



INTERNATIONAL CONFERENCE SMART BIO

3RD International Conference

„Smart Bio“

02-04 May 2019

KAUNAS

LITHUANIA

ABSTRACT BOOK

OUR SPONSORS:



VYTAUTAS
MAGNUS
UNIVERSITY
Botanical garden



VYTAUTAS MAGNUS
UNIVERSITY
AGRICULTURE
ACADEMY

**EUROPEAN
REGIONAL
DEVELOPMENT
CENTER**

BACTERIOSTATIC EFFECT OF THE MILK WHEY PROTEINS ON THE CAUSATIVE AGENT OF POTATO BREAD DISEASE	258
<i>Totukan Korchubekova, Svetlana Gutsal</i>	
BIODIVERSITY OF THE EASTERN PODILIA - BASIS OF STRATEGY OF BALANCED DEVELOPMENT OF THE REGION	259
<i>Oleksandr Mudrak, Yuliia Ovchynnykova, Halyna Mudrak, Halyna Tarasenko, Bohdan Nesterovych</i>	
BIOLOGICAL CHARACTERISTICS OF THE STONE COCKSCOMB <i>ALECTRIAS ALECTROLOPHUS</i> (STICHAETIDAE) OF AVACHA BAY (EASTERN KAMCHATKA)	260
<i>Murasheva M.Yu.</i>	
BIOSYNTHESIS OF POLYENE ANTIBIOTICS BY <i>STREPTOMYCES NETROPSIS</i> IMV AC-5025 UNDER THE ACTION OF EXOGENOUS ISOPENTENYLADENOSINE	261
<i>Mariia Loboda, Liudmyla Biliavska, Galyna Iutynska</i>	
BIOTIC RELATIONS BETWEEN PATHOGENIC LEPTOSPIRES AND GREEN ALGAE.....	262
<i>Hulai Oleksandr, Hulai Vitalii, Tkachuk Nataliia</i>	
CARDIOVASCULAR SYSTEM AS AN ADAPTATION INDICATOR OF STUDENTS	263
<i>Anar Bisseneva</i>	
CENTROMERIC AND ASSOCIATED PROTEINS OF HIGHER METAZOAN: COMPARATIVE ANALYSIS AND PRACTICAL RECOMMENDATIONS	264
<i>Tatiana Grishaeva, Victor Spangenberg, Yuri Bogdanov</i>	
CONFIGURING SAMPLE PLOTS: SAMPLE-BASED FOREST INVENTORY AND ACCURACY IMPLICATIONS	265
<i>Viktor Myroniuk, Andrii Bilous, Petro Diachuk, Fedyna Kateryna, Maksym Matsala</i>	
CONTROL OF SERUM ENZYME ACTIVITY USING ULTRASONIC AND ELECTROSTATIC FIELDS	266
<i>Anna A. Oleshkevich</i>	
CORRELATION BETWEEN RESISTANCE TO UV IRRADIATION AND THE TAXONOMIC POSITION OF MICROORGANISMS.....	267
<i>Galina Gladka, Vira Hovorukha, Victoria Romanovskaya, Oleksandr Tashyrev</i>	
CYTOGENETIC DISTURBANCES IN CELLS OF BONE MARROW AND THYMUS AS A POSSIBLE SIDE EFFECT OF LASER THERAPY	268
<i>Bulyakova N.V.</i>	
DEVELOPMENT OF MANAGEMENT CONCEPT ON MODERN ANIMAL BIODIVERSITY TRANSFORMATIONS IN THE STEPPE ZONE OF UKRAINE UNDER CONDITIONS OF CLIMATE CHANGES	269
<i>Pakhomov O., Loza I., Holoborodko K.,</i>	
DISTRIBUTION OF ALLERGENIC TREE SPECIES IN KAUNAS	270
<i>Irma Česnakaitė, Audrius Dėdelė, Auksė Miškinytė</i>	
DISTRIBUTION OF LYMANTRIADISPAR IN FORESTS OF CSI «KYZYLZHARSKOE FORESTRY» OF THE NORTH KAZAKHSTAN REGION	271
<i>Kozhevnikova L.N., Pechenkina O.S.</i>	
ECOLOGICAL ASPECTS OF DRUGS USE	272
<i>Kotvitska A.A., Kononenko N.M., Yeromenko R.F.</i>	
EFFECT OF PARP INHIBITION ON HAS2, COX2 AND GREM1 GENE EXPRESSION IN OVARIAN CUMULUS CELLS UNDER THE CONDITION OF EXPERIMENTAL IMMUNE COMPLEX INJURY IN MICE.....	273

Cardiovascular System As An Adaptation Indicator Of Students

Anar Bisseneva¹

¹NORTH KAZAKHSTAN STATE UNIVERSITY NAMED AFTER M. KOZYBAYEV, KAZAKHSTAN
BISENEVA.ANAR@GMAIL.COM

Abstract

The system of circulation blood is an indicator of the adaptive capabilities of the whole organism. This is due to the leading role of the circulatory system in the adaptive reactions of the body, which is reduced to providing the necessary level of energy and metabolic processes, maintaining the functional state of the organism in accordance with the requirements of the environment. A labile indicator of the functional state of the cardiovascular system is the heart. It varies both during the growth process and under the influence of internal and external stimuli. In the process of age development there is a decrease in heart rate, which in the adolescent period is close to the value determined in adults.

Evaluation of the functional reserve of the cardiovascular system under conditions of mental and physical loads allows us to predict the level of functional readiness and the possibility of achieving a given result and, in addition, is the reference value when choosing the optimal and the maximum allowable training loads, is a convenient method of quantitative health characteristics or level of capacity for various types of adaptation, measurement of fatigue.

The cardiovascular system is the first to respond to physical and mental stress. High adaptive capabilities of the cardiovascular system, realized with systematic muscular activity, should be considered as evolutionarily fixed forms of adaptive reactions.

One of informative donozological integral indicators reflecting the features of adaptive-adaptive reactions of the organism in a healthy population of people is the type of self-regulation of blood circulation. The determination of the type of self-regulation of blood circulation makes it possible to assess the level of stress in the regulation of the cardiovascular system. Also, the index of functional changes of the cardiovascular system shows the degree of adaptation, functional reserves, predicts health.

The study involved students of North Kazakhstan State University named after M. Kozybayev. We surveyed students of the 1st, 2nd and 3rd courses. Students were monitored for blood pressure using the oscillometric and auscultatory method of Korotkov, anthropometry method. We determined the parameters of the cardiovascular system of students, the type of self-regulation of blood circulation and index of functional changes of the cardiovascular system and their influence on adaptation.