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REACTIONS OF PYRIMIDINIUM SALTS WITH SILYL ENOL ETHERS

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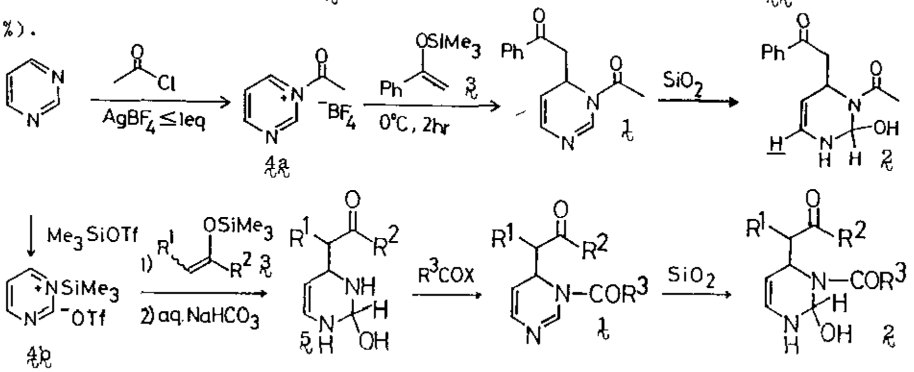
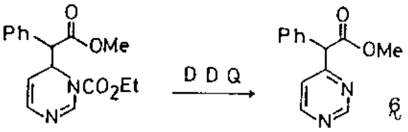
The hydrate (2) of 1-acyl-6-(2-oxoalkyl)-1,6-dihydropyrimidines (1) were prepared by the two kinds of methods. One is the addition of trimethylsilyl enol ethers (3) to N-acylpyrimidinium tetrafluoroborate (4a) (eq. 1, 32%). The other is the two step method, i.e., the selective acylation of 5, which was prepared from the reaction of 3 with N-silylpyrimidinium salts (4b) (eq. 2, 19-68%).

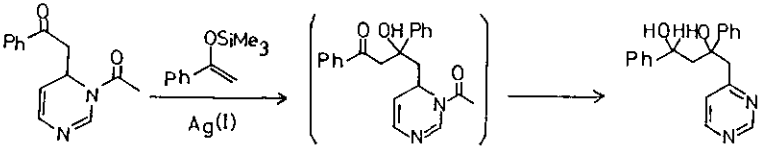


(1)

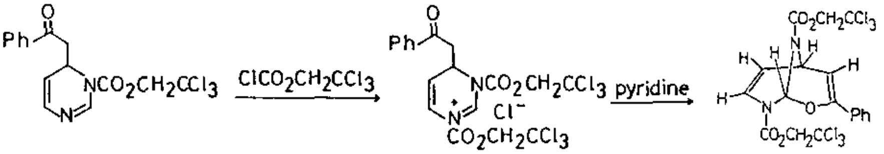
(2)

By the latter method, dihydropyrimidine (1) was isolated in almost pure form and could be oxidized into the functionalized pyrimidine (6). Interesting reactions which were found during the study of these methods, for example, intramolecular oxidation-reduction (eq. 3) and intramolecular cyclization (eq. 4), were also described.





(3)



(4)