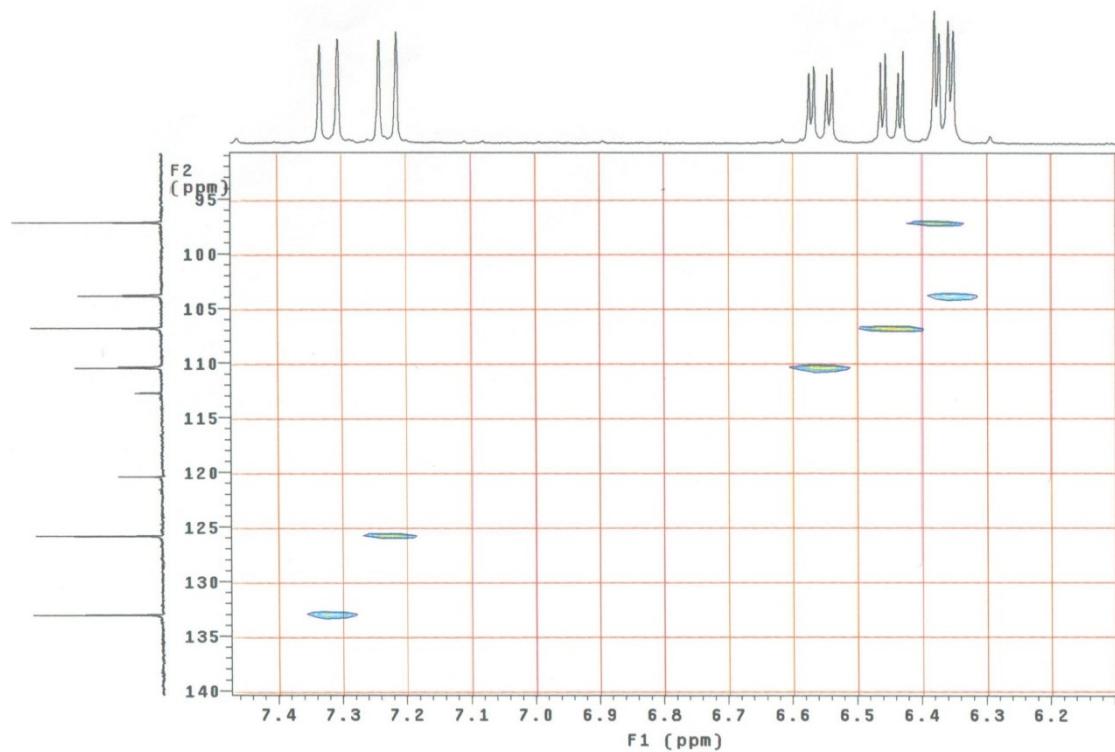
**Figura 16S.** Expansão do mapa de correlação homonuclear COSY -  $^1\text{H}$  x  $^1\text{H}$  de **4**, 300 MHz, acetona  $d_6$



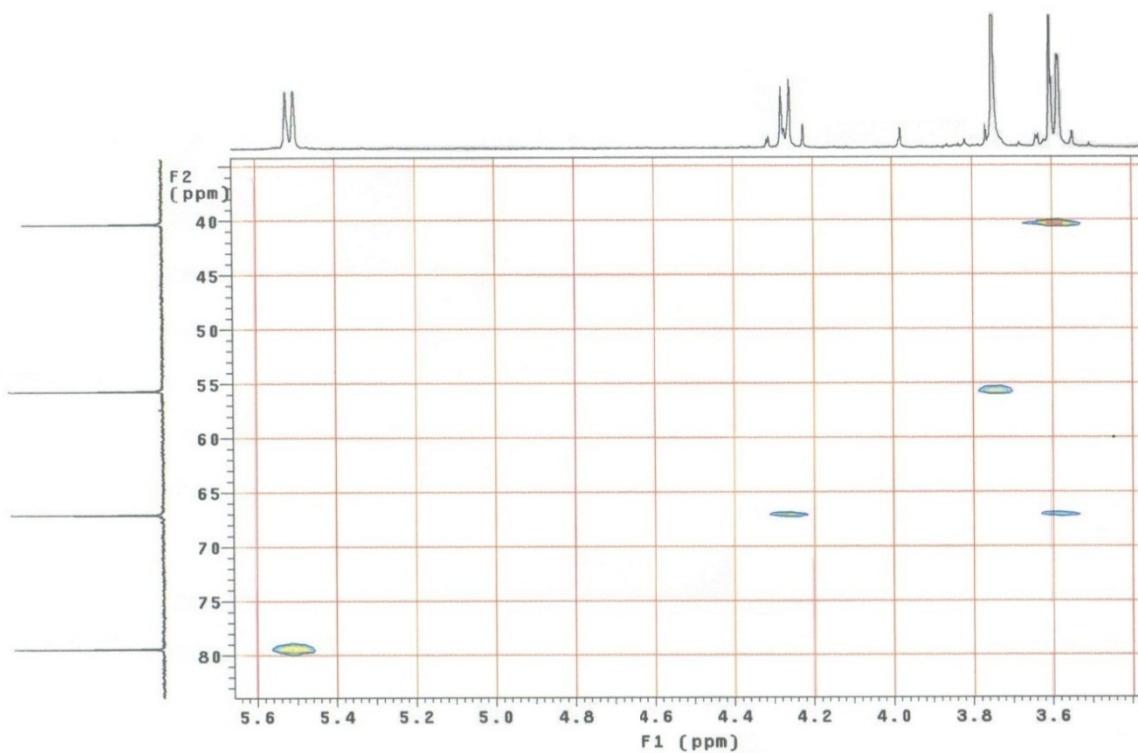
**Figura 17S.** Espectro de RMN  $^{13}\text{C}$  de **4**, 75 MHz, acetona  $d_6$



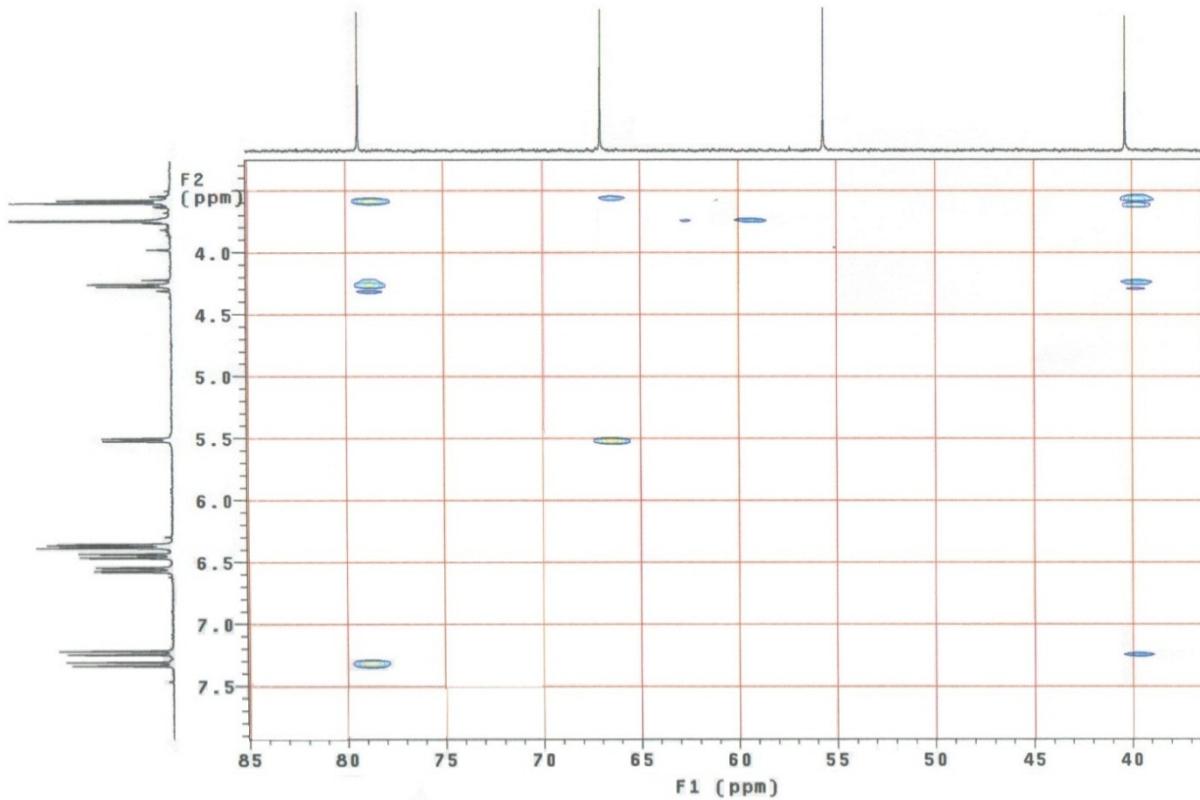
**Figura 18S.** Espectro de DEPT de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$



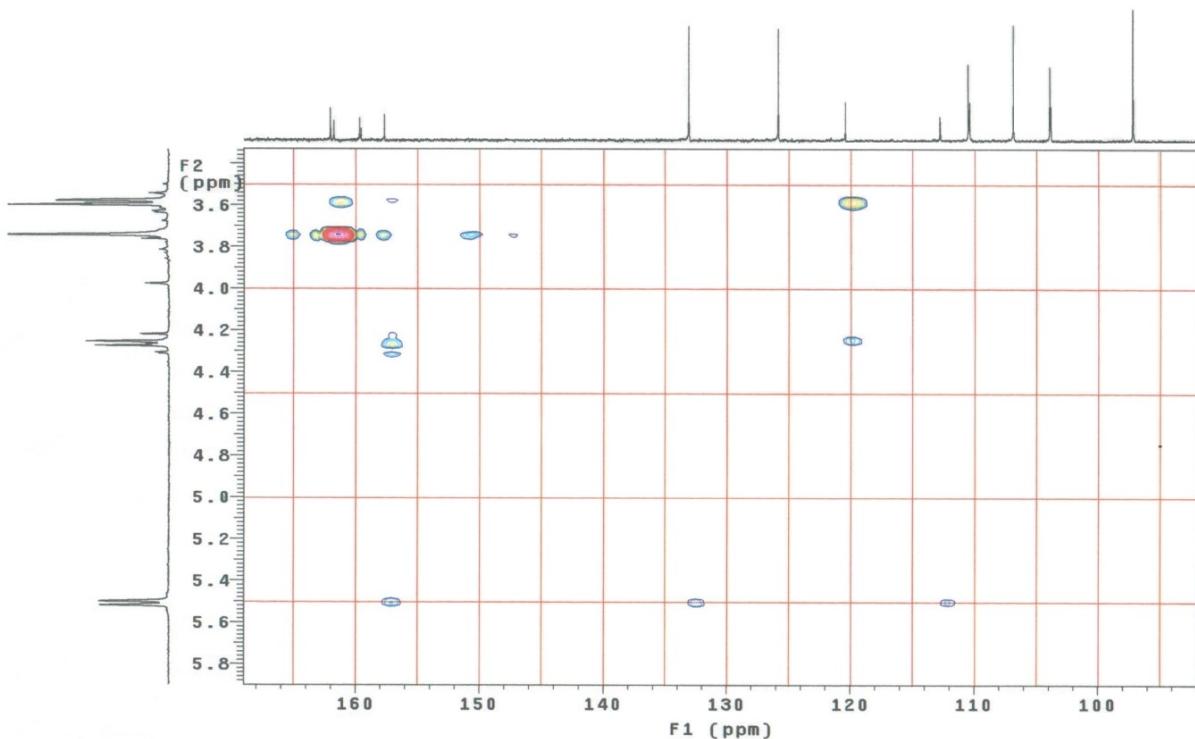
**Figura 19S.** Mapa de correlação heteronuclear HETCOR de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$



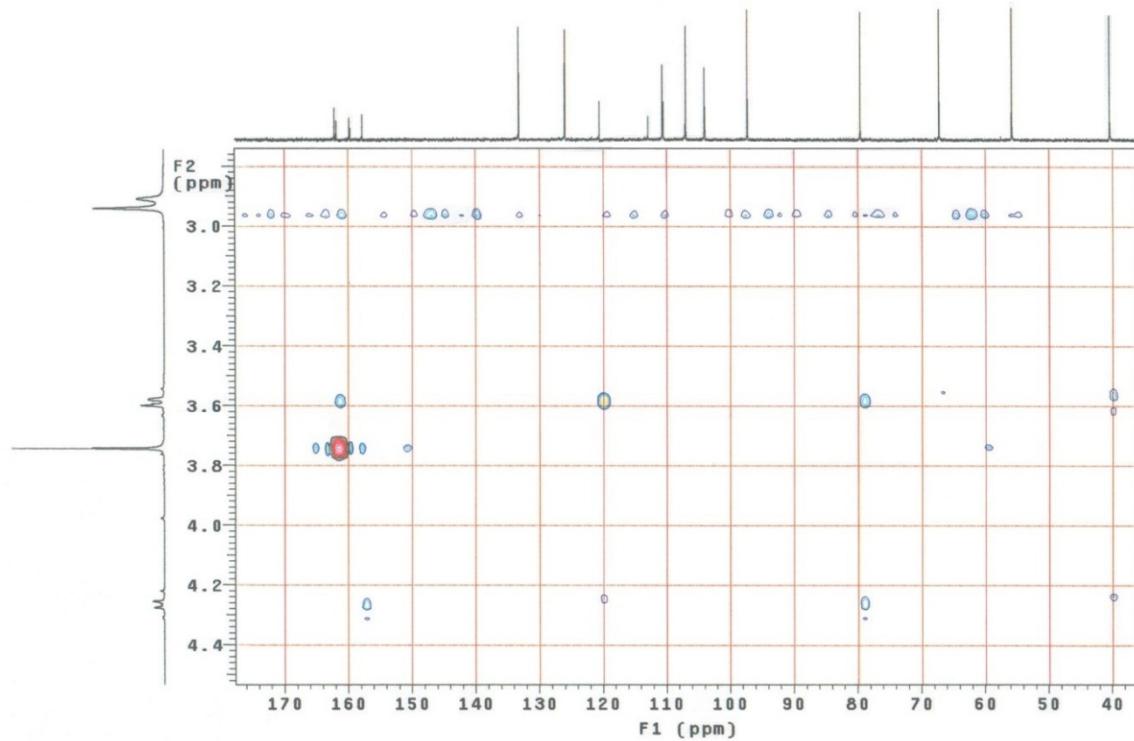
**Figura 20S.** Expansão do mapa de correlação heteronuclear HETCOR de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$



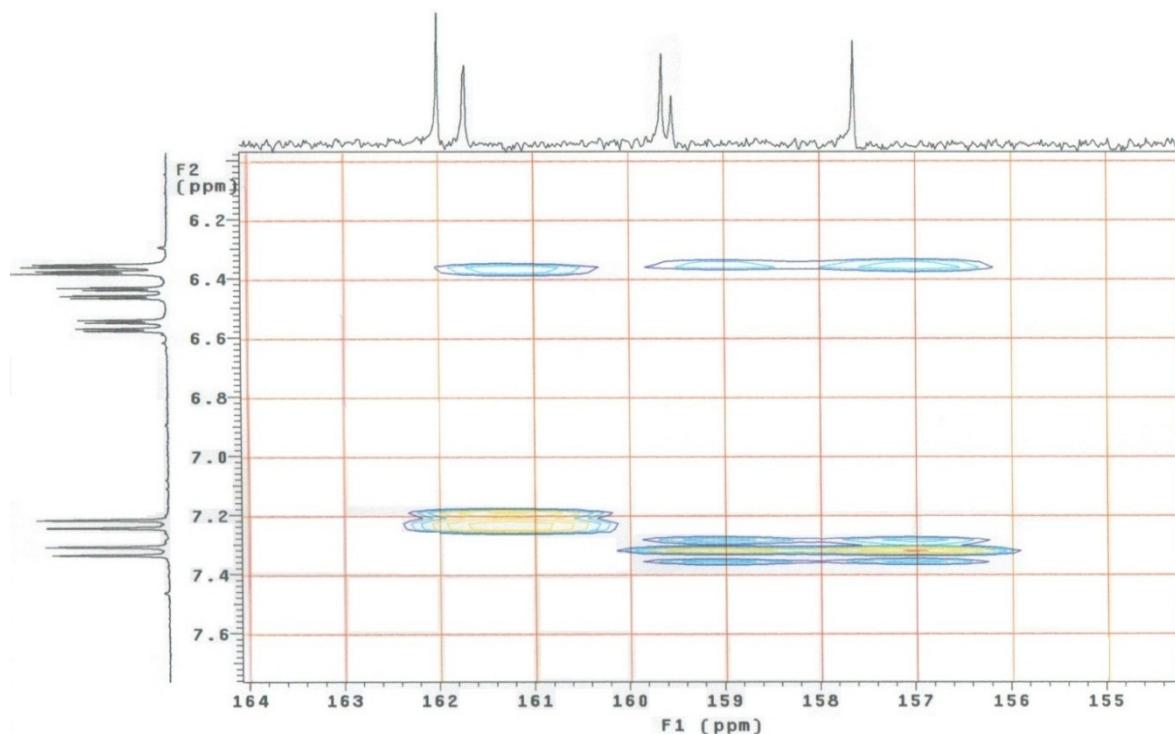
**Figura 21S.** Expansão 1 do mapa de correlação heteronuclear HMBC de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$ , na região de (3,5-8,0 ppm) x (35,0-85,0 ppm)



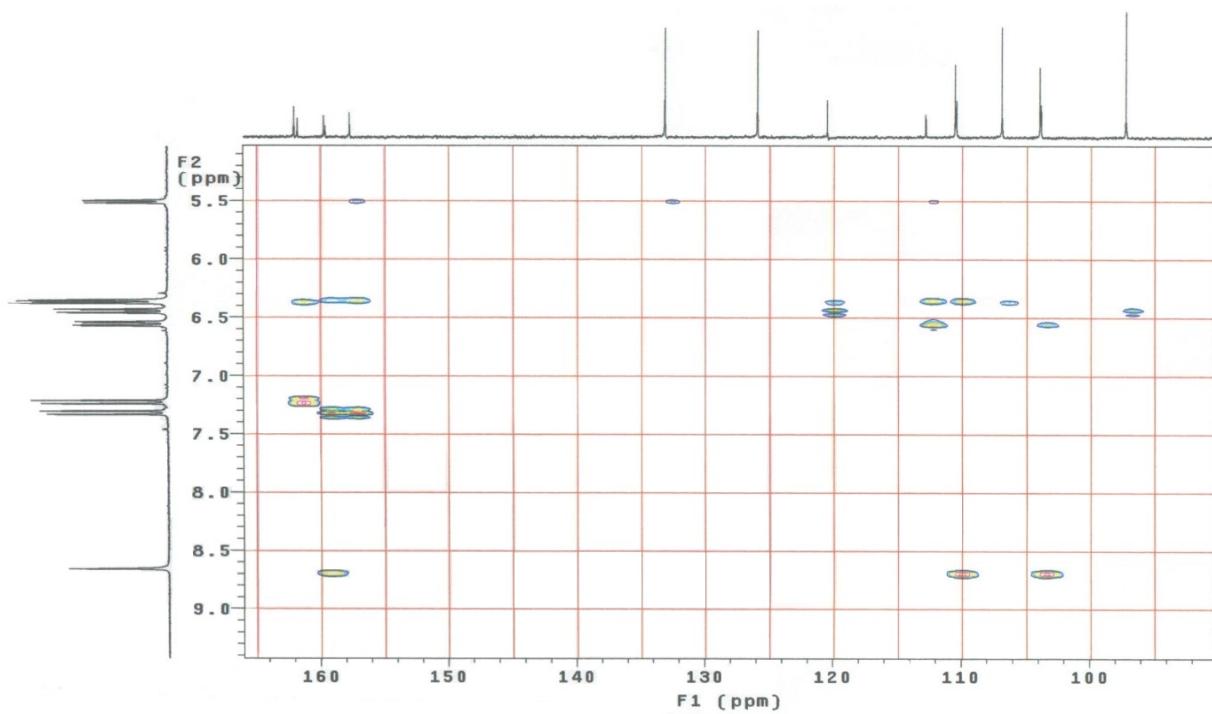
**Figura 22S.** Expansão 2 do mapa de correlação heteronuclear HMBC de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$ , na região de (3,4-5,8 ppm) x (95,0-168,0 ppm)



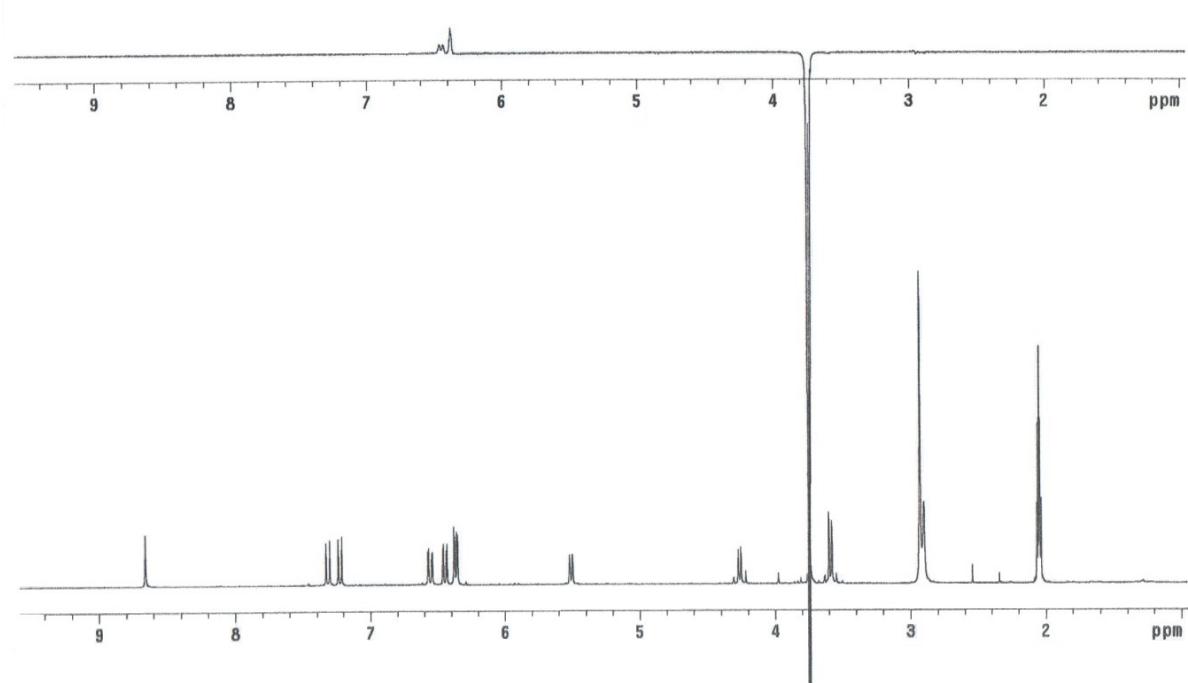
**Figura 23S.** Expansão 3 do mapa de correlação heteronuclear HMBC de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$ , na região de (3,1-4,5 ppm) x (38,0-176,0 ppm)



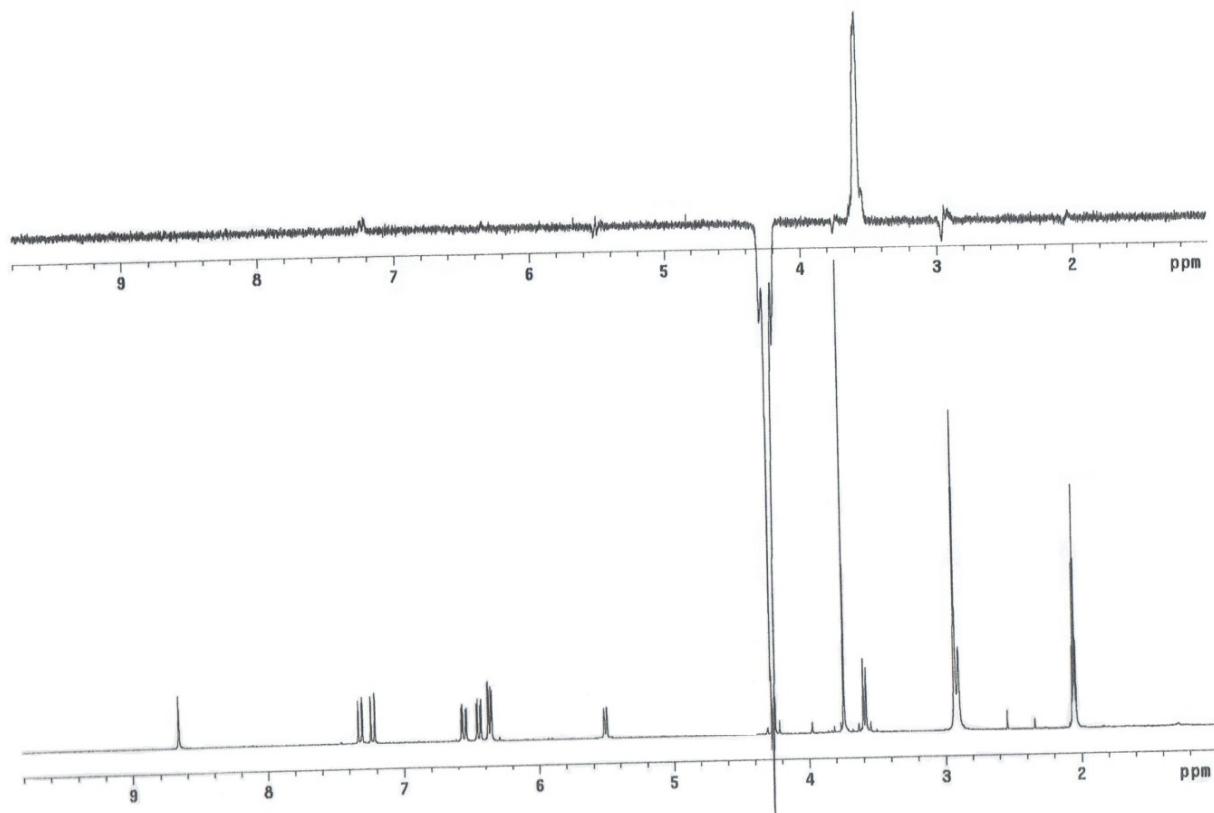
**Figura 24S.** Expansão 4 do mapa de correlação heteronuclear HMBC de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$ , na região de (6,1-7,7 ppm) x (154,0-164,0 ppm)



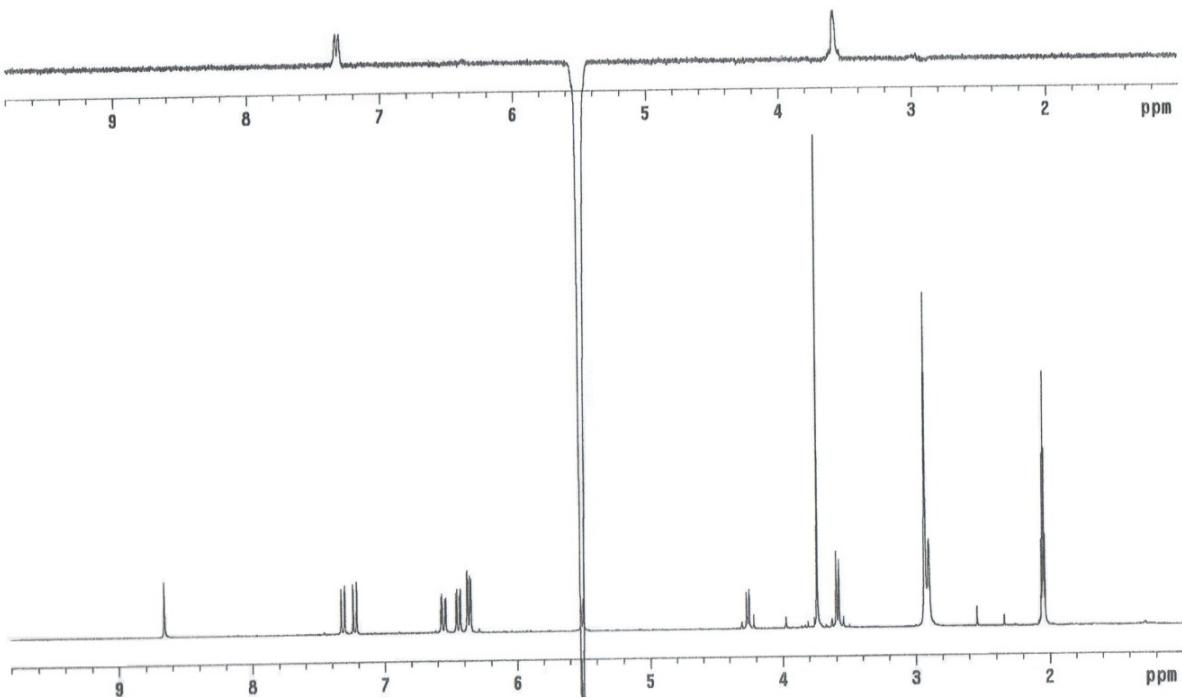
**Figura 25S.** Expansão 5 do mapa de correlação heteronuclear HMBC de **4**,  $^1\text{H}$ : 300 MHz,  $^{13}\text{C}$ : 75 MHz, acetona  $d_6$ , na região de (5,4-9,4 ppm) x (90,0-164,0 ppm)



**Figura 26S.** Espectro de NOE diferencial ao irradiar os hidrogênios do grupo metoxílico ( $\delta_H$  3,74) de **4**, 300 MHz,  $\text{CD}_3\text{OD}$



**Figura 27S.** Espectro de NOE diferencial ao irradiar o sinal em  $\delta_H$  4,26 ( $H\text{-}2\alpha_{\text{axial}}$ ) de **4**, 300 MHz,  $\text{CD}_3\text{OD}$



**Figura 28S.** Espectro de NOE diferencial ao irradiar o sinal em  $\delta_H$  5,50 ( $H\text{-}4_{\text{equatorial}}$ ) de **4**, 300 MHz,  $\text{CD}_3\text{OD}$