

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 CH₃O- group at position 4'.

The HMBC correlations between the proton signal at δ_H 2.13 (5'-Me) and 2.16 (3'-Me) with C-4' as well as HMBC correlations between the proton signal at δ_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. ¹H and ¹³C-NMR data (CDCl₃) of compound 5

Position	Compound 5 (CDCl ₃)		2',4'-dihydroxy-6'-methoxy- 3',5'-dimethylchalcone (CDCl ₃)	
	δ_H , J (Hz)	δ_C	δ_H , J (Hz)	δ_C
1		135.6		135.3
2	7.65 (2H, <i>dd</i> , 7.6, 2.0)	128.6	7.65 (2H, <i>m</i>)	128.4
3	7.41 (3H, <i>m</i>)	129.1	7.41 (3H, <i>m</i>)	128.9
4	7.41 (3H, <i>m</i>)	130.2	7.41 (3H, <i>m</i>)	130.2
5	7.41 (3H, <i>m</i>)	129.1	7.41 (3H, <i>m</i>)	128.9
6	7.65 (2H, <i>dd</i> , 7.6, 2.0)	128.6	7.65 (2H, <i>m</i>)	128.4
7	7.84 (1H, <i>d</i> , 15.7)	143.0	7.84 (1H, <i>d</i> , 15.7)	142.9
8	7.98 (1H, <i>d</i> , 15.7)	127.0	7.99 (1H, <i>d</i> , 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}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 CDCl_3 .

The good comparison of NMR spectral data with those reported for kaempferol in same solvent CD_3OD proposed that compound 7 was kaempferol.

NMR data for compound 7 and kaempferol in CD_3OD

Position	Compound 7 (CD_3OD)		Kaempferol (CD_3OD)	
	^1H -NMR	^{13}C -NMR	^1H -NMR	^{13}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