

PEST PREVENTION TRAINING

An advanced education program for those on the front lines protecting Hawai'i

Cadang-cadang Disease

Coconut cadang-cadang viroid

Not known to be present in Hawai'i

Disease that is known to kill all cultivars of coconut.





Stunted tree with yellowing leaves



Impacts

- Affects all commercial cultivars of coconut palms (Cocos nucifera). Can also affect betelnut (Areca catechu), sugar palm (Arenga pinnata), Borassus, gebang palm (Corypha utan), African oil palm (Elaeis guineensis), sago palm (Metroxylon sagu), date palm (Pheonix dactylifera)
- Once infected with this disease, there is no cure or treatment
- Natural method of spread is unknown





High-risk Commodities

 Imported coconut germplasm, seed, and pollen from the Philippines







Cadang-cadang Disease

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Distribution

• Only found in the Philippines





Identification

- Nuts become round, longitudinal scaring. Small with no kernel. Trees stop producing nuts at 2 years
- Flower spathes are reduced and when it opens the flowers are necrotic
- Yellow/orange spots start appearing on older leaves the entire leaf can turn yellow over time
- Trees are stunted, top of the trunk shrinks giving it a pencil like appearance
- In the petiol the basal fibers remain attached giving the new leaves a 'winged' look



Yellow spotting on leaves



Best Managment Practices

- Contaminated tools and farm equipment.
- Importing coconut germplasm, seed, and pollen from the Philippines.
- Report suspected beetles to 643pest.org, or by phone to 643-PEST (7378).



Deformed coconuts

Selected References:

- www.cabi.org/isc/datasheet/13700
- chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html? pdfurl=http%3A%2F%2Fdownload.ceris.purdue.edu%2Ffile%2F1858&clen=1811242



