

## Flavonoids from *Annona dioica* Leaves and their Effects in Ehrlich Carcinoma Cells, DNA-topoisomerase I and II

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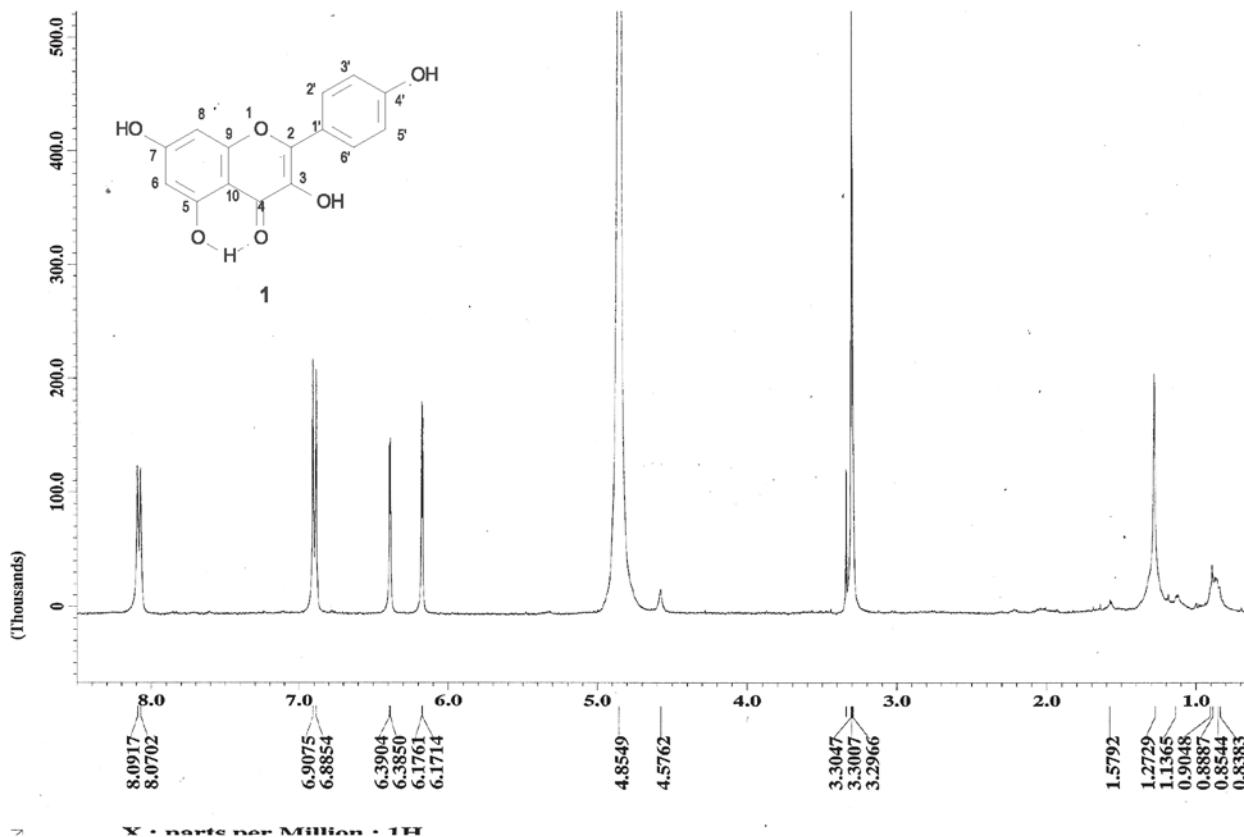
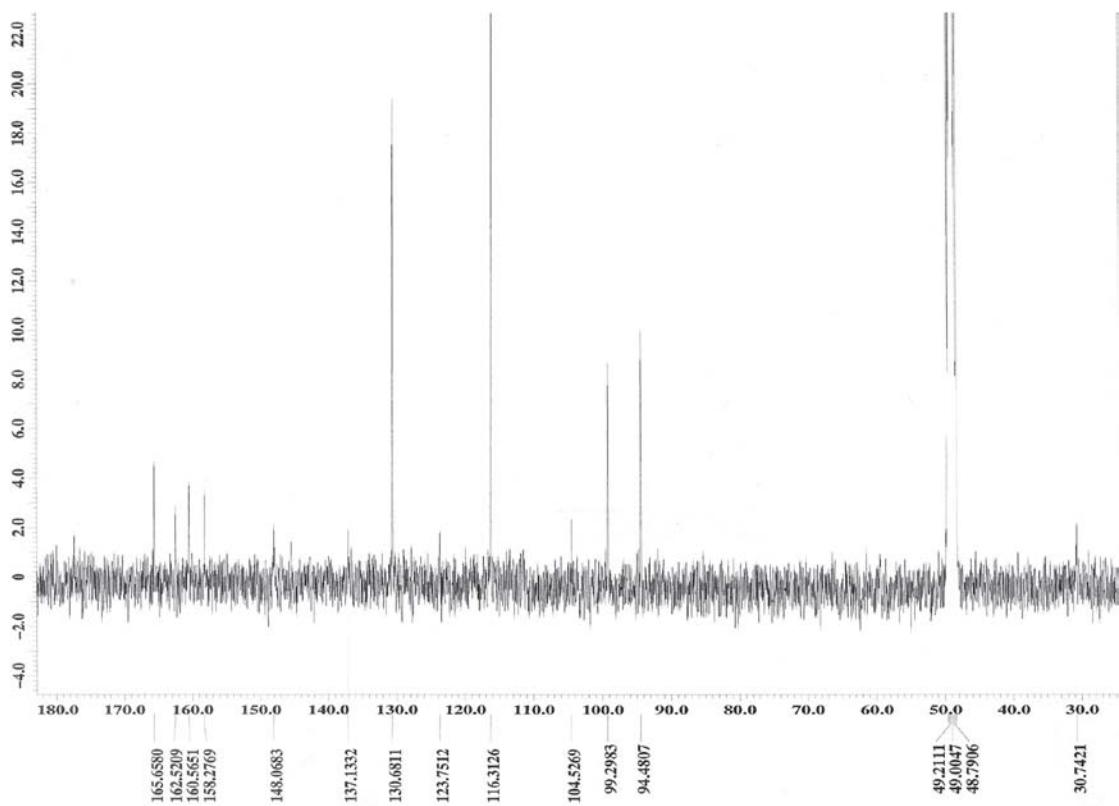
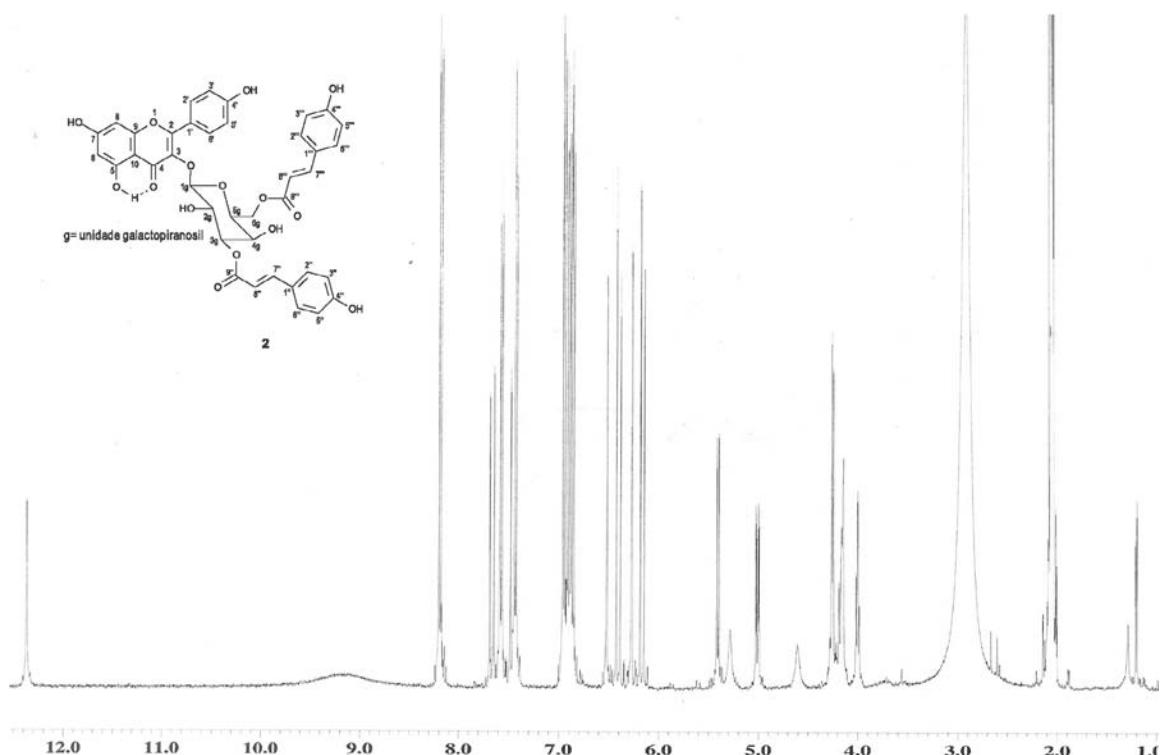


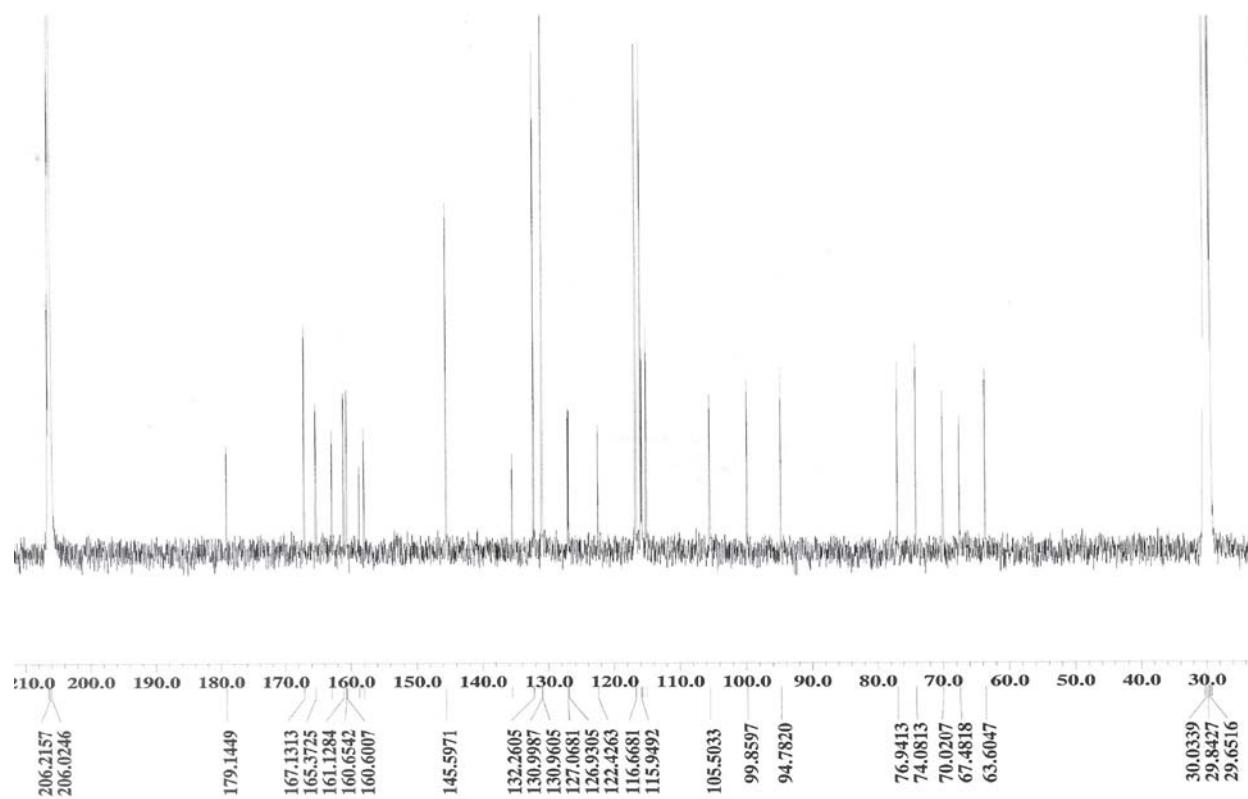
Figure S1. <sup>1</sup>H NMR spectrum of flavonoid 1 (400 MHz, CD<sub>3</sub>OD).



**Figure S2.**  $^{13}\text{C}$  NMR spectrum of flavonoid **1** (100 MHz,  $\text{CD}_3\text{OD}$ ).



**Figure S3.**  $^1\text{H}$  NMR spectrum of flavonoid **2** (400 MHz, acetone- $\text{D}_6$ ).



**Figure S4.**  $^{13}\text{C}$  NMR spectrum of flavonoid **2** (100 MHz, acetone- $\text{D}_6$ ).

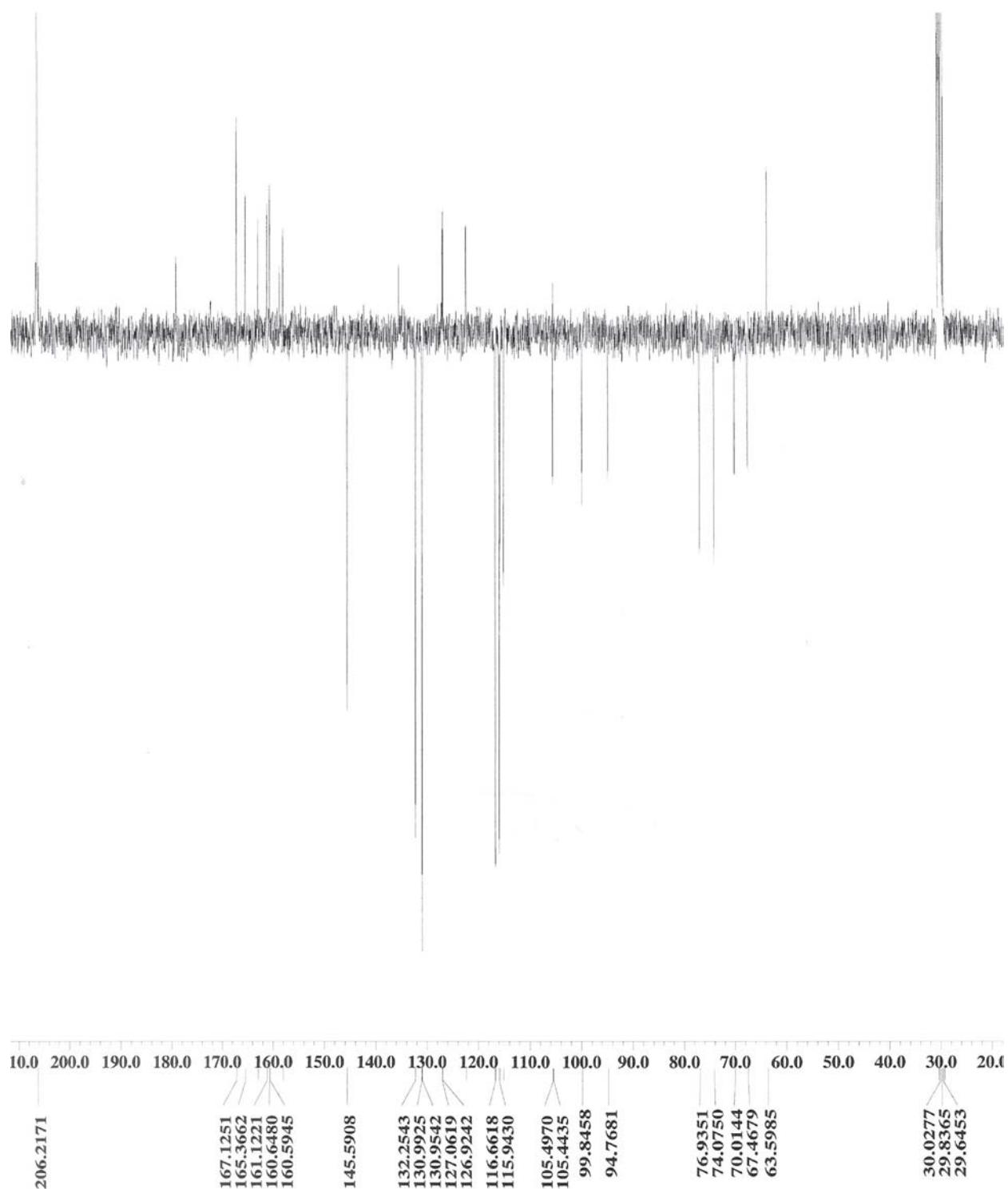
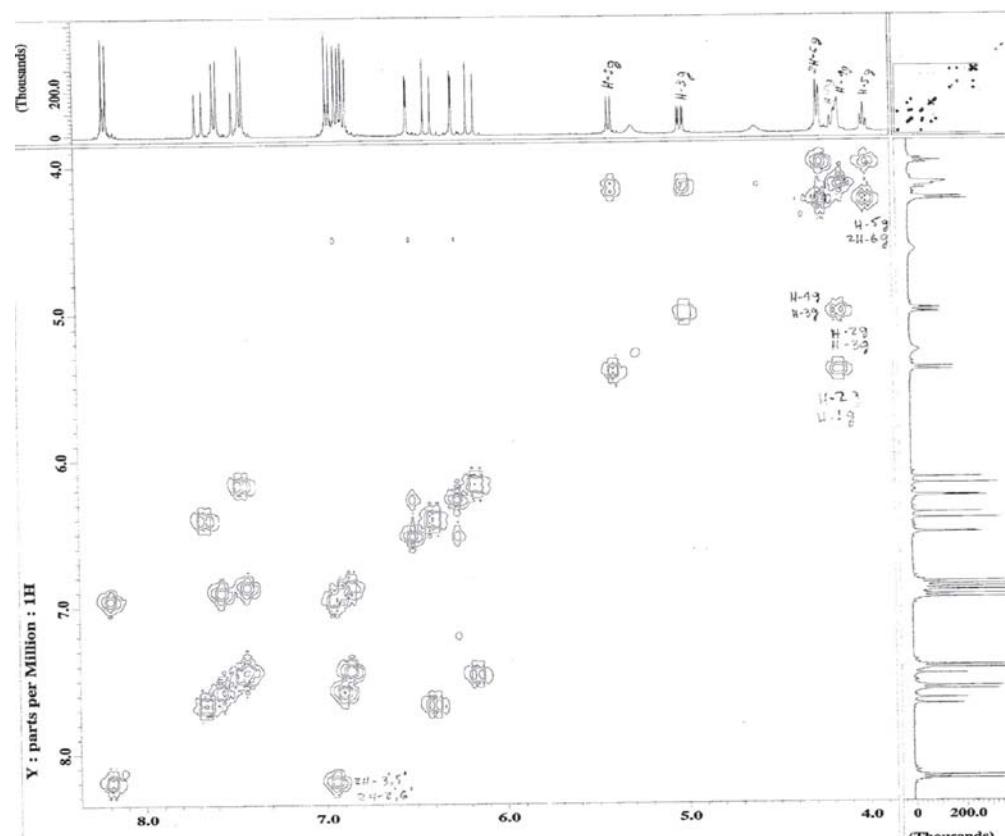
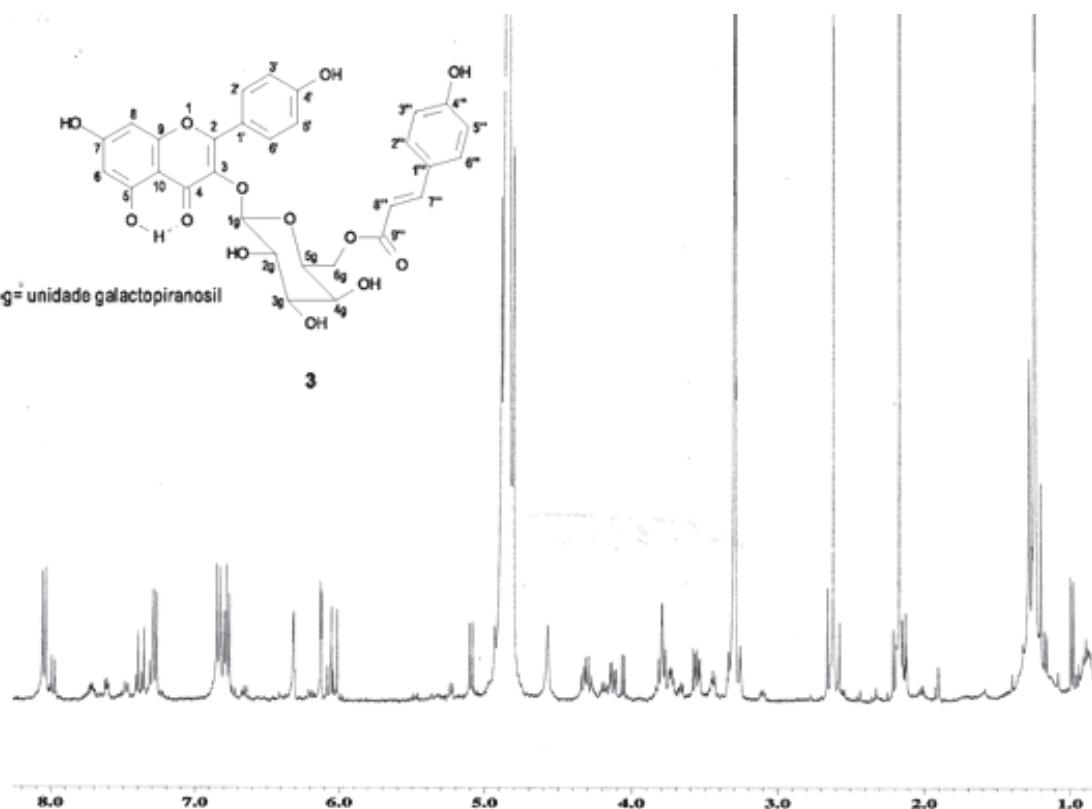


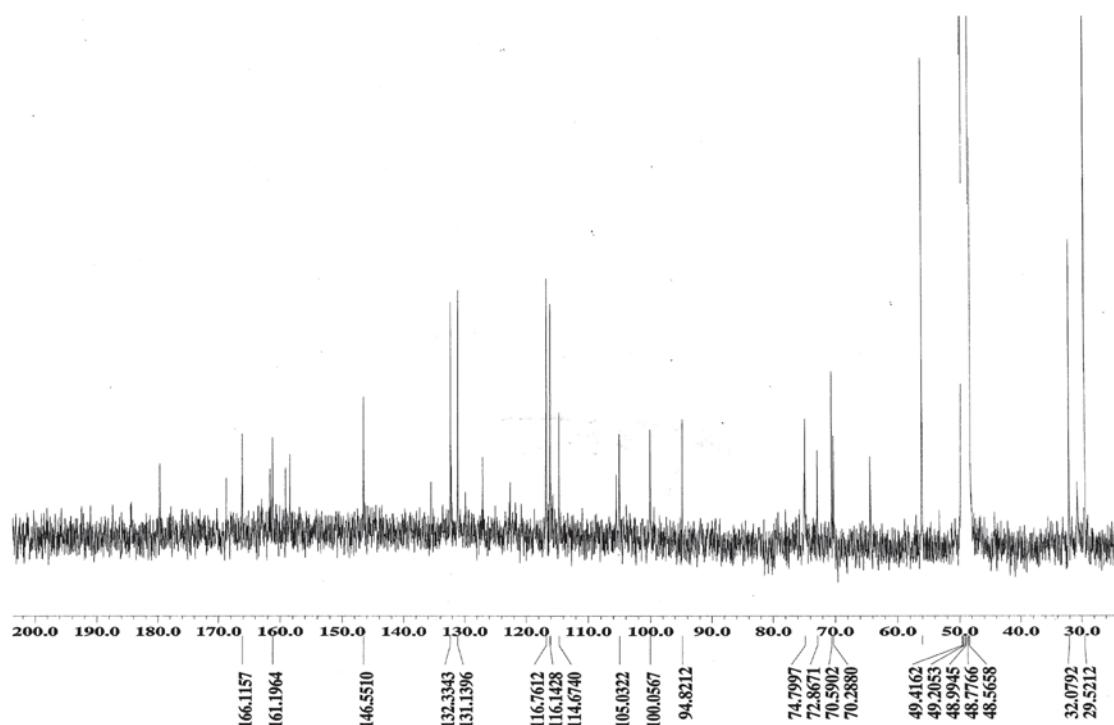
Figure S5.  $^{13}\text{C}$  NMR - APT of flavonoid 2 (100 MHz, acetone- $\text{D}_6$ ).



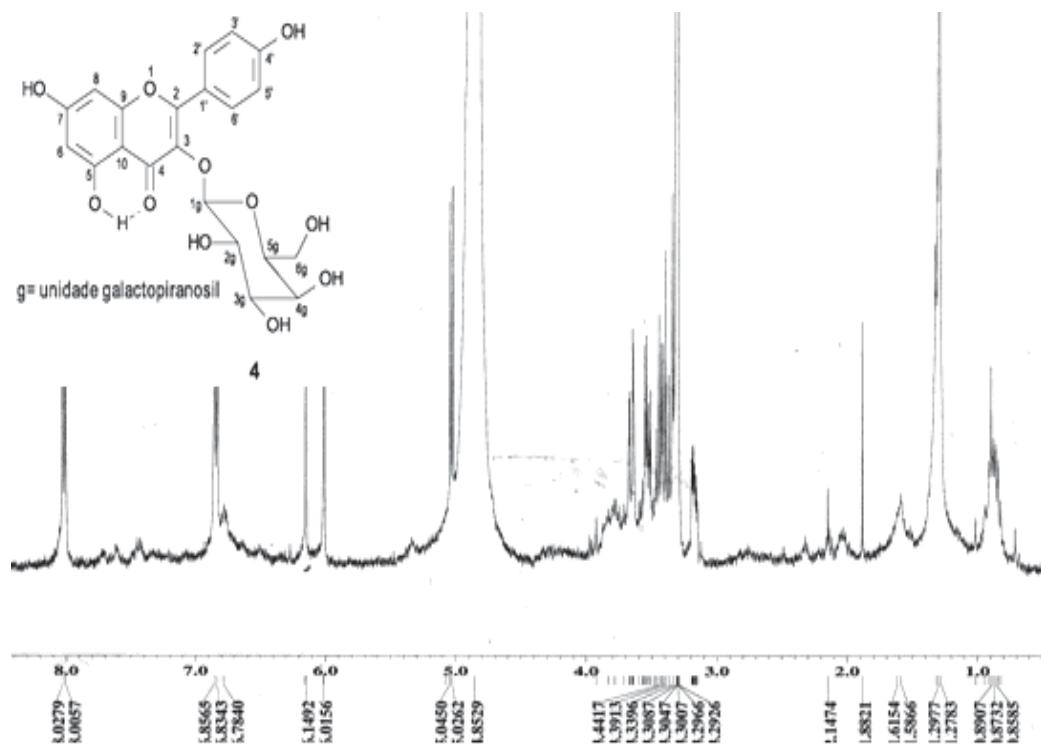
**Figure S6.** NMR  $^1\text{H}$ - $^1\text{H}$ - COSY spectrum of flavonoid 2.



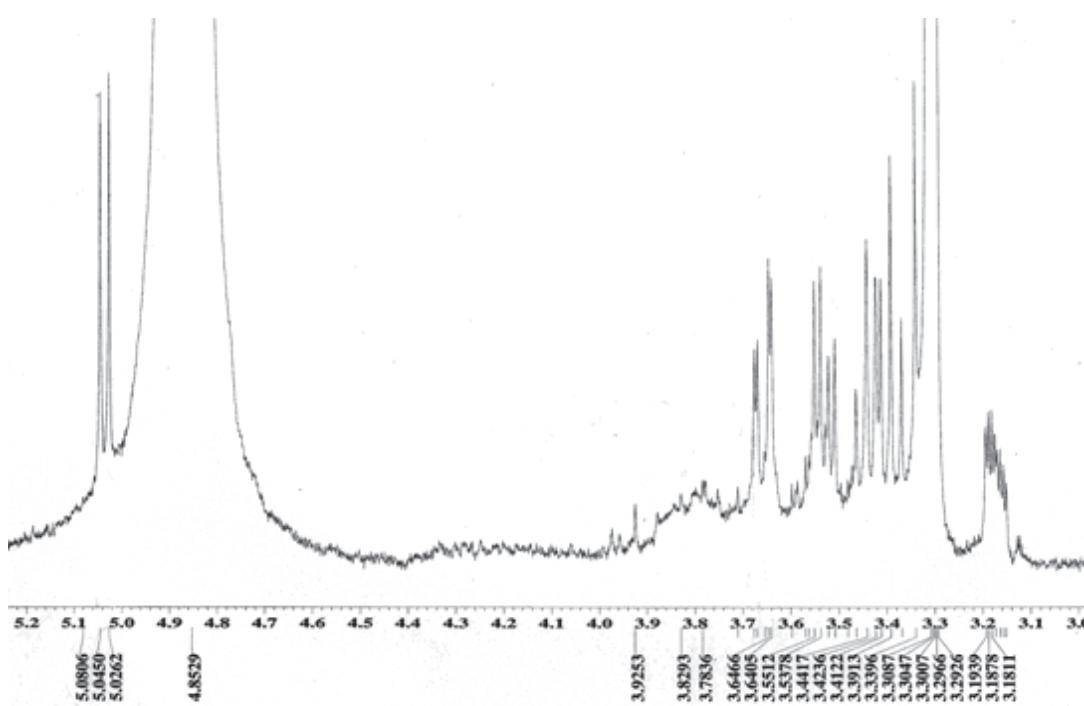
**Figure S7.**  $^1\text{H}$  NMR spectrum of flavonoid 3 (400 MHz,  $\text{CD}_3\text{OD}$ ).



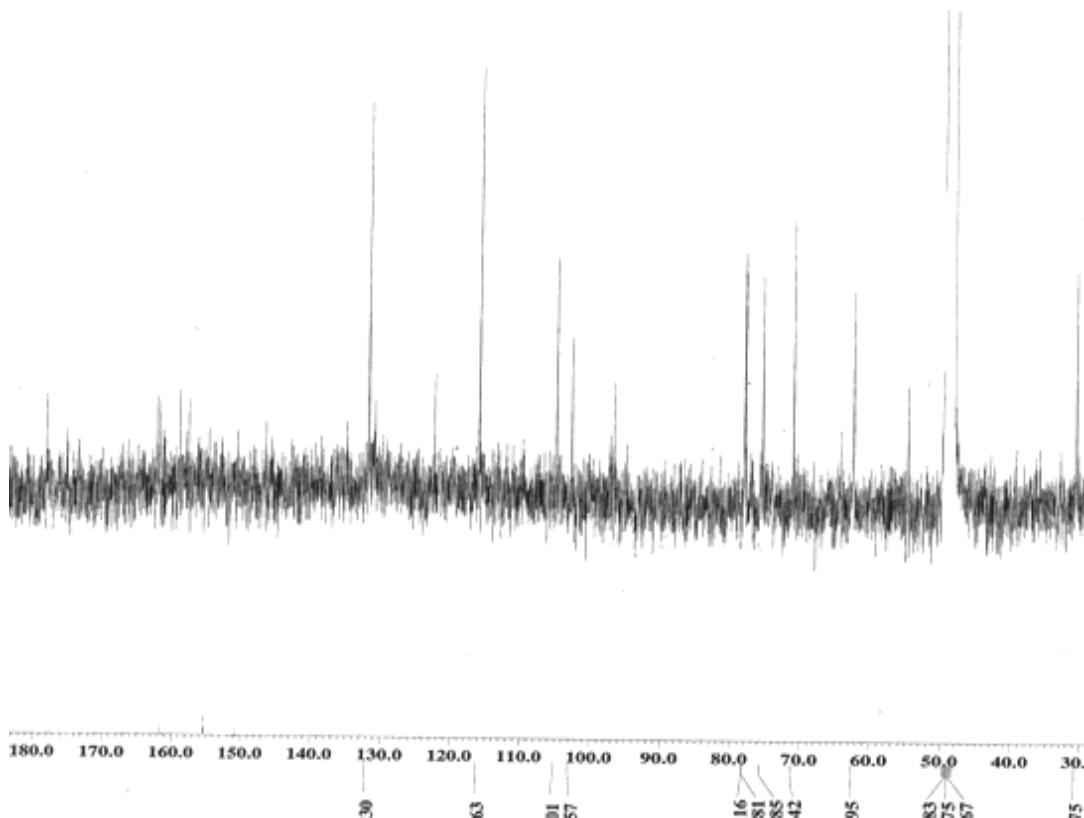
**Figure S8.**  $^{13}\text{C}$  NMR spectrum of flavonoid 3 (100 MHz,  $\text{CD}_3\text{OD}$ ).



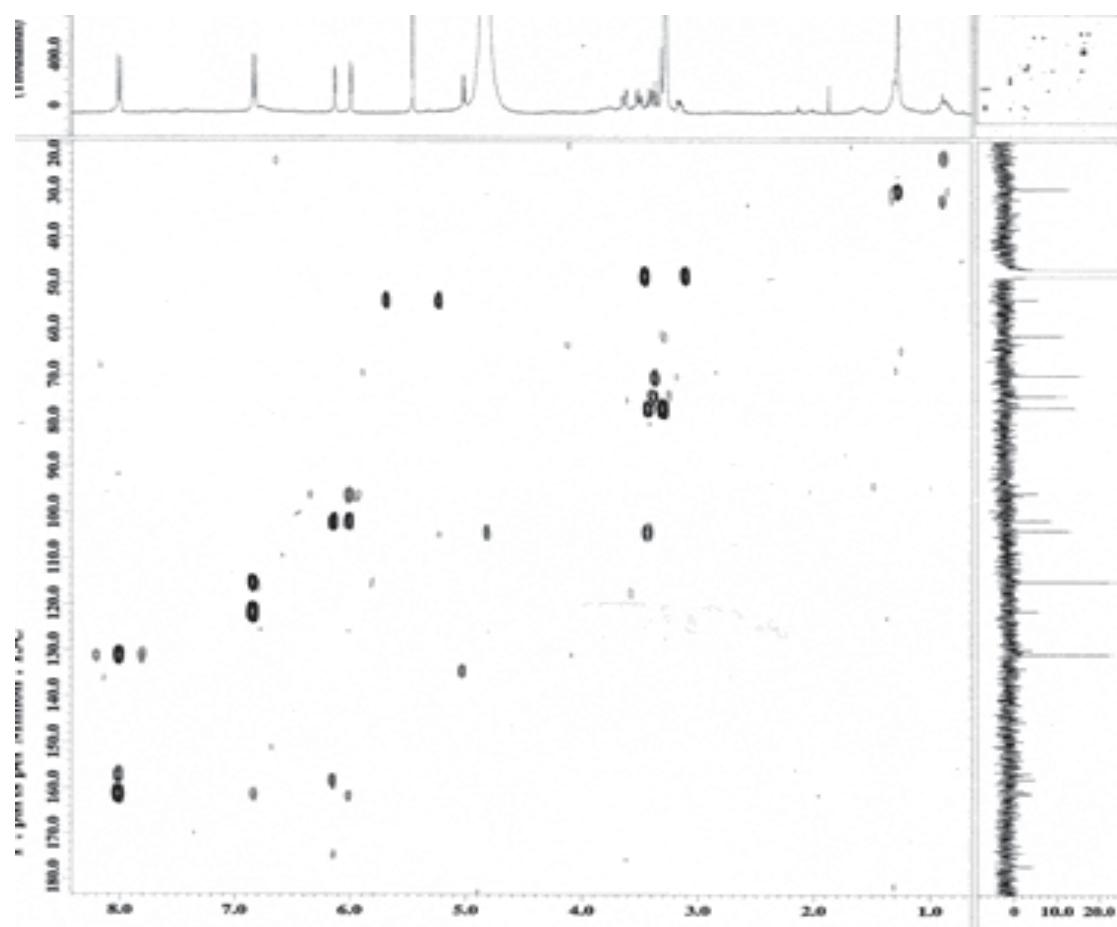
**Figure S9.** NMR  $^1\text{H}$  spectrum of flavonoid 4 (400 MHz,  $\text{CD}_3\text{OD}$ ).



**Figure S10.**  $^1\text{H}$  NMR spectrum expansion of flavonoid 4 de (400 MHz,  $\text{CD}_3\text{OD}$ ).



**Figure S11.**  $^{13}\text{C}$  NMR spectrum of flavonoid 4 (100 MHz,  $\text{CD}_3\text{OD}$ ).



**Figure S12.** NMR  $^1\text{H}$  -  $^{13}\text{C}$  - HMBC (100 MHz,  $\text{CD}_3\text{OD}$ ) of flavonoid 4.