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**YIELD OF DIFFERENT VARIETY WINTER BARLEY
DEPENDING ON FERTILIZER RATES, GROWTH REGULATORS
AND FUNGICIDES UNDER CONDITIONS OF THE WESTERN
FOREST-STEPPE**

The results of researches on comparison of productivity of winter barley by different varieties (brewery variety Vintmalt, two-rows Khanelore, six-rows Highlight) with using morphoregulators are given. The yield of the Vintmalt variety is shown for different fertilizer rates and variants of fungicidal protection.

It was established that the highest increase of yield compare to control in the study of the morphoregulators influence, during 2016–2017 years on three varieties was obtained in the variant with applying of chlorlormeqvatchloride, 1,5 l/ha at the beginning of stem elongation and growth regulator medax top, 1 l/ha at the flag leaf stage. The highest yield was received on six-row variety Highlight. Its yield was higher on 3,4 dt/ha compared to the Khanelore variety and on 4,6 dt/ha higher than the yield of variety Vintmalt.

Also, it was investigated the influence of the minimum rate of mineral fertilizers ($N_{40}P_{30}K_{40}$), the average rate ($N_{80}P_{60}K_{80}$) and the high ($N_{120}P_{90}K_{120}$) on the yield of the Vintmalt variety. There are conducted comparing of average yield for two years and established that highest one (77,2 dt/ha) received for high level of mineral fertilizers.

The following conformity was found: with the increase of the mineral fertilizers rate with the intensive use of fungicides, the raise to control is decreases.

The best variant of the productivity of the Vintmalt variety is determined depending on fungicidal protection. It was found that the yield was highest under the influence of fungicidal treatment with systiva 1,2 l/t and adexar plus, 1,0 l/ha and amounted 80,3 dt/ha with using low fertilizer rate and 88,0 and 91,0 dt/ha per medium and high rate of mineral fertilizers.