

RESEARCH OF TECHNOLOGY FOR OBTAINING OIL EXTRACTS

Lytvinenko E., Bisaga E., Herasymova I., Vyshnevskaya L.

National University of Pharmacy, Kharkiv, Ukraine

iryna_herasymova.ukr.net

Introduction. Today is an acute issue of expanding the range of domestic medicines based on raw materials of plant origin by many advantages.

Aim. Development of technologies for oil extracts from medicinal plants celery (*Apium graveolens* L.) and parsnip (*Pastinaca sativa* L.).

Materials and methods. Analysis of the literature, organoleptic analysis of the sample of oil extracts, thin-layer chromatography.

Results and discussion. Oil extracts are widely distributed in the range of medicines past centuries. Although in most cases the rational use of polar extractant as alcohol (which eliminates the need for addition of antiseptics and preservatives), but if necessary, to conduct extraction of lipophilic substances such as chlorophyll or carotenoids, it is better to use vegetable oil.

The objects were used by us in subsequent studies were fragrant herb celery (*Apium graveolens* L.) and parsnip (*Pastinaca sativa* L.).

An analysis of published data we know that the grass celery contains such biologically active substances such as asparagine, tyrosine, nicotinic acid, chlorophyll, essential oils, B vitamins, vitamins C and E, carotenoids, and Pasternak - furocoumarins, flavonoids, chlorophylls.

Therefore, medicinal herbs contain both hydrophilic and lipophilic substances. Through the selection of extractant can vary the content of various substances in the extract. Where necessary to get from raw whole range of substances the raw can moisten by alcohol before extraction.

For oil extracts and further research, we chose corn oil, which has established itself as emollients with relatively high extractive capability.

After oil organoleptic analysis of the extracts we were determined all samples were a homogeneous liquid oil with a specific smell, green. However, samples of previous wetting ethanol had a rich green color, indicating a more complete extraction of chlorophyll.

Qualitative composition was determined by thin-layer chromatography.

Solvent system hexane – isopropyl alcohol – water solution of sodium carbonate in the ratio 50: 5: 0.25 used for chlorophyll and carotenoids.

A result of conducting of thin-layer chromatography spots of chlorophylls, carotenoids and feofityn were found.

Conclusions. Based on the results of the studies we found that the oil extractants advisable to use if necessary to get lipophilic substances from medicinal plants.