

Plantain Nursery Stock Study

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1	Control	Product	Frequency
2		NPK fertilizer 20-10-10 at a rate of 1g/plant every two weeks	CARBAP reference
3		AZOMITE® alone with an application rate of 5g/plant every two weeks.	Equivalent adapted from Indus Agro-Service reference of 50g/pied for field plants.
4		AZOMITE® + NPK fertilizer combination (combination T2 and T3) every 2 weeks	CARBAP Protocol
5		Foliar Fertilizer Agrovert at a rate of 50g/15 litres every 21 days.	Manufacturer's recommendation

Summary of Test Results with and without AZOMITE®

<u>TRT</u>	<u>Plant Height</u> (cm)	<u>Circumference of Trunk</u> (cm)	<u># Leaf/Plant</u>	<u># Roots/Pl</u>	<u>Total Wt</u> (grams)
T1	16.7	4.8	9.7	10.1	67.7
T2	32.4	6.29	11.2	13.3	151.6
T3	20.0	5.33	10.5	10.7	81.1
T4	32.6	6.70	10.4	16.9	160.9
T5	14.4	4.41	9.7	9.3	56.9

Conclusion from Prin. Investigator

After the analysis of the preliminary results of this new product, it appears to have very interesting effects on plantain plantlets in the nursery, notably on:

- **Growth in the height** of the plantlets with at least 20% increase in height, with respect to the control. This increase can substantially double the height of the plant when AZOMITE® is associated with a mineral fertilizer (NPK);
- **Increase in plantlet diameter** (by at least 11%) with the possibility of achieving a 40% increase in diameter when AZOMITE® is associated with NPK;
- **Increase in number of leaves** emitted (at least 8%). The rate can reach 15% in case of addition of a mineral fertilizer (NPK);
- **Root-emission**, when AZOMITE® is associated with NPK, there is possibility of increasing the number of roots by nearly 73%. In addition, it is interesting to note that AZOMITE® alone can contribute to a biomass increase in a range from 50% to over 7 times when combined with NPK fertilizers. It is the same for plant weight, which is increased by 20% with AZOMITE® alone, and when combined with an NPK fertilizer can also reach 7 times.

Based on these observations, we recommend the use of AZOMITE® in the nursery for plantain plantlets at a dose of 5g/sachet containing a plant in combination with an NPK mineral fertilizer, notably 20-10-10 used in this experiment. AZOMITE® should be incorporated into the upper half of the substrate before transplanting the plantlets. Mineral fertilizer should be applied at a dose of 1g/plant from the 8th day after transplanting and then after every two weeks. Subsequent applications of AZOMITE® should follow the same sequence.