

STUDY THE GENERAL ANATOMIC FEATURES OF LEAVES OF *CRATAEGUS FLAVA* AIT.

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Introduction. In the territory of Ukraine is successfully cultivated the big-fruits species of hawthorns are representative of North American flora.

Crataegus flava Ait. – as tall as 6 meters; branches form an asymmetrical crown; spines are thin, straight, brown; leaves are broadly ovate, with acute apex and cuneate base, slightly lobed, thin, glabrous above, pubescent below; petioles are glandular, wing; stipules falcate; inflorescence 3-7-flowered; petals white; the fruits are large, dark orange; seeds 4-5, on the back ribbed.

As a result of our studies in the leaves of *Crataegus flava* Ait. identified different classes of biologically active substances (BAS): phenolic compounds, terpenoids, lipophilic substances, microelements. Considering the above, the most relevant is a detailed pharmacognostic study of leaves of *Crataegus flava* Ait.

The **aim of our study** was to investigate the morphologic and anatomic features of *Crataegus flava* Ait. leaves.

Materials and methods. The object of the study was the dried leaves of *Crataegus flava* Ait., collected in May, 2015 year.

Raw materials is collected in Botanical Garden of V.N. Karazin Kharkiv National University. For microscopical study the leaves are boiling in 3% aqueous solution of sodium hydroxide.

The microslides were examined in the solution of chloral hydrate. The diagnostic features were determined using a МБР-1 and МБР-2 microscope with an increase of 100 and 600.

Results and discussion. As result of the study was determined the main anatomic features of *Crataegus flava* Ait. leaves: the presence of simple hairs and single multicellular glands in the leaf blade; anomocytic type of stomata; wavy wall epidermal cells; simple hairs in petiole; veins with crystals of calcium oxalate; epidermal cells with dark contents.

The histochemical reaction with ferric alum was carried out, resulting in the leaves of *Crataegus flava* Ait. were found phenolic compounds (flabophens).

Conclusions. For the first time anatomical study of leaves *Crataegus flava* Ait. was carried out. The obtained information can be used in conducting further standardization of raw materials.