

SEDATIVE EFFECT OF A THICK EXTRACT OF THE *LAMIUM ALBUM* L.

Oleksandr Goncharov¹, Alla Kovalyova¹, Yulia Avidzba², Alina Minaieva¹

¹ – National University of Pharmaceutical, Kharkiv, Ukraine;

² – Kharkiv National Medical University, Kharkiv, Ukraine

12345alina@gmail.com

Justification and purpose. Species of the genus *Lamium* synthesize various groups of biologically active substances (BAS) and have a sufficient raw material base. The aerial organs of *Lamium album* contain flavonoids, tannins, iridoids, saponins, alkaloids, essential oil and polysaccharides. In folk medicine the *Lamium album* is used as a cure with expectorant, anti-inflammatory, antispasmodic, diuretic, hemostatic and soothing action. According to the scientific sources of BAS, this plants exhibit cytostatic, antiproliferative, antiradical activity. A detailed study of BAS of this plants the discovery of the pharmacological activity of the isolated complexes of compounds, the preparation of medicinal products from them is an actual task for pharmacy. Thus, the purpose of this study was to study the sedative effect of the extract of the *Lamium album*.

Methods. In the plant raw material we identified and identified hydroxycoumarins, flavonoids, hydroxycinnamic acids by chromatography-mass spectrometry, benzoic and phenol- and phenylcarbonyl acids were identified. We obtained a thick extract from the *Lamium album* and studied the psychotropic effect by standard screening behavior test of the open field, that makes it possible to reveal the nature of the effect of the complex on the central nervous system. The studies were carried out on 12 white non-linear mice weighing 14-21g, kept in vivarium conditions. As a reference, a liquid extract of *Passiflora incarnata* was used as the "Alora" syrup, that was administered intragastrically at a dose of 375 mg/kg, calculated as liquid extract. The investigated extract of *Lamium album* was administered intragastrically at a dose of 100 mg/kg. Tests were performed 15-25 min after single administration of the drugs.

Results The test extract, as well as the reference drug, after a single administration have a pronounced psycho-sedative effect, which is manifested by a decrease in motor and orientation-research activity. Decrementing effect on the central nervous system is more pronounced for *Lamium album* extract than for the *Passiflora incarnata* extract, and equally as oppression of the horizontal (by 32% compared to the control) and vertical components (by 50% compared with the control, $p < 0.05$). A distinctive feature of the *Lamium album* extract activity from the activity of the *Passiflora incarnata* extract is a marked decrease in the vegetative accompaniment of the emotional reaction. The property of the test substance can be a composite stress-protective action and used to correct neurogenic autonomic disorders.

Conclusions. So, the herb extract *Lamium album* L. is a perspective object for further pharmacological study of the mechanisms of the depressing activity.