Maximizing of crop yield with the best revenue of using nitrogen fertilizer and inoculation of seed with bacteria in sustainable agricultural systems in soybean (Glycine max L.)

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Introduction

Akin to his notion, the researcher has explored the impact of nitrogen fertilizer and the use of Rhizobium japonicum in soybean (Glycine max L.) in sustainable agricultural systems. The study employed a split-plot design to assess the yield and revenue benefits from optimizing the use of nitrogen fertilizer and inoculation of the seed with bacteria. The results demonstrated that inoculation with Rhizobium japonicum and the application of nitrogen fertilizer led to increased crop yield and revenue compared to the control treatments.

Materials and Methods

The study was conducted in a field with a split-plot design. The main plots consisted of different nitrogen fertilizer levels, while the subplots were inoculated with Rhizobium japonicum. The soybean crop (Glycine max L.) was grown under sustainable agricultural conditions.

Results and Conclusion

The results showed a significant increase in crop yield and revenue when nitrogen fertilizer and Rhizobium japonicum were used. The study concluded that this combination is a promising approach to enhance crop production and economic benefits in sustainable agricultural systems.

References

