

PHARMACOGNOSTIC STUDY OF RAW MATERIALS OF SOME PLANTS OF GERANIACEAE FAMILY

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Introduction. The demand for herbal medicines in recent times is constantly growing. This is due to a broad spectrum of pharmacological effect, and few side effects compared to synthetic analogues. Our attention is drawn to the plants of Geraniaceae family – Geranium genus, which are widely cultivated in Ukraine and widely used in folk medicine. Geranium or cranesbill is genus of the Geraniaceae family. It is best known for more than 400 species of herbs and subshrubs of the genus, scattered around the world, and also in the tropical zone – in the mountains. The most famous houseplant is Zonal Geranium, which also are grow in the wild.

Leaves petiolate, palmatipartite or palmatilobate, cut to share or blades of different sizes and shapes, rarely pinnate. Peduncles with one – three flowers. Flowers are regular, large and beautiful, five-leaves from open cups and five similar nearly round petals of the corolla, which is also open almost in the plane; their color is white, magenta, blue and purple of different shades. Flowers are with ten stamens, all are usually with anthers. The fruit is a capsule with sepals remaining intact on the fruit. Forest Geranium contains vitamin C, essential oil, significant amounts of tannins, carotene, starch, pectin, gum. Geranium has an antiseptic effect, anticatarrhal action, helps with cardiovascular diseases, as well infusion is used in kidney stones.

Aim. Pharmacognostic study of raw materials of some plants of the Geraniaceae family. The study of underground organs of Forest Geranium with the determination of the main diagnostic characters, morphological and anatomical structure of whole and crushed plant material.

Materials and methods. The object of the study were the roots of Zonal Geranium which harvested in October-November 2016.

Results and discussion. The root of the Zonal Geranium has cylindrical shape, the surface is wrinkled, color is light brown. Integumentary tissue is represented by multi-layered cork. The conducting system is represented by two open collateral bundles, in which a layer of cambium is well marked. In the heart of The rays of primary xylem are visible in the middle. Two medullary rays are very well observed. Druses are present in both cork and core parenchyma.

Conclusions. The result of the research established the main anatomical and diagnostic features of the underground organs of the Zonal Geranium. The obtained data allow us to identify raw materials and to make a conclusion about the prospects of the study of the geranium root to create new drugs based on it.