

ABSTRACT

Chestersiene, 4(4-methoxyphenoxy)buta-1,2-diene, a metabolite of the fungus Hypoxylon chestersii, was obtained by reacting the allenic intermediate, 4-bromobuta-1,2-diene with methoxyphenol.

A synthetic route to α -(methylenecyclopropyl) glycine, the hypoglycaemic lower homologue of Hypoglycin A and a constituent of the fruit Litchi chinensis, was investigated. This resulted in methylenecyclopropyl methanol being obtained by cyclopropanation of buta-2,3-dien-1-ol.

Three pyrimidines, 2-methyl-6-(1-methylethyl) pyrimidin-4(3H)-one, 2-methyl-6-(1-methylpropyl)pyrimidin-4(3H)-one and 2-methyl-6-(n-propyl)pyrimidin-4(3H)-one have been prepared. Their syntheses involved reacting the allenic esters ethyl 4-methylpenta-2,3-dienoate, ethyl 4-methylhexa-2,3-dienoate and ethyl octa-2,3-dienoate respectively, with acetamide hydrochloride. The bis acetamide adduct of ethyl penta-2,3-dienoate was similarly obtained.

A series of conjugated and unconjugated allenic anilides has been prepared by reacting an anilino Grignard reagent with the appropriate conjugated or unconjugated allenic ester. The conjugated esters prepared were ethyl 4-methylpenta-2,3-dienoate, ethyl 4-methylhexa-2,3-dienoate and ethyl