Note Sample 1 The volatile components of Salix caprea L. shoots.

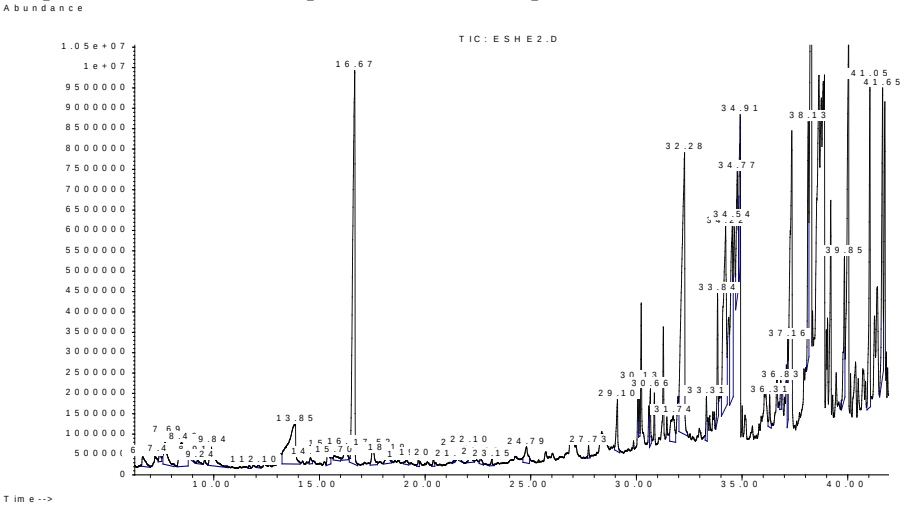

Fig. 1 presents the chromatogram of the volatile substances of lipophilic extract from Salix caprea L. shoots.

Conclusions. The data obtained show that in Salix caprea L. shoots eugenol, geraniol and squalene prevail among compounds of the terpenoid nature, there are also terpene hydrocarbons and their oxygenated derivatives, aromatic and heterocyclic compounds, fatty acids and their esters. The data obtained show that in lipophilic extract from Salix caprea L. shoots eugenol, geraniol and squalene prevail among compounds of the terpenoid nature, there are also terpene hydrocarbons and their oxygenated derivatives, aromatic and heterocyclic compounds, fatty acids and their esters. Fatty acids are more abundant in the extract from Salix caprea L. shoots, with linoleic, linolenic, and palmitic acids as the major compounds of this family.

COMPARATIVE PHYTOCHEMICAL STUDY OF WORMWOOD TINCTURE AND HERB PRODUCED BY VARIOUS FIRMS

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Introduction. Wormwood (*Artemisia absinthium* L.) is a perennial herbaceous plant of the *Asteraceae* family, which is used in modern medicine in its pure form and as a component of complex preparations against diseases of gastrointestinal tract without acute inflammation events, such as helminthosis, gastritis, peptic ulcer, diarrhea, colitis, hepatitis, chronic pancreatitis, cholecystitis, cholangitis, biliary dyskinesia, chole- and urolithiasis, as well as against arterial hypotension, neurocirculatory dystonia of hypotonic type, pathological climax, early toxicosis of pregnant women, hypomenstrual syndrome.

On the basis of wormwood herb, various forms of medicine are developed, but most useful in therapy are tinctures and infusions. Raw materials for medicinal forms are collected in different regions of Ukraine, so its composition will vary, and the qualitative and quantitative composition of preparations based on it will be also variable. That is why, comparative study of wormwood herb medications of different manufacturers is of scientific interest, which indicates the relevance of the chosen topic.

The **aim** of the work is to conduct a comparative phytochemical analysis of the wormwood preparations of different manufacturers in the pharmaceutical market of Ukraine.

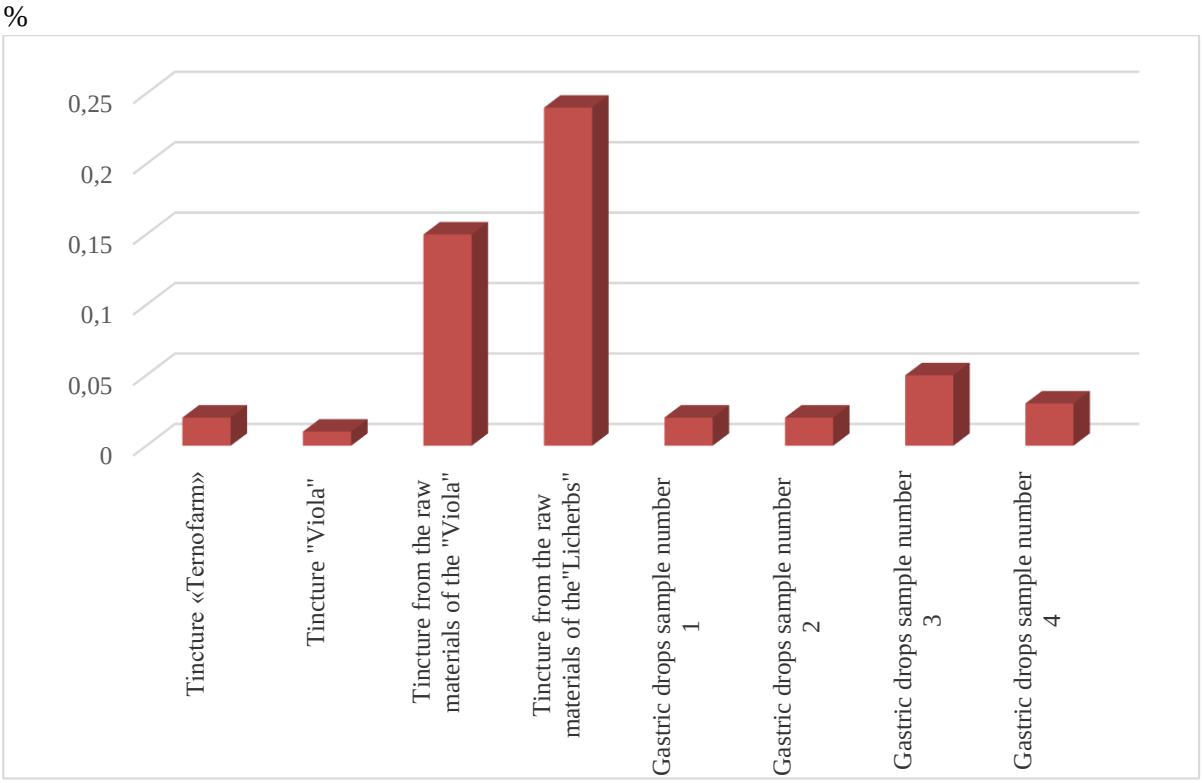
Materials and methods. For research, tinctures of wormwood of two domestic producers ("Viola" and "Ternofarm") and complex preparation "Gastric drops" (contains: valerian tincture, wormwood tincture, peppermint tincture, belladonna tincture) produced by "Ternofarm", as well as wormwood herb manufactured by two domestic producers ("Viola" and "Liktravy"), from which tinctures were made in laboratory conditions, were used.

Preliminary chromatographic study was carried out using paper chromatography (PC). An equal number of test specimens were applied to the Filtrak starting line and chromatographed by an ascending method in a solvent system: ethyl acetate - formic acid - water (10:2:3). The dried chromatogram was detected in UV light at a wavelength of 354 nm.

For spectrophotometric determination, were made elution with 96% alcohol (pure solvent was used as a standard). The optical density was measured on a spectrophotometer SF-46.

Results and discussion. As a result, brown spots appeared, which after processing with ammonia vapor, did not change their color. They were identified as a mixture of flavonoids – apigenin, apigenin 7-β-D-glucopyranoside (cosmosiin), luteolin and luteolin 7-glucoside (cinarozide). Blue spots with Rf = 0.56 detected on paper chromatogram by fluorescence before and after processing with ammonia vapor and spectrophotometric characteristics were identified as chlorogenic acid and its derivatives.

After determination, the quantitative content of the amount of flavonoids in terms of cinaroside was calculated for each sample: tincture "Ternofarm"−0.02%; tincture "Viola"−0.01%; tincture from the raw materials of the manufacturer "Viola"− 0.15%; tincture from the raw materials of the manufacturer "Liktravy"−0.24%; "Gastric drops" sample 1 – 0.02%; "Gastric drops" sample 2 - 0,02%; Gastric dros sample 3 - 0.05%; Gastric drops sample 4 - 0.03% (Pic. 1).



Pic. 1. Quantitative content of flavonoids in studied samples of wormwood medications

Conclusions. As a result of the study, it was found that tinctures made in laboratory conditions from the wormwood herb by "Viola" and "Liktravy" contains more flavonoids than ready-made fluid medications manufactured by domestic producers.