

Potential of New West Indian Avocado Selections for Tropical America

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EXPLORING, EXPLAINING AND CONSERVING THE WORLD OF TROPICAL PLANTS

FAIRCHILD TROPICAL BOTANIC GARDEN

www.fairchildgarden.org



Avocados races:

Mexicans: (*P. americana* Var. *drymifolia*), 1500-3000 m.

• **Guatemalan** (*P. americana* Var. *guatemalensis*), 1000-2000 m.

• **West Indian** (*P. americana* Var. *americana*), Sea level-1000 m.

• *Persea schiedeana* (coyo)



**West Indians
are the Key
Components
of
Subsistence
Agriculture
But...
Overlooked in
collections.**



**Emphasis on
Mexican and
Guatemalan hybrid
export varieties
leading to....**

***Loss the genetic
resources***



FTBG collecting activities: Identify, locate, collect and conserve diversity from patio gardens throughout select regions of lowland Central America.



Diversity of West Indian avocado near Rivas, Nicaragua: Fruit collected and properly ripened by collaborators.



- Fairchild Tropical Botanic Garden
- Vaughn-Jordan Foundation
- Campo Verde de la Familia, Inc.
- Avocado Growers
- Local Collaborators



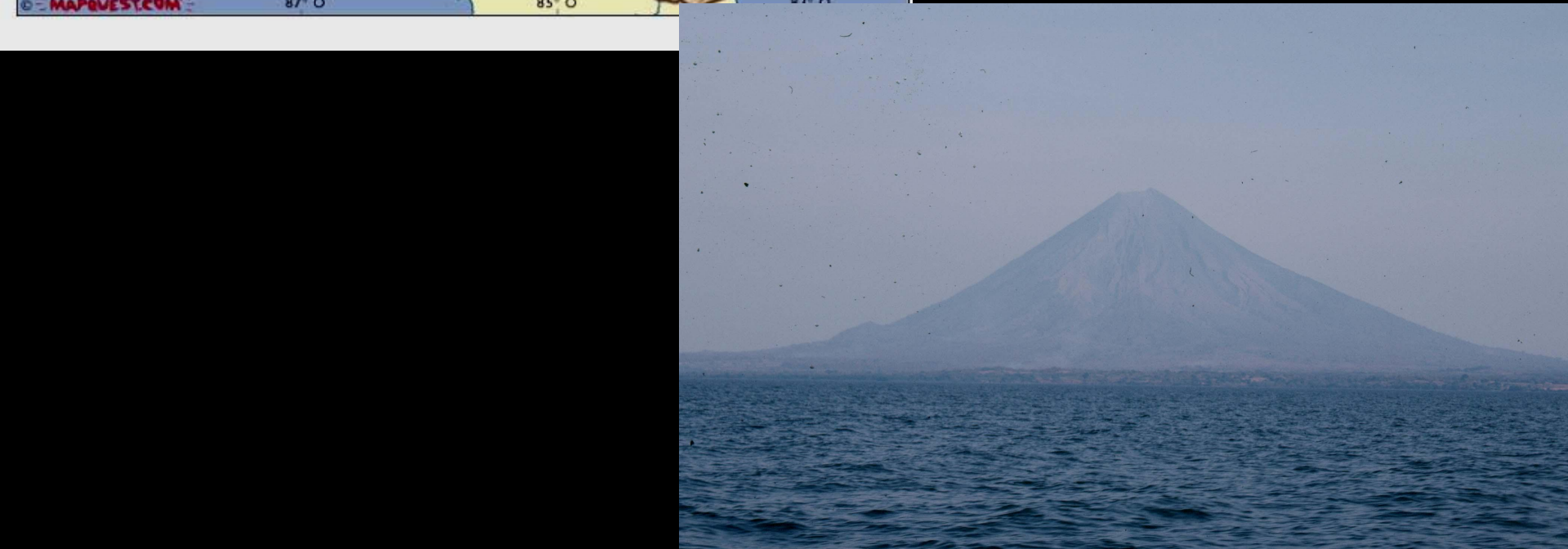
Collecting objectives: Superior local selections for fresh market, phytophthora tolerance, and new markets.



Collecting in Patio Gardens:

- Costa Rica
- Dominican Republic
- Nicaragua
- El Salvador
- Guatemala
- Panama







Fruiting season

Evaluation of quality



Propagation



Potential for Tropical America:

- Production
- Multiple cropping
- Superior Fruit quality
- Small seed (or seedless)
- Potential for rootstocks.

Table 1. West Indian avocado and *Persea schiedeana* selections currently growing in the living collections at FTBG, South Florida, USA.

Selection	Origin	Initial observations
Amapola	Nicoya, Costa Rica	300 g, purple, good quality
Baldelomar	Rivas, Nicaragua	750 g, green, elongated
Blas	Orotina, Costa Rica	Productive, good quality
Cano	Costa Rica	Productive
Consección	Rivas, Nicaragua	450 g, red, pear-shaped
Darien	Panama	Potential as rootstock.
El Fidio	Orotina, Costa Rica	Small, productive
Escuela	Jesus Maria, Costa Rica	Pear-shaped, large, quality.
Fernandez	Costa Rica	Good quality
Kukra Hill	Campos Azules, Nicaragua	Productive, multiple crops
Largo	Costa Rica	Elongated, large fruit
Laurent	Orotina, Costa Rica	Purple, good quality
Linea	Orotina, Costa Rica	Productive, good quality
Lizano	Orotina, Costa Rica	Productive, elongated
Lola	Costa Rica	Excellent quality
Marta	Rivas, Nicaragua	400 g, green, multiple crops
Nidia	Rivas, Nicaragua	400 g, green, pear-shaped
Norma	Nicoya, Costa Rica	400 g, green, good quality
Orotinense	Orotina, Costa Rica	Multiple crops, productive
Pepita	Costa Rica	Productive, good quality
Pila	Costa Rica	Productive, good quality
Rivas - 1	Rivas, Nicaragua	Excellent quality
Rivas - 2	Rivas, Nicaragua	450 g, elongated, schiediana?
Torres	Nicaragua	Productive
Urroz	Costa Rica	Productive
Kala Lu	Hawaii	400 g, pear-shaped



Amapola
 Baldelomar
 Berta Rodriguez
 Blas
 Cano
 Catalina
 Chema
 Consección
 Darien
 Edsas
 Edwin
 El Pidio
 Elizabeth
 Escuela
 Fernandez
 Invernadero
 Jose Maria Aragon
 Juan Jose
 Kala Lu
 Kukra Hill
 Largo
 Laurent
 Linea
 Lisa
 Lizano
 Lola
 Marta
 Moki Maui
 Nidia
 Norma
 Orotinense
 Pepita
 Pila
 Rivas - 2
 Ruiz
 Torres
 Tres E
 Urroz
 Virginia

Nicoya, Costa Rica
 Rivas, Nicaragua
 Rivas, Nicaragua
 Orotina, Costa Rica
 Costa Rica
 Costa Rica
 Nicoya, Costa Rica
 Rivas, Nicaragua

Nicoya, Costa Rica
 Nicoya, Costa Rica
 Orotina, Costa Rica
 Nicoya, Costa Rica
 Jesus Maria, Costa Rica
 Costa Rica
 Costa Rica
 Rivas, Nicaragua
 Orotina, Costa Rica
 Hawaii
 Campos Azules, Costa Rica
 Costa Rica
 Orotina, Costa Rica
 Orotina, Costa Rica
 Nicoya, Costa Rica
 Orotina, Costa Rica
 Costa Rica
 Rivas, Nicaragua
 Hawaii
 Rivas, Nicaragua
 Orotina, Costa Rica
 Orotina, Costa Rica
 Costa Rica
 Costa Rica
 Rivas, Nicaragua
 Nicoya, Costa Rica

Nicoya, Costa Rica
 Costa Rica
 Nicoya, Costa Rica



