Synthesis of Novel 2-Alkoxy-5*H*-benzo[6,7]cyclohepta[1,2-*b*]pyridine-3-carbonitriles

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Reaction of 6-arylmethylene-6,7,8,9-tetrahydro-5*H*-benzocyclo-hepten-5-ones (**1**) with malononitrile in the appropriate alcohol in the presence of sodium afforded the corresponding 2-alkoxy-4-aryl-6,7-dihydro-5*H*-benzo[6,7]cyclohepta[1,2-*b*]pyridine-3-carbonitriles (**2**) and not their isomeric forms 2-alkoxy-4-aryl-6,7-dihydro-5*H*-benzo[3,4]-cyclohepta[1,2-*c*]pyridine-1-carbonitriles (**3**). The proposed structure was confirmed *via* independent synthesis of (**2**) through the reaction of 6,7,8,9-tetrahydro-5-benzocycloheptenone (**4**) with the appropriate ylidenemalononitriles **5** under the same reaction conditions. Single crystal X-ray diffraction proves the structures of **2a,b**.

Key words: 5*H*-Benzocyclohepten-5-ones, 5*H*-Benzo[6,7]cyclohepta-[1,2-*b*]pyridine-3-carbonitriles, Ylidenemalononitriles, Michael Reaction