

ORGANIZING INNOVATIVE ECOLOGICAL EXCURSIONS IN BIOLOGY AND BOTANY LESSONS

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Abstract: *In this article, the development of the methodology of organizing ecological excursions in biology classes, the inclusion of local natural objects and conditions by the teacher in the planning of excursions, and the inclusion of excursions in the biology process are fully discussed.*

Key words: *Biology, environmental excursions, extracurricular activities, extracurricular activities.*

Introduction:

It is known that field trips to biology classes have high educational potential in addition to educational value. They develop a sense of beauty, a responsible attitude and love for nature and their homeland. In biology classes, field trips play a key role in connecting education with life. Excursions can be botanical, zoological, general biological, ecological and complex, taking into account the educational content of individual biology courses.

When planning excursions, the teacher takes into account local natural objects and conditions. Excursions can be organized around the school's educational and experimental site, agricultural production, scientific research institute, botanical garden, recreational park, etc.

Literature analysis and methodology:

Field trips in the subjects of training courses are divided into the following. An introduction to a lesson or topic, usually held in the fall, aimed at engaging students with questions, observations, and collected material. The success of the excursion depends on the preparation of the teacher and students. An excursion will not be held in a place unknown to the teacher. The teacher must conduct an excursion in a pre-planned place. Organization of biological excursions in teaching biology takes an important place in the system of biology teaching forms.

The inclusion of excursions in biology classes solves the main educational, improvement and educational tasks: improvement of correct ideas about external relations, internal structure of the organism and organs in general, development of ideas about physiological processes, formation of the ability to compare, find commonalities, it is important to develop teamwork skills on the material, to improve interest in knowledge, and to develop professional directions of students.

Results:

The main form of educational work for all subjects studied at school is the lesson. In the lessons, the educational material prescribed by the state program and to a certain extent the textbook is taught. Attending classes is mandatory for students. In addition to the

important form of teaching biology - lessons, other forms of educational work conducted by the teacher with students have historically emerged in school practice.

Initially, non-compulsory extracurricular and extracurricular activities, excursions were included in the educational system. In biology classes, the teacher uses all teaching methods: oral, visual, practical methods. It shows plants and animals and introduces students to the external and internal structure of some organisms through practical activities. However, it is not possible to show the formation of living organisms and the cooperation of different organisms in biocenoses. That is why special forms are used to supplement lessons in biology teaching methodology.

Discussion:

Excursions in biology classes introduce students to natural groups, farms or museums, plants and animals in nature. Excursions are integrally connected with the lesson. During the course, the objects studied during the excursion are recalled many times, and the collected items are displayed. During excursions, students strengthen their previous knowledge, develop their learning about nature, make observations and collect materials based on assignments.

Therefore, biology is an important form of teaching in general secondary schools. The course covers important academic material, but is integrated with other forms of teaching, such as extracurricular activities, extracurricular activities, and field trips. Extracurricular activities, for example, results of observations and experiments conducted in nature, at home and in the corner of living nature, herbariums and collections prepared on excursions are used in the lesson.

Summary:

In conclusion, it should be noted that ecological excursions serve to strengthen, expand, improve the knowledge and skills students have acquired from the subjects of biology, and consciously guide them to the profession. Therefore, in the teaching of biology, it is necessary to plan and effectively organize lessons, extracurricular activities, extracurricular activities and excursions, that is, to implement a systematic approach to teaching.

REFERENCE

- 1) Qurbonov, I. "Tulip varieties imported from the netherlands technology of cultivation of namangan region. galaxy international interdisciplinary research journal (giirj) issn (E): 2347-6915 Vol. 9." (2021).
- 2) Kurbanov, I. G. "CARE OF TULIP VARIETIES OF THE NETHERLANDS IN THE CLIMATIC CONDITIONS OF THE NAMANGAN REGION." American Journal of Interdisciplinary Research and Development 6 (2022): 117-120.
- 3) Qurbonov I. E-RECRUITMENT: SOCIAL MEDIA AND RECRUITING //InterConf. – 2021.

- 4) Qurbonov, Ibragim Sharifjonovich. "CLONELY MICRO-CULTIVATION OF PLANTS AND ITS APPLICATION TO AGRICULTURE." Scientific and Technical Journal of Namangan Institute of Engineering and Technology 1.4 (2019): 74-78.
- 5) Юсупова М. Н., Ахмедова М. М. МЕВАЛИ ДАРАХТЛАРНИ ЗАРАКУНАНДАЛАРИГА УЙЎНЛАШГАН КУРАШ ЧОРАЛАРИ //ЖУРНАЛ АГРО ПРОЦЕССИНГ. – 2020. – Т. 2. – №. 8.
- 6) Ходжаев, Ш. Т., Сагдуллаев, А. У., Исаев, О. Б., & Юсупова, М. Н. (2011). Проблемы защиты растений в Узбекистане. Защита и карантин растений, (8), 23-24. Юсупова М. Особенности защиты хлопчатника посеянного под пленки от вредных организмов //Автореф. канд. дисс./М. Юсупова–Ташкент. – 2001.
- 7) Ходжаев, Ш. Т., Юсупова, М. Н., Курязов, Ш., & Саттаров, Н. (2008). Перспективы биологической защиты хлопчатника от хлопковой совки. Сб. трудов.- Ташкент: Таллин, 44-49.
- 8) Yusupova M. N., Nosirov B. Z. Pests of cotton and straw control at collection //EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal. – 2020. – Т. 6. – №. 12. – С. 57-61.
- 9) Yusupova M. N., Axmedova M. M. Mevali daraxtlarni zararkunandalariga uyunlashgan kurash choralari //Jurnal JURNAL AGRO PROTSESSING. Data publikatsii. – 2020. – №. 8. – С. 12.
- 10) Yusupova M. N. Biological method of crop protection in the fergana valley //Agrarian science. – 2018. – №. 6. – С. 68-70.
- 11) Urmonovich, Numonov Otabek. "MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES." ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 14.5 (2023): 3-5.
- 12) MN, Yusupova, and B. Z. Nosirov. "Control Of Cotton Pests On Stubble Lands." International Journal of Applied 10.2 (2015): 99-108.
- 13) Юсупова М. Н., Тургунова А. Н., Очилов С. Н. Система интегрированной защиты растений //Российский электронный научный журнал. – 2015. – №. 1. – С. 169-174.
- 14) Alimzhanova Z. I., Kadyrova D. S., Yusupova M. N. Ceramic pigments based on raw materials from Uzbekistan //Glass and Ceramics. – 2014. – Т. 70. – №. 11-12. – С. 441-443.
- 15) Yusupova M. N., Gapparov A. M. Biological Method Of Plant Protection In Uzbekistan //The American Journal of Agriculture and Biomedical Engineering. – 2020. – Т. 2. – №. 11. – С. 29-32.
- 16) Rashidovna M. N., Urmonovich N. O. Comparative Characteristics of the Leaving of Glutathione From Cells of Different Types //International Journal on Orange Technologies. – Т. 2. – №. 10. – С. 79-82.
- 17) Юсупова М. Н., Носиров Б. З. БИОЛОГИЧЕСКИЙ МЕТОД ЗАЩИТЫ РАСТЕНИЙ В УЗБЕКИСТАНЕ //Научно-практические пути повышения экологической устойчивости и социально-экономическое обеспечение сельскохозяйственного производства. – 2017. – С. 498-501.

- 18) Urmonovich, N. O. (2023). MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 14(5), 3-5.
- 19) Yusupova M. et al. Protection of after harvest cultures-as a reservetors of cotton pests //Agriculture and Biology Journal of North America. – 2013. – Т. 4. – №. 5. – С. 576-582.
- 20) Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., Исаев, О. Б., & Шокирова, Г. (2011). Борьба с вредителями хлопчатника на пожнивных культурах в севообороте. Вестник защиты растений, (2), 46-52.
- 21) Yusupova M. N. et al. Possibilities of the biological method of cotton plant protection //Agriculture and Biology Journal of North America. – 2011. – Т. 2. – №. 5. – С. 742-744.
- 22) Ходжаев, Ш. Т., Юсупова, М. Н., Юлдашев, Ф., & Жамалов, А. Г. (2010). Хлопковая совка на пожнивных культурах. Защита и карантин растений, (12), 22-23.
- 23) Хайдарова, Х. А., Юсупова, М. Н., Ихтиярова, Г. А., & Хайдаров, А. А. ПОЛУЧЕНИЕ ХИТОЗАНА ИЗ ПОДМОРА ПЧЕЛ APIS MILLIFERA. Сучасний рух науки: тези доп. XI міжнародної науково-практичної інтернет-конференції, 8-9 жовтня 2020 р.–Дніпро, 2020.–Т. 2.–426 с., 352.
- 24) Yusupova M., Turgunova A., Ochilov S. INTERGRATED PLANT PROTECTION SYSTEMS.
- 25) Abduhamidovich N. A. et al. MANGOSTIN DARAXTI VA MEVASINI TIBBIYOTDA FOYDALANISH //Journal of new century innovations. – 2023. – Т. 28. – №. 2. – С. 12-14.
- 26) Urmonovich N. O. MANGOSTEEN NUTRITIONAL PRICE AND FUNCTIONAL PROPERTIES //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 14. – №. 5. – С. 3-5.
- 27) Юсупова, Махпуза Нумановна. "АНОРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ." PEDAGOG 6.4 (2023): 562-567.
- 28) Юсупова М. Н. и др. ФАРҶОНА ВОДИЙСИ ШАРОИТИДА ИГНА БАРГЛИ ДАРАХТЛАРНИ ЗАРАРКУНАНДАЛАРДАН ҲИМОЯЛАШ //SO ‘NGI ILMİY TADQIQOTLAR NAZARIYASI. – 2023. – Т. 6. – №. 4. – С. 316-320.