

L. BAYSTRUK-HLODAN

Institute of Agriculture Carpathian Region of NAAS

**THE INFLUENCE OF HYDROTHERMAL INDICATORS
AND INTERPHASE PERIODS
ON SEED PRODUCTIVITY OF RED CLOVER
IN THE CONDITIONS OF PRECARPATHIANS**

Most of the modern varieties of red clover have a rather high productivity potential, the realization of which is constrained by their low homeostaticity and sensitivity to unfavorable environmental factors. The increase and stabilization of plant productivity in local conditions should consist of increasing the level of general adaptability, as well as replacing of absolute resistance to stress factors of the environment with nonspecific complex-field tolerance.

Increasing the efficiency of clover sowing is possible first of all due to the improvement of breeding work and clear organization of clover seed growing, because variety plays a decisive role in the introduction and use of this crop in production.

The study of the breeding material in different hydrothermal conditions of the year makes it possible to obtain information on the characteristics of genotypes reaction to change environmental conditions.

The material for research was 16 collection samples of red clover different eco-geographical origin.

Analysis of weather conditions for 3 years (2013–2015) and extrapolation of data to individual interphase periods of vegetation red clover variety-samples indicates a significant variability of meteorological indicators. This is especially concern to the amount of precipitation. The presented data testify to the unevenness of their fallout during the growing season.

The meanings of hydrothermal parameters directly affects on passage of individual interphase periods of vegetation of red clover plants.

Low values of HTC indicate an increase of the climate aridity. So, the lowest HTC in terms of development phases was registered in 2013 and 2015, during budding – flowering (respectively 0,74; 0,38), in flowering – maturation (respectively 0,92 and 0,93).

In accordance with the established factors affecting yields, we have adjusted the breeding programs for creating red clover varieties with a high

adaptive potential, and a systematic approach to the creation, selection and study of promising material is being introduced into practical breeding.