



## Correction to: Synthesis and antibacterial activity of novel chalcone derivatives bearing a coumarin moiety

Yi-Hui Wang<sup>1</sup> · Shi-Chun Jiang<sup>1</sup> · Ying Chen<sup>1</sup> · Tao Guo<sup>1</sup> · Rong-Jiao Xia<sup>1</sup> · Xu Tang<sup>1</sup> · Ming He<sup>1</sup> · Wei Xue<sup>1</sup>

Published online: 23 July 2020  
© Institute of Chemistry, Slovak Academy of Sciences 2020

**Correction to: Chemical Papers (2019) 73:2493–2500**  
<https://doi.org/10.1007/s11696-019-00802-0>

Unfortunately the original article was published Online with incorrect entries as given below in the Table 3.

Table 3 was submitted for publication with numerous incorrect entries. %Inhibition values for the entries for compound **3l** at 50  $\mu\text{g mL}^{-1}$  against Xoo, and for 4-hydroxycoumarin and for compounds **3a–3v** against Xac, are corrected. The values for thiodiazole-copper control in Table 3 essentially are unchanged. Where the difference between the corrected value and the previous incorrect value is greater than two-fold, both the correct and the previously reported incorrect values are listed here. The revised Table 3 given below shows all entries, each with their correct values. The corrected values are for **3l**, % Inhibition at 50  $\mu\text{g mL}^{-1}$  against Xoo is  $19 \pm 3$ ; for 4-hydroxycoumarin, % Inhibition at 50  $\mu\text{g mL}^{-1}$  against Xac is  $21 \pm 4$  and % Inhibition at 100  $\mu\text{g mL}^{-1}$  against Xac is  $29 \pm 4$ . The corrected values for % Inhibition at 50  $\mu\text{g mL}^{-1}$  against Xac are: **3a** ( $4 \pm 4$ , previously was  $47 \pm 2$ ); **3b** ( $18 \pm 1$ ); **3c** ( $34 \pm 3$ ); **3d** ( $19 \pm 4$ ); **3e** ( $41 \pm 2$ , previously was  $4 \pm 2$ ); **3f** ( $13 \pm 5$ , previously was  $6 \pm 5$ ); **3g** ( $9 \pm 4$ , previously was  $4 \pm 1$ ); **3h** ( $3 \pm 5$ , previously was  $1 \pm 4$ ); **3i** ( $34 \pm 3$ ); **3j** ( $19 \pm 3$ , previously was  $51 \pm 4$ ); **3k** ( $33 \pm 3$ ); **3l** ( $22 \pm 5$ ); **3m** ( $29 \pm 4$ , previously was  $6 \pm 5$ ); **3n** ( $54 \pm 4$ , previously was  $10 \pm 2$ ); **3o** ( $37 \pm 1$ , previously was  $14 \pm 1$ ); **3p** ( $45 \pm 4$ , previously was  $5 \pm 2$ ); **3q** ( $9 \pm 3$ ,

previously was  $32 \pm 7$ ); **3r** ( $19 \pm 3$ ); **3s** ( $36 \pm 3$ , previously was  $6 \pm 2$ ); **3t** ( $33 \pm 4$ , previously was  $12 \pm 4$ ); **3u** ( $7 \pm 1$ , previously was  $20 \pm 3$ ); **3v** ( $27 \pm 1$ , previously was  $5 \pm 1$ ). The corrected values are % Inhibition at 100  $\mu\text{g mL}^{-1}$  against Xac: **3a** ( $10 \pm 3$ , previously was  $71 \pm 2$ ); **3b** ( $22 \pm 2$ , previously was  $46 \pm 4$ ); **3c** ( $49 \pm 4$ ); **3d** ( $33 \pm 5$ ); **3e** ( $72 \pm 3$ , previously was  $6 \pm 3$ ); **3f** ( $30 \pm 1$ ); **3g** ( $23 \pm 1$ ); **3h** ( $9 \pm 4$ ); **3i** ( $58 \pm 2$ , previously was  $23 \pm 2$ ); **3j** ( $34 \pm 2$ ); **3k** ( $57 \pm 5$ ); **3l** ( $28 \pm 4$ ); **3m** ( $54 \pm 3$ , previously was  $10 \pm 5$ ); **3n** ( $72 \pm 4$ , previously was  $13 \pm 3$ ); **3o** ( $60 \pm 3$ , previously was  $17 \pm 4$ ); **3p** ( $78 \pm 5$ , previously was  $7 \pm 4$ ); **3q** ( $18 \pm 3$ , previously was  $48 \pm 2$ ); **3r** ( $29 \pm 3$ ); **3s** ( $50 \pm 4$ , previously was  $9 \pm 2$ ); **3t** ( $60 \pm 1$ , previously was  $17 \pm 3$ ); **3u** ( $16 \pm 2$ ); **3v** ( $47 \pm 4$ , previously was  $12 \pm 2$ ).

The revision of these data in Table 3 does not affect the conclusions of this paper. Its conclusions were based on the  $\text{EC}_{50}$  data of Table 4. The  $\text{EC}_{50}$  data were obtained by a separate experiment from the experiment used for the % Inhibition data of Table 3 (as stated on p. 2497). From the data in Table 4 on p. 2499, and the statements in the fourth paragraph on pp. 2497 and 2498 (“Compounds **3c**, **3e**, **3i**, **3k**, **3m**, **3n**, **3o**, **3p**, **3s**, **3t**, and **3v** expressed strong antibacterial activity against Xac, with  $\text{EC}_{50}$  values of 98, 59, 80, 83, 94, 48, 72, 51, 94, 77, and 119  $\mu\text{g/mL}$ , respectively”), compounds **3e**, **3n**, and **3p** are identified as the most active compounds against Xac. The corrected data of Table 3 better support this conclusion. Moreover, the corrected data also support the statement (third paragraph on page 2497) that “Compounds **3c**, **3e**, **3i**, **3k**, **3m**, **3n**, **3o**, **3p**, **3s**, **3t** and **3v** showed qualified antibacterial activity against Xac at 100  $\mu\text{g/mL}$ , and the achieved inhibition ranged from 47 to 78%”.

The original article can be found online at <https://doi.org/10.1007/s11696-019-00802-0>.

✉ Ming He  
mhe1@gzu.edu.cn

✉ Wei Xue  
wxue@gzu.edu.cn

<sup>1</sup> State Key Laboratory Breeding Base of Green Pesticide and Agricultural Bioengineering, Key Laboratory of Green Pesticide and Agricultural Bioengineering, Ministry of Education, Guizhou University, Huaxi District, Guiyang 550025, China

**Table 3** Antibacterial activities of compounds **4-hydroxycoumarin**, **3a–3v**, and *Thiodiazole-copper*

Compound	Inhibition rate (%) <sup>a</sup>					
	<i>Xoo</i>		<i>Xac</i>		<i>Rs</i>	
	100 µg/mL	50 µg/mL	100 µg/mL	50 µg/mL	100 µg/mL	50 µg/mL
4-Hydroxy-coumarin	23 ± 4	15 ± 4	29 ± 4	21 ± 4	16 ± 3	9 ± 2
<b>3a</b>	71 ± 2	47 ± 2	10 ± 3	4 ± 4	39 ± 1	20 ± 4
<b>3b</b>	46 ± 4	29 ± 3	22 ± 2	18 ± 1	12 ± 2	7 ± 3
<b>3c</b>	42 ± 5	34 ± 5	49 ± 4	34 ± 3	18 ± 2	16 ± 1
<b>3d</b>	46 ± 3	26 ± 5	33 ± 5	19 ± 4	20 ± 2	8 ± 1
<b>3e</b>	6 ± 3	4 ± 2	72 ± 3	41 ± 2	28 ± 5	24 ± 3
<b>3f</b>	21 ± 2	6 ± 5	30 ± 1	13 ± 5	29 ± 3	26 ± 2
<b>3g</b>	18 ± 5	4 ± 1	23 ± 1	9 ± 4	14 ± 3	8 ± 4
<b>3h</b>	6 ± 2	1 ± 4	9 ± 4	3 ± 5	20 ± 3	11 ± 5
<b>3i</b>	23 ± 2	17 ± 2	58 ± 2	34 ± 3	66 ± 5	49 ± 3
<b>3j</b>	60 ± 3	51 ± 4	34 ± 2	19 ± 3	32 ± 3	27 ± 5
<b>3k</b>	39 ± 5	26 ± 4	57 ± 5	33 ± 3	48 ± 6	33 ± 2
<b>3l</b>	40 ± 4	19 ± 3	28 ± 4	22 ± 5	15 ± 7	7 ± 1
<b>3m</b>	10 ± 5	6 ± 5	54 ± 3	29 ± 4	23 ± 2	22 ± 3
<b>3n</b>	13 ± 3	10 ± 2	72 ± 4	54 ± 4	11 ± 2	1 ± 5
<b>3o</b>	17 ± 4	14 ± 1	60 ± 3	37 ± 1	13 ± 3	0 ± 4
<b>3p</b>	7 ± 4	5 ± 2	78 ± 5	45 ± 4	38 ± 5	12 ± 1
<b>3q</b>	48 ± 2	32 ± 7	18 ± 3	9 ± 3	15 ± 2	1 ± 3
<b>3r</b>	24 ± 1	22 ± 1	29 ± 3	19 ± 3	20 ± 4	15 ± 6
<b>3s</b>	9 ± 2	6 ± 2	50 ± 4	36 ± 3	36 ± 6	28 ± 1
<b>3t</b>	17 ± 3	12 ± 4	60 ± 1	33 ± 4	26 ± 1	23 ± 6
<b>3u</b>	29 ± 5	20 ± 3	16 ± 2	7 ± 1	32 ± 3	30 ± 5
<b>3v</b>	12 ± 2	5 ± 1	47 ± 4	27 ± 1	12 ± 2	1 ± 5
<i>Thiodiazole-copper</i> <sup>b</sup>	36 ± 3	26 ± 4	37 ± 4	26 ± 4	41 ± 4	24 ± 2

<sup>a</sup>Average of three replicates<sup>b</sup>The commercial antibacterial agent *Thiodiazole-copper* was used as positive control

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.