

THE PROSPECTS OF USAGE OF RAW MATERIAL OF AN ARACEAE FAMILY REPRESENTATIVE

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Introduction. The search for new sources of medicinal plant material and the creation of new medicinal preparations on its basis is an essential problem nowadays. The drugs from medicinal plant materials are low toxic for long-term use and are characterized by slow development of resistance of microorganisms towards them.

In this plan our attention was attracted to the plant from the *Philodendron* genus, *Araceae* family.

Aim. To conduct a preliminary pharmacognostic research of *Philodendron* plant material.

Materials and methods: The leaves of *Philodendron* were harvested during the full opening of the leaf plate in May-September 2017.

Results and discussion. *Philodendrons* are evergreen perennials. They differ from other plants of the *Araceae* family by variety of forms. Among them there are epiphytes and semiepiphytes, or hemiepiphytes, although there aren't many hemiepiphytes among *Philodendrons*. Mostly, *philodendrons* are epiphytes or climbers which are attached to the support by means of long air roots-suction cup. Some species can combine several forms of life, identifying them depending on the conditions of growth. The aerial roots can be of different shapes and sizes, in most of the plants are formed in nodes, sometimes in internodes. The stem is fleshy, ligneous at the base. The location of the leaves is alternate. Petioles are with sheaths. Inflorescences, stems, leaves and roots of *philodendrons* secrete milk juice containing rubber. This feature of *philodendrons* distinguishes them from other family members. Milk juice may be red, orange, yellow or colourless, while in the air it becomes brown. *Philodendron* contains up to 0.7% oxalate in the form of crystals of calcium oxalate. A systematic study of series of leaves and shoots of *philodendron* was conducted. For each type of raw material, numerical indices are determined: weight loss in drying, extractable matter, total ash and ash, insoluble in 10% solution of hydrochloric acid. Limit values of these parameters were established. The study of the features of the morphological structure of *philodendrons* was carried out. It was established that from the point of view of macro-diagnostics the value is for *philodendron* plant material series have: the shape of the leaf blade, its color and nature of the surface.

Conclusions. A morphological and preliminary chemical analysis of the raw material was carried out. *Philodendron* is a promising source of herbal raw material.

SYNTHESIS, PHYSICAL-CHEMICAL PROPERTIES AND BIOLOGICAL ACTIVITY OF SOME 3,1-BENZOXAZINONES-4

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Introduction. Potential opportunities have compound compounds of both natural and synthetic origin, containing heterocyclic systems in their composition. A promising direction for the search for biologically active substances is the synthesis of heterocyclic derivatives, where the starting substances are acylanthranilic acids.

Aim. Therefore, the aim of our work is the purposeful synthesis of 6-bromo-2-(*R*-phenyl)-3,1-benzoxazinones-4 and the search for pharmacologically active and low-toxic substances as potential medicines among them.

Materials and methods. *N*-(*R*-benzoyl)-5-bromoanthranilic acids are synthesized by the acylation of 5-bromoanthranilic acid with chlorohydrates of aromatic acids. 6-bromo-2-(*R*-phenyl)-3,1-benzoxazinones-4 was synthesized by the reaction of intramolecular cyclodehydration of *N*-(*R*-benzoyl)-5-bromoanthranilic acid with acetic anhydride by the scheme 1: