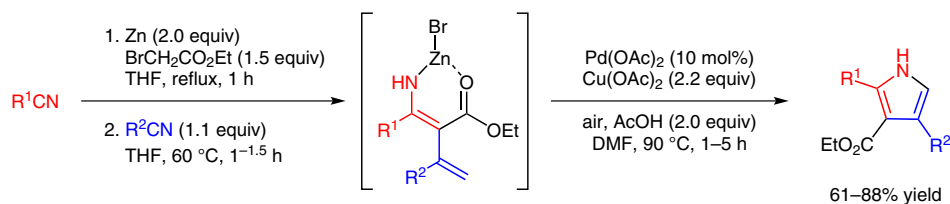


J. H. KIM, S. Y. CHOI, J. BOUFFARD, S.-G. LEE* (EWHA WOMANS UNIVERSITY, SEOUL, REPUBLIC OF KOREA)

Tandem One-Pot Synthesis of Polysubstituted NH-Pyrroles Involving the Palladium-Catalyzed Intramolecular Oxidative Amination of the Zinc Bromide Complex of β -Enamino Esters

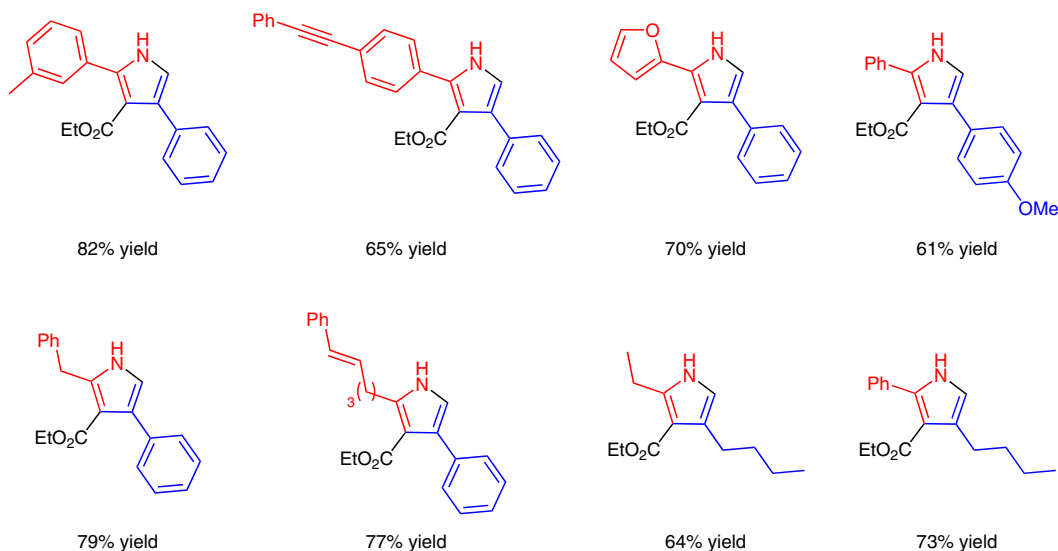
J. Org. Chem. **2014**, *79*, 9253–9261.

Oxidative Amination of the Zinc Bromide Complex of β -Enamino Esters



R¹ = Alk, Ar, HetAr, Bn
R² = Alk, Ar, CH₂CH₂Ph

Selected examples:



Significance: Lee and co-workers report a tandem palladium-catalyzed intramolecular oxidative olefin amination of the zinc bromide complex of α -vinylated β -amino esters to afford various 2,3,4-trisubstituted pyrroles in good yields.

Comment: The synthetic utility of this efficient and atom-economical procedure is shown by the synthesis of pyrrolophenanthrenes and pyranopyrrolones through selective palladium- and copper-catalyzed C–C and C–O bond-forming reactions.

SYNFACTS Contributors: Paul Knochel, Diana Haas
Synfacts 2015, 11(1), 0083 Published online: 15.12.2014
DOI: 10.1055/s-0034-1379650; Reg-No.: P15514SF

2015 © THIEME STUTTGART • NEW YORK

Category

Metal-Mediated
Synthesis

Key words

amination

zinc

pyrroles