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Yepishin, V., **Govorun, O.** A Recent Encounter with Omiodes Monogona Meyrick, 1888 (Crambidae: Spilomelinae)-an Interesting Snout Moth Endemic to Hawaii (2024). *Zootaxa*, 5406 (2), pp. 397-400. DOI: 10.11646/zootaxa

https://www.webofscience.com/wos/woscc/full-record/WOS:001199838500007

Hrona, N., Khomych, T., **Semenog, O.**, Kharchenko, I., **Yurchenko, A.**, **Semenikhina, O.** Tools for the Development of Emotional Intelligence: Cognitive Native Language Teaching (2024). *International Journal of Instruction*, 17 (2), pp. 599-616. DOI: 10.29333/iji.2024.17233a

https://www.webofscience.com/wos/woscc/full-record/WOS:001184438300029

The study is devoted to the establishment of connections between teaching the native language and the emotional intelligence of students. It proved a statistically significant positive effect of the cognitive native (Ukrainian) language teaching on students' emotional awareness, managing one's emotions, self -motivation, empathy, and recognizing other people's emotions. The study describes the method of cognitive native (Ukrainian) language teaching that is based on integrating college students' mental and communicative activities. The participants of the pedagogical experiment were 312 students and 16 teachers from various educational institutions in Ukraine. Hall's method assessed the impact of the cognitive native (Ukrainian) language teaching on students' emotional intelligence. Empirical data were analyzed statistically (significance level 0.05): the Pearson test for confirming the normality of group distributions and the Student's criterion for estimating averages. Statistical analysis showed statistical uniformity of EG and CG at the beginning of the experiment; the significance of changes for the scales "emotional awareness," "self -motivation, " and "empathy" in the middle of the study; and the statistical significance of changes for all scales after the experiment.

Gruenbaum, B., Zlotnik, A., **Oleshko, A.**, Matalon, F., Shiyntum, H., Frenkel, A., Boyko, M. The Relationship between Post-Traumatic Stress Disorder Due to Brain Injury and Glutamate Intake: A Systematic Review (2024). *Nutrients***,** 16 (6), № 901. DOI: 10.3390/nu16060901

https://www.webofscience.com/wos/woscc/full-record/WOS:001193428300001

There is a growing body of evidence that suggests a connection between traumatic brain injury (TBI) and subsequent post-traumatic stress disorder (PTSD). While the exact mechanism is unknown, we hypothesize that chronic glutamate neurotoxicity may play a role. The consumption of dietary glutamate is a modifiable factor influencing glutamate levels in the blood and, therefore, in the brain. In this systematic review, we explored the relationship between dietary glutamate and the development of post-TBI PTSD. Of the 1748 articles identified, 44 met the inclusion criteria for analysis in this review. We observed that individuals from countries with diets traditionally high in glutamate had greater odds of developing PTSD after TBI (odds ratio = 15.2, 95% confidence interval 11.69 to 19.76, $p < 0.01$). These findings may support the hypothesis that chronically elevated blood glutamate concentrations caused by high dietary intake invoke neurodegeneration processes that could ultimately result in PTSD. Further studies will clarify whether lowering glutamate via diet would be an effective strategy in preventing or treating post-TBI PTSD.

Mashchenko, O., Kriuchko, L., Bordun, R., Podhaietskyi, A., Sobran, I., Davydenko, G., **Toryanik, V.**, Hnitetskyi, M., Kuz'menko, R. The formation of indicators of the quality of buckwheat grain depending on the elements of technology (2024). *Modern Phytomorphology*, 18, pp. 12-16.

https://www.webofscience.com/wos/woscc/full-record/WOS:001187877500004

The purpose of the research was to determine the response of buckwheat varieties of different morphotypes to sowing dates and methods and to evaluate the influence of these factors on the formation of productivity indicators and qualitative characteristics of buckwheat. To find out the agrobiological features of the growth and development of buckwheat plants depending on the action and interaction of the researched elements of cultivation technology. Based on the results of the research, it was established that the grain quality indicators of both varieties of buckwheat depended to a greater extent on the genetic properties of the variety, to a lesser extent on the terms and methods of sowing. This made it possible to reveal a complex reaction in unstable weather conditions during the growing season and years of research that influenced their change. Buckwheat by-products in the form of straw and chaff make it possible to obtain valuable fodder, for the Slobozhanka variety in feed units from 1.86 t/ha to 2.29 t/ha, and for the Yaroslavna variety - forage units from 2.05 t/ha to 2.27 t/ha. Thus, buckwheat, in addition to grain, provides farms with a fodder base in the amount of 6.2 t/ha to 7.6 t/ha of straw, which in terms of nutrition is close to the hay of perennial grasses, and in terms of mineral composition to leguminous grasses.

Hnatyshena, I., Petrenko, O., Dobrovolska, N., Frumkina, A., **Chykalova, M.** Application of the Moodle Learning Platform in Teaching Foreign Languages (2024). *Ad Alta-Journal of Interdisciplinary Research*, 14 (1), pp. 18-22.

https://www.webofscience.com/wos/woscc/full-record/WOS:001156490800001

The topic of using the Moodle learning platform in teaching foreign languages has become increasingly important in the context of the development of digital technologies in education and their integration into the learning process. The issue of teaching a foreign language lies in the effectiveness of learning activities by using verbal and non-verbal means of communication. The article aims to analyze the advantages and quality of using the Moodle learning platform for teaching a foreign language and the possibility of its further development in a dynamic educational environment. The research methodology is based on a critical analysis, evaluation of statistical information on using the digital learning platform, as well as the introduction of various deductive research methods on the prospects for further development. The paper analyzes theoretical approaches to foreign language teaching. The authors carried out a statistical analysis of the platform's global development and possible prospects for its further expansion. In addition, they outlined the factors of usage and spread of digital technologies as a plug-in for learning a foreign language. The study revealed the main benefits of using the Moodle digital learning platform as an interactive tool for teaching a foreign language. It also suggested key aspects of its improvement and possible ways of further development. The article focused on the issues of using digital platforms for remote communication between students and teachers to maintain the effectiveness of the educational process and the possibility of further improvement by introducing this platform into the educational process. The obtained research findings describe the current state of the platform's use along with its technological capabilities and advantages for teaching foreign languages.

Hordieieva, I., **Omelyanenko, V.**, Krysovatyy, I., Oprysok, M., Kostin, I. Project Management in Complex Technical Infrastructure Projects: Challenges and Strategies (2024). *Ad Alta-Journal of Interdisciplinary Research*. 14 (1).

https://www.webofscience.com/wos/woscc/full-record/WOS:001156490800034

The paper delineates essential facets of hybrid management in the realm of infrastructure projects and programs, elucidating pivotal concepts, methodologies, and models integral to this approach. A comprehensive examination of the extant status of infrastructure project implementation at the regional level is undertaken, encompassing an inquiry into terminology, regulatory frameworks, and financial management standards specific to this domain. Noteworthy attention is devoted to global practices in program implementation at the regional level, as well as contemporary strategies for overseeing infrastructure projects and programs. The culmination of this investigation is the formulation of a refined scientific and applied framework for hybrid management at the regional level. This conceptual framework is rooted in the integration of project management knowledge systems and is delineated by its adaptation to the methodology of project program management. Within the parameters of this articulated concept, a convergent system for the utilization of project management methods and approaches in the context of efficient project program management has been devised.

Kovalchuk, O., Otero, O., Barkaszi, Z., Murray, A., Divay, J. A new species of *Lates* (Perciformes, Latidae) from the Late Miocene of Ukraine and notes on the latest records of lates perches in the Eastern Paratethys (2024). Journal Of Vertebrate Paleontology. DOI: 10.1080/02724634.2023.2299314

https://www.webofscience.com/wos/woscc/full-record/WOS:001155971900001

The family Latidae is considered to have originated in marine waters of the Tethys, and the fossil record of this group indicates a widespread occurrence of latid fishes in the past. In the Mediterranean-Paratethyan basins, the genus Lates is represented by a number of fossil species, the youngest of which have been reported from Miocene deposits of Italy and Ukraine. Here we report on Lates fossils recovered from Late Miocene (Pontian) deposits of the Shkodova Gora locality of Ukraine, with a description of a new species dagger Lates odessanus sp. nov. The new species bears distinct morphological traits, especially on its maxilla, premaxilla, and parasphenoid, not found in other spatiotemporally close relatives. The fossil record shows that much of the latid species diversity was lost after the Late Miocene, and the newly described species, dagger L. odessanus, appears to be the last known extinct representative of this group in low salinity deposits of the Mediterranean-Paratethyan basins. The only extant Lates species in the Mediterranean, L. niloticus, has survived in estuarine environments of the southern shore.

Hrinchenko, H., **Prokopenko, O.**, Shmygol, N., Koval, V., Filipishyna, L., Palii, S., Cioca, L.-I. Sustainable Energy Safety Management Utilizing an Industry-Relative Assessment of Enterprise Equipment Technical Condition (2024). *Sustainability*, 16 (2), № 771. DOI: 10.3390/su16020771

https://www.webofscience.com/wos/woscc/full-record/WOS:001151376000001

The study considers approaches to ensuring energy management for the safe operation of facilities and their equipment and ways to improve it. It has been established that to ensure effective safety management of industrial enterprises, one of the critical areas is the technical diagnostics of power equipment during operation. An assessment of the actual technical condition of power equipment of VVER-1000 power units is proposed based on establishing the aging mechanisms and determining the relative evaluation coefficients for the characteristics of individual equipment elements. The results of the calculations allowed us to conclude that the obtained results correspond to the coefficients of relative assessment Ki of the technical characteristics of the power equipment that determine its degradation. Studies indicates that when assessing the state of power equipment, it is necessary to consider the presence and impact of the following operational factors that are not considered in the design calculations: loads, high levels of mechanical stress, fatigue damage, and metal defects, which primarily indicate the presence of degradation changes. To assess the technical condition of the equipment, considering the degree of mechanical wear, 17 technical characteristics were selected to determine the aging mechanisms by signs of degradation. A mathematical model of the dependence of the relative evaluation coefficient K on changes in the operating parameters is

presented, and it is noted that the most significant influence on the value of the coefficient is the temperature of the coolant at the inlet (K = 0.56). The developed approach makes it possible to improve the safety management system of power facilities by introducing the proposed model to assess the technical conditions of power equipment by defining the parameters in the overall safety management system.