

PHARMACOGNOSTIC STUDY OF RAW MATERIALS FROM THE ARACEAE FAMILY

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Introduction. Demand for phytopreparations has been constantly growing lately. It is connected with the wide spectrum of pharmacological effect, insignificant side effects as compared with the synthetic analogues. The search of new available sources of medicinal vegetable raw materials is one of the top priority tasks of modern pharmacy. Our attention is attracted by the plants of the Araceae family, species Dieffenbachia, which are widely cultivated in Ukraine and are used in traditional medicine.

Growing wild plants of the Araceae family are spread in the tropics and subtropics and run to 2000 species. These are perennial herbs, usually with large leaves close to the roots, though lianas and trees are also found. The raw materials of the majority of this family's specimen contain saponins, glycosides, alkaloids and are poisonous. But they mostly lose these properties when boiled or dried. Some plants of the Araceae family are cultivated in Ukraine. They, grow monstera, some kinds of kala, dieffenbachia and anthurium, philodendron and some others as decorative and hot-house plants.

Investigation Aim. So summarize printed information as to spreading, chemical composition, aspects of usage of Dieffenbachia representatives from the Araceae family, to determine morphological and anatomical peculiarities of the raw materials texture.

Materials and Methods. The objects of the study were overhead organs of different kinds of dieffenbachia. The raw materials were stored up in spring 2015.

Results. It is found out that in morphological aspect diagnostically important for leaves are: the size and the form of a leaf's lamina, upper and lower surfaces' colour, the type of nervation, the number of bunches of the midrib; for a stalk: the length, surface's nature and colour, the presence of fissures and pubescence.

Anatomical investigation showed that important diagnostic features to identify leaves as raw materials are: the nature of epidermis' cuticle, the type and frequency of occurrence of the respiratory apparatus, the presence and type of hairs, the texture of the stalk and the main nerve (the number of bunches), the presence of rounded elongate crystals, of calcium oxalate.

Conclusions. Analysis of the investigation results has become the first step in pharmacognostic study of raw materials of the specimen from the Araceae family – prospective sources of medicinal vegetable raw materials.