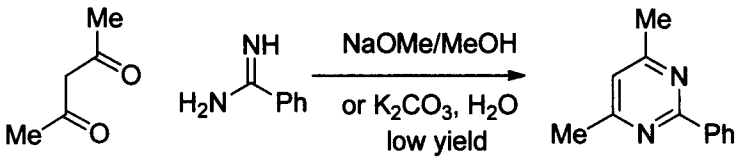
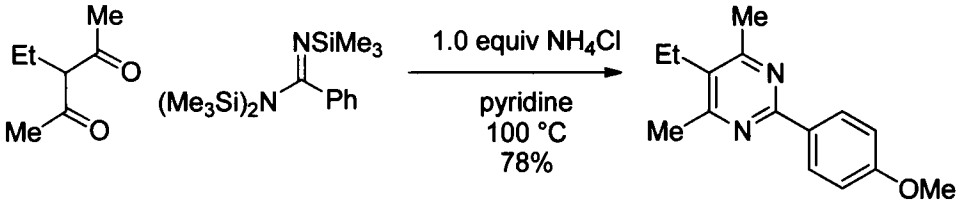
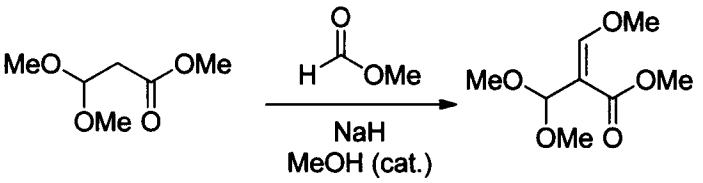
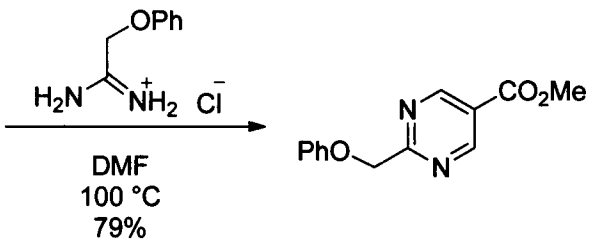




Indeed, the condensation of a three-carbon unit (typically a 1,3-dione or enone) with an N–C=N fragment (Pinner method) is widely used for the preparation of pyrimidines.[7] However, synthesis of highly substituted pyrimidines using the Pinner method generally requires long reaction times and provides the desired compounds in poor yields. The rate-limiting step in this double condensation reaction is postulated to be the dehydration of the various hydroxy-hydropyrimidine intermediates. On the other hand, *N,N,N*-tris-(trimethylsilyl)-amidines as an amidine equivalent would produce hexamethyldisiloxane rather than water. It was anticipated that the condensation reaction would be driven toward the forward direction by the silyl substitution because production of hexamethyldisiloxane is more thermodynamically favoured. NH_4Cl was identified as a general promoter for the synthesis of pyrimidines presumably by activating 1,3-dicarbonyl component.[8]





A method for the synthesis of 2-substituted pyrimidine-5-carboxylic esters is described based on the similar concept of condensation of amidine