

SYNTHESIS OF CYCLE B FUNCTIONALIZED DERIVATIVES OF (+)-LARIXOL

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Abstract. The main purpose of this research was the synthesis of highly functionalized derivatives of (+)-larixol by combination of classical and nonconventional method, like dye-sensitized photooxidation with preservation of outside chain. As a result, a series of four new cycle B derivatives of (+)-larixol were obtained, including products of photooxidative dehydrogenation and [2+4] cycloaddition of singlet oxygen, compounds **7** and **8**, respectively. The structure of all synthesized compounds was fully confirmed by spectral method (IR, ¹H and ¹³C NMR) and for compound **8** containing endoperoxide functional group, additionally by single crystal X-ray diffraction analysis.

Keywords: (+)-larixol, enolacetylation, dye-sensitized photooxidation, reduction, X-ray analysis.

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