

THE DEFINITION OF MORPHOLOGICAL AND ANATOMICAL CHARACTERISTICS OF PERSEAE AMERICANAE

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Introduction. The main tasks of modern medicine and pharmacy are the search and investigation of poorly studied plant materials. Our attention was attracted by a plant of the Lauraceae family, *Persea* genus – *Persea Americana*, which in Ukraine started being cultivated relatively recently. The Lauraceae family consists of more than 2000 types taking a significant part in the structure of forests in tropical and subtropical regions. Lauraceae are woody plants (except a parasite *Cassytha*) with leathery, simple, entire or dissected leaves without stipules. The plant material of most members of this family contain fatty oil, vitamins (PP, A, C, B₆, B₂, B₁, B₉), essential oils, formic, butyric, lauric acids, minerals, tannins, resins, bitters.

Some species of the Lauraceae family are cultivated in Ukraine. Bay Laurel, for example, Camphor tree, as well as *Cinnamomum verum*, *Persea Americana* can be seen in the greenhouses.

Aim. The study of morphological and anatomical structure of *Persea Americana* fruits with the establishment of diagnostic features.

Materials and methods. The raw material was collected in spring of 2017. The micro specimens were prepared from freshly collected and fixed in a mixture of alcohol-glycerin-water (1:1:1) fruits. The study was performed using a microscope MBR-1, MBI-6 LOMO (100-600). The received micropreparations were photographed on camera "Kodak-400". Pictures were processed using the computer program "Photoshop CS5".

Results and discussion. The morphological and anatomical study of the *Persea Americana* fruit was carried out of the *Persea Americana*. Fruit is a pear-shaped seeded berry. It was determined that the diagnostic features of the fruit are: size and shape, dark green color and thickness of the pericarp, its density, the presence of tubercles on it. The fruit pulp is buttery and soft, yellow-green color on the cross section. There is an ovoid large seed in the center of the fruit. The diagnostic features which are of a great importance for the identification of the fruit as a type of plant material were determined. These include the specific epidermal structure, character and thickness of the pericarp, presence of brown pigmented spots, large amount of fatty oil spots in the pulp which are coloured orange by Sudan III in orange.

Conclusions. Thus, the obtained data will be used for further study *Persea Americana*, which is a promising plant for producing new types of medicinal plant material with relevant directions of action.