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Technology of Production and Study of Lilacs Flowers Thick Extract

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Abstract : The physicochemical and technological properties of lilac flowers have been studied to develop the optimal technology for extracts obtaining, as well as the efficiency of the extraction process, the forecasting and rationing of the finished product quality. It was established: humidity – 5.92%; bulk density – 0,23 g/cm^3; grinding ratio – 3-5 mm; specific gravity 1.40 g/cm^3; bulk mass – 0.50 g/cm^3; porosity – 0.59 g/cm^3; fenestration – 0.54 g/cm^3; the free volume of the layer – 0.81 g/cm^3; absorption coefficient of extragent: water – 4.4 ml / g; 40% ethanol – 3.9 ml/g; 70% ethanol is 3.1 ml/g.

The process of lilac flowers filtration extraction to obtain dense extract has been studied. The best yield of extractive substances from lilac flowers was observed under the following conditions of filtration extraction at laboratory conditions: the mass of the loaded raw material – 150.0 g; extragent – 50% ethanol; extraction temperature – 20±2 ºC; extraction rate – 3-4 ml/min; the ratio «raw material:extractant» (DER) – 1:5.

The obtained data can be used in the development of the technological specification, the quality specification of the extract, and also when calculating the material balance of the technological riles.

Keyword : lilac flowers, extraction, the ratio of «raw materials:extractant», extractives.

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