Ethyl 3-Amino-3-selenoxopropanoate as a New Reagent for the Synthesis of Selenium-Containing Heterocycles

I. V. Dyachenko and V. D. Dyachenko

Shevchenko Lugansk University, ul. Oboronnaya 2, Lugansk, 91011 Ukraine
e-mail: dyachvd@mail.ru

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Abstract—Interaction of ethyl cyanoacetate with hydrogen selenide afforded new reagent for obtaining selenium-containing heterocycles such as ethyl 3-amino-3-selenoxopropanoate. Starting from the latter substituted selenazoles and ethyl 3-selenoxo-2,3,5,6,7,8-hexahydroisiquinoline-4-carboxylates were synthesized. The structure of the obtained compounds was confirmed by IR, NMR spectroscopy and gas chromatography-mass spectrometry.

Keywords: cyanoacetic ester, selenide, ethyl 3-amino-3-selenoxopropanoate, substituted selenazoles ethyl 3-selenoxo-2,3,5,6,7,8-hexahydroisiquinoline-4-carboxylates, $S_NV$in reaction

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