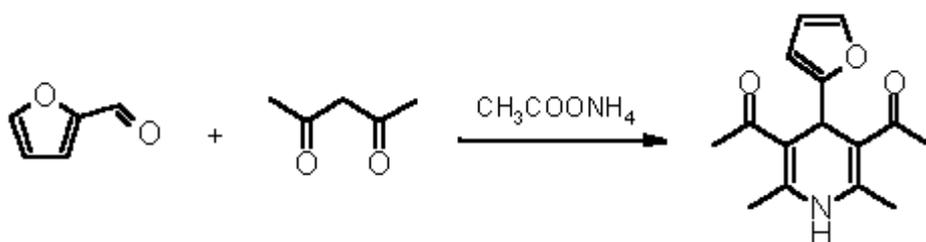


1-[5-Acetyl-4-(2-furyl)-2,6-dimethyl-1,4-dihydro-3-pyridinyl]-1-ethanoneAryan Younessi ^{1*} and Gennady D. Krapivin ²¹ Research Laboratory of Furan Chemistry and ² Department of Organic Chemistry, Kuban State University of Technology, Moskovskaya st. 2, Krasnodar 350072, Russian FederationE-mail: ar_younesi@yahoo.com, organics@kubstu.ru

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1,4-Dihydropyridines are of interest because some of them exhibit various kinds of pharmaceutical activity [1-3]. So in the course of our study we have synthesized novel derivatives of 1,4-dihydropyridine based on the reactions of furaldehydes with acetylacetone.



A mixture of acetylacetone (5.0 g, 30 mmol), furfural (2.4 g, 25 mmol) and CH₃COONH₄ (1.25 g, 16 mmol) in 20 mL of ethanol was refluxed for 5 h (the reaction duration was monitored with TLC) and left overnight at room temperature. Then solvent was evaporated, residue was washed with water, dried and recrystallized from ethyl acetate - hexane mixture to yield 3.19 g, 77 % of titled compound as pale yellow crystals.

Mp: 159-160 °C.

IR (KBr): 3300, 3230, 1675, 1665 cm⁻¹.¹H NMR (acetone-d₆, 60 MHz, ppm): 2.23 (s, 12H, 4 CH₃), 5.15 (s, 1H, H_A), 5.85 (d, J_{3,4} = 3.2, 3-H_{Fur}), 6.13 (d, J_{4,5} = 1.8, 4-H_{Fur}), 7.20 (d, J_{3,5} = 0.9, 5-H_{Fur}), 7.97 (s, 1H, NH).Anal. calc. for C₁₅H₁₇NO₃: C 69.48, H 6.61, N 5.40; Found: C 69.79, H 6.44, N 5.57.**References and Notes**

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Sample availability: available from the authors.

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