RESEARCH OF THE LIQUID NETTLE LEAVES EXTRACT OBTAINING BY PERCOLATION METHOD

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It is known that nettle grows like a weed, but it refers to the medicinal plant raw material and has a complex of valuable substances such as vitamin, carotenoids, chlorophyll, vitamin C, flavonoids, tannins, and others. Stinging nettle has hemostatics, diuretic and tonic effect, showing weak choleretic activity. Nettle leaves are part of the species with gastric, laxatives, vitamin and other effect. From the leaves of nettle prepared tincture, liquid and dense extract. Dense extract part of the drug Alohol, which has a choleretic effect.

Long been and till present day by decoction of nettle leaves rinse hair to strengthen the roots and structure of hair, liquid extract is part of the therapeutic shampoo "Fitoval."

Therefore, we consider that the development of topical medicinal shampoos containing a set of extraacts from several types of raw materials, one of which is the nettle leaves is relevant.

Preparation of a liquid extract made by percolation, as extragent used 50% water alcoholic mixture, extraction conducted at room temperature. 100 g of raw material loaded into a percolator, to eliminate formation of voids (dead zones) pouring of extragent was carried out from the bottom up to a "mirror" level. Raw material was infused within 24 hours, and then started the process of percolation, that is selection of extract at a rate of 110 drops per 1 minute and at the same rate feeding by fresh extragent.

In order to establish the dynamics of the extraction process was carried out selection of extract samples in the amount equal to the weight of the loaded material. In all collected consistently extracts was determined the dry residue at a temperature of 105°C on hygrometer of «Sartorius» company (Germany). Also was calculated yield of extractives.

As a result of studies, it was found that for complete exhaustion of raw materials needed to use a ten-fold amount of extragent relative to the weight of the raw material. The obtained liquid extract was evaporated on a laboratory vacuum evaporator up to 100 mL, to achieve a ratio of raw material: extragent 1:1. Thus there was obtained liquid nettle extract, which will be used in our futher work at development of a therapeutic shampoo.