

MOLECULAR REARRANGEMENTS OF HIGHLY FUNCTIONALIZED TERPENES. AN UNIQUE REACTIVITY OF BICYCLIC FRAMEWORK AND POLIENIC CHAIN INHIBITION UNDER SUPERACIDIC TREATMENT

Marina Grinco, Veaceslav Kulcički, Pavel F. Vlad, Alic Barba,
Elena Gorincioi, NiconUngur*

Institutul de Chimie al Academiei de Științe a Moldovei, 3, Academiei str., Chisinau MD-2028, Republic of Moldova
**e-mail: nicon.ungur@gmail.com, phone / fax: (+373 22) 73 97 75*

Abstract. Synthesis of polyfunctional triterpene derivative [8(27),13E,17E,21E]-15-phenylsulfonyl-16-oxo-bicyclofarnesylfarnesol benzyl ether (**8**) from commercially available monoterpene geraniol and diterpene manool has been accomplished in 73% yield and its chemical transformation in superacid medium has been investigated. An unexpected rearrangement of **8** occurred, which involved methyl migration in the bicyclic fragment and total inhibition of the lateral polienic chain. A new bicyclic triterpene product [5(10),13E,17E,21E]-15-phenylsulfonyl-16-oxo-30(10→9)-abeo-bicyclofarnesylfarnesol benzyl ether (**9**), with rearranged new carbon skeleton has been obtained. Its bicyclic moiety is analogous to this of a natural triterpene neopolypodatetraene.

Keywords: triterpenes, synthesis, superacid, isomerization.