



# Hawai'i Turmeric (*Curcuma longa*) Research Update

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COOPERATIVE EXTENSION

UNIVERSITY OF HAWAII AT MĀNOA  
COLLEGE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES





# Historic Importance

- Food & Flavor
- Medicine
- Dye
- Religious
- Ornamental



R. Criley



R. Criley



Kapa Olena  
<http://kahanatapa.tripod.com>





# Current Situation

\$5.50/lb Farmgate  
(Hawai'i 2020)



Production expanding

Local market easily saturated

Increased exports

Value addition

Clean seed





# Turmeric

## *Curcuma longa*

- **Seasonal**  
Hawai'i: Apr/May- Feb/Mar
- **Full sun**
- **Temp. 20 – 30 C**  
**69 – 86 F** (Sivaraman, 2007)
- **600 - 1,500 mm**  
**24 – 60 inches H<sub>2</sub>O/season**







# Turmeric - *Curcuma longa*





# Turmeric - *Curcuma longa*







# Trial Sites

O'ahu: 2019, 2020, 2021

Maui: 2020

Kaua'i: 2020, 2022



Maui 2020



O'ahu 2019



Kaua'i 2022





# Harvest Methods







# Washing Methods

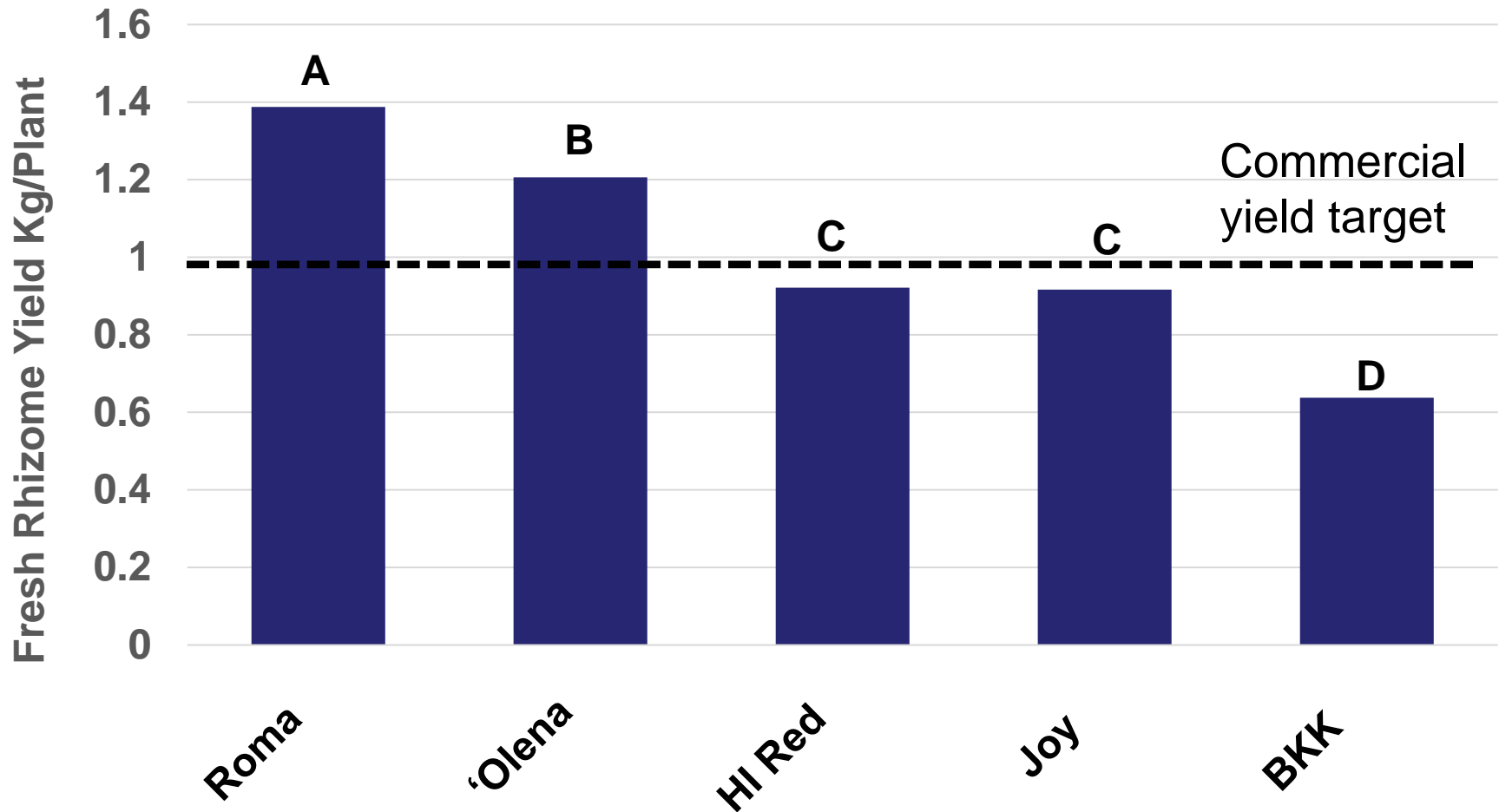
Washing is one of the most labor intensive (expensive) aspects of production







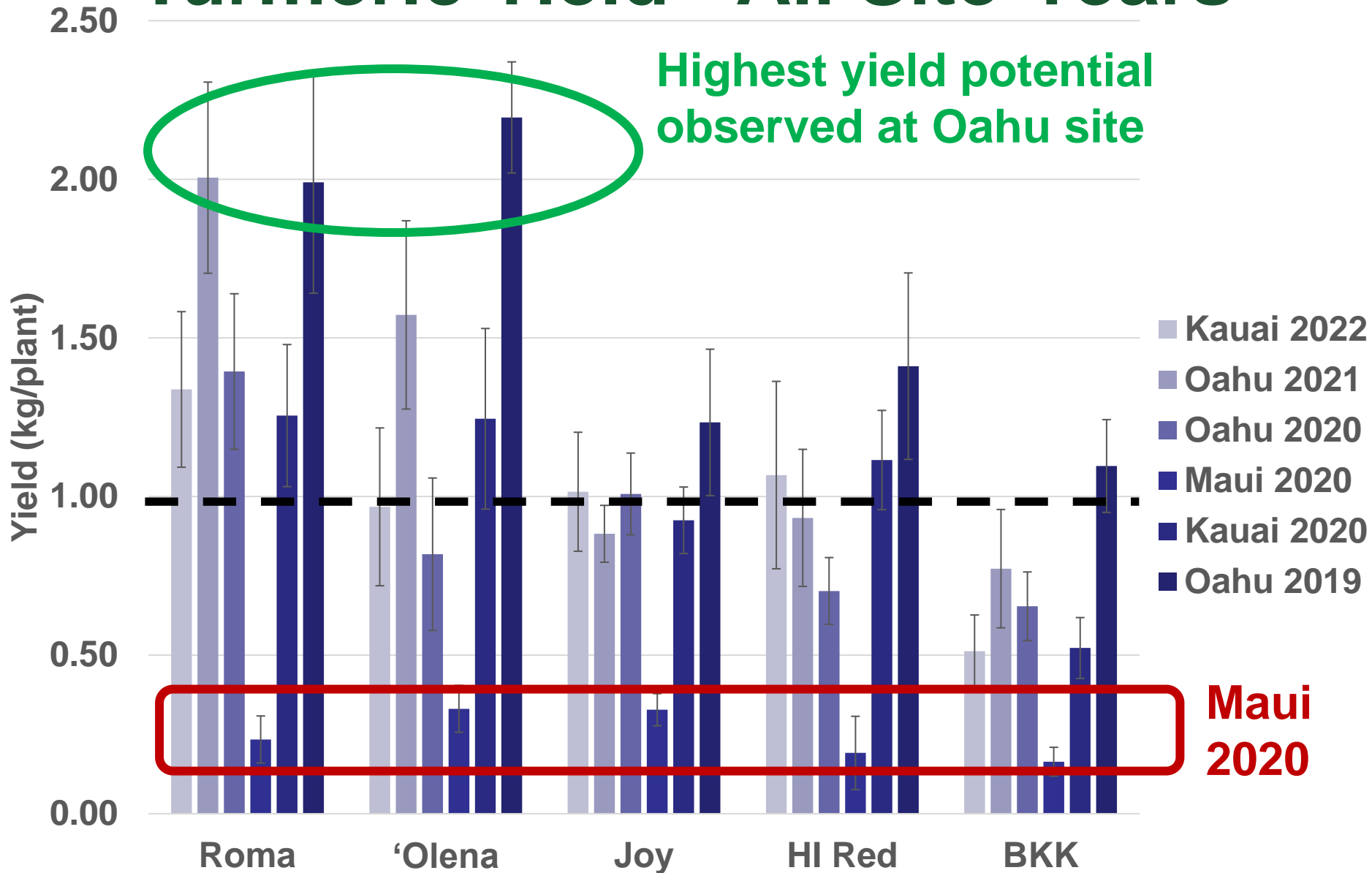
# Yield of *C. longa* – Across 6 site-years







# Turmeric Yield - All Site-Years







**Other attributes  
besides quantity  
are important**

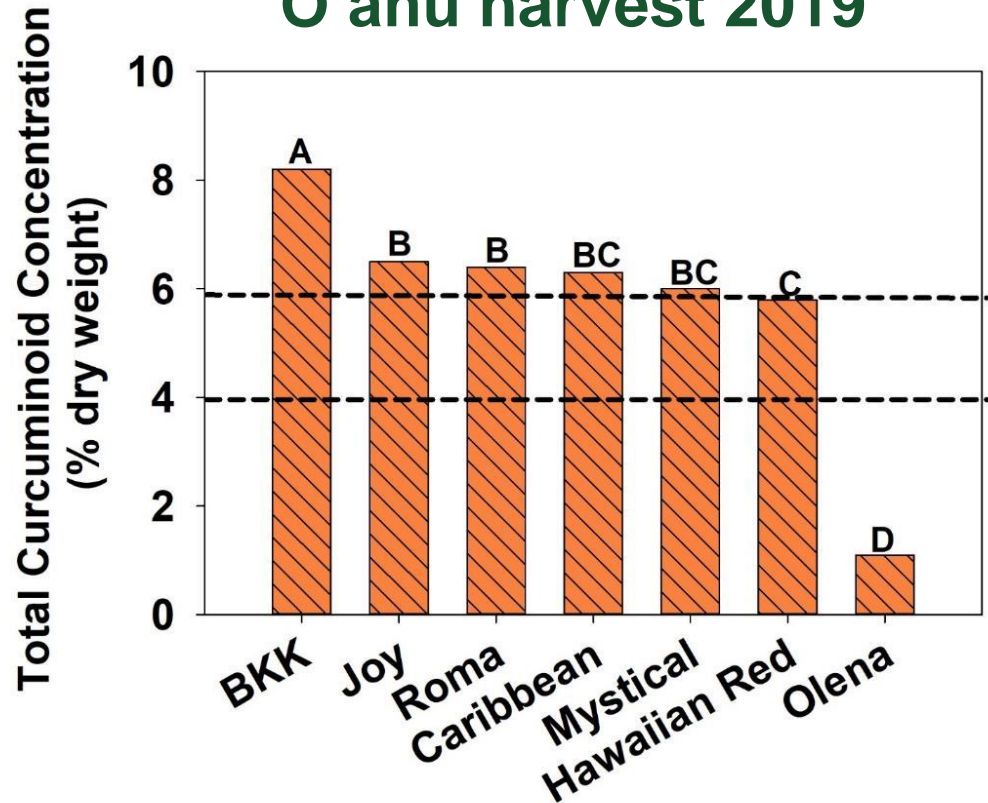




# HPLC Analysis of Curcuminoids



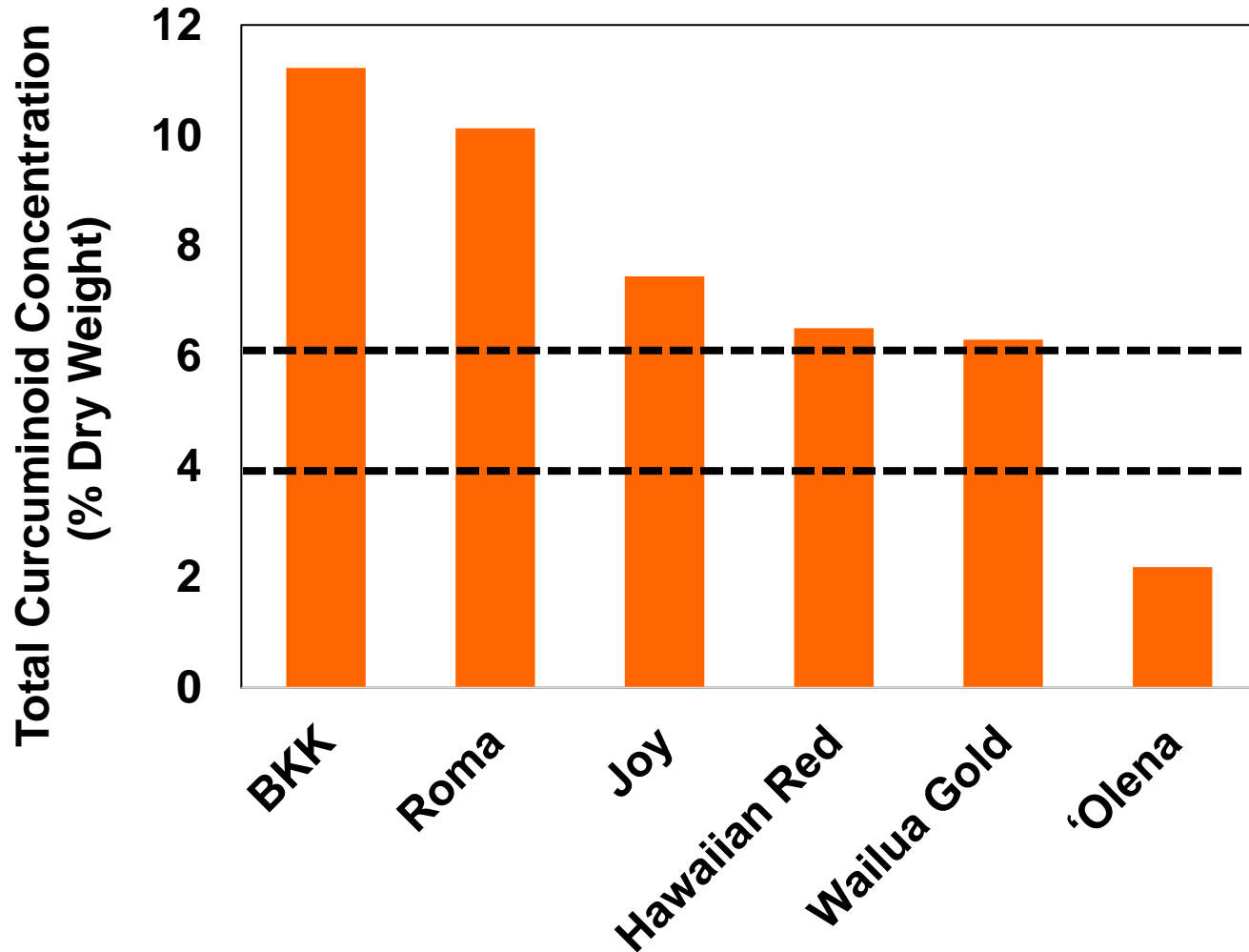
## Total Curcuminoid Content O'ahu harvest 2019







# Total Curcuminoid Content Kaua'i Harvest 2020





# Current work: Turmeric and Ginger in Pots Multi-State Trial



Sites: O‘ahu, Kaua‘i, Florida, Texas, Indiana  
Ginger: 2 cultivars      Turmeric: 4 cultivars





**Many thanks to the many hands that made this work possible!**







# Mahalo! Thank you!



*SeaSons*  
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