DESIGN AND SYNTHESIS OF TWO BICYCLO[3.3.1]NONANE-STEROID DERIVATIVES

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Abstract. Several studies for the synthesis of bicyclo[3.3.1]nonane analogues have been reported, however, there is little information on the preparation of bicyclo[3.3.1]nonane-steroid derivatives. In this way, the aim of this study was to synthesize two steroid-bicyclo[3.3.1]nonane analogues (**11** or **12**) from either estradiol or estrone using some reactions such as etherification, addition, nucleophilic substitution and cyclization. The chemical structure was evaluated through NMR spectroscopic analysis. The results showed higher yield for **11** compared with **12**. It is noteworthy, that the reagents used in this investigation are not expensive and do not require special conditions for handling.