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METHODS OF CHECKING MICROCLIMATE INDICATORS OF ROOMS

Abstract: The article presents the main elements of microclimate, methods of identifying microorganisms in room air, effects of climate change on buildings and structures, negative effects of low and high temperature, humidity on buildings.

INTRODUCTION

Microclimate - the climate of the air layer near the earth's surface. The main elements of microclimate include temperature, humidity, air movement speed, barometric air pressure, the strength of heat currents, physical characteristics of the air environment, which describe the microclimate in production enterprises. Air movement speed and temperature humidity are factors that can be controlled in closed rooms. Air movement speed in rooms affects air exchange indicates the chemical and bacteriological purity of the air of hospital rooms, the hygienic norms of the microclimate of hospital rooms SanQ and M 0292-11 "Sanitary norms and rules for the design, construction and use of treatment and preventive facilities" are presented. the optimal value of the relative humidity of the air is 40-60%, and the speed of movement is -012-03% m/second. In addition, taking into account the temperature of the room, the indicators that determine the temperature of the room are the average temperature. requires determination of temperature parameters in vertical and horizontal directions. The average air temperature in the room for an adult human organism is determined at a height of 1.5 m above the floor, and at a height of 0.8-1 m in children's rooms. Measurements are taken at three points along the diagonal of the room, and then the average temperature. describes the gradient of combustion, the value should not exceed 2.5 C. If the temperature difference exceeds these values, it can cause cold feet and colds. To determine the temperature gradient in the horizontal direction, the temperature is measured at a height of 1.5 m from the floor at two points - 1 m from the outer and inner walls. The gradient of horizontal burning should not exceed 1.5 C, otherwise discomfort will be observed, and the amount of heat from the body will increase through radiation.

METHODS

Methods for identifying microorganisms in room air: Sedimentation (settling) method. Climate change affects not only the structures of buildings and structures, but also the microclimate of buildings. Buildings built earlier do not meet today's standards. Based on the above, it is necessary to establish microclimatic parameters in newly designed buildings and to eliminate the unconscious situations that arise as a result of climatic effects in operational buildings, to study the effect of the climate of the planned construction object on the dimensional and planning solution of the building. The microclimate of the room directly depends on the combination of certain factors. secondly, protection of buildings from the influence of external conditions; Thirdly, internal factors, humidity, heat or closed air currents in it. In addition to moisture, heat and CO₂, there can be products of human household and industrial activity, various gases, aerosol dust. An increase in the concentration of harmful substances in the air of a closed room has a negative effect on the demand for microclimate in

it and, accordingly, on people's health. Many buildings are characterized by insufficient ventilation. Existing buildings are equipped with natural ventilation, and their work is related to energy saving activities. Thermomodernization measures consist of installing new modern windows and laying thermal insulation, which reduces the amount of infiltrating air. In some cases, mechanical ventilation cannot be used in buildings due to architectural and construction requirements due to insufficient space. One of the solutions to improve the indoor microclimate is decentralized frontal ventilation.

RESULTS

Methods for identifying microorganisms in room air: 1) Sedimentation method (sediment) - this is a very simple method. Open Petri bowls with a solid nutrient medium are placed in several places of buildings for 5-10 minutes. Air microflora sinks to the surface of the environment under the force of gravity. Then the Petri dishes are placed in a thermostat at a temperature of 37 C for 49 hours, and then the grown colonies are counted. This method does not provide complete information about the microflora about small dispersed bacterial aerosols, because their sedimentation depends on the effect of air currents. Therefore, this method is a determinant of the quality characteristics of the air microflora. 2) Aspiration method - includes electro and thermoprecipitation, suction through a liquid medium and slotted method. Their advantages over other methods are: 1. Air seeding is done in the same place and at the time of sampling. 2. Bacteria are separated from the air relatively quickly. 3. Parallel plantings give more effective results. Disadvantages of this group of methods: 1. There should be nutrient media in which different microorganisms grow in Petri dishes. 2. It is difficult or possible to isolate viruses and bacteria. During sowing, when a single particle or droplet containing several bacteria enters the nutrient medium, only one type of bacterial colony will grow, which is an indicator of general contamination.

DISCUSSION

The working principle of the Kratov apparatus is based on rapid energy deposition of the nutrient medium of aerosol particles. Air flow with a speed of 15-20 l/min hits the surface of the food medium through a narrow slot, and microelements are trapped on its wet surface. The Petri dish mounted on the disk rotates and the microorganisms are evenly spread over the agar. The method of determining air contamination with bacteria is to pass 30 liters of air through the device for 1 minute. After 24 hours in the thermostat, the grown colonies are counted and expressed in 1m3. Bacteriological evaluation of the air environment in pharmacies indicators such as air oxidation, carbon dioxide content and microorganism content are used for 1 m3 of air. An approximate assessment of air sanitation is determined by the amount of microflora that settles on the surface of 1m3 of nutrient medium in 1 minute. It is calculated by the formula $M = Ax1000/TxV$.

REFERENCES:

1. Саримсаков, М. И., Р. Х. Султанова, and И. Иброхимов. "Фармакологические свойства масел, полученных на основе растений." (2021).
2. Kadyrov, T. X., et al. "Etiological factors of secretory and invasive diarrhea and measures to improve their treatment." BIO Web of Conferences. Vol. 65. EDP Sciences, 2023.
3. Саримсаков, М. И., and Р. Х. Султанова. "Изучение фитомасел при воспалительных процессах." (2021).

4. Darvishi, Mohammad, et al. "Evaluation of the total antioxidant capacity of *Oliveria decumbens* and *Capparis spinosa*." *Journal of Biological Research-Bollettino della Società Italiana di Biologia Sperimentale* 95.2 (2022).
5. Саримсаков, Мухаммаджалол Исажонович. "Применение Лекарственных Препаратов Полученных На Основе Растений При Заболеваниях Опорно-Двигательных Органов." *Central Asian Journal of Medical and Natural Science* 3.3 (2022): 91-95.
6. Саримсаков, Мухаммаджалол Исажонович. "ОЦЕНКА ПОБОЧНЫХ ДЕЙСТВИЙ ЛЕКАРСТВЕННЫХ СРЕДСТВ." *Интернаука* 3-1 (2021): 30-32.
7. Giyazidinovna M. Y. et al. Global problems of labor protection in agriculture //the theory of recent scientific research in the field of pedagogy. – 2023. – Т. 1. – №. 7. – С. 5-9.
8. Umaralievich A. R. et al. Hygienic assessment of working conditions and environmental protection at glass production plants //World Bulletin of Social Sciences. – 2021. – Т. 2. – С. 120-122.
9. Солиев Б. и др. Производительность sous vide: оптимальный подход к обеспечению микробиологической безопасности пищевых продуктов //international scientific research conference. – 2023. – Т. 1. – №. 12. – С. 30-35.
10. Soliyev B. et al. The contribution of the founders of medicine to the science of hygiene and the empirical data the collected //Евразийский журнал медицинских и естественных наук. – 2023. – Т. 3. – №. 4 Part 2. – С. 51-54.
11. Tavakkal o'g'li, Ismoilov Dilmurod. "IN IMPROVING THE QUALITY OF DRINKING WATER BASIC METHODS." *Ethiopian International Journal of Multidisciplinary Research* 11.05 (2024): 914-916.
12. Xolmat o'g'li, T. R. (2024). WHAT IS THE DISEASE OF MONKEY POX. IS THERE A DANGER OF A NEW PANDEMIC IN THE WORLD?. *Ethiopian International Journal of Multidisciplinary Research*, 11(09), 87-91.
13. Tukhtamatov, R. X., & Ermanov, R. T. (2023). The Role of Proper Diet in a Healthy Lifestyle. *International Journal of Integrative and Modern Medicine*, 1(3), 25-32.
14. Жумаева, А. А., & Тўхтаматов, Р. (2023). Изучение Санитарно-Гигиенических Условий Труда В Ковровом Производстве. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 2(3), 92-95.
15. Xalmat o'g'li, Tuxtamatov Ravshan. "ABOUT WEAPONS OF MASS DESTRUCTION." *Ethiopian International Journal of Multidisciplinary Research* 11.05 (2024): 436-441.
16. Baxtiyorjon O'g'li Q. B. SOG'LOM OVQATLANISH ASOSLARI //ENG YAXSHI XIZMATLARI UCHUN. – 2023. – Т. 1. – №. 6. – С. 63-66.
17. Baxtiyorjon o'g'li, Qambarov Barkamol. "EPIDEMIOLOGIYA. EPIDEMIK JARAYON. YUQUMLI KASALIKLARNING UMUMIY EPIDEMIOLOGIYASI." *Miasto Przyszłości* 48 (2024): 726-729.