EVALUATION OF NDVI, SPAD VALUES AND YIELD OF TWO DIFFERENT MAIZE (ZEA MAYS L.) GENOTYPES UNDER FOLIAR FERTILISATION

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Ensuring global food security has become a matter of great concern with the constantly increasing population growth, resulting in rising food demands. Simultaneously, climate change, global warming, and land degradation pose major risks to agricultural production. Maize is one of the most produced crops globally and maize yields must be increased to meet the population's needs. Fertilisation is considered indispensable for the crop growth and development. Foliar fertilisation, unlike root fertilisation, enables rapid access of nutrients to plants while sustaining the environment. Our research was carried out at Látókép in 2021, where, foliar sprays of Natur Plasma T biostimulant, Natur Active complex foliar fertiliser, Zinc and Sulphur Mono additives were applied at the 8-leaf stage on two maize hybrids, Mv 352 (FAO 350) and Mv Anissa (FAO 510). The main objectives were to examine the treatment's effect on crops at critical phenophases (12-leaf stage, silking, maturity), besides determining its impacts on the harvested yields. Based on our findings, foliar nutrients had positively influenced the NDVI and SPAD values of both crops. Furthermore, in comparison with the control plots, the yield of Mv Anissa was 9% higher, while that of Mv 352 was 5.4% higher. Consequently, Mv Anissa produced the highest yield of 21.345 t/ha, i.e. 2.8 tons higher than that obtained by Mv 352. Moreover, the treatment increased their thousand-grain weight. Thereby, our study demonstrates the efficiency of the foliar fertilisation method in improving maize vegetative growth and development in addition to its productivity by enhancing its final yield.