

Synthesis of heterocyclic compounds from δ -unsaturated 1,3-diketo-esters. Albar, Hassan A.; Makki, Mohamad S. I.; Faidallah, Hassan M. Fac. Sci., Univ. King Abdulaziz, Jeddah, Saudi Arabia. Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1996), 35B(1), 23-9. CODEN: IJSBDB ISSN: 0376-4699. Journal written in English. CAN 124:175932 AN 1996:10722 CAPLUS (Copyright 2004 ACS on SciFinder (R))

Abstract

Diketo-esters have been synthesized and converted to the corresponding pyrazole (2), isoxazole and 4-pyrone derivs. Fusion of 2 with hydrazine hydrate give the corresponding acid hydrazides (3). Reaction of 3 with the appropriate isothiocyanate yield the disubstituted thiosemicarbazides which are cyclized into thiotriazoles, thiadiazoles and oxadiazoles. Condensation of 3 with arom. aldehydes yield the corresponding arylidenes which are cyclized to dihydro-oxadiazole and oxadiazole derivs. Mannich bases have also been prepd. from oxadiazole-2-thiones.