Thematic Section: Preparative Research. **Full Paper**
Subsection: Analytical Chemistry. *Reference Object Identifier* – ROI: jbc-02/16-46-6-51
Article based on the report at the conference "Modern problems of chemical technology of biologically active substances." D.I. Mendeleev MUCTR. 26.05.2016.
Publication is available for discussion in the framework of the on-line Internet conference "*Chemical basis for the rational use of renewable natural resources*".
http://butlerov.com/natural_resources//
Submitted on June 17, 2016.

Extraction of carvacrol and thymol from the essential oil of thyme *Thymus pulegioides* L. growing on the territory of the Republic of Belarus

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Keywords: extraction, distribution constants, *Thymus pulegioides* L., essential oil, carvacrol.

Abstract

The distribution constants of essential oil components of thyme *Thymus pulegioides L.* in extraction systems hexane-water, hexane-acetonitrile, hexane-ethanol, hexane-methanol and its water mixtures containing up to 20% of water by volume have been determined using GC/MS analysis. It was found that the smallest value of the distribution constants for target components like thymol and carvacrol (0.12 and 0.22 respectively) is characterized for acetonitrile. The possibility of the essential oil separation in two fractions – hydrocarbons/ethers and alcohols/phenols – has been found by its selective extraction from hexane extracts of thyme with acetonitrile or water-acetonitrile mixtures.