IMPROVING OF MAIZE YIELD STABILITY WITH FOLIAR FERTILIZERS

Péter Jakab[1]*, Györgyi Csontos[1], Mihály Sárvári[2], Melinda Tar[1], István Kristó[3]

[1]University of Szeged, Faculty of Agriculture, Institute of Plant Sciences and Environmental Protection, Hódmezővásárhely, Hungary
[2]University of Debrecen, Faculty of Agricultural and Food Sciences and Environmental Management, Institute of Plant Sciences, Debrecen, Hungary
3Hungarian University of Agriculture and Life Sciences
Szeged, Hungary

*corresponding author: jakab.peter@szte.hu

Increasing the yield stability in crop production is very important. Foliar fertilizers can be suitable for this purpose. In our study the effects of different foliar fertilizers were investigated for maize production. The experiment was set up in three replications, using random block design on the area of Hungarian University of Agriculture and Life Sciences in Szeged. The soil deeply salt meadow chernozem . The examined maize hybrid was DKC 4555. We applied three foliar fertilizers individually and combined with each other. 2021 was unfavourable year for maize. The amount of precipitation was lower by 113.58 mm than the average in the vegetative period of maize. We processed the obtained data by single factor variant analysis. The yield of the untreated control plot was 2.44 t ha^{-1}. By using of foliar fertilizer treatments we got higher yields (2.48-3.14 t ha^{-1}). Although the foliar fertilizer treatments resulted in maximum 29% higher yield in this experiment, but statistically it was not significant. Based on our results we can establish, that using foliar fertilizers can improve the yield stability of maize.