



PLANT SYSTEMS BIOLOGY: INTEGRATING SCALES AND TIMES

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IMPACT OF THE USE OF NANO-FERTILIZERS IN SOYBEAN CROP

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INTRODUCTION

In the Cerrado region, Rio Verde GO, Brazil, rural producers seek to increase the soybean productivity efficiently. The objective of this work was to develop a complementary fertilization protocol to the traditional management of the producer (TMP) of Rio Verde-GO applying nano-fertilizer (MIST-P and MIST TPS) during the sowing of the soybean crop.

METHODOLOGY

Control

Soybean sowing

TMP (Traditional Management Producer)

TMP + MIST-P (P 20,5%, Ca 3L ha⁻¹ 45,9%, S 22,1% and Si 11,5%)

TMP + MIST TPS (Ca 40,6%, $3L ha^{-1} +$ Mg 11,9%, S 34,2% and Si 3L ha⁻¹ 1,6%) + MIST-P.



Plots of 4 m² - 6 replications



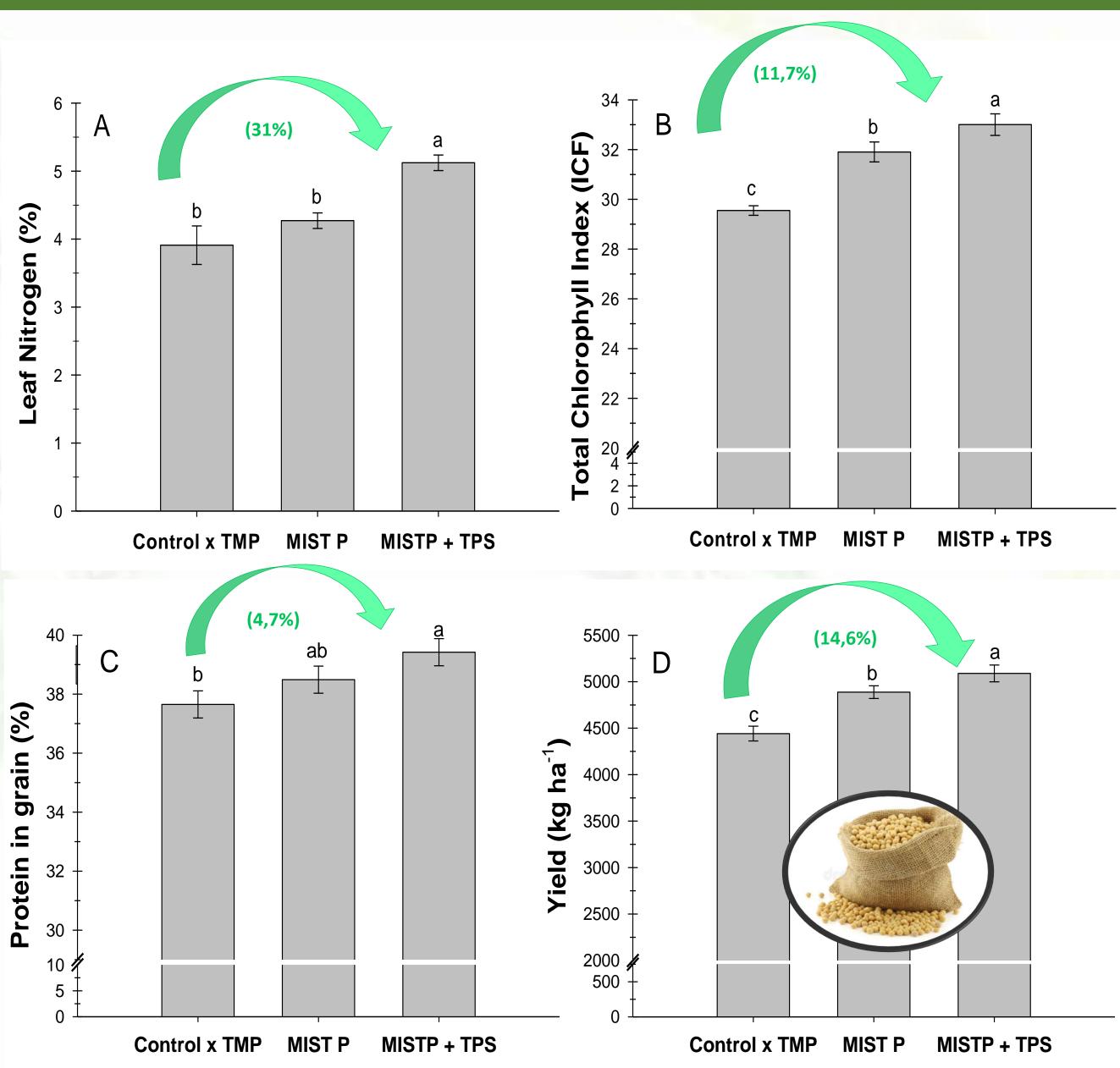
Total Clorophyll Index (ICF)





Yield (kg ha⁻¹ – 118 days after emergency)

RESULTS AND DISCUSSION



Percentage of leaf nitrogen content (A), Total chlorophyll index Falker, ICF (B), percentage of protein in grains (C) and Yield (kg ha⁻¹) with management of nano-fertilizer in soybean crop. Means followed by the same letter do not differ statistically according to Tukey's test at 5% probability.

CONCLUSION

results show that NF are a These promising complementary fertilization alternative to the traditional management of the producer for the soybean production in the study region.

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ACKNOWLEDGMENT



















