

Responding to Editor and Reviewers's comments

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Chemical constituents of *Pilea microphylla* (L.)

## REVIEW 1

We thank for the corrections of the Reviewers and have tried to adjust the manuscript.

All errors corrected by the Reviewer were adjusted and highlighted in yellow color in the manuscript.

## REVIEW 2

### 1. Structure of 5 (on page 3) has the wrong CH<sub>3</sub>O- group at position 4'.

The HMBC correlations between the proton signal at  $\delta_H$  2.13 (5'-Me) and 2.16 (3'-Me) with C-4' as well as HMBC correlations between the proton signal at  $\delta_H$  3.66 (6'-OMe) with C-6' indicated the location of one methoxy group at C-6'.

### 2. A discussion of spectra for compounds 2 and 3 needs to be added

The authors are grateful to the reviewer for the positive comment.

### 3. For compound 5, the spectral signals in table 2 of the 3'-Me and 5'-Me groups should be reversed.

Based on the comparison of NMR spectral data with those reported for 2',4'-Dihydroxy-6'-methoxy-3',5'-dimethylchalcone indicated the location of two methyl groups at C-3' and C-5'.

Table 1. <sup>1</sup>H and <sup>13</sup>C-NMR data (CDCl<sub>3</sub>) of compound 5

Position n	Compound 5 (CDCl <sub>3</sub> )		2',4'-dihydroxy-6'-methoxy-3',5'-dimethylchalcone (CDCl <sub>3</sub> )	
	$\delta_H$ , J (Hz)	$\delta_C$	$\delta_H$ , J (Hz)	$\delta_C$
1		135.6		135.3
2	7.65 (2H, dd, 7.6, 2.0)	128.6	7.65 (2H, m)	128.4
3	7.41 (3H, m)	129.1	7.41 (3H, m)	128.9
4	7.41 (3H, m)	130.2	7.41 (3H, m)	130.2
5	7.41 (3H, m)	129.1	7.41 (3H, m)	128.9
6	7.65 (2H, dd, 7.6, 2.0)	128.6	7.65 (2H, m)	128.4
7	7.84 (1H, d, 15.7)	143.0	7.84 (1H, d, 15.7)	142.9
8	7.98 (1H, d, 15.7)	127.0	7.99 (1H, d, 15.7)	126.7
9		193.5		193.4

1'		109.3		109.0
2'		162.2		162.0
3'		106.7		106.6
4'		159.3		159.3
5'		109.0		109.0
6'		159.1		158.8
2'-OH	13.58 (1H, s)	-	13.62 (1H, s)	-
3'-Me	2.16 (3H, s)	8.4	2.16 (3H, s)	8.2
5'-Me	2.13 (3H, s)	7.7	2.13 (3H, s)	7.6
6'-OMe	3.66 (3H, s)	62.5	3.66 (3H, s)	62.4

*V. Choommongkol, K. Punturee, P. Klumphu, P. Rattanaburi, P. Meepowpan and P. Suttiarporn, "Microwave-assisted extraction of anticancer flavonoid, 2',4'-dihydroxy-6'-methoxy-3',5'-dimethyl chalcone (DMC), rich extract from *Syzygium nervosum* fruits", Molecules, 1397, 2022.*

*E. C. Amor, I. M. Villasenor, A. Yasin, and M. Iqbal Choudhary, "Prolyl Endopeptidase Inhibitors from *Syzygium samarangense* (Blume) Merr. & L. M. Perry", Z. Naturforsch. 59 c, 86–92, 2004.*

**4. The authors need to further explain why the  $^{13}\text{C}$  NMR spectral signals in groups 3 and 5 of compound 5 in table 2 are so different and different from the literature.**

Overall, the elucidation of their structures is credible. But, the authors did not write the paper carefully. The authors greatly appreciated the detailed remarks by the Reviewer (Table 1).

**5. If possible, for compound 7, the literature should be replaced with the same solvent  $\text{CDCl}_3$ .**

The good comparison of NMR spectral data with those reported for kaempferol in same solvent  $\text{CD}_3\text{OD}$  proposed that compound 7 was kaempferol.

**NMR data for compound 7 and kaempferol in  $\text{CD}_3\text{OD}$**

Position	Compound 7 ( $\text{CD}_3\text{OD}$ )		Kaempferol ( $\text{CD}_3\text{OD}$ )	
	$^1\text{H-NMR}$	$^{13}\text{C-NMR}$	$^1\text{H-NMR}$	$^{13}\text{C-NMR}$
2		148.1		146.8
3		137.2		136.6
4		177.4		176.6
5		162.5		162.3
6	6.18 (1H, d, 2.1)	99.3	6.28 (1H, d, 2.0)	99.2
7		165.6		164.9
8	6.40 (1H, d, 2.1)	94.5	6.52 (1H, d, 2.0)	94.4
9		158.3		157.7
10		104.6		104.1
1'		123.8		123.3
2'	8.09 (2H, d, 8.9)	130.7	8.04 (2H, dd, 11.5, 2.8)	125.9

3'	6.91 (2H, <i>d</i> , 8.9)	116.3	6.95 (2H, <i>dd</i> , 9.8, 2.7)	116.3
4'		160.5		160.1
5'	6.91 (2H, <i>d</i> , 8.9)	116.3	6.95 (2H, <i>dd</i> , 9.8, 2.7)	116.3
6'	8.09 (2H, <i>d</i> , 8.9)	130.7	8.04 (2H, <i>dd</i> , 11.5, 2.8)	125.9

*L. Siti Aisyah1 , Y.Febriani Yun1 , T. Herlina , E. Julaeha , A. Zainuddin , I. Nurfarida , A. Tatang Hidayat, U. Supratman and Y. Shiono, “Flavonoid compounds from the Leaves of Kalanchoe prolifera and their cytotoxic activity against P-388 Murine Leukimia Cells”, Natural Product Sciences, 23 (2), 139-145, 2017*