The quantitative determination of flavonoids was carried out by spectrophotometry at a wavelength 415 nm on calculation of rutin. It was determined (%) of flavonoids – 0.77, 1.19 and 1.22, depending on the cultivar.

The results were converted to a completely dry raw material, processed and statistically significant. Received literature and experimental data allow considering almond leaves as prospective raw materials for further phytochemical and pharmacological research.

STUDY OF *PRUNUS DOMESTICA* RAW MATERIAL AS PROSPECTIVE SOURCE OF FOOD SUPPLEMENT

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Plum (*Prunus domestica* L., fam. *Rosaceae*) originated from the Caucasus region in West Asia and is widely cultivated worldwide. The total global annual gathering of fruit is more than 5 million tons, approximately 80% of annual harvesting accounts for European countries, near 10% for America, only about 5% - in Asia. In Europe the plum tree is mainly cultivated in Germany, Romania, Hungary, Bulgaria, Ukraine and Poland. In Asia, large plantations of plum are in Turkey, Lebanon, Israel, Syria and Japan.

Plum fruits are used as a light laxative in Ukraine folk medicine. They are part of complex laxatives medicines “Cafiolum” and “Regulax” and are part of many dietary supplements, such as Cleanseen, Phytomucil Diet formula, Pro form. Containing abundant pectin and organic acids, plum fruits can increase peristalsis of intestines and stomach, and eliminate constipation. According to the animal experiments sour plum products contained citric acid can prevent kidney and bladder stone.

Because plums are widely cultivated in Ukraine to have sufficient raw materials, it was actual to study the chemical composition of plum leaves and branches for isolation substances, studying their pharmacological activity for creation of new phyto medicines and food supplements. By our preliminary study it was determined that leaves and branch of plum tree, collected in Kharkov region in autumn 2012, contain flavonoids, coumarins, hydroxycinnamic acids, tannins, free organic acids, polysaccharides. Quantitative determination of these groups of compounds was carried out. Received literature and experimental data allow considering plum leaves and branches as prospective raw material for further phytochemical and pharmacological research and creation of new phyto medicines and dietary supplements.

EXOGENOUS APPLICATION OF SELECTED PHYTOHORMONE INCREASE GROWTH, PHOTOSYNTHETIC PIGMENTS AND HEALTH COMPOUNDS OF DILL

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The pot experiment was carried out on Dill to study the Individual effect of foliar spray of 10^{-2} M or 10^{-3} M of gibberellic acid (GA_3), and deionized water (control test). The best results were obtained with 10^{-3} M GA_3 for plant fresh and dry weight, root weight, photosynthetic pigments, health compounds and yield parameters. However, plant height, root length and branch number were maximally affected with 10^{-2}M GA_3. Maximum percent increase for most of the characteristics were obtained with 10^{-3}M GA_3.Thus, the spray of 10^{-3} M GA_3 may be used for greatest growth, photosynthetic pigments and health compounds of the selected crop.