

Correction to “Copper-Catalyzed *N*-Benzylation of Amines via Aerobic C–C Bond Cleavage”

Wenyu Fan, Youqing Yang, Jianhua Lei, Qijian Jiang, and Wang Zhou*

J. Org. Chem. **2015**, *80* (17), 8782–8789. DOI: 10.1021/acs.joc.5b01670

The substrate scale in Scheme 2 should be revised for **1a** (1.0 mmol) and **2** (0.5 mmol). As a result, the corresponding adjustments in the Experimental Section should be made follows:

Page 8785, column 1, paragraph 6, lines 2–5: “(**1a**, 0.50 mmol, 98 mg)...for 36 h” should be changed to “(**1a**, 1.0 mmol, 196 mg), aniline (**2a**, 0.5 mmol, 46.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 24 h”.

Page 8785, column 2, paragraph 2, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-methylaniline (**2b**, 0.5 mmol, 53.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8785, column 2, paragraph 3, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 3-methylaniline (**2c**, 0.5 mmol, 53.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8785, column 2, paragraph 4, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-methylaniline (**2d**, 0.5 mmol, 53.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8785, column 2, paragraph 5, lines 2–5: “(**1a**, 0.50 mmol, 98 mg)...afforded 89 mg (79%)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2,4,6-trimethylaniline (**2e**, 0.5 mmol, 67.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 48 h using the typical procedure afforded 89 mg (74%)”.

Page 8785, column 2, paragraph 6, lines 2–5: “(**1a**, 0.50 mmol, 98 mg)...afforded 89 mg (79%)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-methoxyaniline (**2f**, 0.5 mmol, 61.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 36 h using the typical procedure afforded 77 mg (68%)”.

Page 8785, column 2, paragraph 7, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-fluoroaniline (**2g**, 0.5 mmol, 55.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8785, column 2, paragraph 8, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-chloroaniline (**2h**, 0.5 mmol, 63.8 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 2, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.05 mmol, 9.9 mg)” should be

changed to “(**1a**, 1.0 mmol, 196 mg), 4-bromoaniline (**2i**, 0.5 mmol, 86 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 3, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-bromoaniline (**2j**, 0.5 mmol, 86 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 4, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-iodoaniline (**2k**, 0.5 mmol, 110 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 5, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 3-iodoaniline (**2l**, 0.5 mmol, 110 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 6, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-iodoaniline (**2m**, 0.5 mmol, 110 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 1, paragraph 7, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 4-aminobenzonitrile (**2n**, 0.5 mmol, 59 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 2, paragraph 1, line 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-aminopyridine (**2o**, 0.5 mmol, 47 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 2, paragraph 2, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 3-aminopyridine (**2p**, 0.25 mmol, 47 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 2, paragraph 3, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-aminonaphthalene (**2q**, 0.25 mmol, 71.5 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)”.

Page 8786, column 2, paragraph 4, lines 2–4: “(**1a**, 0.50 mmol, 98 mg)...monohydrate (0.050 mmol, 9.9 mg)” should be changed to “(**1a**, 1.0 mmol, 196 mg), 2-amino-1,3,4-thiadiazole (**2r**, 0.5 mmol, 50.6 mg), CuCl₂·2H₂O (0.05 mmol,

Published: July 19, 2016

8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)".

Page 8786, column 2, paragraph 5, lines 2–4: "(1a, 0.50 mmol, 98 mg),...monohydrate (0.050 mmol, 9.9 mg)" should be changed to "(1a, 1.0 mmol, 196 mg), 2-phenylethanamine (2s, 0.5 mmol, 60.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)".

Page 8786, column 2, paragraph 6, lines 2–5: "(1a, 0.50 mmol, 98 mg),...for 36 h" should be changed to "(1a, 1.0 mmol, 196 mg), 1-methyl-3-phenylpropyl amine (2t, 0.5 mmol, 74.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 24 h".

Page 8786, column 2, paragraph 7, lines 2–4: "(1a, 0.50 mmol, 98 mg),...monohydrate (0.050 mmol, 9.9 mg)" should be changed to "(1a, 1.0 mmol, 196 mg), furan-2-amine (2u, 0.5 mmol, 41.5 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)".

Page 8787, column 1, paragraph 2, lines 2–4: "(1a, 0.50 mmol, 98 mg),...monohydrate (0.050 mmol, 9.9 mg)" should be changed to "(1a, 1.0 mmol, 196 mg), cyclohexylamine (2v, 0.5 mmol, 49.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)".

Page 8787, column 1, paragraph 3, lines 2–4: "(1a, 0.50 mmol, 98 mg),...monohydrate (0.050 mmol, 9.9 mg)" should be changed to "(1a, 1.0 mmol, 196 mg), morpholine (2w, 0.5 mmol, 43.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg)".

Page 8787, column 1, paragraph 4, lines 2–5: "(1a, 0.50 mmol, 98 mg),...for 40 h" should be changed to "(1a, 1.0 mmol, 196 mg), piperidine (2x, 0.5 mmol, 42.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) for 72 h".

Page 8787, column 1, paragraph 5, lines 2–5: "(1a, 0.50 mmol, 98 mg),... for 40 h" should be changed to "(1a, 1.0 mmol, 196 mg), *N*-methylaniline (2y, 0.5 mmol, 53.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) for 36 h".

Page 8787, column 1, paragraph 6, lines 2–5: "(1a, 0.50 mmol, 98 mg)... for 40 h" should be changed to "(1a, 1.0 mmol, 196 mg), (*R*)-1-phenylethylamine (2z-*R*, 0.5 mmol, 60.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 36 h".

Page 8787, column 1, paragraph 7, lines 2–5: "(1a, 0.50 mmol, 98 mg),... for 40 h" should be changed to "(1a, 1.0 mmol, 196 mg), (*S*)-1-phenylethylamine (2z-*S*, 0.5 mmol, 60.6 mg), CuCl₂·2H₂O (0.05 mmol, 8.5 mg), and 1,10-phenanthroline monohydrate (0.10 mmol, 19.8 mg) in acetonitrile (2.0 mL) for 36 h".

In addition to the above corrections, some other corrections should be corrected as below:

Page 8787, column 2, paragraph 1, line 3: "CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 2, lines 3 and 4: "CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 3, lines 3 and 4: "CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 4, line 3: "CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 5, lines 1–3: "1-(4-bromophenyl)-2-phenylethanone (1j, 0.50 mmol, 138 mg),... CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "1,2-bis(4-bromophenyl)ethanone (1j, 0.50 mmol, 177 mg), aniline (2a, 0.25 mmol, 23 mg), CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 6, lines 1–3: "2-phenyl-1-(*p*-tolyl)ethanone (1k, 0.50 mmol, 106 mg), aniline (2a, 0.25 mmol, 23 mg, 22 μL), CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "1,2-bis(*p*-tolyl)ethanone (1k, 0.50 mmol, 112 mg), aniline (2a, 0.25 mmol, 23 mg), CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".

Page 8787, column 2, paragraph 7, line 3: "CuCl₂·2H₂O (0.25 mmol, 4.3 mg)" should be changed to "CuCl₂·2H₂O (0.025 mmol, 4.3 mg)".