

UNODE AGRO UGANDA LTD

3RD /APRIL/2025

BULOBA AGT

WAKISO DISTRICT

A COMPARATIVE REPORT SHOWING THE PERFORMANCE OF BIO FARM FERTILIZER ON TISSUE CULTURED BANANAS AND CONTROL CROPS (BANANAS) IN NURSERY BED AT AGT LABORATORIES IN BULOBA

DATE: 3RD /APRIL/ 2025.

STAFF: BARBRA ESTHER NAMISANGO

ACKNOWLEDGEMENT

I would like to extend my humble and sincere gratitude to Unode Agro Uganda Ltd for facilitating my field visits to AGT laboratories in Buloba to monitor the growth of tissue cultured bananas.

EXECUTIVE SUMMARY

This report presents the results of a field experiment comparing the performance of a non bio farm sprayed versus a bio farm sprayed tissue cultured bananas. The experiment was conducted at AGT laboratories in Buloba and the results show that crops sprayed with bio farm had a faster growing rate, and more green leaves compared to non bio farm sprayed.

INTRODUCTION

I was entrusted by Unode Agro Uganda Limited to monitor the experiment of Banana tissues, those sprayed and those not sprayed with Bio Farm fertilizer at Buloba AGT laboratories for comparison on growth rate and green color manufacture.

The experiment was aimed at evaluating the effectiveness and performance of Bio Farm fertilizer on bananas. I was instructed to check on the crops on a weekly interval and had to begin this exercise on 25th February 2025.

MATERIALS AND METHODS

Experimental designs

- Location: AGT Laboratories in Buloba
- Crop: bananas
- Treatment: control crops vs bio farm applied
- Reapplication: spraying every 10 days three times a month.

Bio farm application

Bio farm fertilizer: This is a foliar and purely organic liquid fertilizer with 20 kinds of natural amino acids from animals of which 9 are essential

Application rate: 60mls in a 20litre spray pump.

Application method: applied directly to the leaves and the whole plant.

RESULTS

The 1st experiment was carried out on the 17th /02/2025

After one week, on 25th/02/2025 the results below were observed:

- *There was no difference between the crops sprayed with bio farm and the control crops.*

EXTRACT PHOTO OF CONTROL CROPS A WEEK AFTER THE EXPERIMENT



CROPS SPRAYED WITH BIO FARM FERTILIZER



The second experiment was carried out on 24th /02/2025

AFTER THE 2ND spray of bio farm there was a difference in the crops sprayed with bio farm control crops.

- According to my observation, the bananas sprayed with bio farm were growing faster compared to the control crops. This is evidenced by more banana plantlets bringing the second and broad leaves compared to the control crops.
- Majority of the plantlets sprayed with bio farm germinated well including those which we re-cut compared to the control crops
- The bananas sprayed with bio farm had more green leaves compared to the control crops.
- All this is evidenced in the pictures below

EXTRACT PHOTO OF THE CONTROL CROPS AFTER THE 2ND SPRAY



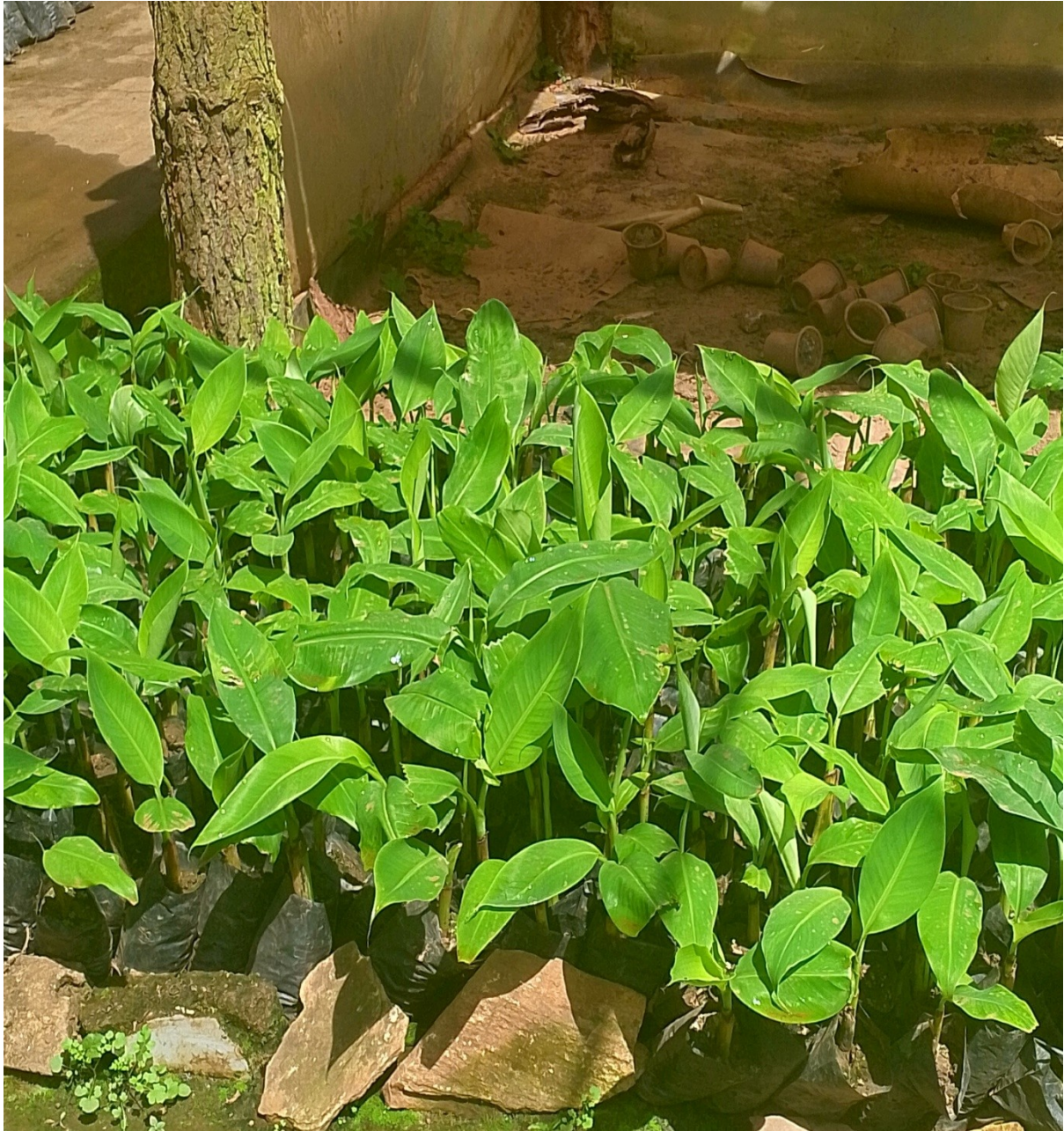
EXTRACT PHOTO OF THE BANANAS SPRAYED WITH BIO FARM FOR THE SECOND TIME



- *The third spraying was on 7th /03 /2025*
- *There was a big difference between the bananas sprayed with bio farm and control crops*
- *The bananas sprayed with bio farm had more green leaves compared to control crops*

- The growth rate of crops sprayed with bio farm was higher than the control crops
- This is evidenced in the extracts of photos provided below

EXTRACT PHOTO OF CONTROL CROPS ON THE THIRD ROUND OF EXPERIMENT



EXTRACT PHOTOGRAPH OF BANANAS SPRAYED WITH BIO FARM ON THE THIRD AND FINAL ROUND



AFTER ONE MONTH

1. The crops sprayed with bio farm had grown faster compared to

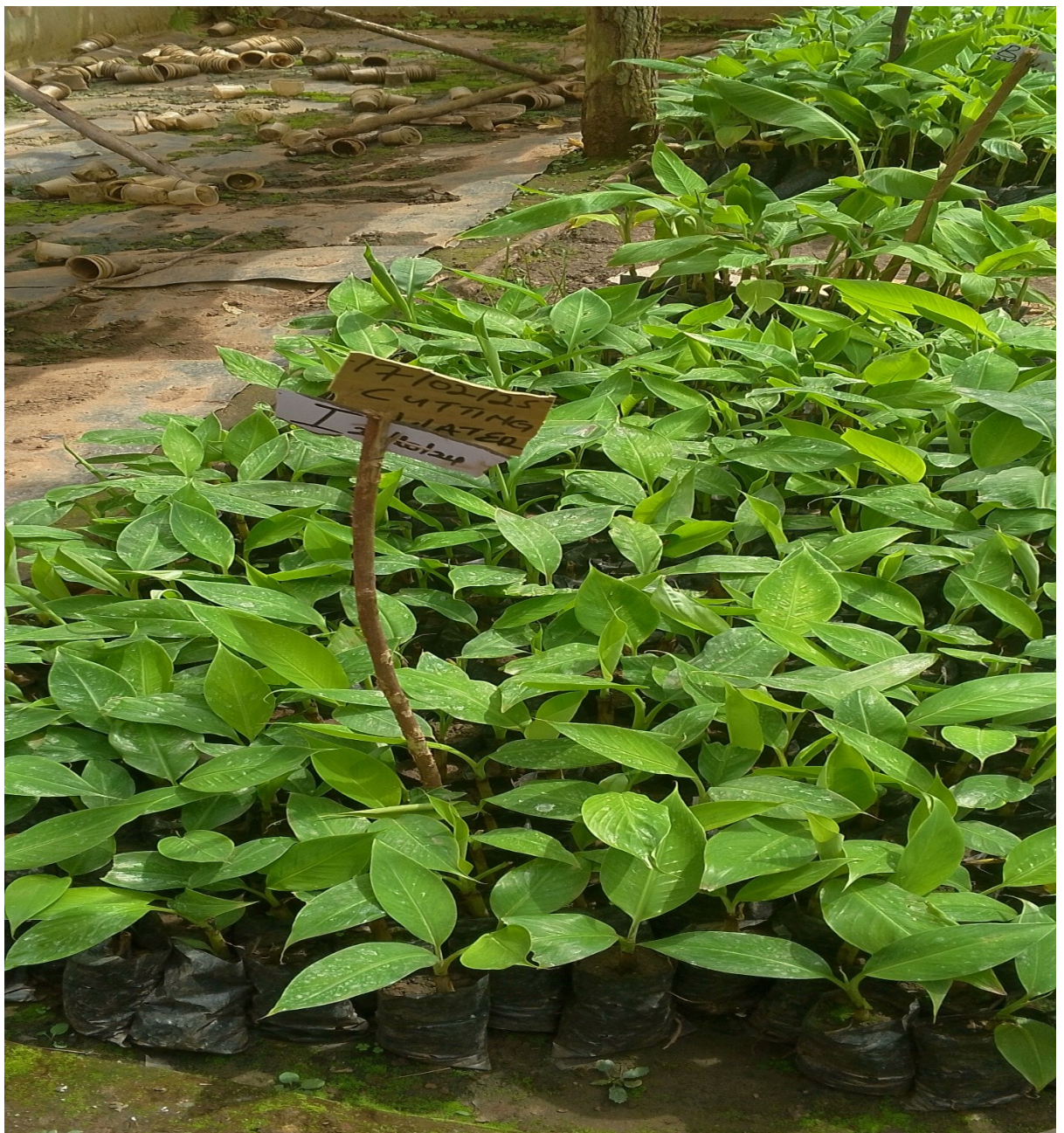
control crops.

2. The crops sprayed with bio farm were all green and good looking

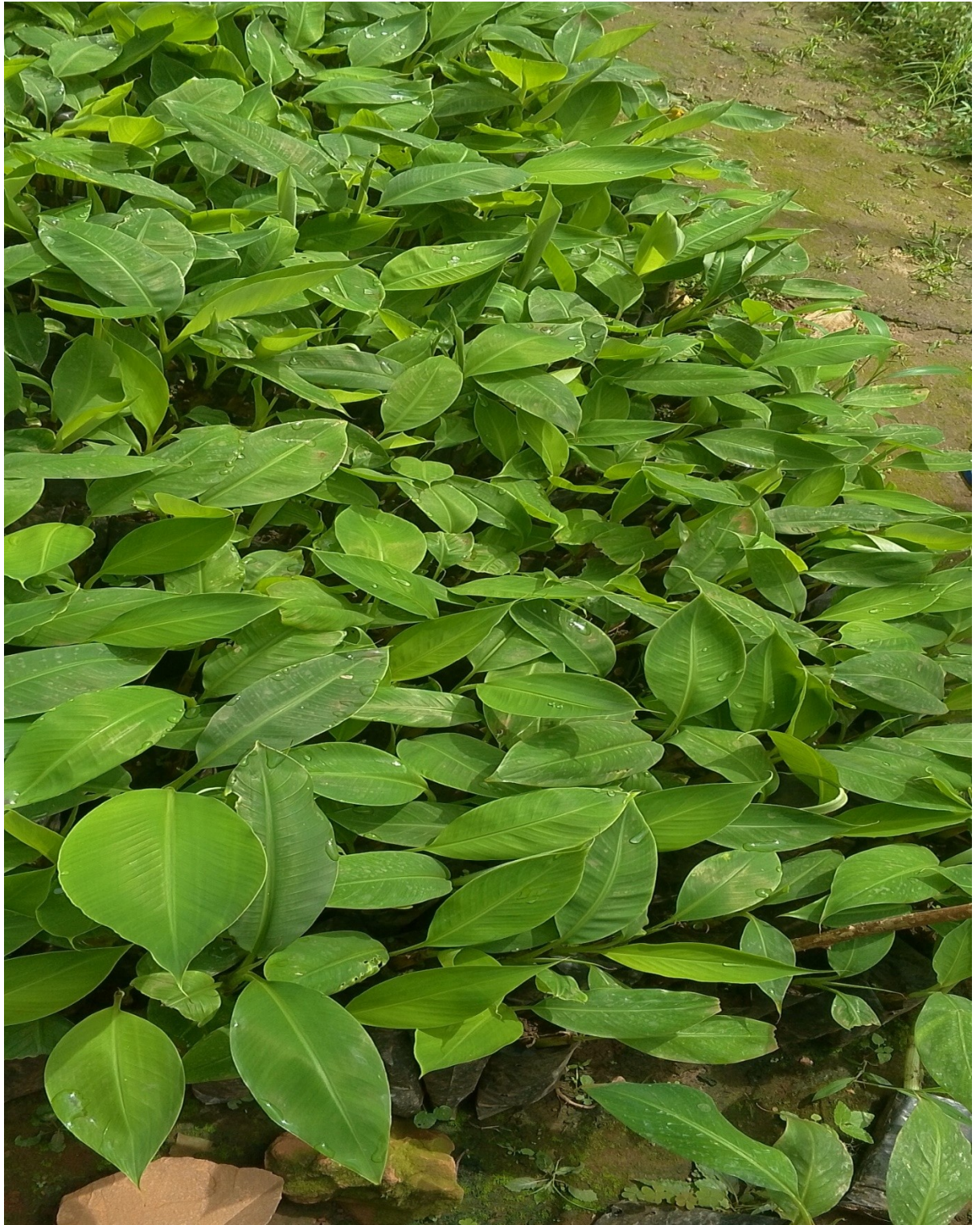
compared with control crops.

3. Some Small signs of leaf damage by insects were identified at the beginning of the experiment and very minor leaf damages are seen at the end of the third and final experiment'

CONTROL CROPS AFTER ONE MONTH



CROPS SPRAYED WITH BIO FARM AFTER ONE MONTH



DISCUSSION

The results of this experiment show that bio farm application had a positive impact on banana crop performance, resulting into improved germination, growth rate and chlorophyll manufacturing. These findings suggest that bio farm fertilizer is a valuable tool for improving banana productivity and sustainability.

CONCLUSIONS

This experiment demonstrates the potential of bio farm fertilizer to improve the rate at which bananas grow and sustainability.

RECOMMENDATIONS

- *We are appreciative of AGT laboratories for working with us and experimenting bio farm fertilizer as a sustainable alternative to chemical fertilizers*
- *More research is needed to evaluate the effectiveness of bio farm on other crops as well.*
- *I recommend the use of Bio Farm fertilizer on banana production at AGT laboratories for perfect results.*

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