

SYNTHESIS OF NEW DI- AND TRI-NORLABDANE COMPOUNDS WITH 2-AMINO-1,3-THIAZOLE UNITS

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Abstract. The present paper reports the synthesis of new hybrid terpeno-heterocyclic compounds belonging to di- and tri-norlabdane series. Starting from natural labdane diterpenoide (-)-sclareol, *via* its intermediates 8 α -hydroxy-15,16-dinorlabd-13-one and sclareolide, two di-norlabdane and three tri-norlabdane, previously unreported compounds possessing 2-amino-1,3-thiazole structural units were obtained in three and four steps, respectively, with acceptable to good overall yields. The structures of newly obtained compounds were confirmed by means of spectral IR, ¹H and ¹³C NMR analyses. It can be assumed that the synthesized compounds possess potential biological activity due to the presence of the heterocyclic unit. Additionally, the mechanism of 2-amino-1,3-thiazole ring formation is proposed.

Keywords: synthesis, di-norlabdane, tri-norlabdane, 2-amino-1,3-thiazole, cyclization reaction.

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