Full Paper

Registration Code of Publication: 11-26-12-16 Subsection: Organic Chemistry. Publication is available for discussion in the Internet as a material of "All-Russian Working Chemical Conference "Butlerov's Heritage-2011". http://butlerov.com/bh-2011/ Contributed to editorial board: June 22, 2011

## Study of phenol carbonic acids in callus tissue cultures of medicinal plants

## © Yury V. Belykh, and Nadezhda V. Kirillova\*+

Department of Biochemistry. St. Petersburg State Chemical Pharmaceutical Academy. Prof. Popov St., 14. St. Petersburg, 1977376. Russia Phone: +7 (812) 234-90-33. Fax: 234-60-44. E-mail: kirillovanv47@mail.ru

\*Supervising author; <sup>+</sup>Corresponding author

Keywords: phenol carbonic acids, callus culture of medicinal plants.

## Abstract

It is shown that the biomass of callus tissue cultures of Panax ginseng, Panax quinquefolium, Poliscias filicifolia contain significant quantity of phenol carbonic acids. In particular, it was found that the researched tissue culture of medicinal plants contained chlorogenic, coffeic, vanillic, p-hydroxycinnamic, ferulic, verotranovaya and salicylic acids. In cultured cells of Panax ginseng salicylic acid is absent, but its content in the dried biomass of *Panax quiquefolium* and *Polyscias filicifolia* is several times higher than the content of other phenolic carbonic acids.