

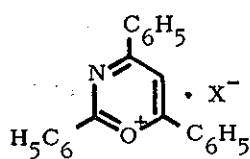
REACTION OF
2,4,6-TRIPHENYL-1,3-OXAZINIUM SALT AND -1,3,5-OXADIAZINIUM SALT
WITH VARIOUS AMINO COMPOUNDS

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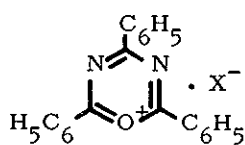
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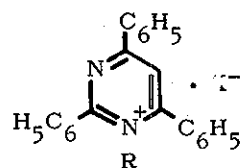
The reactions of 2,4,6-triphenyl-1,3-oxazinium salt (1) and -1,3,5-oxadiazinium salt (2) with various amino compounds were studied. In regard to 1, methylamine, aniline semicarbazide and 4-phenylsemicarbazide give pyrimidinium salts (3a, b, c, d). Aminoethanethiol and polymethylenediamines ($n = 1 \sim 5$) yield 2,4,6-triphenylpyrimidine, and o-phenylenediamine, o-aminothiophenol and o-aminobenzamide give 2,4-diphenyl-1,5-benzodiazepine, 2-phenyl-1,3-benzothiazole and 2-phenyl-4-hydroxyquinazoline, respectively. Benzoylhydrazine and N,N-dimethylhydrazine afford open-chain adducts (4,5,6). N,N'-Dimethylhydrazine derives 3,5-diphenylpyrazolium salt and 3,5-diphenyltriazolium salt competitively. In contrast to 1, 2 gives only 3,5-diphenyl-1,2,4-triazole, when treated with benzoylhydrazine, (thio)semicarbazides and 4-phenyl-(thio)semicarbazides. These results show that there is a significant difference in the reactivities of 1 and 2.



(1)



(2)

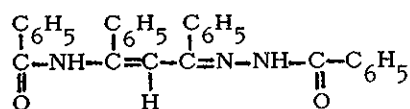


(3a) R=CH₃

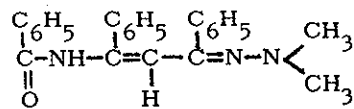
(3b) R=C₆H₅

(3c) R=NHCONH₂

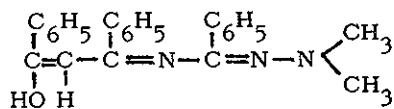
(3d) R=NHCONHC₆H₅



(4)



(5)



(6)