UDC: **632.7-027.36:551.521.11:633.11”324”**

INFLUENCE OF SUNLIGHT ON THE PROPAGATION OF WINTER PESTS OF WINTER WHEAT WITH NO-TILL TECHNOLOGY IN THE FOREST-STEPPE OF UKRAINE

Volodymir Sakhnenko candidate of agricultural sciences

National university of life and environmental sciences of Ukraine

Actuality. Winter wheat is the main crop of world agriculture in sowing areas and is an indisputable condition for the existence of mankind, and also determines the socioeconomic and ecological position of Ukraine in the world market. She has no equal in the ability to adapt to different climatic conditions and range. Wheat is the leading agricultural crop of Ukraine. However, the increase in the production of food and fodder wheat wheat by Ukrainian commodity producers in the current market conditions is still carried out at an insufficient level of the phytosanitary state of agrocenoses with a relatively high efficiency of their activities and the development of modern agricultural production. The main reason for this is the imperfection of technologies and their adaptation to changes in the geoclimatic factors affecting the development of grain crops, and the survival of the main pests of winter wheat.

The goal of the investigation is to investigate the structure of the ethomo complex and to justify protective measures from them on winter wheat with No-till technologies in the Forest-Steppe of Ukraine and the impact of sun rays on reproduction of the main species of pests of winter wheat in the main stages of plant organogenesis. Make an assessment of the specific features of the influence of solar and geoclimatic influences

on the stage of development of phytophages in cereal crops in the Forest-Steppe of Ukraine.

The materials and methods of investigation. Common methods of research in entomology, bioecology and plant protection, laboratory, vegetative, analytical and statistical methods for assessing the complex of connections of features of biology, ecology and distribution of major harmful insects of winter wheat in the Forest-Steppe of Ukraine.

The results and discussion. In 2014-2017 among the factors that influenced the system of "phytophagous plant" a special place was occupied by three main types of winter wheat pests. Their harmfulness depended on the temperature and humidity of air and soil.

During the ripening of the grain, the favorable temperature of air is 22-25 ° C. Thus, winter wheat - fireproof enough and drought-resistant culture, but comparatively less winter hardy than winter rye. At high air temperatures (above 40 ° C), and with a lack of moisture and dry winds, the process of photosynthesis is disrupted, transpiration is increased, plant growth is inhibited, and the development and reproduction of a complex of harmful insect species is adversely affected [1].

In addition, intensive solar illumination and a decrease in air and soil temperature negatively influence the formation of the first internode and promote a deeper bedding of the tillering node, which positively provides wintering of winter wheat and reduces the degree of colonization of the main stem by cereal flies. Illuminance of crops depends on the density of plant standing, thickened crops reduce the illumination, which also affects the settlement of wheat crops by the ordinary bread sawmill.

Conclusion. On the basis of the consequences of many years of research, the main factors of agriculture and weather conditions were

established. Their influence on soil fertility and productivity of field crops is revealed. The basic principles of crop rotation for various soil ecological zones of Ukraine are developed with due regard for different forms of ownership, the structure of sown areas is adjusted due to unfavorable weather conditions. Among special measures to prevent the impact of unfavorable weather factors, especially drought, the application of a crop rotation system is important. Imperfection of technologies and their adaptation to changes in geoclimatic factors affecting the development of grain crops, and the survival of the main pests of winter wheat.