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Synthesis of 2,6-Disubstituted Imidazo[2,1-*b*][1,3,4]thiadiazoles through Cyclization and Suzuki–Miyaura Cross-Coupling Reactions

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Keywords: Palladium / Microwave chemistry / Fused-ring systems / Cross-coupling

In the original article^[1] the second part of Table 3 was inadvertently omitted; the complete Table 3 is given on the following pages.

The Editors

[1] C. Copin, N. Henry, F. Buron, S. Routier, *Eur. J. Org. Chem.* **2012**, 3079–3083.

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Table 3. Synthesis of compounds 17–42.

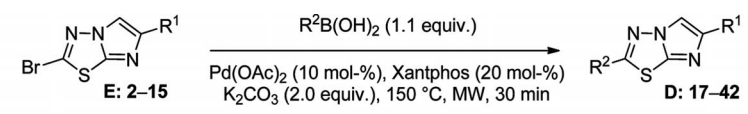
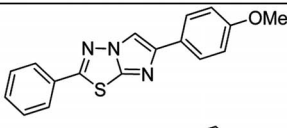
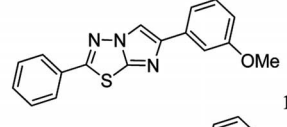
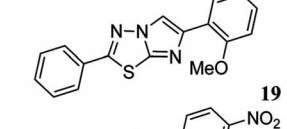
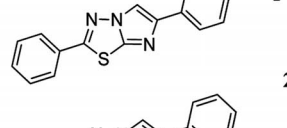
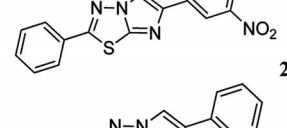
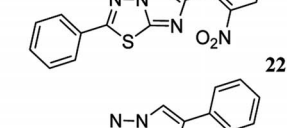
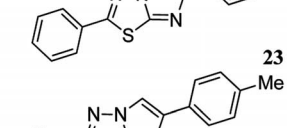
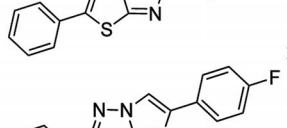
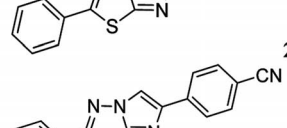
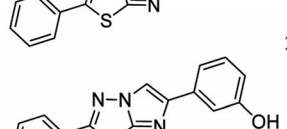
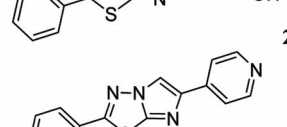
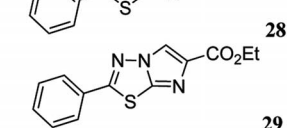
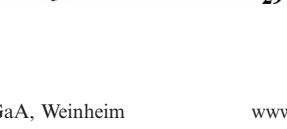
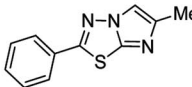
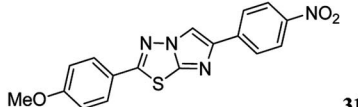
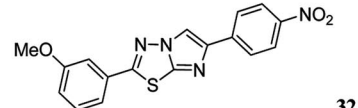
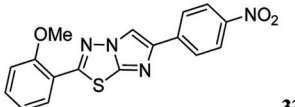
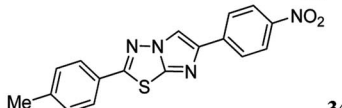
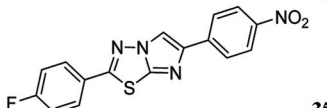
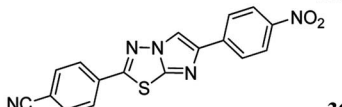
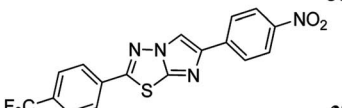
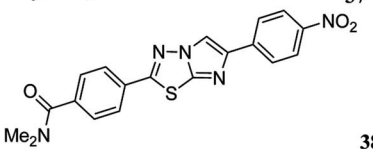
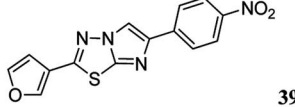
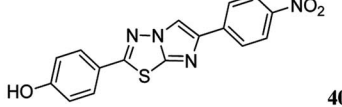
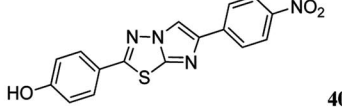
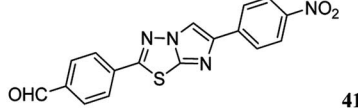
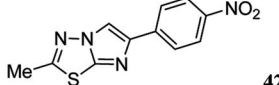
					
Entry	Starting material E	R ¹	R ²	Product D	Yield [%] ^[a]
1	6	4-MeOC ₆ H ₄	C ₆ H ₅	 17	78
2	5	3-MeOC ₆ H ₄	C ₆ H ₅	 18	73
3	4	2-MeOC ₆ H ₄	C ₆ H ₅	 19	82
4	10	4-NO ₂ C ₆ H ₄	C ₆ H ₅	 20	83
5	9	3-NO ₂ C ₆ H ₄	C ₆ H ₅	 21	73
6	8	2-NO ₂ C ₆ H ₄	C ₆ H ₅	 22	82
7	3	C ₆ H ₅	C ₆ H ₅	 23	90 ^[13]
8	7	4-MeC ₆ H ₄	C ₆ H ₅	 24	79
9	12	4-FC ₆ H ₄	C ₆ H ₅	 25	94
10	13	4-NCC ₆ H ₄	C ₆ H ₅	 26	91
11	11	3-HOC ₆ H ₄	C ₆ H ₅	 27	92
12	14	4-pyridinyl	C ₆ H ₅	 28	76
13	15	CO ₂ Et	C ₆ H ₅	 29	81

Table 3. (continued).

Entry	Starting material E	R ¹	R ²	Product D	Yield [%] ^[a]
14	2	Me	C ₆ H ₅		83
15	10	4-NO ₂ C ₆ H ₄	4-MeOC ₆ H ₄		86
16	10	4-NO ₂ C ₆ H ₄	3-MeOC ₆ H ₄		98
17	10	4-NO ₂ C ₆ H ₄	2-MeOC ₆ H ₄		94
18	10	4-NO ₂ C ₆ H ₄	4-MeC ₆ H ₄		80
19	10	4-NO ₂ C ₆ H ₄	4-FC ₆ H ₄		88
20	10	4-NO ₂ C ₆ H ₄	4-NCC ₆ H ₄		67
21	10	4-NO ₂ C ₆ H ₄	4-F ₃ CC ₆ H ₄		57
22	10	4-NO ₂ C ₆ H ₄	4-(Me) ₂ NCOC ₆ H ₄		32
23	10	4-NO ₂ C ₆ H ₄	4-furyl		70
24	10	4-NO ₂ C ₆ H ₄	4-HOC ₆ H ₄		ND
25	10	4-NO ₂ C ₆ H ₄	4-THPOC ₆ H ₄		84 ^b
26	10	4-NO ₂ C ₆ H ₄	4-OHCC ₆ H ₄		91
27	10	4-NO ₂ C ₆ H ₄	Me		65

[a] Yield is given for the isolated compound. ND: Not detected. [b] The compound involved in the reaction is THP protected. Additional treatment with 20% HCl was required to isolate **40**.