THE REACTIONS OF N-ALKYL-3,5-DISUBSTITUTED ISOXAZOLIUM SALTS WITH BASES

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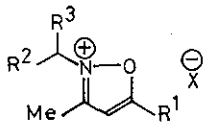
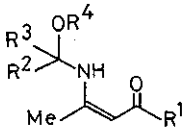
When N-alkyl-3,5-disubstituted isoxazolium salts (I) were treated with various bases, four types of reactions were observed. Here we reported these reactions, mainly two types of reactions.

1) Treatment of I with potassium alkoxides in alcohol gave the corresponding β-aminoenones (II), whichwere pyrolyzed to 2,2,4,6-tetrasubstituted 2H-1,3-oxazines (III).

2) The reaction of I with hydroxylamine hydrochloride in the presence of anhydrous potassium carbonate in methanol afforded 3,5-disubstituted isoxazoles (IV). In this reaction, nitrogen atom of hydroxylamine attacked 5-position of I regioselectively.



I



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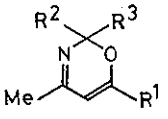
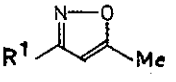


III



IV