

**THE STUDY OF BIOLOGICAL ACTIVE SUBSTANCES OF
LEDUM PALUSTER L. AND SOME SPECIES
OF THE *RHODODENDRON* GENUS**

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Introduction. Searching new sources biological active substances for creating new drugs with different actives is actual task contemporary pharmacy in Ukraine.

Only 4 species from family *Ericaceae* is official medicinal plants – *Ledum palustre L.*, *Arctostaphylos uva ursi (L.) Spreng.*, *Vaccinium vitis-idaea*, *Vaccinium myrtillus*, which find application in traditional medicine, homeopathy and production biological active substances. List of indications for clinical applying extracts from these plants is limited. Some species of genus *Rhododendron* using in traditional medicine for treating colds and gastrointestinal illness, like antiseptic and diuretic cure.

Aim. The aim of this work is comparative study chemical composition biological active substances *Ledum palustre L.* and some kinds of *Rhododendron* family *Ericaceae* for identifying potential sources new kinds of vegetable materials for creating new effective drugs.

Material and methods. The objects of study were family *Ericaceae*. As the material for studying used aerial part *Ledum palustre L.*, foliage *Rhododendron luteum Sweet.*, *Rhododendron ponticum L.*, flora of Ukraine and the Caucasus. For extraction polyphenolic compounds were used water-alcoholic solutions. Separation of substances carried with using adsorbtion and partition chromatography with different sorbents.

Results and discussion. In plants which study was found 30 substances in the individual state 11. The main compounds are the flavonoids quercetin, kaempferol, myricetin and their glycosides. Hydroxycinnamic acid represented coffee, ferulic, chlorogenic, neochlorogenic, coumarin derivatives - umbelliferone, skoloipoetine, eksuletine and eksuline and found arbutin.

Conclusion. The most promising for creation new drugs is *Ledum palustre L.*, *Rhododendron luteum Sweet.*, *Rhododendron ponticum L.*, which characterized diversity biological active substances and combination wide spectrum of pharmacological activity.