

Correction

Novel 2-Thioxanthine and Dipyrimidopyridine Derivatives: Synthesis and Antimicrobial Activity[†]

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The authors wish to make the following changes to their paper [1]. The omitted to put ¹³C-NMR before the data of three compounds. Also, they repeated the same IR and ¹³C-NMR data for one compound with the same structure, as well as some minor typing errors. Please note the following:

1. On page 19264, line 31, the sentence “giving 4,5-diminouracil 3” should be replaced with “giving 4,5-diaminouracil 3”.
2. On page 19268, line 11, the sentence “Anal. calcd. for C₁₃H₁₁ClN₄OS (306.77): C, 50.90; H, 3.91; N, 18.26” should be replaced with “Anal. calcd. for C₁₃H₁₁ClN₄OS (306.77): C, 50.90; H, 3.61; N, 18.26”.
3. On page 19268, lines 14 and 15, the sentence “¹H-NMR (DMSO-*d*₆): 10.76 (s, 1H, NH), 8.04–8.01 (d, 1H, *J* = 1.8, arom.), 7.50–7.50 (m, 1H, *J* = 1.2, arom.), 7.22–7.19 (d, 1H, *J* = 8.4, arom.), 7.12–7.07 (m, 1H, *J* = 7.5, arom.)” should be replaced with “¹H-NMR (DMSO-*d*₆): 10.76 (s, 1H, NH), 8.04–8.01 (d, 1H, *J* = 1.8, arom.), 7.51–7.50 (m, 1H, arom.), 7.22–7.19 (d, 1H, *J* = 8.4, arom.), 7.12–7.07 (m, 1H, *J* = 7.5, arom.)”.
4. On page 19268, line 29, the sentence “107.11, 113.42, 122.64, 127.89, 136.57, 141.48 (C-S), 149.83, 153.01, 154.23 (C=O) ppm” should be replaced with “107.11, 113.42, 122.64, 127.89, 141.48 (C-S), 146.57, 149.83, 153.01, 154.23 (C=O) ppm”.
5. On page 19268, line 34, the sentence “¹H-NMR (DMSO-*d*₆): 13.23 (s, 1H, OH), 10.02 (s, 1H, NH), 7.66–6.64” should be replaced with “¹H-NMR (DMSO-*d*₆): 13.23 (s, 1H, OH), 10.02 (s, 1H, NH), 7.66–7.65”.
6. On page 19269, lines 3–5, the sentence “¹H-NMR (DMSO-*d*₆): 13.12 (s, 1H, OH), 10.98 (s, 1H, NH), 7.820–7.815 (d, 1H, *J* = 1.5, arom.), 7.15–7.01 (m, 2H, arom.), 6.87–6.80 (m, 1H, arom.), 4.29 (s, 3H, SCH₃), 3.79 (s, 3H, NCH₃); 16.21 (SCH₃), 28.98 (NCH₃), 107.10, 113.41, 122.55, 127.72, 128.17, 136.61, 141.32 (C-S), 149.83, 152.24, 154.13 (C=O) ppm” should be replaced with “¹H-NMR (DMSO-*d*₆): 13.12 (s, 1H, OH), 10.98 (s, 1H, NH), 7.82–7.81 (d, 1H, *J* = 1.5, arom.), 7.15–7.01 (m, 2H, arom.), 6.87–6.80 (m, 1H, arom.), 4.29 (s, 3H, SCH₃), 3.79 (s, 3H, NCH₃); ¹³C-NMR (DMSO-*d*₆): δ = 16.21 (SCH₃), 28.98 (NCH₃), 107.10, 113.41, 122.55, 127.72, 128.17, 136.61, 139.29, 141.32 (C-S), 149.83, 152.24, 154.13 (C=O) ppm”.
7. On page 19269, line 17, the sentence “16.18 (SCH₃), 29.38 (NCH₃), 44.18 (NCH₃), 108.13, 113.27” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 16.18 (SCH₃), 29.38 (NCH₃), 44.18 (NCH₃), 108.13, 113.27”.

8. On page 19269, lines 29–31, the sentence “16.31 (SCH₃), 29.27 (NCH₃), 44.16 (NCH₃), 52.01 (OCH₃), 108.13, 111.29, 113.27, 122.42, 127.89, 128.13, 136.57, 141.48 (C-S), 149.83, 153.01, 154.21 (C=O) ppm” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 16.31 (SCH₃), 29.27 (NCH₃), 44.16 (NCH₃), 52.01 (OCH₃), 111.29, 118.23, 123.27, 124.42, 127.89, 128.13, 139.51, 141.58 (C-S), 152.83, 153.81, 154.41 (C=O) ppm”.
9. On page 19270, line 10, the sentence “IR (KBr) ν_{max} (cm^{−1}): 3654 (OH), 3076 (CH arom.), 2928 (CH aliph.), 2839 (CH aliph.)” should be replaced with “IR (KBr) ν_{max} (cm^{−1}): 3076 (CH arom.), 2928 (CH aliph.), 2839 (CH aliph.)”.
10. On page 19270, lines 16–19, the sentence “IR (KBr) ν_{max} (cm^{−1}): 3052 (CH arom.), 2830 (CH aliph.), 1674 (C=O), 1627 (C=N); ¹H-NMR (DMSO-*d*₆): 7.43–7.41 (m, 1H, arom.), 7.24–7.21 (m, 2H, arom.), 7.18–7.12 (m, 1H, arom.), 4.22 (s, 3H, SCH₃), 3.81 (s, 3H, OCH₃), 3.68 (s, 3H, NCH₃), 3.69 (s, 3H, NCH₃); MS: *m/z* (%) = M⁺, 316 (21), 302 (100), 287 (13)” should be deleted.
11. On page 19270, line 31, the sentence “91.2, 111.9, 117.2, 126.1, 129.3, 131.3, 162.2 (C=O), 171.1 (C=S) ppm; MS: *m/z* (%) = M⁺ + 2” should be replaced with “91.2, 111.9, 117.2, 126.1, 129.3, 151.3, 162.2 (C=O), 171.1 (C=S) ppm; MS: *m/z* (%) = M⁺ + 2”.
12. On page 19271, line 9, the sentence “112.1, 117.5, 126.7, 129.6, 131.4, 162.4 (C=O), 171.3 (C=S) ppm” should be replaced with “112.1, 117.5, 126.7, 129.6, 151.4, 162.4 (C=O), 171.3 (C=S) ppm”.
13. On page 19271, line 17, the sentence “117.3, 126.0, 129.2, 131.2, 162.4 (C=O), 171.3 (C=S) ppm” should be replaced with “117.3, 126.0, 129.2, 151.2, 162.4 (C=O), 171.3 (C=S) ppm”.
14. On page 19271, line 26, the sentence “131.3, 132.0, 162.2 (C=O), 171.1 (C=S) ppm; MS: *m/z* (%) = M⁺, 418 (1), 377 (5), 97 (12), 91 (100)” should be replaced with “131.3, 152.0, 162.2 (C=O), 171.1 (C=S) ppm; MS: *m/z* (%) = M⁺, 418 (1), 377 (5), 97 (12), 91 (100)”.
15. On page 19272, lines 7–10, the sentence “¹³C-NMR (DMSO-*d*₆): δ = 33.46 (CH), 45.9 (CH₃), 125.08, 127.9, 128.2, 128.9, 129.52, 131.20, 161.9 (C=O), 169.8 (C=S) ppm; MS: *m/z* (%) = M⁺ + 2, 422 (0.3), M⁺, 420 (1), 129 (19), 74 (39), 69 (100); Anal. calcd. for C₁₇H₁₄ClN₅O₂S₂ (419.90): C, 48.63; H, 3.63; N, 16.68. Found: C, 49.02; H, 2.86; N, 17.01” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 33.46 (CH), 45.9 (CH₃), 95.08, 127.9, 128.2, 128.9, 129.52, 131.20, 161.9 (C=O), 169.8 (C=S) ppm; MS: *m/z* (%) = M⁺ + 2, 422 (0.3), M⁺, 420 (1), 129 (19), 74 (39), 69 (100); Anal. calcd. for C₁₇H₁₄ClN₅O₂S₂ (419.90): C, 48.63; H, 3.36; N, 16.68. Found: C, 49.02; H, 2.86; N, 17.01”.
16. On page 19272, lines 15–17, the sentence “¹³C-NMR (DMSO-*d*₆): δ = 33.56 (CH), 46.33 (CH₃), 125.24, 126.72, 127.45, 128.12, 128.43, 129.21, 129.91, 131.82, 162.40 (C=O), 171.3 (C=S) ppm” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 33.56 (CH), 46.33 (CH₃), 95.24, 126.72, 127.45, 128.12, 128.43, 129.21, 129.91, 151.82, 162.40 (C=O), 171.3 (C=S) ppm”.
17. On page 19272, lines 23, 24, the sentence “¹³C-NMR (DMSO-*d*₆): δ = 33.55 (CH), 46.41 (CH₃), 125.27, 128.11, 128.43, 128.93, 129.86, 131.34, 161.93” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 33.55 (CH), 46.41 (CH₃), 95.27, 128.11, 128.43, 128.93, 129.86, 151.34, 161.93”.
18. On page 19272, lines 32, 33, the sentence “¹³C-NMR (DMSO-*d*₆): δ = 33.48 (CH), 45.88 (CH₃), 125.16, 127.89, 128.16, 128.91, 129.47, 131.16, 161.89 (C=O), 169.77 (C=S) ppm” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 33.48 (CH), 45.88 (CH₃), 95.16, 127.89, 128.16, 128.91, 129.47, 151.16, 161.89 (C=O), 169.77 (C=S) ppm”.
19. On page 19272, lines 37 and 38, the sentence “IR (KBr) ν_{max} (cm^{−1}): 3321 (NH), 3096 (CH arom.), 2901 (CH aliph.), 1684 (C=O), 1580 (C=N), 1141, 1081 (C=S)” should be replaced with “IR (KBr) ν_{max} (cm^{−1}): 3654 (OH), 3321 (NH), 3096 (CH arom.), 2901 (CH aliph.), 1684 (C=O), 1580 (C=N), 1141, 1081 (C=S)”.
20. On page 19273, lines 2 and 3, the sentence “¹³C-NMR (DMSO-*d*₆): δ = 33.46 (CH), 45.64 (CH₃), 125.02, 127.84, 128.12, 128.76, 129.32, 131.14, 161.85 (C=O), 169.73 (C=S) ppm” should be replaced with “¹³C-NMR (DMSO-*d*₆): δ = 33.46 (CH), 45.64 (CH₃), 95.05, 115.02, 127.84, 128.12, 128.76, 129.32, 131.14, 151.24, 161.85 (C=O), 169.73 (C=S) ppm”.

The authors would like to apologize for any inconvenience caused to the readers by these changes which do not affect the scientific results. The manuscript will be updated and the original will remain online on the article webpage, with a reference to this Correction.

References

1. El-kalyoubi, S.; Agili, F.; Youssif, S. Novel 2-Thioxanthine and Dipyrimidopyridine Derivatives: Synthesis and Antimicrobial Activity. *Molecules* **2015**, *20*, 19263–19276. [[CrossRef](#)] [[PubMed](#)]



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