

# PHYSICO-CHEMICAL STUDIES OF THE MATRIX TINCTURE "CAPSICUM ANNUUM"

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**Introduction.** The starting materials for the production of a homeopathic medicine from herbal raw materials are usually matrix tinctures. They must meet the requirements of the article "matrix tinctures for homeopathic medicines" and other applicable regulatory documents. They are usually rated according to general quality indicators: description, relative density, pH of the medium, dry residue and alcohol content.

**Aim.** To establish the quality of the obtained matrix tincture "Capsicum annum", organoleptic indicators (color, transparency, odor, taste), relative density, dry residue and alcohol content were determined.

**Materials and methods.** The most characteristic and specific indicator for homeopathic matrix tinctures is the relative density and dry matter. The alcohol content is a reflection of the correctness of the technology for manufacturing matrix tinctures in accordance with the technological paragraphs (or methods), however, this indicator has a direct relationship with density and can be used as an additional quality indicator.

**Results and discussion.** Quality control of the granules is carried out in appearance, identification classification, the number of adhered granules, dissolution time, weight loss on drying, the average amount of granules in 1.0 g, the average weight of the granules, the weight of the contents of the package and microbiological purity. The most characteristic and specific indicator for homeopathic matrix tinctures is the relative density and dry matter.

After drying, the granules are packed in 10.0 g each in yellow glass vials or in a paper bag, which indicates: the name of the medicinal product, weight and date of manufacture.

**Conclusions.** The preliminary results of spectrophotometric analysis suggest that all samples contain similar classes of biologically active substances, as evidenced by the coincidence of the corresponding absorption peaks.

Physicochemical and pharmacological studies of the obtained homeopathic preparations were carried out: matrix tincture "Capsicum annum" and homeopathic granules "Capsicum C3".

The presence of polysaccharides, alkaloids, flavonoids, proteins, saponins and amino acids in the matrix tincture "Capsicum annum" was determined using qualitative reactions.