

FINDING MORPHOLOGICAL AND ANATOMICAL DIFFERENCES OF SORTS OF VIBURNUM OPULUS

Leontiev B. S.

Scientific supervisor: prof. Khvorost O. P.

National University of Pharmacy, Kharkiv, Ukraine

farmaman97@gmail.com

Introduction. *Viburnum opulus* L. represents a branchy shrub, about 4 meters in height, with brown or dark gray bark. On the territory of Ukraine it has a significant spreading in the forest and prairie zone. This plant is a historical and literature symbol of country. Almost all of parts of *Viburnum* L. have a use in traditional medicine. Bark has a hemostatic properties, fruits - diuretic properties and the leaf use against of swelling.

There are many sorts of this plant, but only one of them has interesting differences. This kind of *Viburnum* named *Xanthocarpum*. It is rarely found on all of the territory of Ukraine variety, about 1,5 meters in height, with a large leaves and yellow fruits.

Aim. Spending a pharmacognostic analysis of two sorts of *Viburnum* for the determination of morphological and anatomical differences.

Materials and methods. At this study were used a standard methods of pharmacopoeic analysis – “Identification A and Identification B”. In witch described a conducting of procedure finding external distinctive features and diagnostic features of internal structure

Results and discussion. In this research we have found an interesting features between two sorts of *Viburnum*. Their internal and external structure were somewhat different.

The sort *Xanthocarpum* has white flowers, they are collected in the scars. It is typical for the *Viburnum*: there are many small fruiting flowers in the center, several large sterile flowers are located along the edges of the scute. The fruits are bright yellow, shiny, large, after the first frosts become translucent, keeping a light yellow tone. The leave of this plant has an egg-shaped three or five lobed form, in spring and summer it is green, in autumn it is yellow or even faintly red color.

The sort of traditional *Viburnum opulus* has some differences towards the previous sort. There are differences in length of shoots, sizes and surface texture of leaves, sizes of inflorescence, colors of leaves and fruits. Also different period of keeping of the fruit on the branches they have.

Conclusions. We diagnostic features of the objects: the type of the structure of the puff plate, the shape of the epidermis cells, the type of peritoneal apparatus, the type and localization of the trichomes were established.

COMPARATIVE PHYTOCHEMICAL STUDY OF HAWTHORN TINCTURE AND FRUITS PRODUCED BY VARIOUS FIRMS

Marchenko V. O., Ochkur O. V., Goncharov O. V., Sidora N. V.

Scientific supervisor: prof. Kovalyova A. M.

National University of Pharmacy, Kharkiv, Ukraine

alex.o4kur@gmail.com

Introduction. The blood-red hawthorn (*Crataegus sanguinea* L.) is a small tree or a shrub belonging to the *Rosaceae* family. Medications based on the raw material of this plant show cardiogenic, spasmolytic, antihypertensive, sedative and desensitizing effect. Biologically active compounds of hawthorn are able to increase the power of systole, regulate the blood pressure, reduce excitability of the nervous system, supply a deep, calm long sleep, not causing the states of mental inhibition after awakening.

Various dosage forms have been developed on the basis of the hawthorn raw material – fruits, flowers and leaves. Raw material is collected in different regions of Ukraine, therefore its composition is different, as well as the qualitative and quantitative composition of the drugs derived from it. That is why, comparative study of hawthorn products of different manufacturers is of scientific interest, which indicates the relevance of the chosen topic.