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Effect of foliar fertilization with Dr Green technology on the growth, development, yield and quality of maize grain

Summary:

Maize is a species of great economic importance in Poland. Crop cultivation is of special importance for covering the demand for consumption and animal feed and, to a growing extent, also for energy. Abrupt changes in climate along with the potential abiotic and biotic stresses are serious challenges for plant growth and production worldwide. Correct recognition of plants nutritional status during vegetation provides the possibility to predict yield at a very early stage is an important element affecting its size and quality. Therefore, the aim of the research was to assess the effect of foliar fertilization of maize with the Dr Green technology on the growth, development, yield and quality of maize grain.

The applied foliar fertilization had a positive effect on the growth and development of maize in the subsequent development stages, shaping its morphological features, the size of the maize grain yield and thousand grain weight. It has confirmed the positive impact of foliar fertilization on the relative content of chlorophyll in leaves and macronutrients and micronutrients in the vegetative and generative parts of the corn. Under production conditions, foliar fertilization had a positive effect on the cost and energy consumption as well as the economic and energy efficiency indicators for maize production.