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# ARYL MIGRATION OF HETEROAROMATICS HAVING AROYL GROUP

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The reaction of 4-aroylquinazolines (1) with sodium hydroxide in dimethyl sulfoxide (DMSO) was found to proceed in two ways. One is the aryl migration to lead to 4-aryl-3,4-dihydro-4-quinazolinecarboxylic acids (2), and the other is the fission of the $C^4$-CO bond to yield quinazoline (3) and aroic acids (4).

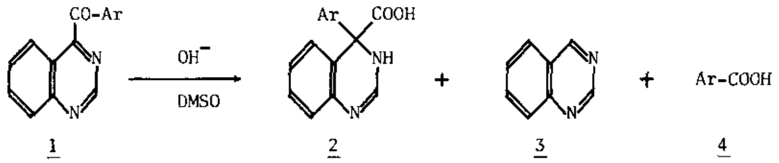

Chart 1

When the reaction mixture after stirring 7-aroyl-3-phenyl-3H-1,2,3-triazolo-[4,5-d]pyrimidines (5) with sodium hydroxide in DMSO was subjected to potassium ferricyanide oxidation, 5 was easily converted into the corresponding 7-aryl-3-phenyl-3H-1,2,3-triazolo[4,5-d]pyrimidines (6) by way of 7-aryl-6,7-dihydro-3-phenyl-3H-1,2,3-triazolo[4,5-d]pyrimidine-7-carboxylic acids (7).

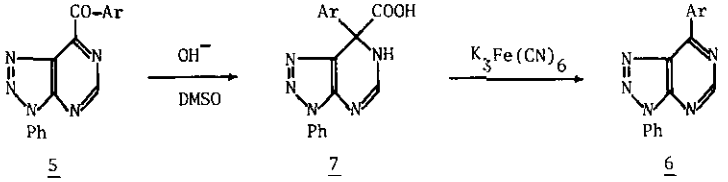

Chart 2

In the case of the reaction of 2-aroylquinoxalines (8), 2-arylquinoxalines (9), quinoxaline (10), aroic acids (4), and α-aryl-α-(methylsulfinylmethyl)-2-quinoxalinemethanols (11) were obtained.

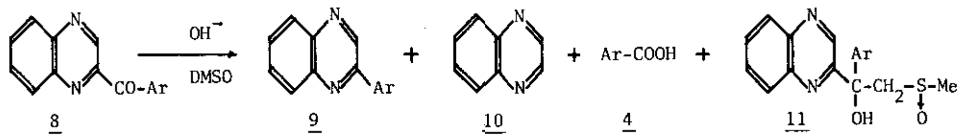

Chart 3

*Mechanism for the aryl migration*, similar to that for benzilic acid rearrangement, is proposed.