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Interaction of 3-aryl methylidene-3H-pyrrol-2-ones with diazoacetic ester

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Abstract

Interaction of 3-arylmetiliden-3H-pyrrol-2-ones with diazoacetic ester was conducted when heated to 60 °C in chloroform.

It has been shown that in the selected conditions there is realized the attack of diazoacetic ester on the carbon atom of the carbonyl group of substrates. The reaction is accompanied by the expansion of the cycle and the formation of 2-carboxyl-4-Ar¹-3-hydroxy-6-Ar-1,4-dihydropyridines. Other possible directions of the reaction are not realized.

The structure of the end products is proved with the assistance of IR, ¹H NMR spectroscopy.