

SUMMARY

Abu Hada R. H., Martynyuk V. S. Reaction of mast cells on extremely low frequency magnetic fields *in vitro* // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 3-7.

The influence of extremely low frequency magnetic field on the mast cells of rats was examined. It was shown that the sensitivity of mast cells is high to magnetic influence. Reactions of mast cells depend on frequency, amplitude and time of exposure to MF.

Keywords: mast cells, degranulation, extremely low frequency magnetic field

Akimova K. A. Some peculiarities of biology of *Fadejewobdella quinqueannulata* (Lukin, 1929) (Hirudinea; Erpobdellidae) // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 8-11.

The paper deals with some ecological, biological and morphological properties of rare leech species *Fadejewobdella quinqueannulata*. Descriptions of organ systems are given. The ecology of this species is studied in details. There are some suggestions on the point of including this conservation-needing species into the Red Data Book.

Keywords: leech, digestive system, coelomic system

Brigadirenko V. V. The conservational classification of ground-beetles (Coleoptera, Carabidae) of Ukraine // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 12-16.

The present stage and prospects of conservation of ground-beetles species diversity in Ukraine were analyzed. The circuit of conservational classification of ground-beetles is proposed. This classification is based on fixed degree of a species studies, the area of its distribution, current state of populations, relation of a species to various types of human activity, finding of ecosystems, in which the species lives, under threat of anthropogenous transformation. The necessity of creation of an electronic database on ground-beetles of Ukraine is proved.

Keywords: ground-beetles, Carabidae, protection, biodiversity, rare species

Eystafyeva I. A. Relationship between the circulation system reactivity and the load of mercury in hair of schoolboys // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 58-62.

The investigation of 25 schoolboys living at the dust-heap with a high load of mercury in the soil, was carried out. Higher load of mercury in hair leads to compensation of the which can be revealed after physical exertion.

Keywords: circulation system, children, physical exertion, mercury

Gamma T. V., Ravaeva M. Yu., Husainov D. R., Kizilov A. E. Impact of biologically active on the electrical activity of identified neurones in mollusc *Helix albescens* // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 21-26.

The results of investigation of electrical activity on identified mollusk neurons affected by solutions of benzimidazole and kumarine are presented.

Keywords: neuron, electrical activity, benzimidazole, kumarine

Godunko R. J. Structural and functional organization of mayfly communities (Insecta, Ephemeroptera) of river ecosystems in the Ukrainian Carpathians // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 31-35.

Data about some structural and functional parameters of mayfly communities of lotic ecosystems of Ukrainian Carpathians are presented. The index of species diversity and community organization were determined. The hierarchic classification of ecomorphs of Ephemeroptera of Carpathians region (including some taxa of world fauna) is proposed.

Keywords: mayfly, Ephemeroptera, communities, river ecosystems, Ukrainian Carpathians

Gol'din, P. E. Registering structures of bulla tympani of harbour porpoise *Phocoena phocoena relicta* Abel, 1905 (Cetacea, Phocoenidae) // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 36-40.

Based on research of bullae tympani in harbour porpoises, it was shown that the periosteal zone of medial part of bulla tympani in odontocetes is a registering structure containing annual layers. The period of layering is limited by the age of 10 years, and the laws of bone lamination during two first years of life remain

unclear. This makes difficult the practical use of bulla tympani in life history studies.

Key words: harbour porpoise, registering structures, bulla tympani, periosteal zone, age

Gorelova E.V. Dynamic properties of some components of rats' zoosocial behaviour depending on the character of space – motor asymmetry // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 41-45

The influence of space – motor asymmetry character on a male-rats' zoosocial behaviour was studied in two experimental models. A change of experimental conditions caused the animal behaviour repertoire changes and therefore the behaviour microgroup structure.

Keywords: zoosocial behaviour, space–motor asymmetry

Gorokhova N. Y. Ethioopathogenesis of lungs injury in tourniquet shock // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 46-49.

The model of tourniquet shock in white rats was used. It has been established that in reperfused dysfunction of activation of blood serum proteases and bronchoalveolar lavage on the background of the inhibitors proteinase level. In addition there is strengthening of processes of oxidation of lipids, and abatement of antioxidant potential takes place.

Keywords: tourniquet shock, oxidation of lipids, proteolysis, shock lung

Grachova L. V., Lukatskaya Ye. A., Pakhomov A. Ye. Influence of mole burrowing activity on forming diversity in sandy pine forests of Steppe Pridneprovie // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 50-53.

Characteristic of mole burrowing activity influence on soil biotic diversity in steppe forests is presented. It is shown that species diversity and number of microflora, plants, soil protozoa, microarthropods, soil mesofauna are considerably enriched as a result of mole activity. Reconstruction of biota functional structure, aimed at biological processes activation and increasing edaphotope ecological stability is noted.

Keywords: mole, soil, microflora, soil fauna, vegetation

Gritsjuk S. B., Khlus L. M., Khlus K. M. The variation of conchological characters of *Helix pomatia* L. // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 54-57.

The influence of the anthropogenic load on the variation of conchological characters of *Helix pomatia* L. was investigated by factor analysis. The differences in the communalities and factor loadings of the indices, in the factors' number, in the eigen-values and individual percent of factors are found.

Keywords: *Helix pomatia*, conchological characters, variation, factor analysis

Hetman T.P., Akimova K.A. Dependence between otoliths size and body size of *Odontogadus merlangus euxinus* // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 27-30.

Morphological details of sagitta otoliths structure in *Odontogadus merlangus euxinus* Was studied. Dependence between otoliths size and body size of males and females was found. It was found that sagitta otoliths can be successfully used in species and sex identification.

Keywords: otolith, *Odontogadus merlangus euxinus*, growth, body size

Ikkert O. V., Kurhalyuk N. M., Hordii S. K., Galkiv M. O., Tkachenko G. M. NO-ergic link and mitochondrial energy metabolism in rats with different resistance to hypoxia // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 80-83.

We investigated the influence of intraperitoneal L-arginine and N⁰-nitro-L-arginine injection on processes of energy metabolism, antioxidant systems and processes of lipid peroxidation in rats liver mitochondria with different resistance to hypoxia.

Keywords: NO, mitochondrial respiration, resistance to hypoxia

Ishmukhametov R. R., Chaban Yu. L. Gliding motility of freshwater cyanobacterium *Phormidium uncinatum* under low level of $\Delta\mu\text{H}^+$ // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 84-88.

The rate of freshwater cyanobacterium *Phormidium uncinatum* gliding motility under various pH and cation environment has been studied. It has been shown that dissipation of $\Delta\mu\text{Na}^+$ and $\Delta\mu\text{Ca}^{2+}$ stopped bacteria

movement. Obtained data are discussed in the frame of sodium- and calcium dependent cyanobacterial movement under alkaline pH.

Keywords: bioenergetics, cyanobacteria, adaptation

Kalinovsky P. S., Martynyuk V. S. Influence of low frequency magnetic fields on binding of hydrophobic ligands with human albumin // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 89-93.

The influence of extremely low frequency magnetic field on binding of retinolacetate with human albumin was examined. It was shown that effect of magnetic field responds to initial concentration of retinolacetate. Present correlation is of nonlinear character and having maximal rate on low concentrations.

Keywords: dynamical structure of water, hydrophobous bonds, extremely low frequency magnetic field

Kovblyuk N. M. About the necessity of forest edges examining during the study of local fauna of spiders (Arachnida, Aranei) // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 94-98.

It was found that a forest edge is the specific habitat for spiders at the same extent, as a wood and a glade. For the first time the following species in Ukrainian fauna were recorded: *Robertus mediterraneus* Eskov, 1987, *Scotina celans* (Blackwall, 1841) and *Diaea pictilis* (Banks, 1896).

Keywords: Aranei, fauna, methods, forest edges, Crimea

Khrokalo L. A. The biotopical distribution of dragonflies larvae (Insecta: Odonata) in some regions of Ukraine // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 183-186.

The distribution of the larvae of 36 dragonflies species in 7 types of waterbodies was studied. The analysis of the similarity of biotopes upon the dragonflies larval populations have been made. Some data on biotopical distribution of dragonflies larvae in Carpathian (Chernivtsy region) are presented too.

Keywords: dragonflies, larvae, waterbodies, distribution

Tsaryk I. Y. Fauna diversity of invertebrates in primary and secondary communities of Ukrainian Carpathians highland // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 187-190.

Data for fauna diversity of invertebrate organisms in the highland of the Carpathians are presented. We have discovered some differences in comparing of primary pine-trees communities and secondary meadow communities. The frequency of occurrence of invertebrate organisms is higher for secondary communities. On the other hand, the systematic diversity is very low for meadow communities, and the primary communities are rich in the aspect of systematic diversity.

Keywords: Carpathians, highland, fauna diversity.

Kompaniec A. G., Turlo T. N., Bulakhov V. L. Birds and mammals excretion activity influence on NPK complex forming in soil of ravine oak-forests of Prisamarie // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 99-102.

Characteristics of tropho-metabolites of birds and mammals influence on NPK complex accumulation in soil are presented. It is shown that their excretion activity is important ecological factor of nitrogen, phosphate and potassium forming in soil. Bird excretions enlarge these elements quantity in 1.6-2.3 times, mammal excretions – 1.2-1.9. It promotes increasing fertility and antipressing block against technogenic pollution.

Keywords: birds, mammals, NPK, complex, soil

Korenyuk A. V., Kvach Yu. V., Zamorov V. V. Macrozoobenthos of Budaksky Lagoon and its importance for gobies (Gobiidae) // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 103-106.

The macrozoobenthos of the Budaksky Lagoon during spring and summer period and its importance in the feeding of the round goby *Neogobius melanostomus* and grass goby *Zosterisessor ophiocephalus* was carried out. The results of parasitological analysis of gobies with acanthocephalans *Acanthocephaloides* sp. are given.

Keywords: gobies, macrozoobenthos, feeding, parasites

Leonov S. V. An influence of competitor species on the land snail *Helix albescens* Rossm. juveniles' growth rate // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 107-110.

The paper presents the results of the experimental determination of competition influence of the species

Eobania vermiculata (Müller) on the land snail *Helix albescens* Rossm. juveniles' growth rate in laboratory. The growth rate is considerably higher in absence of competitor species at identical density.

Keywords: *Helix albescens*, growth rate, competition

Lukashev D. V. Estimation of role of mussels in biogenic radionuclid migration in freshwater ecosystems: experience of water-cooling pond of Chernobyl NPP // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 111-115.

The species structure, biotopological allocation and full biomasse of mussels in the water-cooling pond of ChNPP was described. The affect of mussels accumulation and sedimentation activity on bottom radionuclid deposition intensity was found.

Keywords: mussels, radionuclids

Matushkina N. A. Stylus as a sensory element of dragonfly ovipositor // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 116-120.

The study of the females *Lestes sponsa* (Odonata, Lestidae) was showed that styli of the ovipositor can function as a mechanosensory organs controlling the precise eggs positioning in the substrata. Hypothesised that constancy of some characters of eggs sets is caused by complexity of oviposition pattern.

Keywords: ovipositor, Odonata, functional morphology

Mikheev A. V. Informational fields of mammals in forest ecosystems of arena complex // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 121-124.

Results of investigation of communication and signal frames of mammals in forest ecosystems at 2-d sandy (arena) terrace of Samara river were observed. Quantity and quality parameters of biogeocoenotical (interspecies) mammal information fields were analysed.

Keywords: information field, mammals, forest ecosystems.

Musiynko O. V., Sanagursky D. I. Hormonal profile, electrolyte homeostasis and lipid peroxidation during static loads // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 125-128.

The comparative analysis of influence on a hormonal profile and changes of some metabolic parameters of Hatha-Yoga practice and practice by conventional physical education in high schools is carried out. It is shown that the influence of Hatha-Yoga practice on regulation processes in organism, in particular, on humoral and autonome nervous functional regulation is more effective, than conventional physical training.

Key words: physical exercises, hormones, electrolytes, lipidperoxidation

Myakushko S. A. Reproduction strategies in rodents population // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 129-133.

Main characteristic changes of reproductive strategy in bank vole populations in Kanev Nature Reserve were observed. The peculiarities of population reaction at the stages of reserve ecosystem development caused by technogenic pollution were noted.

Key words: rodents, population, reproduction, technogenic pollution

Onchurov M. V. Comparative research of webs in two species of orb-weaving spiders (Aranei, Araneidae) from Crimea // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 134-137.

The webs of two orb-weaving spider species: *Larinioides ixobolus* (Thorell, 1873) and *Nuctenea umbratica* (Clerck, 1758) were compared for estimation of species specifics of building instinct. Formal diagnosis and schematic drawing of catching webs of these species is given.

Key words: orb-weaving spiders, standard web, trap zone

Podoprigora, V. N. The impact of size of certain specimens on imitation and structure of Mugil soiuy Busilewsky, 1885 school // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 138-142.

It was surely proved that imitation occurs in *Mugil soiuy* Busilewsky, 1885, and the size of certain specimens does not affect it. The hierarchical structure of school, which determines normal behaviour and alternation of behavioural reactions, was found.

Keywords: *Mugil soiuy* Busilewsky, 1885, imitation, behaviour, school

Pristinskaya V. V. On the biology of byrrhid beetles (Coleoptera, Byrrhidae) of Ukraine // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 143-146.

On initial stage of faunistic investigations in Ukraine was revealed 21 species of Byrrhidae. Phenological observations and studies of biology of *Byrrhus pilula* L. was carried out. Imago of *B. pilula* L. feed on leaves of mosses; the larvae feed on decaying vegetable remains in the soil. Hibernation occurs on the stage of imago. Development from egg to imago lasts 3-4 months.

Keywords: biology, Byrrhidae, Ukraine

Reshetilo O. S. Ecological and microevolutional importance of research in fire-bellied and yellow-bellied toads (*Bombina*) // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 147-150.

The wide spectrum of questions and problems connected with the studying of fire-bellied toads, yellow-bellied toads and their hybrids is shown. Importance and necessity of fundamental investigations of the species is pointed out.

Keywords: bellied toads, investigations, significance

Rubtsova S. I. Oil-oxidizing microflora in Sevastopol coastal region // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 151-154.

The questions of a modern state, seasonal dynamics of an oil-oxidizing microflora in coastal zone of the Sevastopol region are studied. The analysis of the data has shown that the investigated stations are divided into two bunches based on number of heterotrophic and oil-oxidizing microorganisms depending on distance from the high sea. In seasonal dynamics of number of bacteria the legible dependence on seasons is marked.

Keywords: oil-oxidizing microflora, oil hydrocarbons

Sapronova E. S. Using of area of family plot in marmot *Marmota bobac* Muller, 1776 // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 155-157.

Using of classical methods of pointing, representing and treatment of results let us to describe the territory strategy of *Marmota bobac* in family plot on a base of observation on individually-tagged animals.

Keywords: marmot, territory, family plot, tagging

Shibanova O. S. Morphology of nematode larvae Pseudaliidae from the intestine of harbour porpoise *Phocoena phocoena relicta* // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 191-194.

The morphological description of larvae Pseudaliidae gen. sp. (Nematoda) from intestine of harbour porpoise, which differ from 1st stage larvae of *Stenurus minor*, *Holocercus invaginatus* and *H. taurica* (Nematoda: Pseudaliidae) by short oesophagus and appreciable excretory system.

Slusarenko A. E. The immune status of an organism in connection with the contents in soils Zn and Cd // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 158-160.

58 inhabitants of Krasnoperekopsk region living near the «TITAN» plant, where the increased contents of heavy metals was revealed in soils, were examined. Their immunological status was examined. Three groups with similar changes of immunological parameters: infection, allergic syndromes and group with the mixed syndrome, were selected. The correlations between immunological parameters of content both cadmium and zinc in soils of a place of residence were shown.

Keywords: Zn, Cd, immunity, technogenic load

Strukov A. A. *Corynosoma pseudohamanni* Zdzitowiecki, 1984 (Acanthocephala, Polymorphidae) – a parasite of the *Lepthonichothes weddelli* Lesson, 1826 from Pacific part of the Antarctic // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 161-165.

Specimens examined of *Corynosoma pseudohamanni* from *Lepthonichothes weddelli* from Pacific sector of Antarctic are distinct from the described specimens from the Atlantic sector of Antarctic in their body shape, body size, the size and shape of some organs, and armature of proboscis. So we describe the studied material to clarify their taxonomical status.

Keywords: Acanthocephala, Pinnipedia, Antarctic

Stukaluk S. V. Species composition and stational distribution of ants (Hymenoptera: Formicidae) at the Lower plateau of Chaterdag // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 166-168.

Using original method, 12 species were found at the Lower plateau of Chaterdag, 8 of which is discovered at first. For all species of ants stational distribution is typical.

Keywords: ants, volume of species, stational distribution

Sumbayev V. V. Nitric oxide activates MAP-kinase cascade // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 169-173.

It was found that nitric oxide activates protein kinase ASK 1 (MAP-kinase cascade activator) in rat brain forming S-nitrosothiols with reactive thioredoxin (the direct ASK 1 inhibitor). Ascorbate and glutathione inhibit the NO-dependent ASK 1 activation.

Keywords: nitric oxide, protein kinase ASK 1, thioredoxin.

Suslov O. A. Changes of agrochemical soil characteristics caused by bacterial preparations // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 174-177.

The paper presents the data about agrochemical changes of soil characteristics under the influence of microbiologic and mineral fertilizers N30P20. It is shown that they are environmentally safe. They are recommended for improving plant feeding. This ensures the ecological balance of agro and ecology system and is a perspective approach in crop cultivation.

Keywords: Ключевые слова: microbiological preparations, agrochemical characteristics

Tribrat, A.G., Krilov, D.V. The influence of biofeedback on man's internal time counting // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 178-182.

The influence of α -training on man's internal time counting was studied. Diverse tendencies of dynamic of a proper standard time realization were stated.

Keywords: biofeedback, α -training, internal time counting

Vovchuk I. L., Benderskaya N. V., Chernadchuk S. S., Motruk N. V. Tissue proteinases of ovarian and endometrial tumours // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 17-20.

The research of the condition of proteinase-inhibiting system has shown the increase of activity of proteinases during non-malignant process. Differentiation of malignant tumour is accompanied by the decreasing (endometrial) or increasing (ovarian) of activity of tripsyn-like proteinases and is regulated by the level of tripsyn's inhibitor.

Keywords: proteinases, α_1 -antitripsyn, ovarian, endometrial, tumour Keywords: parasites, nematodes, Pseudaliidae, larvae.

Yakovenko N. S. Lichen-dwelling rotifers (Rotifera) found in some regions of Ukraine // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 195-199.

31 species and subspecies of bdelloid rotifers are found in samples of 22 xerophytic lichen species from 8 regions of Ukraine including reserves Polissky, Kara-Dag and «Kam'yani mohyly». 12 rotifer species proved new for the fauna of Ukraine. 28 rotifer species were not previously found in lichens.

Keywords: Rotifera, Bdelloidea, lichens, fauna, Ukraine

Yasinska I. M. Quercetin is the novel irreversible cytochrome P450 aromatase inhibitor // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 200-203.

It was found that flavonoid quercetin is competitive inhibitor of rat uterine aromatase (K_i - 15.6 nM). This agent irreversibly inhibits the aromatase activity in the ovaries and uteri and decreases the concentration of estrogens in the blood serum of rats.

Keywords: cytochrome P450 aromatase, quercetin, estrogens

Zamesova T. A., Kirienko S. M. Role of trophic and metabolic activity of phytophagous mammals in restoration of biological activity of soils polluted by heavy metals // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 67-71.

The analysis of phytofagous mammals excretory activity influence on formation of soils biological activity under their contamination by heavy metals is given. This factor promotes recovery of biological activity and plays the important role in creation of the homeostasis mechanism.

Keywords: heavy metals, excretory activity, mammals

Zemlanoy A. A., Suvorkin M. Yu., Reva A. A. Influence of production association «Azov» air pollution on rodents population rate and morphophysiological indicators // Uchenye zapiski TNU. Series: Biology. 2001. – Vol. 14. – No. 1. – P. 72-75.

Characteristics of ammonia and nitrogen oxides air pollution influence on rodents population rate and morphophysiological indicators is submitted. It is shown that strong air pollution causes significant reduction of rodents population rate. The reduction of animals number is accompanied with the organism adaptation through the changes of body and organ size and weight, which intensificate the metabolism.

Keywords: Rodents, morphophysiological indicators, pollution, adaptation

Zhuk V. L., Pakhomov A. E. Functional role of mammals in changes of β -radioactivity of soils in arena forest biocoenoses of steppe forests of Ukraine // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 63-66.

The specific mass total β -radioactivity in steppe zone of Ukraine and influence on its vertical redistribution in ground digging of activity *Talpa europaea* is considered.

Keywords: digging activity, β -radio-activity, ground

Zolotova N. V., Domashevskaya E. A. The influence of microgravity on the osteocytes structure of monkeys bone tissue // Uchenye zapiski TNU. Series: Biology, 2001. – Vol. 14. – No. 1. – P. 76-79.

Changes in population of osteocytes in bony tissue of the iliac bone of monkeys (*macaca-mulatta*), which were during 14 days on space fligh «Bion-11», were study. Tendency to reduction in cancellous bone of quantity of osteocytes in connection with theris destruction was determined. This is an adaptive reactions of bony tissue.

Keywords: bony tissue, osteocytes, iliac bone, microgravitation