

RESEARCH TECHNOLOGICAL PARAMETERS OF THE BORAGE (*BORAGO OFFICINALIS L.*) ROSETTE LEAVES

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Introduction. Borage (*Borago officinalis L.*) of *Boraginaceae Juss.* family has long been used in folk and official medicine. The infusion of herbs has a strong diuretic effect for swelling of cardiac and renal origin, ascites, inflammation of the urinary tract. Polysaccharides of the borage's underground part provide emollient and expectorant effect in catarrh of the upper respiratory tract. The infusion of herbs stimulates the appetite, have a choleric and anti-inflammatory action. Borage oil from the fruit contains a large amount of unsaturated fatty acids, it's an important component of cosmetic products for dry and sensitive skin: improves water-retaining capacity of the skin, increases its elasticity and protective properties. Flowers of the plant are used as a sedative for treatment of increased jitters, irritability. Rosette leaves, which appear in early spring, are recommended fresh in diets. Succulent leaves with a pleasant smell of fresh cucumber and salty flavor are used as a vitamin, tonic, anti-inflammatory. There are published dataevidence that confirm the similarity of chemical composition and biological effect of herbs and rosette leaves, which can be an additional type of raw material for substance.

Aim. Research the range of technological parameters of the borage's (*Borago officinalis L.*) rosette leaves raw materials for obtaining substance.

Materials and methods. Raw materials are harvested during the stage of the full deployment leaf blade in the Kharkiv region (village Peremoga), then it is dried under canopy outdoors. Exit of the rosette leaves air-dry raw material is 19-21% for fresh. The leaves are crushed at the mill LZM-1, used a fraction which passed through a sieve number 8000. The following technological parameters are studied: the loss in weight on drying, the average particle size, volume weight, bulk weight, specific weight, poroznist of the layer, porosity, free volume of the layer, specific surface area of particles, fluctuation, the absorption coefficient of the extractant by techniques that are described in the literature.

Results and discussion. The loss in weight on drying of the borage's rosette leaves is $12.83 \pm 0.19\%$, the average particle size – $1.14 \pm 0.05\text{mm}$, volume weight $0.34 \pm 0.01 \text{ g/sm}^3$, bulk weight – $0.18 \pm 0.01 \text{ g/sm}^3$, specific weight – $1.62 \pm 0.06 \text{ g/sm}^3$, poroznist of the layer – $0.48 \pm 0,01$, porosity – 0.79 ± 0.01 , free volume of the layer – 0.89 ± 0.01 , specific surface area of particles – $187.08 + 4.86 \text{ sm}^2/\text{g}$, fluctuation – ∞ , the absorption coefficient of the extractant 50° ethanol – $4.23 + 0.14$.

Conclusions. The results will be used for development of the technology of raw materials substance.