

# Analysis of Labor Conditions and Health Indicators of Viticulture Workers in Bukhara Region

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**Received:** 2024, 15, Feb **Accepted:** 2025, 21, Mar **Published:** 2025, 30, Apr

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Annotation: Current on the day village farm field, including viticulture network Uzbekistan Republic in the economy important place holds Viticulture in the field labor activity row dangerous and health for inconvenient characterized by factors. Physical heavy labor, high temperature and moisture, dusty air, pesticide and agrochemicals related to effects workers to your health negative impact shows. These factors labor productivity and to workforce stability directly impact does

**Keywords:** viticulture, occupational hygiene, pesticide, agrochemical, labor hygiene, ultraviolet.

# Introduction.

Viticulture is widely developing in Uzbekistan, particularly in the Bukhara region. regardless, regardless in the field labor hygiene to the requirements complete compliance not to be done as a result workers in good health one row problems is being observed. Because of this in viticulture labor conditions hygienic assessment and them improvement according to scientific based practical recommendations work exit necessity increasing is going.

The viticulture industry is one of the most important and developing sectors of agriculture. The processes of grape cultivation and processing are characterized by long periods of hard physical labor, exposure to high temperatures, and the use of chemical pesticides.

The seasonal nature of the labor process (planting, viticulture, harvesting and processing) places various physiological and hygienic demands on the workers' bodies. In viticulture, work is often carried out under direct sunlight, which leads to high temperatures and increased exposure to ultraviolet radiation.

Also, physical activities such as lifting, moving, working at a low angle, staying in the same position for a long time prevail in the work process in the field of viticulture, which puts excessive load on the bone-muscle system.

## **Research and methods.**

Occupational hygiene studies factors affecting human health during work and develops measures to reduce their negative effects. The following main criteria are taken into account when assessing working conditions:

Microclimate indicators (temperature, humidity, air speed);

Aerosol and dust level;

Noise, vibration, light and radiation factors;

Occupational risk factors (agrochemicals, biological factors, etc.);

Working weight and dynamic load level.

Working conditions in the Republic of Uzbekistan are determined by sanitary requirements, permissible limit values for occupational hazard factors (PDK, PDU) and are regulated by the Law "On Labor Protection", adopted in 2021.

The main occupational risk factors encountered in the work process in the field of viticulture are as follows:

High temperature and sunlight: heatstroke, negative effects of ultraviolet radiation (early aging of the skin, skin diseases).

Exposure to agrochemicals: Long-term contact with pesticides and fertilizers has negative effects on the respiratory tract, skin, and internal organs.

Heavy physical work: causes diseases of the musculoskeletal system, spine problems and injuries.

Psychophysiological load: fatigue and stress conditions that occur during seasonal work.

As a result of exposure to occupational risk factors, diseases such as bronchitis, dermatitis, cardiovascular diseases, and musculoskeletal disorders are common among workers.

In world practice, a number of measures are used to improve working conditions in the viticulture sector:

Use of protective clothing and special glasses during work;

Mandatory introduction of personal protective equipment when using pesticides and agrochemicals;

Establish special zones and breaks for relaxation in hot weather;

Reducing the share of physical labor through the widespread use of automated systems in agroindustrial complexes;

Conduct regular medical examinations of workers' health and take preventive measures.

In the conditions of Uzbekistan, it is possible to improve working conditions in viticulture by introducing these practices, adapting them to national characteristics.

## The research purpose

Bukhara region viticulture farms workers labor conditions hygienic assessment and them improvement according to practical solutions work exit

## **Research duties**

In viticulture labor sanitary- hygienic processes characteristics to study;

Professional danger factors determination and assessment ;

Workers of health labor depending on the circumstances the situation analysis to do ;

Labor conditions improvement according to practical recommendations work exit

#### **Research object**

Bukhara region activity driving viticulture farms workers.

#### **Research subject**

Viticulture in the field labor sanitary-hygienic processes condition and health for danger factors.

#### Scientific news

Bukhara region under the circumstances viticulture in the field labor to the conditions impact doer main hygienic factors were studied comprehensively and their workers to your health impact level was determined.

#### Conclusion.

#### The research practical importance

This study results based on viticulture on their farms labor conditions improve workers professional from diseases protection to do according to practical recommendations work It was released.

# **Used literature**

- 1. Medved L. I, Kundiev Yu. I. Hygiene work and agricultural production M. : Medicine, 1981.456 p.
- 2. Dobrovolskogo L. A. Good hygiene. Kiev. RNMB 1983. 365 p.
- 3. Kundieva Yu. I., Krasnyuk E. P. Professional zabolevaniya rabotnikov selskogo hozyaystva. Kiev. 1983. 460 p.
- 4. Zelentsova S. P. nekotorye voprosy normalizatsii mikroklimata v kabinakh tractoristov i selskohozyaystvennyx mashin. Hygiene and sanitation 1975. No. 10. S. 50–51.
- 5. Alekseev S. V., Usenko V. R. Hygiene is in progress. M. 1988. 355 p.
- 6. Balanin V. I. Mikroklimat jivotnovodcheskikh zdaniy SPb. : ProfiKS, 2003.140 p.
- 7. Otsenka osveshcheniya rabochikh mest. Methodical. Ukazaniya MUOT RM 01-98/ MU 2.2.4. 706-98. M. : Agrokhim, 1998. 135 p.
- 8. R. S. Trikoz, Protasov V. P. Collective contract in Moscow. Rosselkhozizdat, 1987. 222 p.
- 9. Mavrina E. A. K voprosu o sostoyanii zdorovya rabotnikov kombikormovykh predpriyatiy. Hygiena truda i prof. Zabolevaniy 1970. No. 10. S. 50–51.
- 10. Parakhin N. V., Kobozev I. V., Gorbachev I. V. i dr. Kormoproizvodstvo. M. : KolosS, 2006. 432 p.
- 11. G. V. Rodionov, L. P. Tabakova. Basic zootechnics: Flying. Posobie dlya stud. uchrejdeni sred. Prof. Obrazovaniya / M. : Izdatelsky center "Academy", 2003. 448 p.

- 12. Instruction for safety work for operators of ptitsefabrik and mechanized farms 2013. No. 10. S. 17.
- 13. Okhrana truda v selskom hozyaystve i ekologiya // Okhrana truda i tekhnika bezopasnosti v selskom hozyaystve, 2013. No. 7. S 58.
- 14. Speransky A. A., Dragunkina N. V. Optimizing system payment work and material stimulation. M. : Izdatelstvo "Alfa-Press", 2006. 192 p.