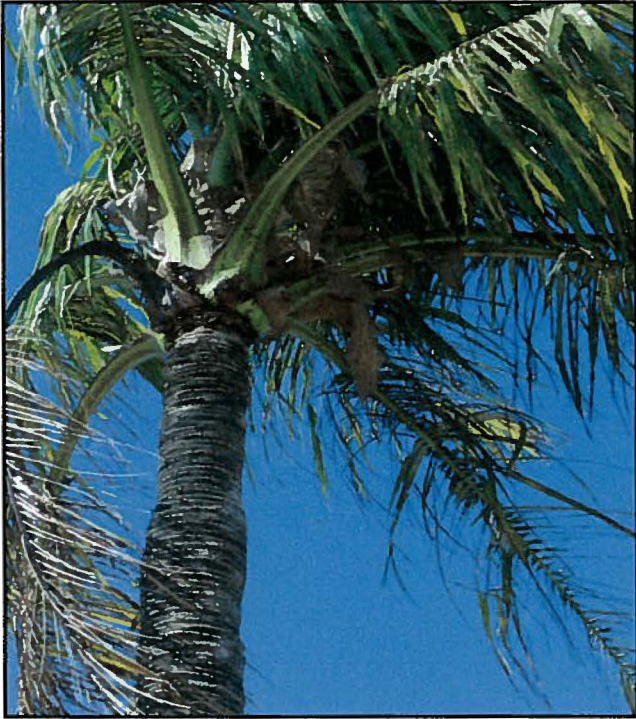


University of Guam Publication



TINANGAJA- A disease of coconut trees

This disease found on Guam's coconut trees, is incurable and can kill infected trees sometimes in less than 10 years, but often taking up to 15 years. The name Tinangaja (pronounced tee-nang-A-ha) is an old Chamorro word.

Symptoms of this disease become evident only on mature trees, that is, after they are old enough to produce nuts. In the early stages of the disease, there are no visible symptoms. Then the nuts become smaller and round, even in varieties with winged nuts. Gradually the nuts become smaller and more deformed and have nothing inside. Then nuts are no longer produced, only the bare inflorescence. Eventually, the tree becomes sterile and no longer produces flowers. Leaves have tiny little specks on them. The canopy becomes thinner, that is, the tree has fewer and fewer fronds. Wings made of burlap-type material remain attached to the base of the lower fronds, and the trunk becomes tapered like a pencil. Finally the few remaining fronds can be blown off in a storm and nothing but a dead trunk remains.

Transmission- It is believed that the viroid causing Tinangaja can be transmitted from one tree

to another by cutting tools. It may also be spread by seed and possibly by pollen. It is possible that insects may transmit it as well. In order to avoid spreading this disease of coconuts, we should take care gathering nuts. Do not use linesmen spikes for climbing trees. For planting, healthy seeds should be collected from areas with little or no disease, such as Tanguisson Beach, Tarague Beach, and remote mountain locations in the southern parts of Guam. Whenever using machetes or other such tools on a coconut tree, these should be disinfested before using on another coconut tree. A 10% bleach solution is a strong disinfestant for most germs. But bleach is corrosive, so blades should be rinsed off after application of bleach.

Testing- Collect 5 fresh leaflet samples from the middle of the canopy, clean, place in ziplock bag, label, and bring to the Plant Pathology Lab, College of Agriculture & Life Sciences at the University of Guam.

For more information, visit our website:
<http://uog2.uog.edu/pathology/>

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