

Stinging Chaya, Fruits for High Rainfall Areas and Exotic Leaf Miner Problem in Nigerian Tomatoes

Stinging chaya; fruits for high rainfall areas



Figure 8. Chaya branch with stinging hairs (as indicated by arrows). *Source: Cory Thede*

Cory Thede, working on the north coast of Haiti, sent a note about a local chaya plant with a branch (Figure 8) that mutated to a wild stinging type. He commented, "When I accidentally backed up against it, I felt stings and it gave me an itchy rash on my arm and back that lasted about a week. The rest of the plant

is regular and almost completely spineless." He added, "I was going to dispose of it but then decided it may be useful in some living fences."

Cory also included an update on fruits that he is growing, obtained from ECHO and other sources. "Starfruit is very popular here. [In 2007 I planted] two Kary, one Sri and one Bell variety, from ECHO. Neighbors that have seedlings from these trees have had fruit for several years. The seedling trees on the main part of our open campus get harvested by kids while the fruit is still small and dark green. This year they even raided one of the original trees in the back of my nursery by my house a few times, day and night. We have shared bushels of fruit at the summer church conferences on our campus for several years and offer trees for sale.

"Some other new fruits that I think have good potential for our (high rainfall) area include jack fruit, ever bearing mulberry from ECHO (through HAFF), peach palm (pictured right), and rambutan (though I only have rambutan seedlings and they are under 3 years old so I don't know if they will fruit well here). [Grafted] thornless jujube from ECHO is a good fruit that can be used like apples, but almost all the pits are empty. [Two seeds germinated and one of the plants is still alive.] I hope with its

pollen I can get more of the very large fruit and viable seed. Thornless jujube is one of the few fruits that does well in both rainforest and desert climates."Canistel and Malay apple also do well and are popular. [We have] 8690/Trompo from ECHO. The Bruce canistel and Malay Apple are from Pine Island Nursery. I also have [a variety of] Malay apple from Dominican Republic that seems [to have] a little better flavor, but it is not very productive yet.

"Date palm doesn't grow as well here as on LaGonave or the dry Gonaives area, and [it has not bloomed.] I thought the cooler winters here on the North coast (lowest winter temperature of about 57 instead of 67°F) might induce yearly bloom.

"USAID is really promoting cacao in our area; there seem to be more cacao nurseries around than ornamentals or anything else. If cacao will grow well here under peach palm, that should be a great combination."



Peach Palm

Exotic leaf miner problem in Nigerian tomatoes

Kathy Barrera sent an article about tomatoes from Deutsche Welle news (<http://www.dw.com/en/pests-and-drought-hit-nigerias-tomato-farms/a-19420515>) and asked for help in dealing with a tomato problem in Nigeria. She wrote, "The situation with tomatoes is critical and why I am looking to try new types of tomatoes, they are the basis of every soup almost to eat with starch. Though there are tomatoes..., commonly grown as a type of plum tomato, we have not seen [them] in the Abuja market for a couple months. The rich of course buy imported [tomatoes] from South Africa as they do many vegetables and fruits..."

Bob Hargrave responded to Kathy. "We discussed this problem in our weekly meeting. It seems from the article you sent and from other information that the main problem is the Tomato leaf miner (*Tuta absoluta*) that was introduced to Africa from South America a few years ago. And although we do not see any immediate solutions we do have these suggestions:

"First, check with the government ministry of agriculture (or whatever the government extension service is called) and see if they have recommendations. They should be aware of the situation and able to suggest pest management strategies.

"Second, there is a website devoted to this pest that has information about pest management:<http://www.tutaabsoluta.com/tuta-absoluta> (<http://www.tutaabsoluta.com/tuta-absoluta>). As you noted, the chemical pesticides are not effective or economical. Cultural practices as outlined in the website are the best first step." Biological control agents and neem seed extract are also presented. Examples of bio-agents include the egg parasitoid *Trichogramma achaeae* and an entomopathogenic (insect-killing) fungus, *Metarhizium anisopliae*. Neem seed extract, applied as a foliar spray, causes larval mortality.

"The website also gives the biology and life history of the pest to better understand when it is most damaging and also when it might be most vulnerable. As one staff member phrased it, 'Know your enemy'!

"We do not know if any tomato varieties are more resistant than others. So like many situations in farming, there is not a quick, simple solution but rather a set of pest management practices that should reduce the damage if practiced consistently from this point on."

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