

## Organocatalyzed Synthesis of Strylpyrazole Nucleus: An Efficient and Affordable Protocol

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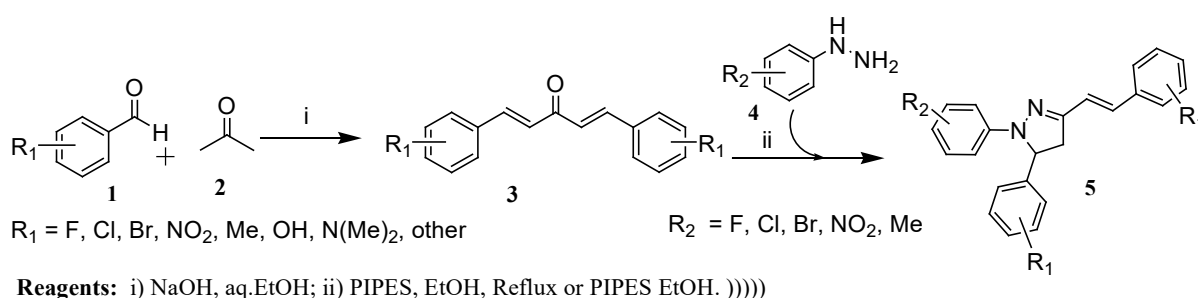
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### Abstract:

Conventional synthesis of Dibenzylideneacetone **3** from substituted benzaldehyde **1** and acetone **2** further succeeded to the formation of 4,5-dihydro-1,5-diphenyl-3-styryl-1H-pyrazole **5** scaffold. The cyclocondensation of Dibenzylideneacetone **3** with Phenylhydrazine **4** using Piperazine-N,N'-bis(2-ethanesulfonic acid) (PIPES) as a reaction promoter in alcohol at reflux temperature have been demonstrated (Scheme 1). The catalytic activity of PIPES as an organocatalyst is assessed in aqueous as well as non-aqueous solvent systems and the results obtained showed its utility as an encouraging catalyst in organic transformation.



**Schemes 1.** Synthetic pathway of the pyrazole compounds.