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Actual Problems of the
Chemistry of Natural Compounds

ABSTRACTS

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EVALUATION QUALITY OF THE DRY EXTRACT OBTAINED ON THE BASIS CELANDINE

N.B. Abdunazarova, E.S. Karieva

Tashkent Pharmaceutical Institute, Tashkent, Oybek, 45

Celandine - *Chelidonium majus L.* - belongs to the *Papaveraceae* family. Celandine grows on cool lands, among shrubs, on forest edges, in ravines, in places, in settlements, in gardens and fields. The celandine plant is found in Europe, Altai, Central Asia, Siberia and the Far East. It grows in small groups, but in some cases, it can also form thickets. Celandine loves moist and fertile soils.

The celandine plant exhibits such pharmacological effects as antimicrobial, antiviral, anti-inflammatory, antispasmodic. Dry extracts obtained from medicinal plants are used for new drugs. Based on this, a dry extract was obtained from grass celandine.

The resulting extract was evaluated according to the following parameters: appearance, exposure, weight loss on drying, moisture content, amount of heavy metals, microbiological purity and quantitative determination of the amount of alkaloids. These studies were identified using the methods presented in the following regulatory documents: "UzR SF I, RF SF XIV, IPA.1.4.1.21 "Extracts", European Pharmacopoeia, 9th edition "Extracts"".

Based on the results obtained, the extract is a brown powder with a specific odor. Its authenticity was determined by carrying out quality tests on the main influencing substance, i.e. alkaloids. Under the influence of 10% sulfate and silicon tungstic acid, a white-yellowish precipitate precipitated.

According to the requirements of regulatory documents, during drying, the mass loss should not exceed 5%. In the analyzed dry extract, this index was 3.92%.

The color of the prepared solution for determining the amount of heavy metals, the color of the solution is not darker than the color of the standard solution, that is, the dry extract, which is also analyzed for this indicator, corresponds the requirements of Normative Documents.

No bacteria were found in 1 g of dry extract of *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Escherichia coli*. It was found that the total number of aerobic microorganisms is no more than 10^4 KOE, yeast and mold fungi - from 10^2 KOE, bile-resistant enterobacteria - no more than 10^2 KOE.

To determine the amount of accumulation of alkaloids in relation to the chelidolin contained in the dry extract of celandine, the method presented in the pharmacopoeia was used: this index was 1.3%.

According to the results of the studies, the dry extract of the celandine according to the indicators corresponds to the qualitative and quantitative requirements of the current normative documents. In the future, the dry extract is planned to be used as the basis for obtaining a wound healing and anti-inflammatory ointment.