

DETERMINATION OF MORPHOLOGICAL AND ANATOMICAL FEATURES OF THE PLANTS OF AGAVACEAE FAMILY

Lisitsyna I. V.

Scientific supervisor: assistant Musienko K. S.

National University of Pharmacy, Kharkiv, Ukraine

lisitsyna08031997@gmail.com

Introduction. Nowadays herbal drugs are very popular since they contain ecologically pure active substances that are extracted from medicinal plants. By their pharmacological properties they are similar to those of synthetic origin. However, they are characterized by naturalness. Natural substances present in herbal drugs are close to the human organism. Thus the features which should be taken into account during the clinical trial appear.

In this aspect, our attention was attracted by plants from the Agavaceae family, *Chlorophytum capense* and *Chlorophytum comosum*. In ethnoscience they have been used since ancient times as anti-inflammatory and anti-microbial agents, and *Chlorophytum* absorbs formaldehyde, carbon monoxide, liberates phytoncides, has significant bactericidal effect, disinfects and cleans the air.

Aim. To conduct the study of morphological and anatomical features of *Chlorophytum comosum* plant material.

Materials and methods. The object of the study was the leaves of *Chlorophytum comosum*, procured in September and October 2016.

Results and discussion. During morphological study such diagnostic features were established: leaves are narrow, linear, form basal rosette. Average length is 40-50 cm, but can reach up to 60-70 cm, 1.5-2 cm wide, and often they are green with a cream stripe along the central vein.

During the anatomical research the features of the structure of basic epidermal cells, features of stomata and their type were established. Leaves are of isolateral type of structure, the chlorenchymacells are located loosely, with intercellular spaces filled with air.

The type of stomatae apparatus, placement of conductive elements were of diagnostic value.

Conclusions. As a result of studies the complex of external and internal structural features of leaves *Chlorophytum comosum* were established which makes it a promising source of medicinal plant material and drugs based on it.