



THE USE OF SOME NON-CONVENTIONAL METHODS IN CHEMISTRY OF BICYCLOHOMOFARNESNIC METHYL ESTERS

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Abstract. The main purpose of this research was to prove the utility of some non-conventional methods in synthesis of new and known homodrimanic compounds. Three methods belonging to green chemistry were successfully used in reported transformations. As a result of microwave irradiation assisted method the formation of bicyclohomofarnesenic methyl esters versus classical Stoll and Hinder method was studied. By means of anodic oxidation and dye-sensitized photooxidation of mentioned esters series of new compounds were obtained and the mechanism of some products formation was established. In addition, new pathway for the preparation of methyl 7-oxo-13,14,15,16-tetranorlabd-6,8(8)-dien-12-oate was elaborated. The structure of all synthesized compounds was fully confirmed by spectral methods.

Keywords: bicyclohomofarnesenic methyl ester, microwave irradiation, anodic electrooxidation, dye-sensitized photooxidation.

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