DETERMINATION OF CARBOXYLIC ACIDS COMPOSITION AND CONTENT IN THE «PRUNOFIT» AND POLYESHCHARIDINE COMPLEX OBTAINED FROM *PRUNUS DOMESTICA* FRUITS

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Introduction. Pharmacological studies of the extract «Pronofit» and the polysaccharide complex (PSC) obtained from *Prunus domestica* fruits have established a pronounced hepatoprotective effect. It is known that hepatoprotective agents include vitamins, amino acids, carbohydrates, flavonoids and carboxylic acids.

Aim. Therefore, the aim of our research was to study the composition and content of carboxylic acids of these extracts.

Materials and methods. The «Pronofit» contained fibers of plum fruit remaining after obtaining a water extract. The PSC was obtained from *Prunus domestica* fruits by adding ethyl alcohol 96% to plum fruit water extract in ratio 3:1.

For research, extracts with 30% ethanol from PSC and «Pronofit» were obtained.

The qualitative composition of the carboxylic acids in «Pronofit» and PSC was determined by paper chromatography (PC) in the solvent systems as 2% acetic acid, 15% acetic acid and propanol-water (85:15) with reliable samples of carboxylic acids. The dried chromatograms were treated with a solution of 0.3% bromophenol blue and 0.1% solution of methyl red in methanol followed by heating in a drying oven at a temperature of 105 ° C. Organic acids appeared in the form of yellow spots on a blue background.

Determination of the content of carboxylic acids in PSC and «Pronofit» was carried out with direct titrimetry, using as a titrant a solution of sodium hydroxide (0.1 mol / L) and indicators of 1% solution of phenolphthalein and 0.1% solution of methylene blue. Titration was carried out until the appearance of purple-red color. The content of carboxylic acids was calculated in terms of malic acid.

Results and discussion. According to the results of PC in "Prunofit" and PSC four carboxylic acids were identified: citric, malic, oxalic, and succinic with the highest content of malic acid in both extracts. According to the results of titrimetric analysis, it was found that content of carboxylic acids in "Prunofit" and PSC was determined as 19.2 % and 12.8 % respectively in terms of dry weight.

Conclusions. The obtained data showed promising further study of «Prunofit» and PSC and will be used for standardization and development of new drugs from *Prunus domestica* fruits.

PHENOL CARBOXYLIC ACIDS OF THE IMMORTELLE (HELICHRYSUM BRACTEATUM)

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Introduction. In modern medicine, often a doctor and patient, having discuss the most optimal and rational approach to prevention and treatment, to choose for herbal medicines than the use of synthetic drugs. Phytochemical research of herbal drugs is carried out in two directions. One direction is a scientific search for new biologically active substances in the plants which are already used for the production of drugs; the other direction is a pharmacological study of new plants. Herbal medicines, as a rule, have an excellent tolerability profile and a minimum of contraindications. It is known that phenol carboxylic acids are contained in almost every plant, and they can be both in the free state and in the form of glycosides. Among phenol carboxylic acids in plants, hydroxycinnamic acids are particularly prevalent. Phenol carboxylic acids have a pronounced pharmacological effect and can be important as independent biologically active substances for medicines.

The Aim of this study is to identify phenol carboxylic acids in the flowers and herb of immortelle.