

## REMOVAL OF FOOD ELEMENTS BY THE HARVEST OF VARIOUS VARIETIES OF WINTER WHEAT

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The article is devoted to the issue of studying the removal of food elements by the harvest of winter wheat varieties: Krastal and Chernozemka 115 (Originators of the V. V. Dokuchaev Research Institute of Agriculture and the P. P. Lukyanenko Krasnodar Research Institute of Agriculture); Chernozemka 121 and Chernozemka 130 (Originator of the V. V. Dokuchaev Research Institute of Agriculture); Governor of the Don (Originator of the Don Zonal Research Institute of Agriculture; Severodonetsk Jubilee (Originator of the Severodonetsk SHOS). The research was conducted in 2016-2018. in the stationary experiment of the Department of agrochemistry and feed production on ordinary, medium-humus chernozem in the conditions of the south-east of the Central Agricultural District, at natural (without fertilizer), slightly fertilized (N30P30K30), increased (N50P50K50+N30) and high (N60P60K60+N30 +N30+N30) levels of soil nutrition with mineral nutrition elements.

As a result of the conducted studies, it was found that the introduction of increased and high doses of mineral fertilizers leads to an increase in the removal of mineral nutrition elements by the main and by-products. The greatest increase in the removal of nitrogen per ton of grain, including by-products, was noted in the Chernozemka 115 and the Governor of the Don, in the removal of phosphorus-in the varieties Severodonetskaya Yubileynaya and Krastal, potassium-in the varieties Krastal and the Governor of the Don. On average, for all levels of fertilization, the highest absolute rate of removal of mineral nutrition elements was observed in the variety Severodonetskaya Yubileynaya - 47.0 kg / t, the lowest was noted in the variety Chernozemka 130 – 43.6 kg/t.

**Keywords:** winter wheat, fertilization level, removal of mineral nutrition elements, main products, by-products, conditional balance of mineral nutrition elements.

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