designing, biochemical process description, analysis of metabolites, the chemical and pharmaceutical analysis.

Objective of the study. To determine the chemical structure and the spatial conformation of phenoxythiazolechloralum for designing an antimycobacterial drug.

Materials and methods. Bruker NMR spectrometer; electronic balance (Ohaus), phenoxythiazolechloralum.

Results and discussion. In this research, the NMR spectra were obtained in relation to internal reference standard of tetramethylsilane (TMS). The study of protonic NMR spectrum (1H1) provides information about the chemical shifts of each type of proton and functional groups, which indicates the presence of CH bonds in the benzene ring (2-4), the aromatic chlorine (1-6) and the alcoholic hydroxyl group (3 -4). The NMR carbonic spectrum (13C6) demonstrates the spatial position of the functional groups that contain carbon, namely aliphatic CH links (25-40), CH in benzene ring (125-145), C = N (117) C = O (194). These results allow to present the chemical formula of phenoxythiazolechloralum.

Conclusions: According to this study was determined the chemical structure and spatial conformation of phenoxythiazolechloralum, a drug with antimycobacterial real potential. Key words: NMR spectroscopy, phenoxythiazolechloralum, antimycobacterial.

359. COMPARATIVE STUDY OF THE ANTIDEPRESSANT ACTIVITY OF THE EXTRACTS AND BIOLOGICALLY ACTIVE SUBSTANCES OF ELEUTHEROCOCCUS SENTICOSUS

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Introduction: The problem of stress has theoretical and practical significance.The stimulation of the immune system and of the adaptive capacity of the organism can be achieved by physical training or introducing into the organism adaptogens. The most important natural adaptogens are the following plants: Panax Ginseng, Eleutherococcus senticosus, Rhodiola rosea, etc. We have researched Eleutherococcus senticosus. The leading groups of biologically active substances (BAS)of Eleutherococcus are phenylpropanoids: eleutheroside B (syringin), eleutheroside D and coumarin (eleutheroside B1), sterol glycoside, carbohydrates, polysaccharides, essential oils, resins and other substances.

Materials and methods: The experimens are performed on white outbred rats of both sexes weighing 200-220 g at the Department of Pharmacology of SamSMU. Four groups of experimental animals were formed. We introduced the following substances liquid extract of the Eleutherococcus senticosus in dose of 150 mkl/kg, the active substances Eleutherococcus senticosus - syringin and eleutheroside B1 in dose of 10 mg/kg and the comparison drug Amitriptyline in dose of 5 mg/kg. All drugs were administered intragastric probe for rats on the background of 1% water load. Control animals received only water load. After a single dose administration of the drug after 2 h was examined

antidepressant activity in The Porsolt swim test (PST) (The behavioural despair test). The animal have placed into the cylinder for 5 min and we register the active and passive swimming and the time immobilization. The increase of the time active swimming and the decrease of the time immobilization are considered as antidepressant effect.

Discussion results: The result of research found that the average time of movement of animals from the experimental groups exceeds the movement of control group and comparative groups. The comparison drug showed a significant increase of the average time of movement to 27%,the liquid extract of eleutherococcus to 46%, the eleutherococcus eleutheroside B1 to 51% and the Eleutherococcus syringin to 62% on the value of water control. By comparing the test substances with amitriptyline we found that the liquid extract of eleutherococcus and eleutheroside B1 nonsignificant increase the average time of the movement of animals to 15% and 19% respectively and the administration of syringin increase significant the activity of rats to 27%.

Conclusion: As a result of experiments we found that the active substances syringin of the Eleutherococcus senticosus has antidepressant effects. The liquid extract of Eleutherococcus senticosus and eleutheroside B1 exert antidepressant activity similar to the action of amitriptyline in dose of 5 mg/kg. The antidepressant activity of the experimental substances syringin and eleutheroside B1 is prononced.

Key Words: Eleutherococcus senticosus, phenylpropanoids, syringin, Porsolt swim test.

360. THE USE OF ATOMIC ABSORPTION SPECTROSCOPY FOR THE DETERMINATION OF CALCIUM IN DAIRY PRODUCTS

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Introduction: Calcium is a mineral present in the highest quantity in the human body and has several important functions. Over 99% of total body calcium is in the bones and joint, which are designed to support the structure. The remaining 1% is present in the blood, muscle and intercellular fluids. Dairy products are the best sources of calcium in the diet, therefore, the health authorities recommended to drink three glasses of milk per day. The calcium content in dairy products is different depending on several factors.

The purpose of this study is a quantitative assessment of calcium in various milk products using a contemporary instrumental method - atomic absorption spectroscopy (AAS). The basic principle of atomic absorption measurements is background radiation attenuation due to absorption in the sample atomized. Relationship between initial and attenuated radiation gives information about the concentration of the element in the test sample.