

Transformations of 2-Ethyl-2-methyl-2,3-dihydro-1*H*-indole at the 3-Position

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Abstract—The oxidation of *N*-acetyl-2-ethyl-2-methyl-2,3-dihydro-1*H*-indole with pyridinium chlorochromate, CrO₃ · 2 Py, or CrO₃ gave *N*-acetyl-2-ethyl-2-methyl-2,3-dihydro-1*H*-indol-3-one which was hydrolyzed to 2-ethyl-2-methyl-2,3-dihydro-1*H*-indol-3-one. The latter was reduced with sodium tetrahydridoborate in ethanol to 3-hydroxy derivative and converted to the corresponding oxime by treatment with hydroxylamine hydrochloride in methanol. Baeyer–Villiger oxidation of 2-ethyl-2-methyl-2,3-dihydro-1*H*-indol-3-one and Beckmann rearrangement of its oxime were studied.

Keywords: 2-ethyl-2-methyl-2,3-dihydro-1*H*-indole, oxidation, oxime, Beckmann rearrangement, Baeyer–Villiger reaction.

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