

CONTENT

BIOLOGICAL SCIENCES

- Zmachinski A.S., Rizevskiy V.K. Zonation and abundance of Amur sleeper (*Perccottus glenii* Dybowski, 1877) in the water bodies of the city of Minsk and the surrounding areas** 3

Summary

The Amur sleeper first appeared in Belarus in the ponds situated within the city of Minsk in the middle of the 1970s. Now Amur sleeper inhabits in all watercourses and in majority of waterbodies in Minsk. Waterbodies which fish fauna is presented only by Amur sleeper had been found.

- Emelianchik O.A. Analysis of death-rate and the frequency of occurrence of anemia indicators cribra orbitalia among the population of the Great Mountains village. XVII-XVIII centuries. (according to the data from craniology)** 13

Summary

The results of research of a series of human skulls from burials dated to the 17th through 18th centuries from Mogilyov region are presented in the article. By results of sex and age definition on a skull the palaeodemographical analysis is carried. Low life expectancy (20,6 years) has been caused by high children's mortality rate. Life expectancy of women was for 5 years lower, than men's. The general occurrence of cribra orbitalia in the investigated group has made 18,9%. The highest incidence of a lesion (67,9%) is registered in younger group of children. Significant sexual differences of occurrence of cribra orbitalia are revealed: in females the lesion meets in 37% of cases while in men cases of cribra orbitalia are completely absent.

- Kopytkov V.V., Kopytkov V.Vl., Borovkov A.V., Tairbergenov J.A., Ismailov G.M. Production of coated seeds on the basis of composite polymeric structures** 21

Summary

The paper reports the results of research on the technology for pelletizing of seeds of forest trees using vegetable polysaccharides and varied target additives. Also, the paper provides information on the optimum concentrations of the target additives and the physicochemical properties of pelleted seeds and gives a comparison of the physicochemical properties of the pelleted seeds depending on the size of vegetable polysaccharide particles and the target additives used.

- Nikolaychuk A.M. Buffering capacity and pH of the internal environment as an indicator of sustainability of urban spaces** 29

Summary

According to the researches spent by us, distinctions in level of buffer ability of plants are caused by their specific properties. It is noticed also that plants which have less sour pH of the internal environment, the influence of the ecological factor on buffer ability is increased. Besides, the kinds sustainable against actions of technogenic factors of environment were characterized in a zone with a minimum level of pollution (settlements Vjazynka), and also in park zones with the raised buffer ability.

Romashko S.N., Jancevich A.V., Molchan O.V., Jurin V.M. Features of the content of terpenic indole alkaloids in <i>Catharanthus roseus</i> cultivated in managed conditions.....	34
---	-----------

Summary

Qualitative content of terpenoid indole alkaloids in the leaves and roots of *Catharanthus roseus*, cultivated in artificial conditions was analyzed by HPLC-MS analysis. The features of the accumulation of vindoline and catharanthine, which are immediate precursors of pharmacologically valuable bis-indole alkaloids, in plant organs were determined. It was also found that the roots of *Catharanthus roseus* contain significant quantities of bis-indole alkaloids.

Saraseko E.G., Podoljak A.G., Degtjareva E.I. The problems of obtaining high-quality crop production in the contaminated areas.....	46
--	-----------

Summary

The problem of obtaining quality crop production and forages on peat soils is most pressing challenge now. Soils vary in their macro- and micro-element contents (from minimum up to above optimum content of elements) even if it is within the bound of one field. Therefore, application of fertilizers should be differentiated according to availability of certain mineral elements in soil, and based on using methods of soil and plant diagnostics.

PEDAGOGICAL SCIENCES

Laptieva L.N. Study of Communication Problems of medical college students.....	54
---	-----------

Summary

The domestic health care demands much of the professional and personal sphere of medical workers with secondary education. The formation of communicative abilities of pupils of medical college is one of the main conditions of their successful professional activity. Existence of problems of communication with different categories of participants of medical and improving process negatively influences professional formation of experts and medical process.

Lemeshkov V.S. Managing the training process of qualified female walkers	62
---	-----------

Summary

The article deals with the general theory of systems. Their basis is the principal of backwash, according to which a successful administration can be only achieved if a managing subject will get the information about the results, achieved by this or that action on the administrating subject. In this article the actual questions concerning the many important sides of the processes of direction's complex dynamic systems in the modern sport's highest achievements are examined.

Maslovskij E.F., Gorovoj V.A., Blotskij S.M. Innovation programs for paramilitary orientated physical education of 4-7 years students of village school	67
--	-----------

Summary

At present there are no technique of the organization of physical training and initial militaryapplied preparation, which are adapted for modern conditions of teenagers' training. In the article experimental justification of innovative design of the content of classes in professional and applied physical preparation (PPFP) of pupils of 4–7 classes of rural school on the basis of use of a complex of exercises from «PPFP blocks» (at 4 stations) in a format of circular training and their invariant (on quarters) distribution in four year cycle of educational process for formation of impellent abilities in a context of initial military preparation is given.

Narskin A.G., Kljuchnikov A.V. The experimental technique for professional physical training of Emergencies Ministry's engineering institutions' military students 74

Summary

In this article professional-applied physical training of students of engineering institutions of Ministry of Emergency Situations of the Republic of Belarus are considered. A new method of professional physical training for developing major physical qualities and complete execution of Fire and Rescue biathlon, which allows the cadets to achieve high results in a professional motor activity, as well as to create a basis for future professional high-performance is worked out and grounded.

Sviridenko V.G., Zykova E.L., Pyrkhx O.V. Peculiarities of organization of self-guided work on analytical chemistry at the Faculty of Biology 80

Summary

Organization of the system of students' self-activity work while studying new material is a crucial point in rising of the efficiency of modern education. Self-independence while studying rises attention to new material, activates the process of thinking, cultivates more serious and responsible attitude to work. Students' self-activity work is an essential part of teaching process as future specialists should possess not only a particular set of skills, but also be capable of getting the necessary information themselves. They should be able to adapt to new conditions, analyze non-standard situations and teach themselves.

Starshikova L.V., Gramovich A.V. Activation of biological faculty students' cognitive activity in the process of chemistry study at teachers training universities..... 85

Summary

The article is about the theoretical study of techniques and practical application of actual methods and techniques of chemistry training with the aim to activate a cognitive activity of students of biological department of pedagogical university. The authors show the efficiency of the use of students pedagogical practice; testing; individual researches and investigation projects carrying out together with pupils; subject contests to improve students learning of chemistry.

Unsovich A.N. Improving the students' efficiency at the mathematics study on the basis of info-communicative model of modular education 90

Summary

The problem of improving the efficiency of the development of competence in mathematics students based on the info-communications model of modular training is revealed in the article. The basic components of its structure (target, technological, content-structured, process-activity-related, effective) as well as basic components: the theory of modular training, expressed in a modular approach to designing the training content, traditional (classroom) and modern (based on information and communication technologies) forms of the organization of educational process; differentiated, gradual assessment of student learning activities are defined.

***Dzjadok M. M. Onims-hroninims in works of art for children (based on the texts of Belarusian children's writers)* 97**

Summary

In the article onimy-hrononimy as a special type of the proper names used by Belarusian writers in works for children are considered. Structural-semantyc features of such units are investigated, their functions are defined. The phenomena of hrononim's system correlation in children's works («game» of words, a pun, etc.) are analysed.

***Gurin I.V. Category of authorization in sentence and text: the main approaches to the identification* 103**

Summary

This article represents the survey of the directions in the research of the phenomenon of authorization on the basis of a sentence and a text. It also determines the essence of this definition, and its role among the categories of the sentence together with its connection with the category of modus. On the basis of publicistic texts the opportunity of the realization of the authorized arrangements in the mass media texts is considered.

***Episheva V.F. Ethnonym Lithuanians among the means of representation of Belarusians' ethnic stereotype in Belarussian historical prose of the first decade of the XXI century* 108**

Summary

Ethnonym of *Litzvins* is widely used when creating ethnic descriptions of Belarusians in Belarus works of art to the historical themes in the first decade of the 21st century. In the profile of our ancestor etnostereotype semes with positive connotations are mainly highlighted confirming the tendency of modern fiction writers to approve a positive image of Belarusian after Korotkevich in order to educate the young generation in the spirit of patriotism and love for their motherland.

***Efimchik O.E. The main factors of the formation of Russian-language competence among Turkmen students studying in Belarus* 113**

Summary

The article deals with the main factors forming the Russian-language competence of Turkmen students studying in Belarus: extralinguistic social factors, place of birth and habitation, first language and general linguistic competence, a place of secondary education, gender, etc. The material of the study are data on a sociolinguistic survey conducted among Turkmen students of two Belarusian universities.

***Levchuk V.V. Celtic language element in British placenames* 119**

Summary

The article deals with the problem of studying ancient Celtic culture and heritage by means of the analysis of the lexical units of Celtic origin functioning in the modern English language. In compliance with the assigned aim the problems of national peculiarity reflection in a language, the existence of a cultural component in the meaning of lexical units, the status of place names in the language system and their classification are logically discussed in the article. The analysis of meaning of the Celtic place names that are used in the English language proves that Celtic national heritage is not lost, the research of place names helps to understand the ancient perception of the world, which sways the image of the modern nation.

Mejkshane T.A. Linguistic reflection of events in the news media texts: to the issue of research methods: to the issue of research methods 125

Summary

The article presents a summary of several researches on the possible ways of the analysis of language construction of an event in the news mediatexts. An original approach to its linguistic study is shown. Some examples of how communicative-pragmatic category of «trustworthiness» of an event's construction are being analyzed.

Rusetskaja O.R. Linguistic markers of communication failures in institutional discourse 130

Summary

This article deals with the problems of successful communication on the basis of political and judicial discourse. The results of the analysis of linguistic means functioning as signals of communicative breakdowns in the official dialogue show the peculiarities of marking failures in political and judicial communication. The research has been carried out on Russian and English materials.

Savko M. V. Indirect interference as an evidence of language interaction in translation (based on the translation of audiovisual texts from French into Russian) 136

Summary

The article deals with language interaction in translation expressed as an indirect interference. We analyzed functioning of several pronouns in translated and original audiovisual texts (scripts of documentary films). We revealed that the number of pronouns in translated Russian texts significantly exceeds the same number in original Russian texts, as a result of the influence of the source language (French).

Sushko T.S. Phraseological units with axiological character in the Old Belarusian language 142

Summary

The article is devoted to the examination of the FU (phraseological units) of axiological nature. The study is based on the material of the old Belarusian language in which historical monuments of the XIVth–XVIth centuries were written. The study of the contemporary phraseological science, as well as the examination of the internal images and ideals reflected in FU is impossible without the studying of the diachronic phraseology. The thematic FU classification of axiological nature is built according to the reflection in the meanings of the FU such values as attitude towards people and surrounding world (i. e. FU, which represent the following spiritual qualities of the person: honesty, love, friendship, kindness, responsibility, humility, diligence and obedience etc.). This classification allows us to see the spiritual foundation of the worldview of the Belarusian nation on which the relationships in the society were built which is relevant to the «golden age» of Belarus.

Timoshenko E. I. Semantic evolution typology of the of etymological roots with the meaning of 'positioning in space' (using the example of Russian language) 150

Summary

In etymological nests with the roots, having primordial value of an arrangement in space, three basic directions of semantic evolution are revealed: a designation of concepts of legislative sphere; a designation of standard moral-ethical categories; formation of semantics of a positive estimation.