

## Qualitative and quantitative determination of carbohydrates in the snowdrops (*Galanthus woronowii* Losinsk, *Galanthus nivalis* L.) medicinal raw materials and homeopathic mother tinctures by TLC and UV-spectrophotometry

© Dmitry O. Bokov,<sup>1\*</sup> Irina A. Samylina,<sup>1</sup> and Dmitry M. Popov<sup>2</sup>

<sup>1</sup> Department of Pharmacognosy. I.M. Sechenov First Moscow State Medical University.

GSP-1, Trubetskaya St., 8. Moscow, 119991. Russia. Phone: +7 (925) 358-84-27. E-mail: [fmmsu@mail.ru](mailto:fmmsu@mail.ru)

<sup>2</sup> Research Institute of Pharmacy. I.M. Sechenov First Moscow State Medical University.

Nahimovskiy Pr., 45. Moscow, 117418. Russia.

\*Supervising author; <sup>+</sup>Corresponding author

**Keywords:** carbohydrates, *Galanthus woronowii* Losinsk, *Galanthus nivalis* L., homeopathic mother tincture matrix, glucose, fructose.

### Abstract

The qualitative and quantitative composition of the carbohydrate content in the homeopathic medicinal raw materials and homeopathic mother tinctures of snowdrops (*Galanthus woronowii* Losinsk, *Galanthus nivalis* L.) were studied. Optimal conditions of TLC analysis, the extraction of medicinal raw materials, were found, spectrophotometric methods for quantifying the carbohydrate content in terms of fructose and glucose were developed.