

An aerial photograph of a dirt road winding through a dense, green forest. The road is light brown and curves from the bottom left towards the top right. The surrounding forest is lush and green, with some areas appearing slightly more yellowish-green, possibly due to sunlight or the type of vegetation. The overall scene is a natural, outdoor setting.

# **Some of the Many Field Tests in Nigeria**

# Introduction

Here are some of the many completed and on-going field tests in Nigeria, which have been requested by state governments, farmer groups, and farmer associations in Nigeria. None of the field tests has failed to outperform chemical farming.

# Maize Tests

# Bio-chemical Farming Maize Field Test in Karfe Town, Suleja, Niger State, Nigeria



# Bio-chemical Maize Field Test in Karfe Town, Suleja, Niger State, Nigeria

- The maize seeds were soaked in Bio-Plant and water for 12 hours before planting.
- The soil, which was in poor condition owing to years of chemical farming, was prepared with a bio-chemical mixture of Urea and Bio-Plant.
- Bio-Plant was mixed with NPK and this bio-chemical mixture was sprinkled around the maize plants during the crop. Pro-Plant was sprayed regularly on the maize.
- The farmers almost doubled their yield. Normally, they only produced 30-40 bags of maize per hectare, but this test produced 60 bags per hectare.
- Normally, the farmers have problems with insects during their maize crops, but this time there were no problems with insect pests at all. No chemical sprays were used.

# Dry Season Maize Test in Chanchaga Village, Niger State, 2015/2016

- Bio-Plant and Pro-Plant were tested on maize using different farmers to evaluate their impact compared to inorganic NPK fertilizer.
- Results obtained revealed that plots treated with Pro-Plant combined with Bio-Plant had significantly higher yields.
- In all the treatments where Pro-Plant was used either alone or combined with NPK or Bio-Plant an appreciable yield increase was obtained.

# **Conclusion of the Maize Test in Chanchaga Village, Niger State**

**“Any treatment that involves Pro-Plant  
is therefore highly recommended  
to maize farmers.”**

**The Director**

**Farm Input Support Services Department.**

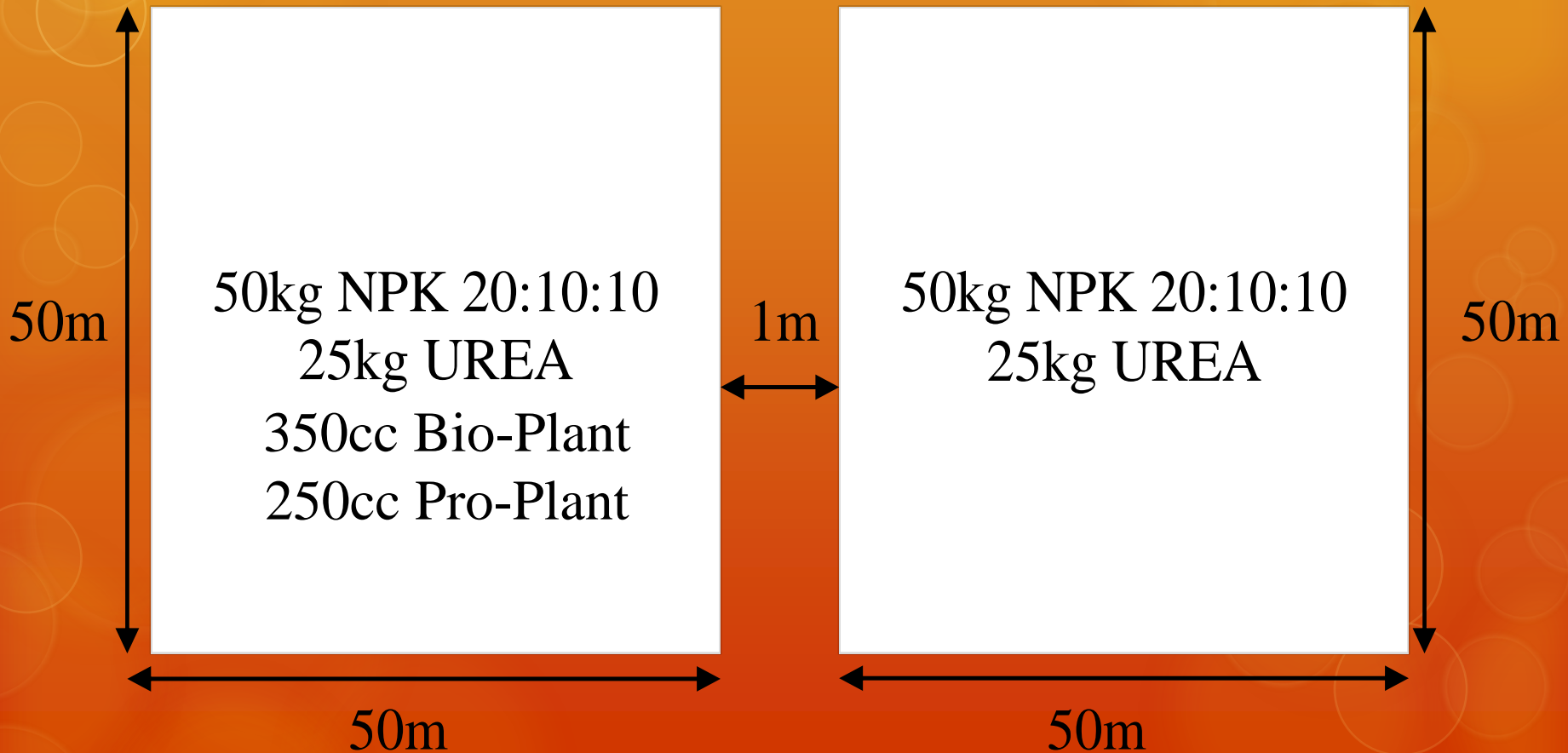
**Federal Ministry of Agriculture and Rural Development.**

# **Maize Tests in Gombe State**

# Maize Field Tests Conducted in 2011 in Gombe State, Nigeria

**T1 (Plot I)**

**T2 (Plot II)**



# Summary of the Results

- The trials were held at the two different locations. Each test showed distinctive differences between Plot 1 and Plot 2 in terms of plant height, stem size and corn ear size.
- Apart from these, Plot 1 in which the organic liquid was applied mixed with conventional fertilizer, had cobs (corn ear) maturing/drying with the stem and leaves still green, while Plot 2 had shorter plants, smaller cobs with the plant and cob drying at the same time.



Chemical  
Maize

Bio-chemical Maize with  
Bio-Plant, and Pro-Plant sprayed  
on the leaves.

**A Mature Cob in Plot I With the Stem and  
Leaves Still Green**



# Field Test Yield Results

<b>Location</b>	<b>Treatment</b>	<b>Yield/Plot (Kg)</b>	<b>Yield/Hectare (Kg)</b>
<b>Pokata</b>	<b>T1 (Bio-chemical)</b>	<b>750</b>	<b>3,000</b>
	<b>T2 (Chemical)</b>	<b>325</b>	<b>1,300</b>
<b>Posulte</b>	<b>T1 (Bio-chemical)</b>	<b>500</b>	<b>2,000</b>
	<b>T2 (Chemical)</b>	<b>350</b>	<b>1,400</b>



**Group Photograph of the Farmers After Observing the Very Good Results**

# Comments

- The yield increased 2X and 3X above the chemical Control areas.
- The farmers were very happy with the results.
- These very good results were achieved in bio-chemical farming without any soil preparation as the tests started late in the maize season. In spite of this, the impact was so apparent.
- Pro-Plant also had an insecticidal effect on weevils, grasshoppers, and even aphids, which impressed the farmers in the area.

# Rice Tests

# 100% Organic Farming Rice Field Test in Taraba State. Pro-Plant Used Only.



- The farmers did not prepare the soil with Bio-Plant and organic matter, and only sprayed Pro-Plant on the rice.
- Nevertheless, the farmers said that their crop yield was more than they ever got with Urea and NPK.
- There were no empty seed shells on the rice plants.
- Also, their costs were very much lower because they only needed one litre of Pro-Plant per hectare.

# Bio-chemical Farming Rice Dry Season Field Test in Jamaare, Bauchi State



- The rice seeds were soaked in Bio-Plant and water for 18 hours before planting.
- The soil was in poor condition. It was prepared with a bio-chemical mixture of Urea and Bio-Plant.
- Bio-Plant was mixed with NPK.
- Pro-Plant was sprayed regularly on the rice plants during the crop.
- No chemical sprays were used.
- The farmers normally only produced 50 bags of rice per hectare, but this test produced 80 bags per hectare, which is a 60% increase.

# 100% Organic Rice Field Test in Borkono, Kujama, Kaduna State Increased the Yield Several Times.



# 100% Organic Rice Field Test in Borkono, Kujama, Kaduna State Increased the Yield Several Times.

- A 100% organic farming field test was carried out on rice in Borkono, Kujama, Kaduna State from June to October 2018 on one acre of land.
- The farmers produced 3.2 tonnes, which compares to their normal yield of between half a tonne and a tonne, if they were lucky.
- The soil, which was in poor condition before the test, was prepared with Bio-Plant mixed with organic matter; the seeds were soaked in Bio-Plant and water; and Pro-Plant was sprayed regularly on the rice plants.
- No chemical sprays were used.

# 100% Organic Rice Field Test in Borkono, Kujama, Kaduna State, Nigeria Increased the Yield Several Times.



# Rice Field Test in Katsina State: Threefold Increase in Yield

- A 100% organic field test was carried out in Katsina State where the farmers normally hardly harvested just 1 tonne of rice per hectare because the soil was very poor as a result of many years of chemical farming.
- The farmers did not have any organic matter or compost to prepare the soil with as they were not used to preparing the soil except with chemical fertiliser, so they sprayed Bio-Plant mixed with water on the soil.
- They also soaked the seeds in Bio-Plant and Pro-Plant before sowing them in the nursery, and sprayed Pro-Plant on the rice, though only twice instead of the normal 5 times.

# Rice Field Test in Katsina State: Threefold Increase in Yield

- Nevertheless, they still increased their yield threefold and produced 3 tonnes per hectare.
- It is noteworthy that the same seeds were used as in the Federal Government's Anchor Browsers programme in Katsina, which took place at the same time, and in which more than 1,500 farmers grew rice with the same seeds.
- However, they harvested a much lower yield than in the bio-fertiliser test. Some farmers used more than 10 bags of NPK and Urea combined, but got a much lower yield. This says a lot about the benefits of using Bio-Plant and Pro-Plant.



**100% Organic  
Rice Field Test  
in Katsina State**



**100% Organic  
Rice Field Test  
in Katsina State**

# Wet Season Rice Test in Kaduna State



- A Wet Season, 100% organic rice test was carried out in Kaduna State in 2018 on one acre.
- The farmers harvested 36 bags x 100 kgs. The chemical farmers said that they only used to get a yield of about 10 x 100 kgs. bags.
- This result was achieved even with very minimal soil preparation.

# Wet Season Rice Test in Kaduna State



# Wet Season Rice Test in Kaduna State



# **Tomato Project in Katsina State, 2019**



# Organic Tomato Farming, Katsina State

# Katsina State, Organic Tomato Project Funded by the Central Bank of Nigeria

- The first project in mid-2019 was carried out for 5,000 tomato farmers in Katsina State. The Central Bank of Nigeria (CBN) funded the project.
- Because the farmers were so pleased with the results, a second tomato project for 10,000 tomato farmers was going to take place and be funded by the CBN, but the CBN did not provide funding in the end.

# Funded by the Central Bank of Nigeria

- The soil was in poor condition owing to years of chemical farming, was prepared by spraying Bio-Plant on the soil. No organic matter or compost was available.
- Results: The farmers were delighted! The number of baskets of tomatoes was generally at least half more than normal, and the tomatoes were larger. We are still waiting for the official field test report..
- Normally, the farmers have problems with insects during their maize crops, but this time there were no problems with insect pests at all. No chemical sprays were used.

# **Other Field Tests in Nigeria**

# 100% Organic Farming Cucumber Field Test in Akwai, Ibom State



- The soil, which was in poor condition before the test, was prepared with Bio-Plant mixed with organic matter.
- The seeds were soaked in Bio-Plant and water.
- Pro-Plant was sprayed regularly on the plants. No chemical sprays were used.
- The farmers said that the cucumbers were larger than those grown with chemicals; they tasted better; they looked fresher; and the quality was better.

# Testimony of Mrs. Hasma Sahura Sabuma, Katsina, Katsina State



# Testimony of Mrs. Hasma Sahura Sabuma, Katsina, Katsina State

- Mrs. Hasma Sahura Sabuma says that she has had great success with the bio-fertilisers when growing a variety of crops and fruit trees, including guava trees, banana trees, tomatoes, rice, beans, and maize. She says that the crop yield and the quality of the produce were far superior to what she used to get when she farmed with chemical fertilizers, and that the crop produce looked much fresher. She also said that the fruit tasted sweeter and that her soil had improved noticeably.
- These are comments commonly made by farmers when they start to use the bio-fertilisers.

# Dry Season, 100% Organic Tomato Test in Kano State



- These tomatoes were being grown 100% organically in Kano State with Bio-Plant and Pro-Plant.
- The farmers were very happy with the rate of growth and the yield, while the taste was much sweeter than when they used chemical fertilisers.

# 100% Organic Pineapple Test in Oyo State



- In this 100% organic field test in Ibadan, Oyo State, Nigeria with pineapple only Pro-Plant was used as the crop had already been planted.
- Nevertheless, the farmers commented that the growth was better than what they achieved with chemicals.

# Some General Comments by Farmers

- Farmers in Sokoto, Kano, Kaduna, and Katsina states where tests have been or are being carried out have commented that they have reduced the amount of chemical fertilizer, which they usually use. For example, normally, they would use 15 bags of NPK 15:15:15 in tomato farming over 1 hectare. But now in bio-chemical farming they have reduced this to 7 bags by mixing the 7 bags with Bio-Plant @ 330 cc per bag.
- Some farmers say that they have stopped using NPK altogether because Pro-Plant provides more nutrients.
- In addition, some farmers have reported that they no longer have problems with disease.



Maize from CO-GAED project farm, Ewu, Edo State where organic fertilizer was used.



Salad Greenhouse rice farm at Lau, Taraba State with 95% seeds and a significant increase in soil fertility due to the use of *Salad Green Bio-Plant and Pro-Plant*.



# **Training Activities in Various States**





Salad Greenhouse Worldwide Ltd in partnership with the Katsina State Government, training and empowering 2,500 women in Katsina State on Organic Agriculture.



Rice grown in Katsina using Salad Green Bio-Plant and Pro-Plant



Katsina Farmer shown how to prepare seeds for planting using Salad Green Bio-Plant and Pro-Plant



Katsina Farmers mixing Bio-Plant in Napsack sprayer for soil preparation



Katsina Farmers using Bio-Plant for Soil Preparation



*Salad Greenhouse Worldwide's*  
technical team training farmers  
on organic farming and the use  
of organic fertilizers





CO-GAED Initiative by **Senator Clifford Ordia**. Training Program organized by Salad Greenhouse Worldwide Ltd. Below is maize grown using Salad Green Bio-Plant and Pro-Plant during the 3-month long program



Salad Greenhouse Worldwide Ltd. Carries out Organic training Programs around Africa giving farmers the tools to enhance farm productivity and soil enrichment.



Salad Greenhouse Worldwide Ltd, training Edo State Farmers at Ewu CO-GAED Farm on 100% Organic farming using Salad Green Pro-Plant and Bio-Plant Fertilizer.



# Training of Farmers on How to Use the Bio-fertilisers in Edo State



# Training of Farmers on How to Use the Bio-fertilisers in Edo State



# Training of Onion Farmers in Sokoto State about How to Minimize the Use of Chemical Fertiliser and Restore Soil Fertility with Bio-Plant and Pro-Plant. February 2019.

