REACTIONS OF 5-AMINO-1-VINYL-4,5-DIHYDRO-1H-1,2,3-TRIAZOLES

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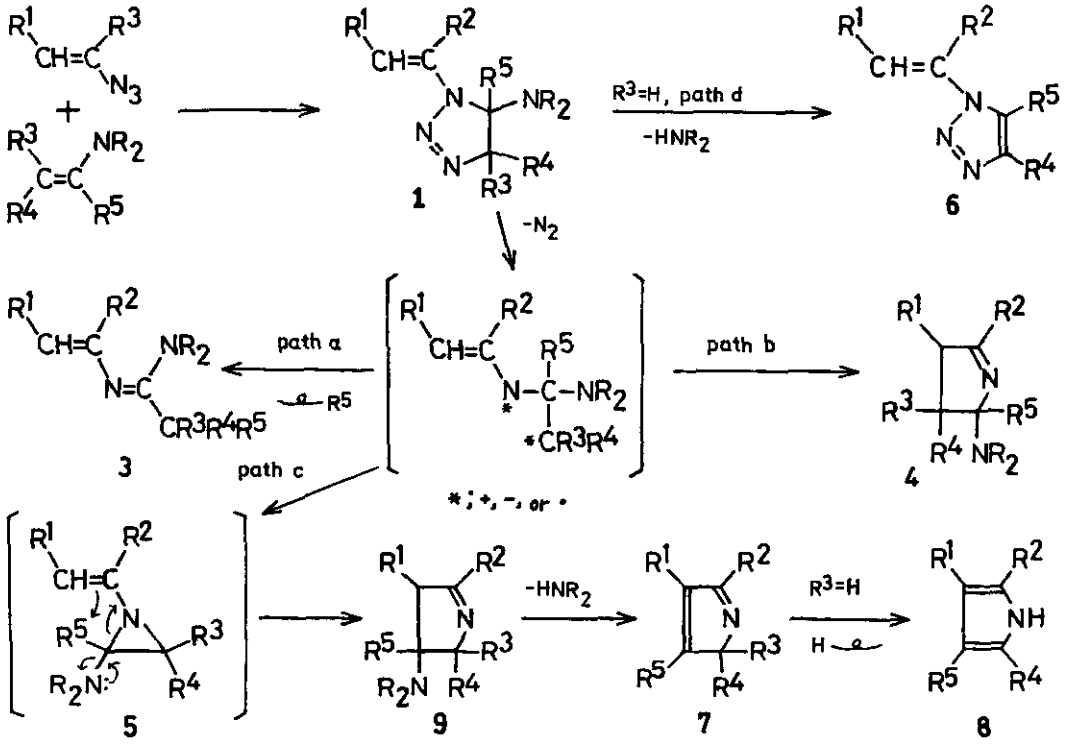
Reactions of 5-amino-1-vinyl-4,5-dihydro-1H-1,2,3-triazoles (1), prepared by 1,3-dipolar cycloaddition reaction of vinyl azides with enamines, were investigated.



Thermolysis or acid decomposition of 1 (R^5=alkyl or phenyl) caused elimination of amine to give the corresponding vinyltriazoles (6) (path d). Thermolysis of 1 (R^5=H) gave N^2-vinylamidines (3) (path a) and/or pyrrole derivatives (7) (path c) and products were varied by the solvent and substituents of 1, while acid decomposition of 1 (R^5=H) gave products via path a.

Photolysis of 1 invariably gave pyrrole derivatives (7,8) via path c.

Products via path b has not hitherto been formed.