

## **Correlation between the Sowing Date and Yield of Maize on Chernozem Soil, in Connection with the Leaf Area Index and Photosynthesis**

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**Abstract :** Our sowing date experiment took place in the Demonstration Garden of Institution of Plant Sciences, Agricultural Center of University of Debrecen, in 2012-2014. The thesis contains data of test year 2014. Our purpose, besides several other examinations, was to observe how sowing date influences leaf area index and activity of photosynthesis of maize hybrids, and how those factors affect fruiting. In the experiment we monitored the change of the leaf area index and the photosynthesis of hybrids with four different growing seasons. The results obtained confirm that not only the environmental and agricultural factors in the growing season have effect on the yield, but also other factors like the leaf area index and the photosynthesis are determinative parameters, and all those factors together, modifying effects of each other, develop average yields

**Keywords :** sowing date, hybrid, leaf area index, photosynthetic capacity

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