



USDA, ARS, Daniel K. Inouye U.S. PBARC, Tropical Fruit & Nut Germplasm Repository, Hilo, HI

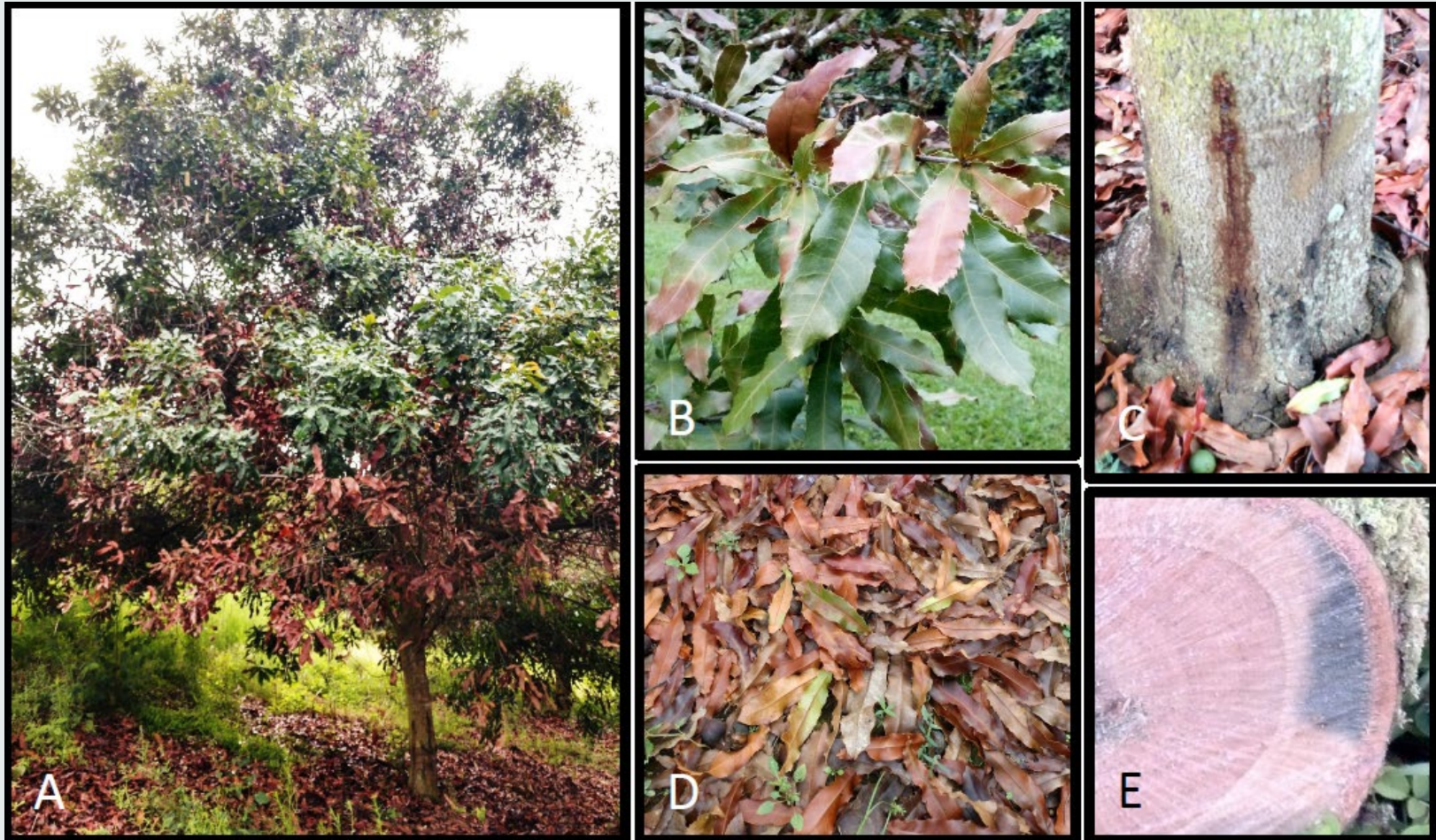
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Challenges and Opportunities for 2019-2020



**"Challenges are what make life interesting.
Overcoming them is what makes them meaningful."
Anonymous**

Macadamia Quick Decline (MQD) Caused by *Phytophthora heveae*



Pacific
Nut
Producer
magazine

Disease symptoms and signs in the field include (A) leaves in large sections of the canopy that turn green to brown within months as the tree dies; (B) dull, green to brown, chlorotic leaves scattered throughout the canopy; (C) bleeding on the trunk; (D) abundant autumnal looking leaf litter; and (E) greyish discoloration of the sapwood

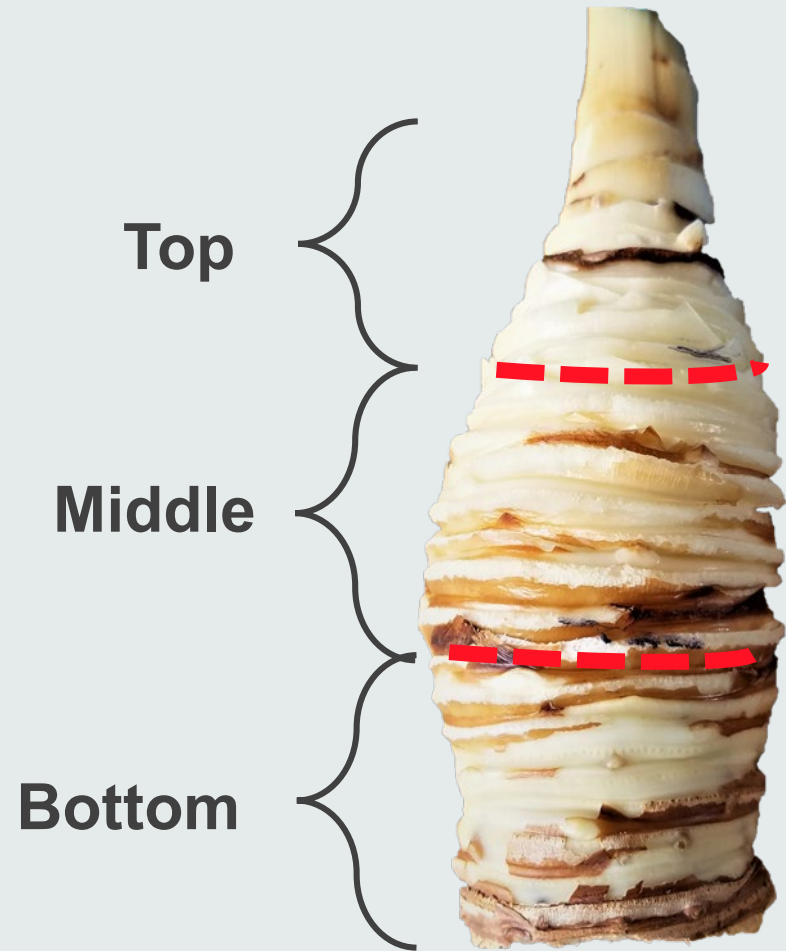
Establishing PMWaV-free pineapple collection

- PMWaV elimination increased as bud explant sized decreased
- 1mm explanted buds was 97% PMWaV-free
- 2mm explanted buds was 97% PMWaV-free



Establishing PMWV-free pineapple collection

- *Buds explanted at 1-2mm:*
- 97% of buds was PMWaV-free when harvested from the top
- 85% of buds was PMWaV-free when harvested from the middle
- 74% of buds was PMWaV-free when harvested from the bottom



Top Stakeholder Research Requests

United States Department of Agriculture



Hawaii Agricultural Theft and Vandalism



Released: April 24, 2020

In Cooperation with the Hawaii Department of Agriculture

Hawaii Field Office · 300 Ala Moana Blvd Suite 7-118 · Honolulu, HI 96850 · (800) 804-9514 · www.nass.usda.gov

Agriculture Theft and Crime Cost Hawaii Farm Producers \$14.4 million in 2019

The total value of theft and vandalism losses, as well as security costs, from Hawaii farms is estimated at \$14.4 million or 10% of the 2018 Hawaii net farm income of \$142 million estimated by USDA, Economic Research Service. Total theft of farm commodities, materials, equipment, and other property is pegged at \$2.62 million. Statewide vandalism cost to farms in Hawaii totaled \$502 thousand. Total security costs to prevent theft and/or vandalism totaled \$11.2 million.

Ag Theft At PBARC



Developing common descriptors with ARS colleagues Mayaguez, PR



Developing common descriptors with ARS colleagues in Miami, FL





Implementation of Coffee Funding

Germplasm Infrastructure for New Coffee Collection



Moving Coffee Collection from HARC to PBARC

- Currently moving seed propagated material
- Then move clonally propagated material
- Molecular characterization is being developed with Dr. Dapeng Zhang, ARS BARC
- Will screen material being incorporated into germplasm for positive ID



HARC Coffee Phase 1 Transfer Commercial Varieties



Commercial Coffee Germplasm at HARC

Group	Description	Genotype	Source	Tree #	Owner
HI commercial	Typica	4	Kona	72	HARC/ public
	Catuai	10	Maui, Kauai, Molokai	150	HARC/ public
	Caturra	2	Molokai, UH	35	HARC/ public
	Yellow Catuai	2	Kauai	40	HARC/ public
	Mokka	4	Maui	80	HARC/ public
	Mokka hybrid	5	Oahu	100	HARC/ public
	Catuai odd type	1	Molokai	15	HARC/ public
	P502	1	UH HSPA trial1988	10	HARC/ public
Other commercial	Maragogipe	1	UH HSPA trial1988	11	HARC/ public
	6549	1	UH HSPA trial1988	12	HARC/ public
	6661	1	UH HSPA trial1988	12	HARC/ public
	San Ramon	1	UH HSPA trial1988	12	HARC/ public
	Pacas	1	UH HSPA trial1988	11	HARC/ public
	Yellow bourbon	1	UH HSPA trial1988	12	HARC/ public
	Kents	1	UH HSPA trial1988	9	HARC/ public
	Blue mountain	1	UH HSPA trial1988	12	HARC/ public
	Preger	1	UH HSPA trial1988	11	HARC/ public
	Guadalupe	1	UH HSPA trial1988	12	HARC/ public
	SL28	1	Kauai Coffee	6	HARC/ public
Catimor	8667-6,5775-7-1	2	Promecafe ⁽¹⁾	45	HARC
Canephora	C. canephora	1	UH HSPA trial1988	7	HARC/ public

Team Effort





Mahalo!

Tropical Plant Genetic Resources and Disease Research Un