

PP30. NITRATION REACTION OF THE QUINOLINE ALKALOID HAPLOPHYLLIDINE

A.U. UBAYDULLAEV^{1*}, Sh.N. ZHURAKULOV^{1,2}, V.I. VINOGRADOVA¹,
K.K. TURGUNOV^{1,3}

¹Institute of the Chemistry of Plant Substances named after academic
S.Yu.Yunusov

²National University of Uzbekistan named after Mirzo Ulugbek

³Turin polytechnic University in Tashkent, Tashkent 100095 Uzbekistan

*Corresponding Author. E-mail: ubaydullayev-aziz@mail.ru

Alkaloids with a quinoline substructure are widespread and possess different biologically activities. For example, carteolol are used to treat arrhythmia and glaucoma, rosoxacin is used to treat respiratory tract, urinary tract and bacterial infections. In order to obtain a new alkaloid derivative nitration reaction was carried out on the basis of haplophyllidine (**1**), a quinoline alkaloid isolated from the seeds of the *Haplophyllum perforatum*. The haplophyllidine alkaloid was dissolved in acetic anhydride and concentrated HNO₃ was added dropwise over half an hour at a temperature of 0-5°C. The reaction was then carried out at room temperature for 5 hours. As a result of the reaction, a nitro ester of haplophyllidine (**2**) was formed in a yield of 76%. The structure of the product is confirmed by ¹H and ¹³C NMR spectroscopy and X-ray diffraction analysis.

