

STUDIES ON DEVELOPMENT OF COMPOSITION AND TECHNOLOGY OF SEDATIVE BLEND

Bahjat Tahsin Mohammed, Gladukh Ie.V.

The National University of Pharmacy, Kharkiv, Ukraine

prom_farm@i.ua

The problem of creation of effective herbal remedies from medicinal plants is currently relevant.

This is due to the fact that the medicines based on natural bioactive compounds have advantages over their synthetic analogues, since the breadth of therapeutic effect in them is combined with minimal side effects. Of particular importance are blends, which contain a complex of biologically active compounds responsible for the multivalent effect on various body systems.

The aim of this work was to develop and study a sedative blend. As objects used the following types of medicinal plants - hop cones, motherwort herb, hawthorn fruit, mint leaves and elderberry flowers.

To determine the optimum extraction conditions extracts with 70% ethanol and purified water were obtained. Each of the extracts was sampled fractionally with DER increments of 1:1. For each sample was conducted quantification and calculated the main parameters of the process dynamics. The extraction process carried out in a laboratory filtration extractor.

It has been established that the maximum number of stages for extraction of the extract should be considered equal to 4, since further increase of the extractant portions does not lead to a significant increase in the yield of finished product. Considering the duration of the extraction process and the power consumption it is rational to obtain total extract, although its yield is slightly less than at extraction of a single plant material. The best yield of extractive and active substances is observed when used as extractant purified water.

A comprehensive study of the blends has been conducted. The presence of flavonoids, phenol glycosides, floroglucides, tannins, anthracene derivatives, saponins, water-soluble vitamins in blends has been established. The main biologically active compounds of blends: flavonoids, tannins, ascorbic acid have been quantified. The coefficients of water absorption and total loss of extractant have been determined.

The optimal dosage form for extemporal manufacture is determined to be an aqueous decoction, filtered without cooling.