

A CASHEW SUCCESS STORY IN MUCOJO

This time we have a story about Agostinho Abudo who lives in Nacutuco, some 5 km from Mucojo Sede. This year he has harvested 10 bags or 900 kg of cashew nuts and has sold them all for a price of 30Mts/kg, and he is still harvesting from his farm. Furthermore he noted, "The cashew fruits were sweeter and the nuts were heavier and larger. It was like in those earlier times when there was no Oidium disease yet." What had made these possible?

In this story there is a twist involving our MOZACAJU facilitator, Raul Momade. As an extension man he wanted to share what he knows to other farmers who were pressuring him about the "medicaments" for Oidium from INCAJU that had not arrived yet and most critically, the cashews were already in full bloom. "Mucojo is a place where the cashews bloom early and the "medicaments are often late," said Raul. The pressure from the farmers and the promising initial results from the farm of Calisto made Raul fidgety. Thus, when 4 containers arrived of the microbial cocktail "remedy" that I had prepared, he gave Agostinho Abudo this natural remedy, and also loaned him the long hose hand pump. Raul felt this was going to be Agostinho's "First Aid" in action. The trouble was that Raul did not inform us about this, so Agostinho had to do his work without any follow-up.

Agostinho had another thought, "Since I had a functioning power sprayer, I could spray this natural remedy using it, and use the hand sprayer to spray the tops of the trees not reached by the power sprayers." His neighbors also began pressuring him and he found himself acceding to their requests, but, after 15 days, they all found that the Oidium continued to be visible, unlike the INCAJU Chemicals that had a knockdown cleaning effect. I got the word from Raul about this, but, he did not indicate it was about Agostinho Abudo's farm and so, I visited the farm of Calisto (the test-run farm) to see what had been happening, and not Agostinho's. At Calisto's it was modestly controlling and the Oidium did not spread extensively compared to those which had not been sprayed. Surely, this was not an unusual phenomenon for natural control, I explained to Raul. Agostinho applied a dosage of 1:200 proportion (of the natural remedy to water) and with the remarks of his neighbors, he thought of making it stronger a 1:20 proportion (this is actually the recommended rate.) and he did to do this to 100 trees in his farm. By then the INCAJU chemical had arrived and the pressure on him from the other farms was gone. But, he still had the natural remedy, so, he sprayed this to his own 100 trees, to find out what would happen after 15 days. He was amazed. The Oidium was cleaned. He decided to spray a third time (again the 1:20 dosage) to find out what happened after 15 days.



Fig. 1 (right).. Agostinho Abudo the background. Note the leaves of the productive shoot and the fruits free of any Oidium scars and Fig. 2 (left) the older leaves with the Oidium scars and the younger leaves clean of the Oidium.

With three sprayings of the microbial cocktail he stopped spraying and began to wonder what was happening. He also sprayed the INCAJU Chemicals in another 200 trees in his cashew grove, but, only twice as there were no more chemicals. These were the trees that received earlier the very dilute microbial cocktail and were also doing well. He was now comparing on his own the two regimens. They were both doing very well. So, he got the MOZACAJU facilitator Raul Momade to inform us. Only then did we know, so when we visited him in November 3rd with Dambiro and Levi, we talked to him. I still had doubts and on November 10th I visited his farm to verify his observations. Agostinho walked me through the area and I could see for myself the signs of the effects of the three sprayings of the natural "remedies". The productive shoots that bore the fruits were free from the scars of Oidium and the older growths on the stem bore the scars of Oidium, attesting to the veracity of the effects of the three sprayings of natural "remedies". There were fruits and we gathered them for testing.

I am now drying the raw nuts to see their outturns equivalency and I brought also some of the false fruits for brix refraction testing. For gustatory testing, we had even eaten a few and corroborated what Agostinho observed.

Agostinho's 10 bags of raw cashew and another 2 bag still to be sold will make him earn about 33,000Mts this year, no mean income compared to years before. This is a good year compared to his 450 kg harvest last year which Agostinho could hardly sell. He is now poised to have 1100 kg from his 300 trees (mostly old big trees) to give him now an average of 3.66kg/tree, a unique experience. So Agostinho is already thinking of next year. He is now asking,

1. "Can we start early next year? Here in Mucojo the flowering is earlier than in most regions of the country and if we are ready in March and April, we should be okay!
2. And can we have more of the white salt (the Potassium Nitrate) to spray? I could see the leaves very deep green and healthy and with less Oidium attacks.
3. And please have a long hose that is stronger (a pressure hose) for the hand pump. The hose of the sprayer that we had flattened and reduced the flow of the liquid."

Agostinho also brought me to another area that was still producing. They were also sprayed the natural way. There we had our fill of delicious cashew apples that were still hanging on the trees. And they were big, so I asked Agostinho if the size was common for his cashews. "Not really this big because they were coming from the old trees and also the old varieties. This one is the new variety of INCAJU, the nuts are big and the apples are also big. I remember as a kid that we also had big cashew apples when the trees were younger."

As I tell this story, I get suggestions for controlled field trials as a next step. Another next step is also to separate the different alternatives, because for this test-run we had mixed together the MM, the EM and Trichoderma for a cocktail spray. And we also incorporated the Potassium Nitrate for the same spray. While we can continue to apply the working mixture as a commercial remedy, it would be good to know the exact effects of each of the remedies and also to see the synergies among them.

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