UDC 633.16:632.165

V. LYKCHOCHVOR
Lviv National Agrarian University
M. MATKOVSKA
Institute of Agriculture of Carpathian Region of NAAS

INFLUENCE OF MORPHOREGULATORS ON GROWTH AND DEVELOPMENT OF PLANTS VARIETES OF WINTER BARLEY IN CONDITIONS OF WESTERN FOREST STEPPE

The results of researches on comparison of productivity of winter barley varieties (brewery of Vintmalt, two-rows Hannelore and six-rows Highlight) with the use of plant growth regulators are given.

The influence of different retardants and the time of their application on the length of each internodes is shown. It was established that the use of retardants on the studied varieties directly affect on height reduction, thickening of the straw walls. The application of the regulators in the 31-32 BBCH stage affects the shortening of the first and second internodes, and the using regulators into the stage of the flag leaf is thicken and shorten the third and fourth internodes.

The effect plant regulators for resistance to lodging investigated varieties are studied. The use of growth regulators in the stage of the beginning stem elongation did not provide reliable protection for crops from lodging. To ensure the resistance of winter wheat barley of the Vintmalt, Hannelore, Highlight varieties, the morphoregulators should be used in the stage of the flag leaf or twice in the phase of the beginning stem elongation and the stage of the flag leaf.

The highest yield of the Vintmalt, Hannelore and Highlight varieties during 2016–2017 was obtained with a double application on the variants chlormequat chloride, s.l., 1,5 l/h (BBCH 31) + medax top, s.c., 1,0 l/ha (BBCH 37–39) and chlormequatchloride, s.l. 1,5 l/ha + modus e.s. 0,5 l/ha (BBCH 31) + terpal, s.l., 1,0 l/ha (BBCH 37–39). `The increase in yield compare to control in these variants was 8–13,2 % depending on the variety, or 0,61–1,05 t/ha.