

EVALUATION OF THE ROLE OF CRITICAL AGROTECHNICAL FACTORS IN SUNFLOWER CULTIVATION

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Abstract. *Today, cropyears with extreme weather conditions are becoming more and more frequent and increase the risk of sunflower production. The objective of researches into plant production is to minimize these effects as much as possible. In this sense, the optimization of agrotechnological factors is of high importance. Therefore, appropriate cropping technologies (crop density), nutrient supply and optimized, rational crop protection are highly important especially in highly sensitive sunflower cultures. The highest yield amount was measured in the treatment models treated two-times with fungicide and fertilized with NPK substances in case of all three hybrids. Regarding the average of the hybrids the highest yield without any fungicide treatment was measured in the treatment with harmonic nutrient supply with plant density of 55,000 plants ha⁻¹. When applying the plant density of 35,000 plants ha⁻¹ and 75,000 plants ha⁻¹ yield amounts were below 4,000 kg ha⁻¹ in case of all nutrient supply levels. Treatments with two-times fungicide treatment resulted maximal yield amounts in case of all three nutrient supply levels by the highest plant density, i.e. 75,000 plants ha⁻¹.*

Keywords: sunflower, plant density, nutrient supply, fungicide treatment, yield

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