Annotation

L.A. Burdenyuk-Tarasevych, M.V. Buzynny

Main mineral nutrition elements ratio impact on the yield of different winter wheat genotypes in years with contrast weather conditions

A great influence on the efficiency of the use of plant fertilizers have fluctuations in the weather conditions of the year, significant deviations from average long-term indicators cause significant changes of physiological functions of plants and, as a result, decreasing their performance.

Industry in recent years began to produce new forms of mineral fertilizers with different NPK ratio, the effectiveness of which in the literature is not yet sufficiently illuminated.

The aim of our work was to study the effective use of mineral fertilizers with different ratios of major nutrients and their background undertake a comprehensive assessment of the adaptive potential of the new cultivars in contrasting weather conditions to create recommendations for varietal agricultural technology.

The increase of the gross wheat harvest and its production cost reduction for profitability improvement can be achieved through the use of science-based modern varieties cultivation methods. Each genotype has its own biological, morphological and physiological characteristics, as well as individual needs in mineral nutrition. Evaluation of 12 wheat varieties of Bila Tserkva selection against various fertilizer applications in contrast weather conditions during 2013-15 will allow for development of agronomic manual to be used in agricultural production.

Key words: *wheat, variety genotype adaptive capacity, fertilizers, weather conditions, vegetation.*