

## **GRASS POLEEN IN THE AIR OF ZAPOROZHYE**

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Pollen from grasses (Poaceae) is predominant aeroallergens throughout the world including tropical countries. Lots of people in India and Ukraine are allergic to the pollen that comes from grasses. It brings on symptoms like a runny or stuffy nose, itchy eyes, and a cough. Grasses tend to start growing in the early spring. In the late spring and early summer, they release pollen into the air. The wind can carry it for miles. Wind carries pollen in the air, especially when it's dry and sunny. When it's cold or damp, pollen counts are usually lower. The aim of the study: To analyze situation with grass pollen in the air of Zaporozhye during 2015 – 2016 years. Materials and methods: Atmospheric pollen was collected on daily bases by using volumetric spore trap 24 h air sampler with the speed of 10 L/min airflow. Pollen was counted with light microscopy. Results: A total of 221 (64% from total concentration for 10 years) pollen grains were collected for 2015 year and only 52 (15% from total concentration for 10 years) pollens for 2016 year. The maximum pollen was counted for year 2015 in the 17th of May (37 pollens), for year 2016 it was 10th of May (10 pollen grains). Conclusion: Amount of grass pollen grains is not identical from year to year. It depends not only on plant phenology but also on meteorological conditions before and during pollination. The results can help to build prognosis of allergic situation and provide information to the allergy practitioners in order to advice avoidance of exposure to allergens.

## **ADAPTATION REACTIONS TO THE EDUCATIONAL PROCESS OF MEDICAL STUDENTS WITH DIFFERENT LEVELS OF ANXIETY**

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Information overload, arising in the study of numerous educational disciplines, is a serious test for the organism of students and causes a significant tension of the adaptive-compensatory systems of the organism, which creates a potential threat to the health of students. Aim. Analysis of the peculiarities of adaptation reactions in medical students with different levels of personal anxiety during the modular control. Materials and methods. The subjects of the study were 150 students of the 3rd course, aged 18 to 21 years. To assess the level of anxiety in students we have used the scale of the level of anxiety of J. Taylor. The heart rate, systolic, diastolic and pulse arterial pressure were used as an indicator of the adaptive abilities of the organism of students under stress conditions. Results. Using the test of John Taylor, we found that 40% of students belong to a group with a high level of personal anxiety. It is noted that among girls the number of people with a very high level of anxiety 1.5 times higher than among boys. Immediately before modular control, the average heart rate in all students increased by 25-32%, and blood pressure by 15-17%. However, the greatest changes in these indicators were observed among students with a very high and high degree of personal anxiety. After the module, 94.7% of the students studied the parameters of the cardiovascular system, immediately recovered. However, 3 guys and 5 girls with a high degree of personal anxiety took a much longer time to restore their heart rate and blood pressure. Conclusions. As a result of the study it was found that large number of students are in a state of high anxiety. A high level of anxiety reduces the level of adaptation of the organism to the educational load.

## **THE EFFECTIVENESS OF PAPAYA LEAF EXTRACT IN TREATMENT OF DENGUE FEVER**

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Introduction: Dengue is a viral disease that today affects a vast number of people in over 125 countries and is responsible for a sizable number of deaths. Studies have indicated that the juice of

the leaves of the *Carica papaya* plant from the family Caricaceae could help to increase the platelet levels in these patients. Deaths due to dengue are usually a consequence of patients developing complications like dengue hemorrhagic fever and dengue shock syndrome. Aim: To prove the effectiveness of papaya leaf extract in treatment of dengue fever. Methods and materials: We analysed the case histories of patients in a private hospital in India and also the literature search was carried out independently by the authors using PubMed, Google and the library database. Results: On the analysis of case history of a patient with dengue, along with the conservative therapy the patient received 25 mL of tender papaya leaf extract twice a day for 3 days. A steady increase in the platelet and white blood cell count was observed after 2 days of treatment. The patient had a platelet count of 1,39,000 cell/cumm, on 2nd day it was 91,000cell/cumm and on third day 73000cell/cumm. But after administering papaya leaf extract there was a boost in the increase of platelets from 79000 to 129000 on 1st day, 159000 on 2nd day and 168000 on 3rd day. Conclusions: It can be noted that the leaf extract does have beneficial properties in dengue. It has been shown to bring about a rapid increase in platelet count. This could be possibly attributed to its membrane-stabilizing property. From the literature analysis, it can be stated that, in addition to its effect against the virus, the papaya plant also appears to be effective against the *Aedes* mosquito. Thus, if proved to be effective, this plant could control dengue at two levels, at the level of transmission as well at the host level.

## **THE ECOLOGY OF ROOM FLORICULTURE**

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The most perfect and accessible way of knowing colours and paints, without any doubt, are flowers. Flesh flowers, which give us plenty of positive emotions and excellent mood, are the essential part of our spirit. History of flowers arrangement dates back to ancient Greece, that's why Temples of ancient Hellas were adorned with flowerpots with gorgeous blossoms in each. The age of discovery gave us different ways to the development of new kinds of flowers, their schemes of classifying and their origin. The aim of our project was to get acquainted with specific kinds of houseplants in educational institutions, to identify ecological groups of plants and their particularities and to determine how to keep houseplants in auditories. The air in close premisses, for various reasons, is full of toxic substances, so the main task of houseplants is to improve indoor air quality. Also, some kinds of houseplants help to cope with the aggression of civilized world. Scientific researches have shown that indoor plants filter out more than 300 volatile organic compounds ( photogenic factor), which have a beneficial influence on our health. Among them are phytoncids – biologically active substances, which prevent growth and development of bacterias and airborne microbes in the air. Indoor plants can reduce components of indoor air pollution, particularly volatile organic compounds (VOC) such as benzene, toluene and formaldehyde. Some kinds of brakes, ivies, palms, sansevera and alone vera are known as the most popular phytoncids. Amid indoor plants, which have bactericidal and antiseptic features, it is relevant to mark out aloe, ivy, etc. For example, geranium disinfects air in a good way and can kill streptococcus and staphylococcus at the same time. Substances of geranium has depressant and anti-stress properties and its aroma has a sedative effect and can prevent stress, sleeplessness or necrosis. Conifers produce wholesome for our health negative ions of oxygen, which can counteract the action of household appliance, especially computers and televisions. One of the most salutary plant is cactus, especially with long needles. This plant has bactericidal effect, however, there is one more vital feature which cactus has. From literature sources, it is known that cactus needles have an attribute to ionize air, which is really useful for our health. But it is necessary to admit that spathiphyllum, syngonium, scindapsus ionize air more intensive. Scientists have made a measurement of electromagnetic radiation near the computer monitor. The result has shown that cactus does not protect people from this kind of radiation. Thus, specific diversity of houseplants in educational institution comprise various ecological groups of plants and their particularities, which demands the ability of locating in right place.