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INFLUENCE OF SOWING TIME AND SEEDING RATE ON THE WEEDING AND WINTER BARLEY AGROPHYTOCENOSIS PRODUCTIVITY

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Formulation of the problem. The primary task of solving the food problem is not only an increase in the production of grain, but also an increase in its quality. In addition to winter wheat, in the grain wedge, other important winter crops such as barley, rye and triticale also play an important role. By growing them and obtaining sustainable yield, grain production in our country will increase significantly and the range of grain products will grow. Nowadays, among the widely spread agricultural crops in agriculture, barley in size is only inferior to wheat, rice and corn. In this connection, the task is urgent to develop new and improve existing elements of technologies for growing barley winter, which are capable in the world in the world among the widely distributed in agricultural production of cereal crops barley in size sown area yields only wheat, rice and corn. In this regard, the task is to develop new and improve the existing elements of winter barley production technologies, which are capable of providing high and stable crops of high quality grain. To ensure high and stable crops of high quality grain.

Presenting main material. The article presents the autumn season growth characteristics of winter barley under Polissya conditions depending on sowing time and seeding rate.

It was investigated that after stopping the autumn growing season the mass of aboveground and underground parts of 100 winter barley plants sown in optimal time (September 20) was 5,1 and 12,5 times higher in comparison with the plants of later date sowing (October 10) respectively. After the restoration of the vegetation in the spring for the first sowing date (September 10), the inflorescence of winter barley crops was at 622–663 pcs./m^2. The predominant species of weeds in agrophytocenoses of winter barley were *Capsella bursa-pastoris L., Viola tricolor L., Tripleurospermum inodorum L., Centaurea cyanus L.* and *Apera spica venti L.*

As a result of accounting for the agrophytocenosis induced by the agrofitocenosis of winter barley before harvesting, it was established that for later sowing periods (September 30 and October 10), the amount of weeds, on the contrary, increases by 1,5–2,0 times compared to the first sowing date (September 10). nflorescence of agrophytocenoses in winter barley was highest (121–143 pcs/m^2) during the period of reaching the last sowing date (October 10). The

increase in the presence of weeds in the agrophytocenosis of winter barley occurs due to the appearance of a large number of spring species, especially Erigeron canadensis L. and other annual wintering spring populations.

The winter barley sowing on later than optimal date (October 10) leads to an increase in the weed-infested crops at the end of growing season in 1,4–1,5 times. The increase of seeding rate by 0,5–1,0 million of germinable seeds per hectare ensures the decrease of weeds by 6–20 %.

The winter barley showed the highest grain yield (3,60–3,67 t/ha) when sown on September 20at, which was 16–20 % higher than in winter barley sown on October 10. In the first sowing season (September 10), the grain yield of barley of winter, depending on the seed seed rate, decreases by 0,42–1,01 tons / ha compared to the second seeding period. The yield of grain of barley of winter for late sowing (October 10), depending on the seed seed rate, decreased by 0,6–0,72 t/ha compared with the optimal seeding period (September 20).

Conclusions. The sowing of barley of winter after late sowing (October 10) leads to an increase of 93–103% of the amount of weed in agrophytocenoses before harvesting compared to the first sowing date (September 10).

Increasing the seed rate by 0,5–1,0 million similar seed per hectare provides a decrease of 6–20% of the level of agrophytocenosis in winter barley.

The highest productivity of winter barley agrophytocenoses was obtained for the second seeding season (September 20), where the yield increase is 12–28% compared with the early sowing date (September 10) and 16–20% compared with the late sowing date (October 30).

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