

# Supplementary Materials:

Structure - antioxidant - antiproliferative activity relationships of natural C7 and C7-C8 hydroxylated flavones and flavanones

Sandra Sordon<sup>a\*</sup>, Jarosław Popłoński<sup>a</sup>, Magdalena Milczarek<sup>b</sup>, Martyna Stachowicz<sup>b</sup>, Tomasz Tronina<sup>a</sup>, Alicja Z. Kucharska<sup>c</sup>, Joanna Wietrzyk<sup>b</sup>, Ewa Huszcza<sup>a</sup>.

a Department of Chemistry, Wrocław University of Environmental and Life Sciences, Norwida 25, 50-375 Wrocław, Poland

b Hirszfeld Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, Weigla 12, 53-114 Wrocław, Poland

c Department of Fruit, Vegetable and Plant Nutraceutical Technology, Wrocław University of Environmental and Life Sciences, Chełmońskiego 37, 51-630 Wrocław, Poland

\*Correspondence: sandra.sordon@upwr.edu.pl

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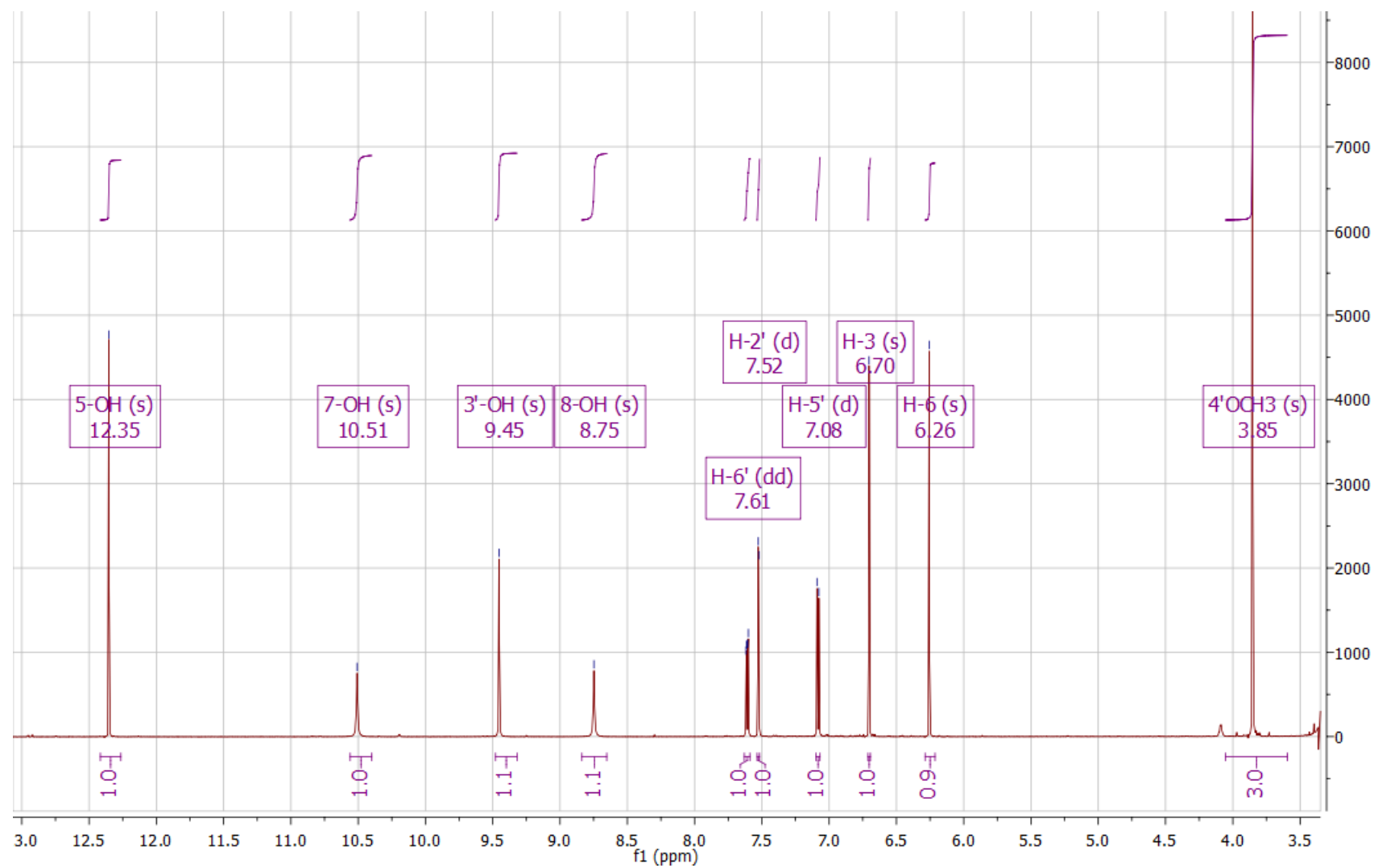


Figure S1. <sup>1</sup>H-NMR (600 MHz, DMSO-*d*<sub>6</sub>) spectrum of 8-hydroxydiosmetin (**12**).

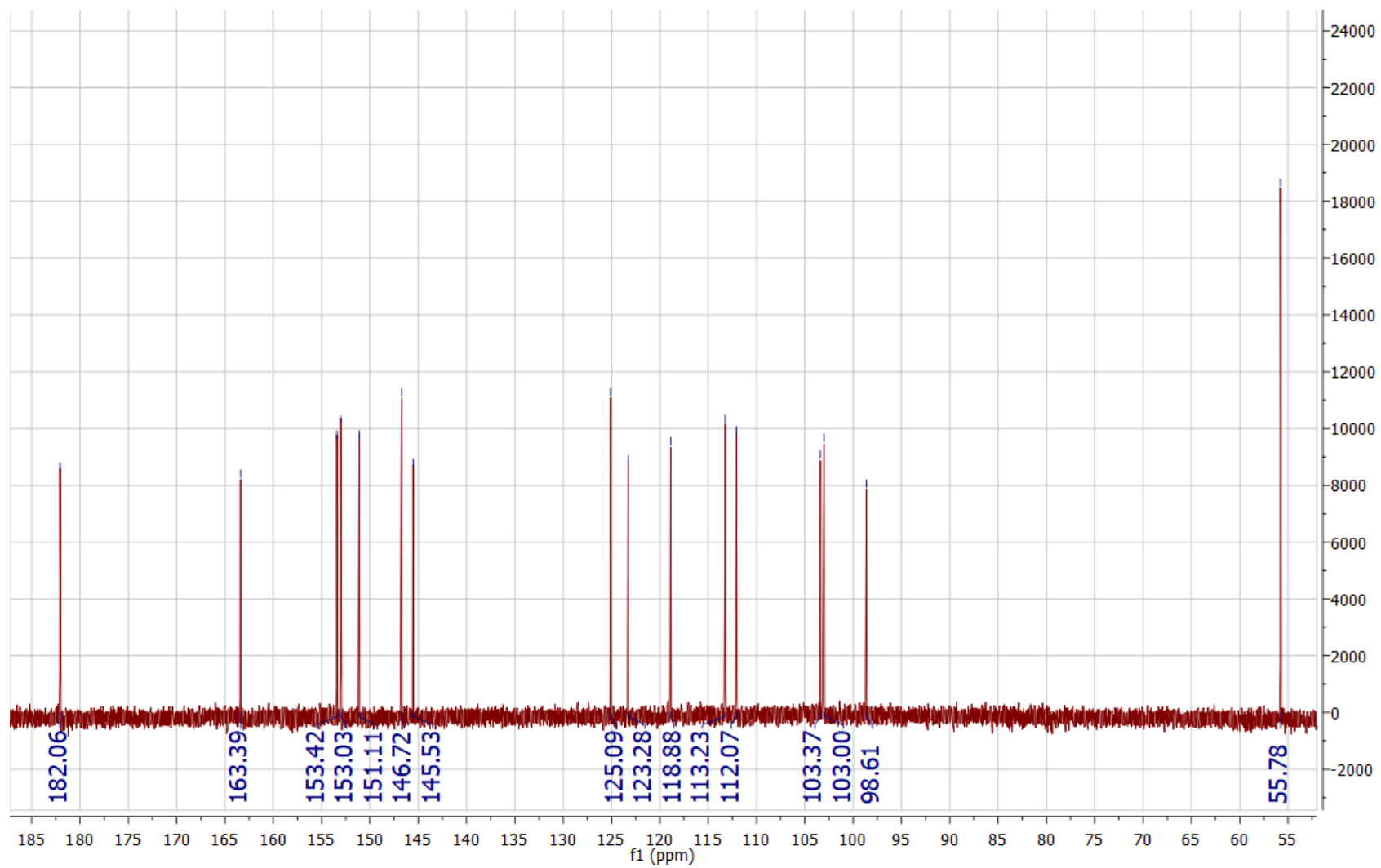


Figure S2.  $^{13}\text{C}$ -NMR (150 MHz,  $\text{DMSO-}d_6$ ) spectrum of 8-hydroxydiosmetin (**12**).

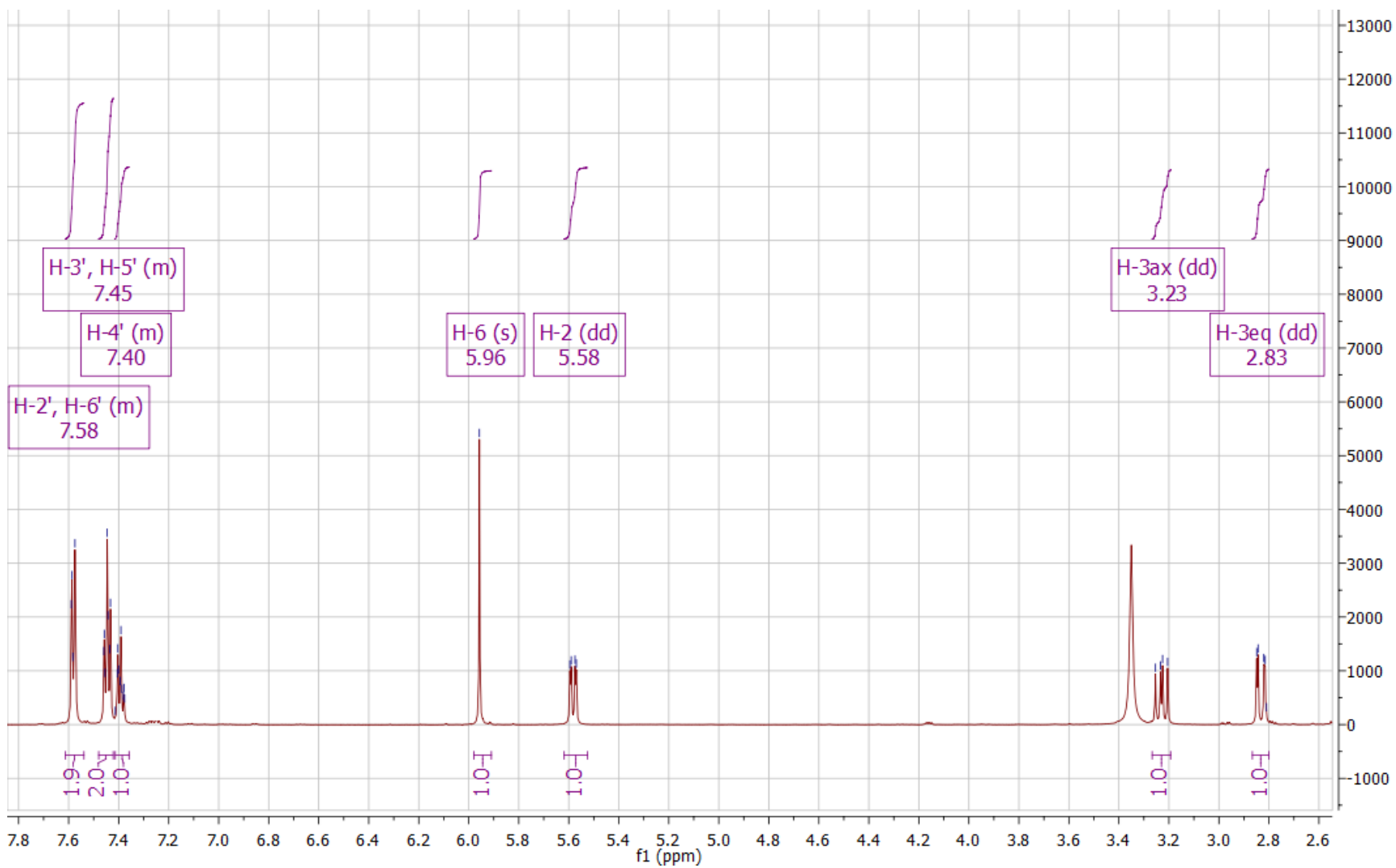


Figure S3. <sup>1</sup>H-NMR (600 MHz, DMSO-*d*<sub>6</sub>) spectrum of 8-hydroxy-pinocembrin (**13**).

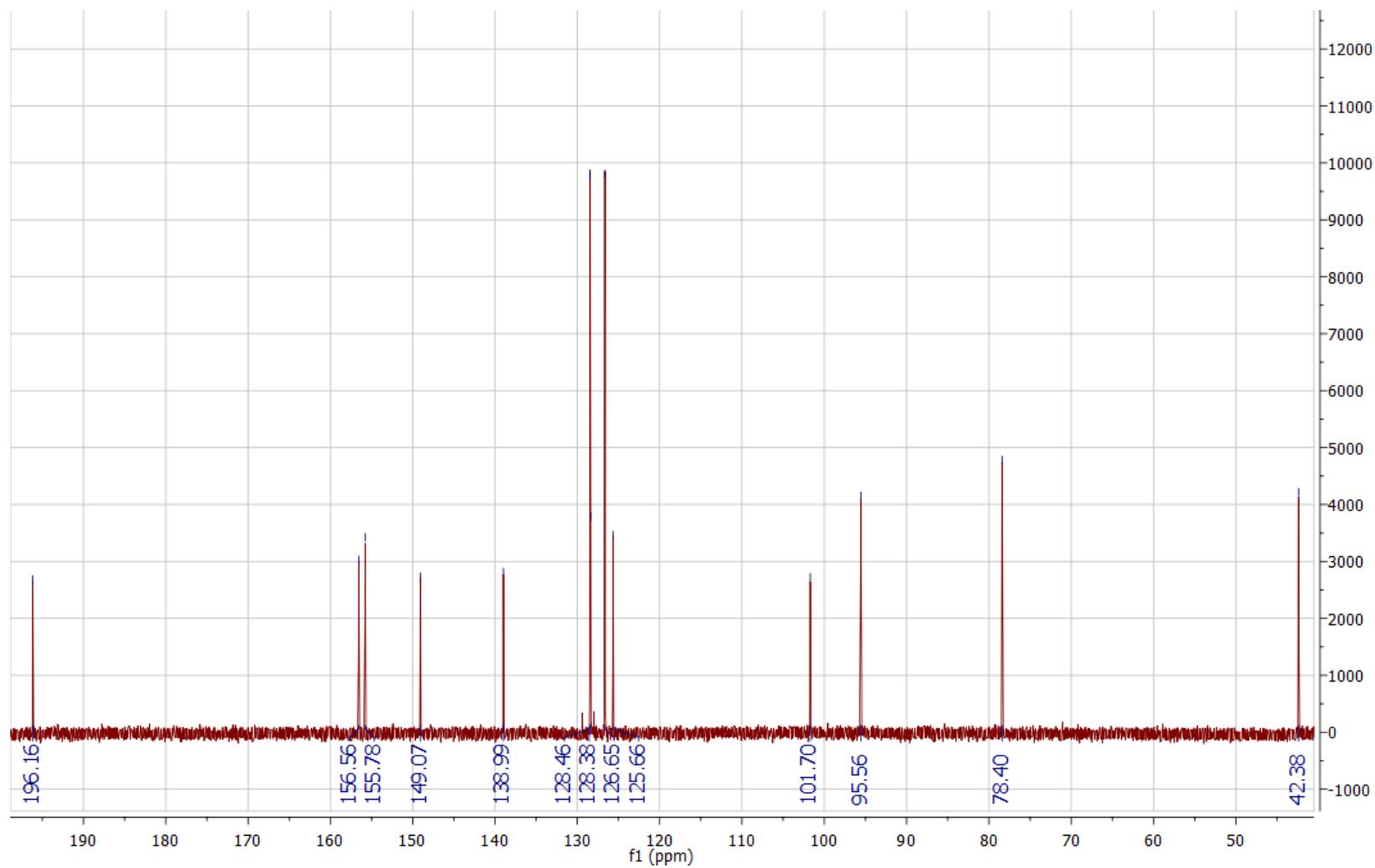


Figure S4.  $^{13}\text{C}$ -NMR (150 MHz,  $\text{DMSO-}d_6$ ) spectrum of 8-hydroxy-pinocembrin (**13**).

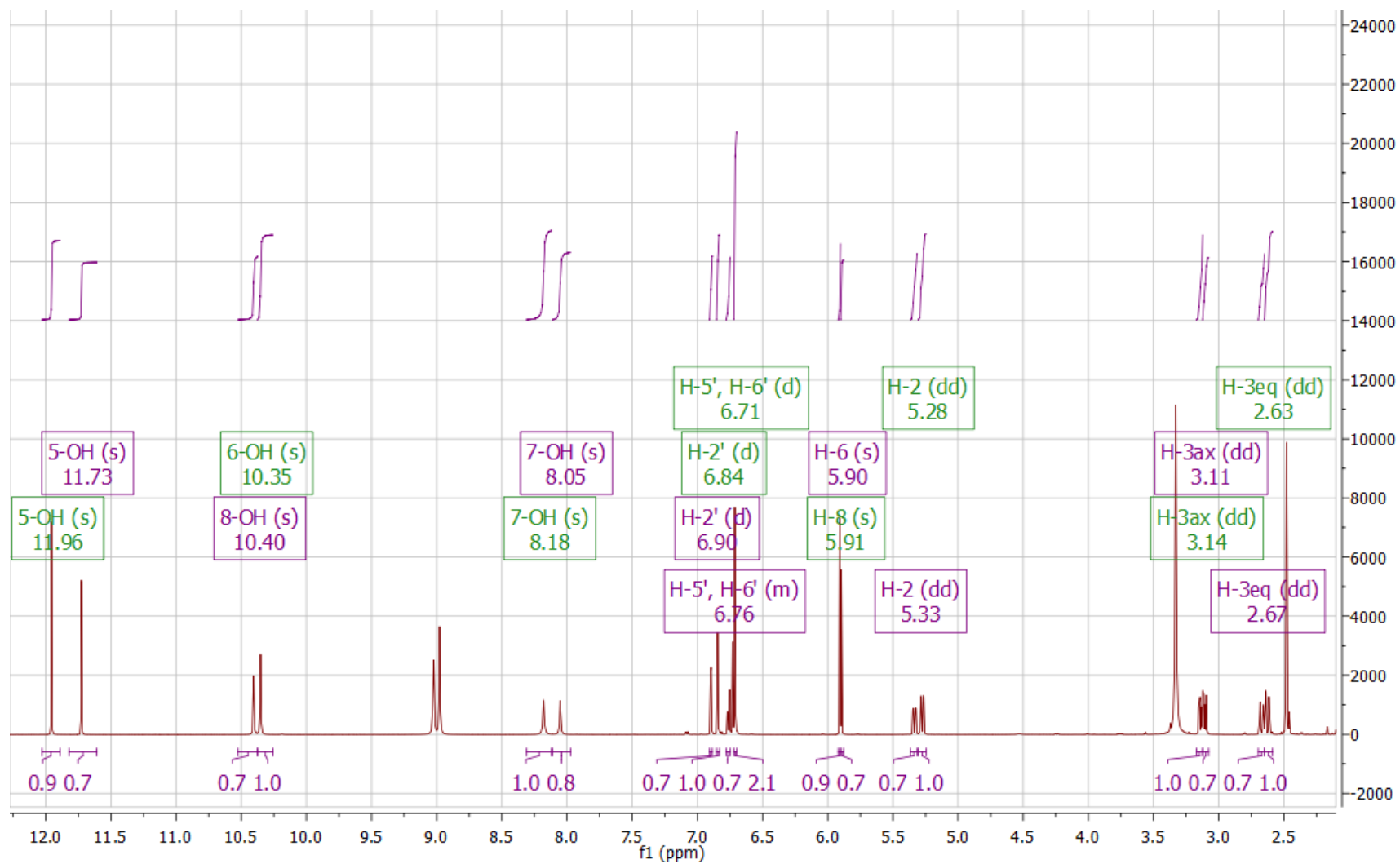


Figure S5. <sup>1</sup>H-NMR (600 MHz, DMSO-*d*<sub>6</sub>) spectrum of 8-hydroxyeriodictyol (**16**) (violet) and 6-hydroxyeriodictyol (**17**) (green).

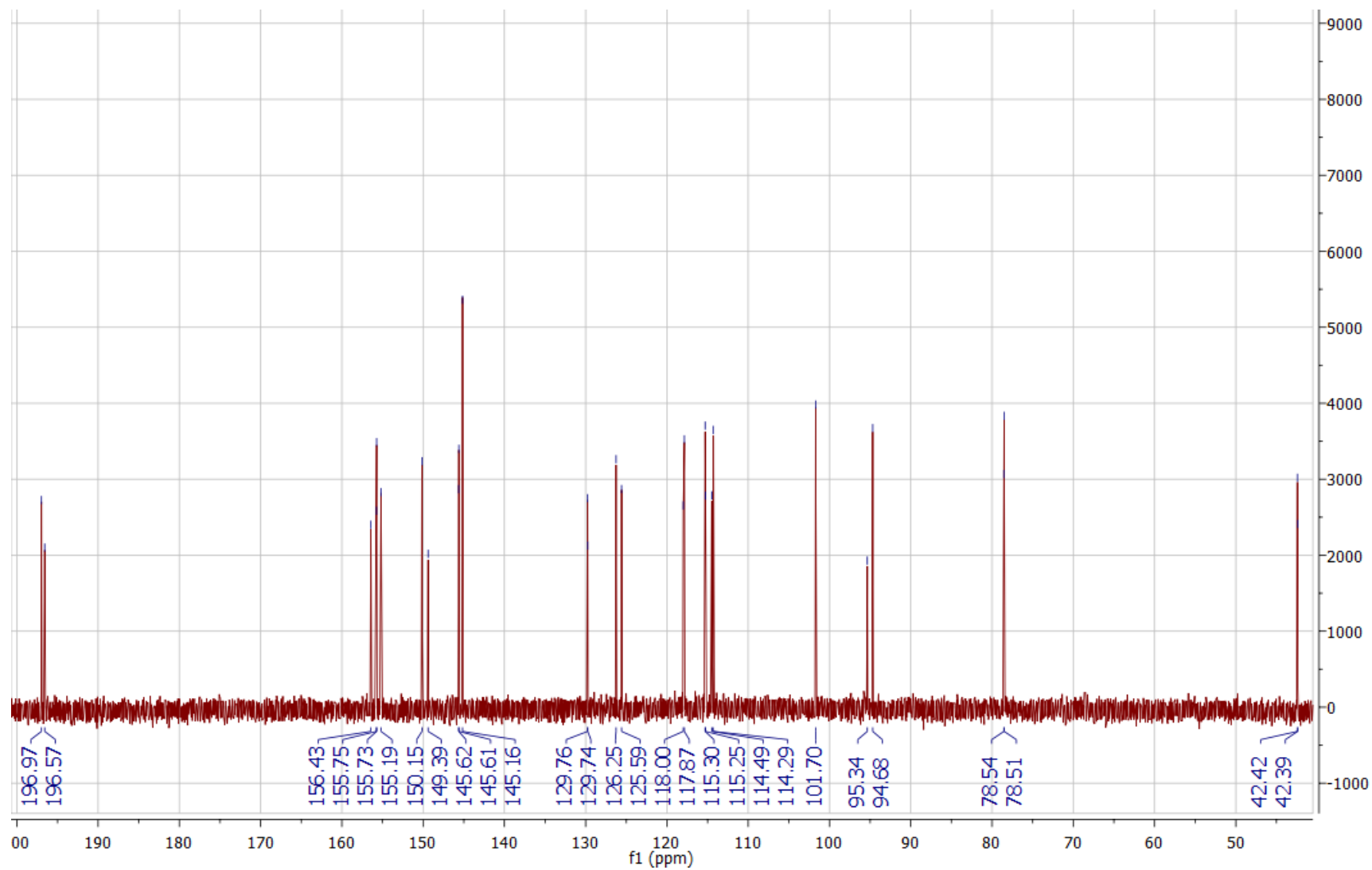


Figure S6.  $^{13}\text{C}$ -NMR (150 MHz,  $\text{DMSO-}d_6$ ) spectrum of 8-hydroxyperiodictyol and 6-hydroxyperiodictyol (**16**, **17**).

Table S1. Antioxidant activity of tested flavonoids.<sup>a</sup>

Compound	TEAC <sub>ABTS</sub>	TEAC <sub>DPPH</sub>	TEAC <sub>FRAP</sub>
<b>1</b>	0.084 ± 0.011	0.004 ± 0.001	ND
<b>2</b>	0.250 ± 0.014	0.005 ± 0.002	ND
<b>3</b>	16.645 ± 0.897	10.50 ± 0.117	17.686 ± 0.327
<b>4</b>	1.712 ± 0.041	0.008 ± 0.001	ND
<b>5</b>	0.165 ± 0.009	0.005 ± 0.001	ND
<b>6</b>	0.347 ± 0.020	0.017 ± 0.002	ND
<b>7</b>	13.988 ± 0.251	9.582 ± 0.315	10.619 ± 0.319
<b>8</b>	13.254 ± 0.123	0.098 ± 0.002	4.025 ± 0.175
<b>9</b>	14.173 ± 1.591	8.038 ± 0.061	8.900 ± 0.582
<b>10</b>	10.184 ± 1.768	5.560 ± 0.121	7.824 ± 0.657
<b>11</b>	34.450 ± 1.016	13.208 ± 0.080	36.895 ± 0.432
<b>12</b>	13.405 ± 0.826	8.496 ± 0.040	11.340 ± 0.203
<b>13</b>	20.763 ± 0.939	9.164 ± 0.097	12.861 ± 0.313
<b>14 and 15*</b>	17.370 ± 0.989	9.098 ± 0.045	8.686 ± 0.093
<b>16 and 17**</b>	29.243 ± 1.362	14.649 ± 0.182	22.367 ± 1.801
<b>18</b>	31.187 ± 1.353	14.150 ± 0.229	25.260 ± 0.909

<sup>a</sup> Results are expressed as the equivalent of  $\mu\text{mol}$  trolox (TEAC<sub>ABTS</sub>, TEAC<sub>DPPH</sub>, TEAC<sub>FRAP</sub>) per  $\mu\text{mol}$  of tested compound; SD – standard deviation; ND – not determined in the range of concentrations tested (50  $\mu\text{g}/\text{mL}$  - 10  $\text{mg}/\text{mL}$ ); \*ratio 19:1 (by HPLC); \*\*ratio 1:1.3 (by HPLC).