

the total free organic acids content was performed by titration with a 0,1 M solution of sodium hydroxide. The total content of hydroxycinnamic acids and amino acids was determined by spectrophotometry. Determination of quantitative content of the sum of oxidizable polyphenols was carried out permanganate-metric method in the Leventhal modification, using as the titrant 0,02 M solution of potassium permanganate. Quantitative analysis of the amount of water-soluble polysaccharides in leaves of apple Williams Pride variety was carried out by gravimetric method.

**Results and discussion.** We have found the presence of polysaccharides, organic, hydroxycinnamic and amino acids, flavonoids, tannins. In the result of quantitative determination it is established that the total content of free organic acids in terms of malic acid in leaves of apple Williams Pride variety made up 6,78%, of the hydroxycinnamic acids in terms of chlorogenic acid was 3,31%, of amino acids in terms of leucine – 0,53%, the sum of oxidizable polyphenols in terms of tannin – 6,46%, the amount of water-soluble polysaccharides of 7,25%.

**Conclusions.** The obtained experimental data show the prospect pharmacognostical further investigation of the leaves of apple Williams Pride variety and will be used in future work in the standardization and development of the relevant sections of the quality control methods of raw materials that were researched.

## HOYA CARNOSA IS A FLESHY PROMISING MEDICINAL PLANT

Ton J. M.

Scientific supervisor: prof. Khvorost O. P.

National University of Pharmacy, Kharkiv, Ukraine

julianicolaevna1007@gmail.com

**Introduction.** The requirements of today require the opening of new horizons in practical pharmacy. Our attention was attracted by the Hoya flesh plant, or the wax ivy – *Hoya carnosa*, the Asteroid family – Asclepiadaceae. The genus *Hoya* unites 250 to 300 species. *Hoya* fleshy – evergreen, honeydewed liana up to 6 m in length. Homeland South – East Asia, the western coast of Australia, Polynesia. Widely cultivated as decorative. *Hoya* flesh is used as an antiseptic, bactericidal remedy for skin diseases (rashes, acne), leaves are used in boils and carbuncles. The moisture content of raw materials was studied.

**Aim.:** To study the morphological structure of a series of leaves of *Hoya* fleshy.

**Materials and methods:** We investigated 7 series of raw materials, which were prepared in January- February 2018 from self – cultivated specimens. Prepared microdermabrasions from freshly collected leaves and fixed in a water-ethanol-glycerin mixture (1:1:1). The study was done on microscope MC -10 and “Granum”. The results of the research were photographed using a “Samsung” digital camera. Photoshop CS5 to process photos was used.

**Results and discussion:** Leaves are opposite, simple, short petiole. The leaflet is integral, the edge is integral, the petiole, the tip of the base is broadly wedge – shaped. The leaf plate is 9,8 – 10,4 cm in width, above a shiny, leathery, dark green color, sometimes with small white spots. The central vein and a few large sized veins are slightly pushed. The middle central vein and veins of the second order are sharply convex, the color of the leaf plate is slightly lighter than the upper surface. The petiole is light – colored in color in the length of 2,0–3,2 cm and 0,3–0,6 cm wide. When the leaf blade is released. With microscopic analysis, the leaves were found to be gynoecious, stomata of the anisocytic type, sporadically, short, simple hairs occur. Leaves dorsiventral type of structure. Petiole and central vein single – breasted.

**Conclusions:** Diagnostic features of the morphological structure of foxglove leaves are established. This is the type of leaf plate, its consistency, color, as well as the type of anatomical structure of the leaf plate, the type of peristome and the one - sidedness of the central vein and stalk.