

A Novel Route to 4-Aminopyrazoles and Aminopyrazolo[4,3-*b*]pyridines

Abdellatif M. Salaheldin, Tayseer A. Abdallah, Naglaa F. Radwan, and
Hamdi M. Hassaneen

Department of Chemistry, Faculty of Science, Cairo University, Giza, A. R. Egypt

Reprint requests to Dr. A. M. Salaheldin. E-mail: amsalaheldin@yahoo.com

Z. Naturforsch. **61b**, 1158 – 1161 (2006); received January 9, 2006

3-Oxo-2-arylhydrazononitriles **6** are readily converted into 4-aminopyrazoles **1** *via* reaction with α -haloketones, chloroacetonitrile and ethyl chloroacetate. The aminopyrazoles are readily converted into aminopyrazolo[4,3-*b*]pyridines upon treatment with malononitrile. Compounds are readily diazotized to yield unstable diazonium salts that readily cyclized into pyrazolo[4,3-*c*]pyridazines.

Key words: 2-Arylhydrazononitriles, Aminopyrazoles, α -Haloketones,
Aminopyrazolo[4,3-*b*]pyridines, Pyrazolo[4,3-*c*]pyridazine