SUPPLEMENTARY MATERIAL

Xanthones from the herb of *Swertia elata* and their Anti-TMV Activity

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ABSTRACT

Two new xanthonones (**1-2**), together with four known ones (**3-6**), were isolated from whole herb of *Swertia elata*. Their structures were elucidated by spectroscopic methods including extensive ¹D- and ²D-NMR techniques. Compounds **1-6** were also evaluated for their anti-tobacco mosaic virus (Anti-TMV) activities. The results revealed that that **1-6** showed weak anti-TMV activities with inhibition rate in the range of 15.2–28.8%.

Keywords: *Swertia elata*, Xanthonones, Anti-TMV activity

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Table S1. ^1H and ^{13}C NMR Data of Compounds **1** and **2** (δ in ppm, in $\text{C}_5\text{D}_5\text{N}$, 500 and 125 MHz).

No.	1		2	
	δ_{C}	δ_{H} (m. <i>J</i> , Hz)	δ_{C}	δ_{H} (m. <i>J</i> , Hz)
1	155.0 s		154.8 s	
2	118.4 d	7.09 d (2.2)	118.0 d	7.00 d (2.2)
3	158.9 s		158.4 s	
4	120.9 d	6.70 d (2.2)	120.6 d	6.70 d (2.2)
5	120.5 d	7.72 s	122.1 d	7.70 s
6	140.5 s		134.0 s	
7	159.9 s		162.9 s	
8	109.0 d	7.43 s	109.1 d	7.74 s
9	176.5 s		176.1 s	
4a	155.8 s		156.0 s	
8a	113.5 s		115.9 s	
9a	112.7 s		111.2 s	
10a	147.0 s		148.0 s	
1'	36.3 t	2.62 t (7.2)	198.6 s	
2'	63.8 t	3.62 t (7.2)	30.7 q	2.51 s
1-OMe	55.9 q	3.87 s	56.0 q	3.86 s
3-OMe	56.2 q	3.83 s	56.3 q	3.81 s
7-OMe	56.1 q	3.89 s	56.2 q	3.88 s

Figure S1. ^{13}C NMR spectrum of Compounds 1

Figure S2. ^1H NMR spectrum of Compounds 1

Figure S3. ^{13}C NMR spectrum of Compounds 2

Figure S4. ^1H NMR spectrum of Compounds 2