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Synthesis of Indole by Cyclization of Hydrazone Catalysed by Lewis Acid

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Abstract: *Experimental evidences have been shown that, stirring and grinding (without solvent) is good method instead of heating and it is time saving. The current studies have been revealed that prepared different indole derivatives have been shows exact melting point. Practical yield of obtained of 2-ethyl indole, 2-methyl indole ,2-(2-hydroxyphenyl)-indole, 2-acetyl indole, 2- (p-hydroxyl-phenyl)-indole, 3-ethyl-2- methyl)-indole, 2-ethyl-3-methyl)-indole were 75.00%, 79.48%, 85.10%, 62.22%, 56.54%, 68.56%, 72.30% ,67.42% respectively. Overall study revealed that excellent practical yield. 2-methyl indole have prepared in high yield by a Fischer indole synthesis of phenyl hydrazine with acetone. New one - pot version of the titled reaction involves strring a mixture of α - carbonyl compound, a phenyl hydrazine and the ethanol. A variety of ketones and several substituted phenylhydrazines could be thus converted to the corresponding indoles in excellent yields (approx. 70-88%). Reaction times were typically 1 hr, the resin being then filtered off and the product isolated after minimal workup.*

Keywords: 2-(p-hydroxyl-phenyl)-indole, Phenyl Hydrazine, one pot synthesis

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