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IMPACT OF CLIMATE CHANGE ON GROWING OF WINTER WHEAT SEEDS IN THE ZONE OF WESTERN FOREST-STEPPE OF UKRAINE

Ukraine is one of the planet regions where climate change is already palpable - the duration of winter periods has decreased significantly, and winters have become less cold, droughts and other natural phenomena associated with climate change have increased.

The country has determined optimal zones for the cultivation of seeds for corn, sugar beet, melons. Based on the comprehensive assessment N. A. Kindruk selected four zones of ecological seed-growing of grain crops, in particular winter wheat, guaranteed, sustainable, unsustainable and risky.

According to the sum of precipitation and active temperatures, the zone of the western Forest-Steppe of Ukraine corresponds to the biological requirements for the cultivation of grain crops, but if the energy efficiency of PAR in the zone of insufficient moisture of the Steppe is 1–2, in the zone of limited moistening of the Central Forest-Steppe – 2–4, then in the zone of excessive moistening of the Western Forest-Steppe – 4–5 %. This indicates that the index of insolation during the maximum formation of the crop is below the norm and does not allow in some years to obtain the yield of seeds with the corresponding qualitative indices, in particular, the mass of 1000 seeds.

Of course, it is practically impossible to locate seed-growing of grain crops that occupied large areas under optimal and guaranteed zones of the Central Forest-Steppe, therefore, taking into account changes in weather conditions in recent years, our research aimed to confirm or disprove the definitions of enrollment of the Western Forest-Steppe in the zone of risky seed production. This would give an opportunity to grow high-quality seed material and reduce the financial costs for the annual acquisition of seeds of high generation in institution-originators located in other areas.

According to the ecological definition, the zone of the Western Forest-Steppe can be attributed to the stable seed-growing of cereals, since over the last 10 years, an increase in the temperature regime and a decrease in the amount of precipitation have positive effect on the cultivation of high-quality sowing qualities of winter wheat.