## APPLICATION RESULTS ~ TOBACCO NURSERY & FIELD OPERATIONS WITH INCIDENCE OF MOLD and BACTERIA

## **INTRODUCTION:**

Tobacco plantations are unique in the different phases of cultivation and germination of the seeds. This process is called Floating, in which the plants float on water in trays for 50 to 60 days. This stage is quite critical as the plants develop in a very wet and humid environment, which is also an ideal breeding ground for fungi, mold, and bacteria, making the seedling very prone to infection, especially with Fungus Fusarium and Bacteria Xanthomonas. In the next stage, the plants are transplanted in a prepared

field. Shortly after planting, Damping Off becomes a great risk, severely affecting production. Damping off is a soil-borne fungal (bacterial) disease that rots the stem and root tissues at the soil level. In most cases, infected plants will germinate and come up fine, but within a few days they become water-soaked and mushy, fall over at the base and die. The phytophthora fungus is the main cause.

### **OBJECTIVES:**

The objective in this case was to prevent the development and infection of these bacteria and diseases through all stages of cultivation. Puroxi (OB) was used exclusively to minimize and control the development of these bacteria.



## **APPLICATION METHOD:**

During the nursery stage, Puroxi (OB) was applied in a precise protocol during the coolest daytime hours (6am-3pm), using a backpack sprayer.

Prior to transplanting in the field, the planting holes were disinfected with Puroxi (OB). After the seedlings were sown into the prepared field, a precise protocol of Puroxi (OB) was applied, after watering. During the first 30 days of the field stage, Puroxi (OB) was applied at specific concentrations and intervals, to reduce the population of the Phytium microorganism,

## **RESULTS:**

The results of Puroxi (OB) application in the Floating Nursery system were clearly evident. There was a marked improvement in the overall health and integrity of the plants, as demonstrated in the comparable photos; with and without Puroxi (OB) treatment. The following results were observed:

- 1) Nursery stage the application of the product achieved a successful germination of 92% vs. 75% of the control plantation. It is important to take into account that the application of the product should be done in the evenings for a better effect.
- 2) Field stage Puroxi (OB) was applied in the ponding areas, where there is no immediate water filtration after irrigation. This helped to keep the roots oxygenated and free of bacteria and fungi, thus resulting in stronger and healthier plants, with a reduced mortality rate.



## **CONCLUSIONS AND RECOMMENDATIONS:**

It is confirmed that the evaluation carried out in this farm, managed to control the appearance of bacteria, confirming that no bacteriological and fungus microorganism in the trays. At the same time, can be considered 3 important recommendations in the application of Puroxi products: the first is to apply the product in the Floating system in the coolest hours of the day. The second is that in the applications of product to disinfect the soil in the field stage, it must be done minutes before sowing and not to exceed more than 12 hours in applying it. The third, to obtain better effectiveness in applications, you must make pre-mixes of the product, and thus obtain a better emulsion of the same.

# PUROXI

## (OB) WATER SOLUTION for TOBACCO plants

## **PURE WATER GLOBAL INC.-**

## **TESTIMONY:**

Mr. Hugo Flores, producer-owner of the farm, indicated the following: "Al I did not put a lot of "coconut" on his product and it did not interest me, but in where it was applied, the plants did not get sick. " For his part, Mr. Iván Tovar agronomist and supplier of the Tabaco estate indicated: "The Puroxi OB product, gave a greater and better uniformity of plant growth, both in the nursery

and in the field, making the The company will accept and adopt the product for its protocols in the future. Additionally, there was more uniformity of size, more healthy plants per apple. There was no mortality by Damping off or Phytium."

Our products, formulations, and application methods have shown proven success with disease resistance and pest prevention, and healthier, more robust plants. This is a bacterial issue and bacteria do not like oxygen. Due to increased oxygen levels and nutrient uptake derived from our product, any fungal or bacterial issues can be prevented or eliminated. We believe that you can counteract the cost of our product by eventually cutting back on fertilizers and pesticides.



## **DISCLAIMER:**

The observations listed above are from specific situations, based on their own unique results and experiences. All water is different; every environment is different; every operator is different; every soil is different. And of course, each challenge of diseases or contaminants is different. We cannot guarantee you will see any specific result listed above. But what we can guarantee is that you will immediately have clean, clear, nutritional water, and in a very short time, better results than without our applications. When your plants and soil have healthy, nutritional water it's a good start. Raising the oxygen levels will further contribute to your overall production success. Application rates and methods vary from operation to operation.



## **PROFILE**

Producer: Mr. Hugo FloresPlace: Zanjón, San Lorenzo

Trial period: 54 daysType of farm: Tobacco

• Type of trees: Nicotianna Tabacum

Climate: Tropical WarmApplication: Nursery and Field

If this makes sense to you, please give us a call; we would love to have you as a customer.

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Clean Clear Nutritional Water



Caution: Do not add fertilizers in the water at the same time as you add Puroxi (OB), without doing a Jar Test. Some fertilizers may plug emitters when mixed with Oxygen. Always consult your local Distributor or us, prior to application to ensure it is done correctly.