Plant growth regulators in winter wheat under Lithuanian conditions

AUŠKALNIENĖ Ona, AUŠKALNIS Albinas - Lithuanian Institute of Agriculture, Akademija

The aim of investigation was to evaluate the influence of different PGR on plant height of winter wheat, grain yield and protein content in grain of two winter wheat varieties under Lithuanian conditions. The stands of winter wheat varieties 'Ada' and 'Zentos' were sprayed with the gibberellin biosynthesis inhibitors chlormequat chloride (CCC), trinexapac - ethyl (TE) or with ethylene releasing mepiquatchloride + ethephon (MQEH) and ethephon (ETH) four times at BBCH 27-29, BBCH 32-33, BBCH 37-39, and BBCH 39-45. The effect of plant growth regulators (PGR) on grain formation of winter wheat was ambiguous and depended on year and varieties of winter wheat. Highest decrease in plant height of winter wheat were obtained in treatments, wherein for the first time of application CCC at rate of 1 L ha-1 and for the second - Modus 0.4 L ha-1, Terpal C 0.7 L ha-1, or Cerone 0.5 L ha-1 at BBCH 39 – 45 were used.