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## ON THE ROLE OF PLANT GROWTH REGULATORS IN INCREASING THE PRODUCTIVITY OF THE GRAIN OF NEW VARIETIES OF WINTER WHEAT

## **N.I. MAMSIROV**

Federal State Educational Institution
of higher vocational education
"Maikop State Technological University"
385000, Republic of Adygea, Maikop, 19, Pervomayskaya street
E-mail: info@mkgtu.ru

The article presents the results of many years of research on some of the possibilities for solving urgent problems of agricultural production of the Republic of Adygea - the steady growth of the basis for creating food and fodder funds - grain production. In particular, the article is devoted to the study of the influence of Regoplant, Biolan, Stimpo growth regulators on the yield and grain quality of winter wheat of new varieties Utrish and Kalym in the foothill zone of the Republic of Adygea. As a result of the research, the positive effect of growth regulators on the treatment of seed and winter wheat varieties of the Utrish and Kalym varieties has been established. At the same time, grain yield increases significantly, and the increase in respect of control amounts to 1.56 t/hectare. Analysis of the grain quality indicators of the studied varieties of winter wheat for protein and gluten content showed that the best are the options with the use of growth regulators Steampo and Biosil. As a result, when assessing the economic efficiency of the studied techniques, a positive effect from the use of growth regulators was established. So, at the maximum grain yield in the variant with the use of the growth regulator Stimpo, by Utrish grade, 4.53 t/hectare, the level of production profitability reaches more than 75%. In a similar variant with the Kalym variety, the grain yield was 4.73 t/hectare, with the level of production profitability exceeding 96%.

**Keywords:** winter wheat, variety, growth regulator, seed treatment, crop processing, predecessor, development phase, grain yield, grain quality, gluten, economic efficiency.

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**Mamsirov Nurbiy Ilyasovich,** Doctor of Agricultural Sciences, Associate Professor, head of the Department of Agricultural Production Technology, Maykop State Technological University. 385000, Republic of Adygea, Maikop, 191, Pervomayskaya street. Ph. 8(918)223-23-25.

E-mail: nur.urup@mail.ru