

**DYNAMICS HARM INSECTS HERBIVORES WINTER WHEAT IN
FOREST-STEPPE OF UKRAINE IN CONDITIONS OF CLIMATE CHANGE**

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Warming of the climate system is a fact, and since 1950 the changes recorded, are unprecedented in scale from decades to millennia. There was warming the atmosphere and ocean, snow and ice reserves decreased, sea levels rose, the concentration of greenhouse gases increased. Each of the last three decades, characterized by a higher temperature of the Earth's surface than any preceding decade since 1850 in the Northern Hemisphere 1983-2012 years were probably the warmest 30-year period in the last 1400 years. Globally averaged aggregate data about the temperature of the land surface and the ocean, based on the linear trend indicate warming 0,85 [0,65-1,06] °C for the period 1880-2012 biennium.

Factors affecting climate change is natural and anthropogenic substances and processes that alter the energy balance of the Earth. Total radiative forcing is positive, which led to the absorption of energy climate system. Most significant contribution to the total radiation exposure brings increased concentration of CO₂ in the atmosphere in 1750.

Analysis of recent research and publications. The average annual temperature is a key parameter for studying climate change. According to research this option, the current climate is characterized by asymmetric Ukraine on the territory of warming, pronounced in winter and summer months. Over the last century the average annual temperature in Ukraine has increased by more than 0,90S. Results of the analysis indicate that the increase in temperature in the cold period averages 1,350S in warm - 1,00S. Since 1989, the average annual temperature has increased by almost 10C. Positive temperature fluctuation throughout the country during the 1989-2013 biennium. Was the most powerful in the history of instrumental observations of the weather.

The average annual rainfall in the Ukraine for the baseline period (1961-1990) amounted to 576 mm, in recent years it has changed slightly for the period 1991-2013 gg. Was 595 mm. However, there are significant changes in rainfall year. Winter monthly amount of precipitation (December, January, February) decreased by one-fifth part, while summer precipitation has increased on average by 5-15%. However, the increase in summer precipitation increase is offset by intense temperatures in the summer months.

The most significant climatic effects will appear under steppes of Ukraine, which is an intermediate zone on agroecological zoning. We know that the forest-steppe in winter wheat crops formed Sustainable harmful entomokompleks loss of crop is on the middle of the twentieth century. estimated at 7%, which determined the feasibility of chemical protection cultures. An evaluation of the dynamics of complex hazard herbivores on winter wheat under steppes was held H.P.Kozak. Like last 10 years, the study was not performed, hence the urgency of this work.

Material and research methods. Analyzed and calculated data base on the spread of pests and forest-steppe zone as described in the annual review of the State Veterinary and Phytosanitary Service of Ukraine, Ukraine Hydrometeocentre database.

The potential harmful insects analyzed in terms of average economic index (IE). For calculations used I_e relation to the average number of pest indicator of its economic threshold of harmfulness. The total damage from insects (integrated hazard) was determined by calculating the integral index harm (I_{ein}) - the amount of economic indices of each type of correction factor that reflects the cultural features of response to damage various types of pests. Multiply integral index of 3% (minimum loss threshold for crops of pests) can calculate the potential yield loss.

Environmental constancy species - sustainability finding of species in different parts of the habitat due to the type of individuals placing it in the space. Class constancy environmental pests of crops winter wheat, we determined the method Dyurye. In this class I to environmental attributed constancy species in the pest monitoring of winter crops were found in samples of insects from 0 to 10%, for the second class - 11-20%, class III - 21-30% grade ... - 100% of cases.

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