

## DEVELOPMENT OF STANDARDIZATION PARAMETERS OF HERBAL SPECIES

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**Introduction.** One of the basic conditions for effectiveness and safety of herbal medicines is the standardization and establishment of quality indicators not only medicinal plant material, which should meet the requirements of the relevant monographs of the State Pharmacopoeia of Ukraine (SPU) and also the dosage form.

**Aim.** The aim of our work was developing parameters for standardizing a new plant collection with analgesic and anti-inflammatory activity.

**Materials and Methods.** The object of the study was the herbal species, which includes (calculation for 100 g): *Harpagophyti radidis* 50 g, *Sophora flower-bud* 20 g, *Phaseoli vulgaris valvae fructus* 20 g, *Polygoni avicularis herba* 10 g. Studying and determination of the collections quality was done in accordance with the procedure of SPU 2.0.

**Results and discussion.** Identification was carried out by macro-, microscopic indicators and method thin-layer chromatography (TLC). In appearance (macroscopic signs) species should meet the following requirements: a mixture of pieces of greyish-green color with inclusions of yellow color with a specific aromatic smell. When we had been conducting microscopic examinations in the field of view of the microscope, fragments of all its components observed with the presence of their anatomical and diagnostic features. Quality indicators: loss on drying ( $9,46 \pm 0,1\%$ ); total ash ( $5,99 \pm 0,2\%$ ); content of extractives ( $43,25 \pm 0,2\%$ ). For identification of TLC and following quantitative determination we used pharmacopoeial standard samples SPU: rutin, hyperoside, and also *arginine P*, *harpogoside P* (Sigma-Aldrich). Determined the quantitative content of biologically active substances in the herbal collection, such as: total flavonoids, expressed as rutin ( $4,93 \pm 0,01\%$ ), total aminoacids, expressed as arginine ( $0,36 \pm 0,02\%$ ), total polyphenols, expressed pyrogallol ( $2,67 \pm 0,01\%$ ) by spectrophotometry. Quantitative content of harpagoside ( $0,36 \pm 0,01\%$ ) was determined by high performance liquid chromatography.

**Conclusions.** As a result of the studies, the following parameters for the standardization macroscopic signs: a mixture of species of a different form of greyish-green color with inclusions of yellow color with a specific aromatic smell. The microscopic picture of the spi was characterized by the presence of all anatomical and diagnostic features of its individual components. Identification by TLC: in the chromatograms present fluorescent zones of solutions rutin and hyperoside. Quality indicators: loss on drying (maximum 10,0%); total ash (max. 8,0%); content of extractives (min. 30,0%). Rationing by indicator «Assay» propose to determine according to the content total flavonoids, expressed as rutin (min. 4,00%) by spectrophotometry.

## RESEARCH ON THE ELEUTHEROSIDE B CONTENT IN THE BARK OF COMMON LILAC OF MILADA VARIETY

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**Introduction.** Common lilac of Milada variety – is a member from Oleaceae family, which is widely cultivated on the territory of Ukraine and other countries. The chemical composition of common lilac is presented by flavonoids, lignans, iridoids and phenylpropanoids, which causes a wide range of pharmacological activity. The eleutheroside B is a standardization marker that provides high adaptogenic and immunomodulating activities, so a search of new raw material with phenylpropanoids is an actual task of phytochemistry.

**Aim.** The aim of the research was quantitative determination of eleutheroside B in common lilac bark of Milada variety.