



Coffee Flower Research Update

Hawaii Coffee Association Conference 2012
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Non-synchronized fruit development



- Increases harvesting costs
- Damage to trees with multiple harvests
- Berries can be a source of CBB if left in field

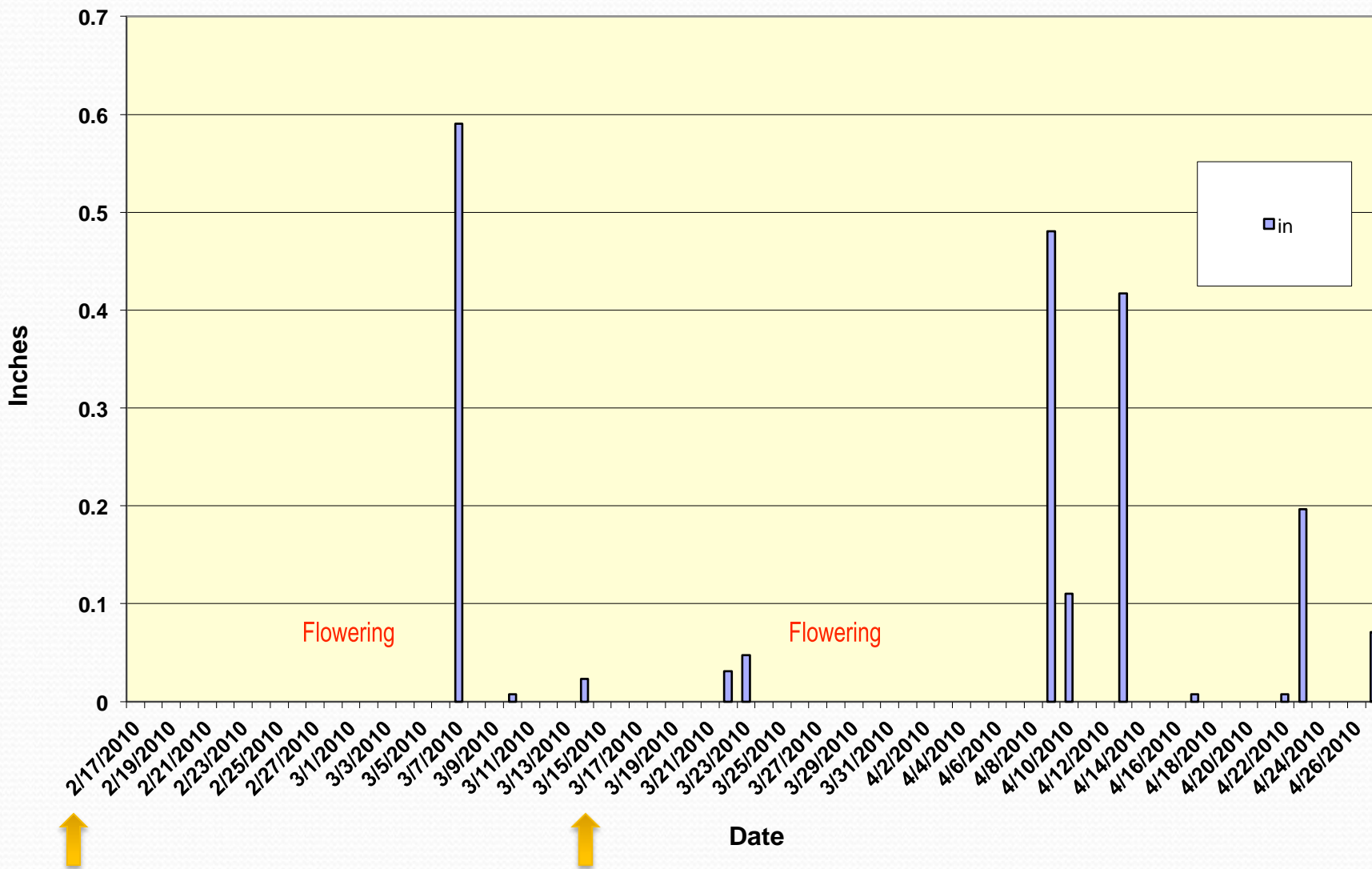


Gibberellic acid (100 ppm) promotes flowering in coffee

- Previous Research

- Flower buds > 4 mm, (not at candle stage open earlier than untreated buds)
- May have some effect on fruit ripening
- Schuch, Fuchigami and Nagao, 1990)
(Clearwater, Meinzer, and Osgood, 1999)

Daily Rainfall Amounts (Inches) for Experimental Plot at Greenwell Farms Kona from February 17, 2010 thru April 27, 2010



Photos on 10-6-10



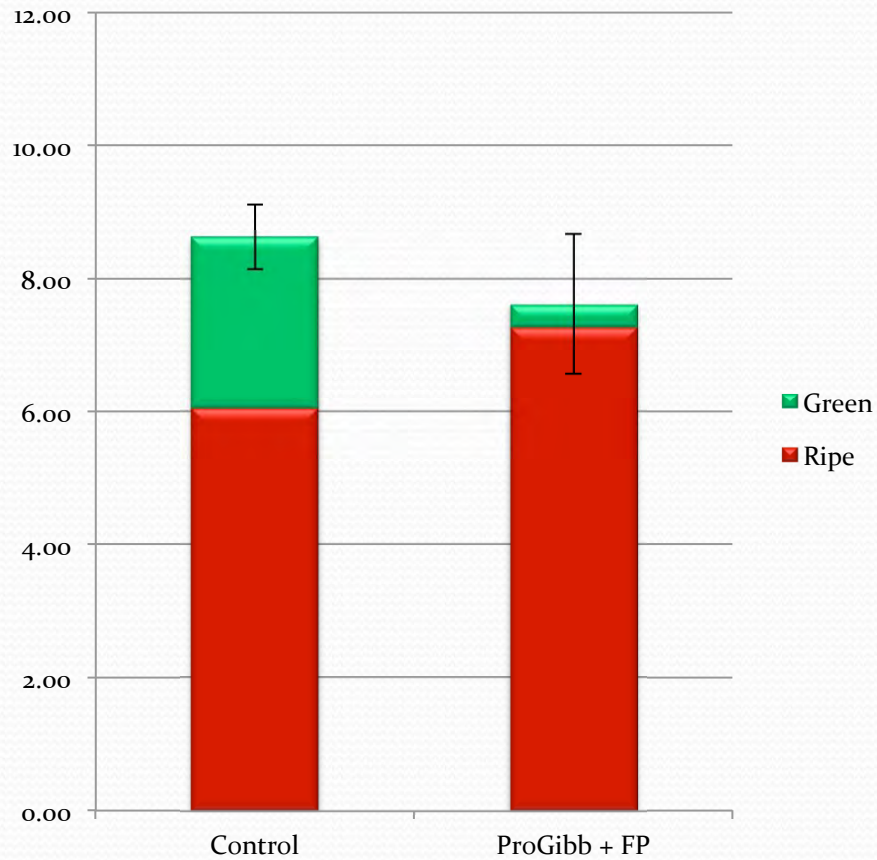
Control trees



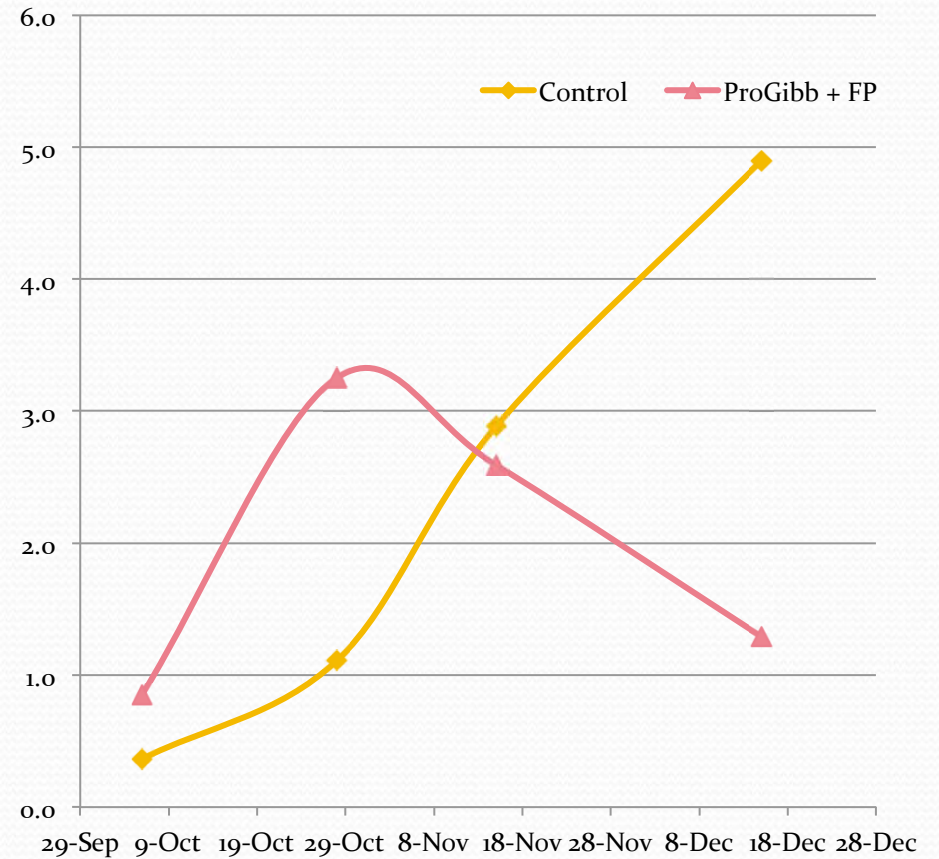
ProGibb

Coffee Berry harvest in 2010

Ripe and Green Coffee Berries harvested per tree



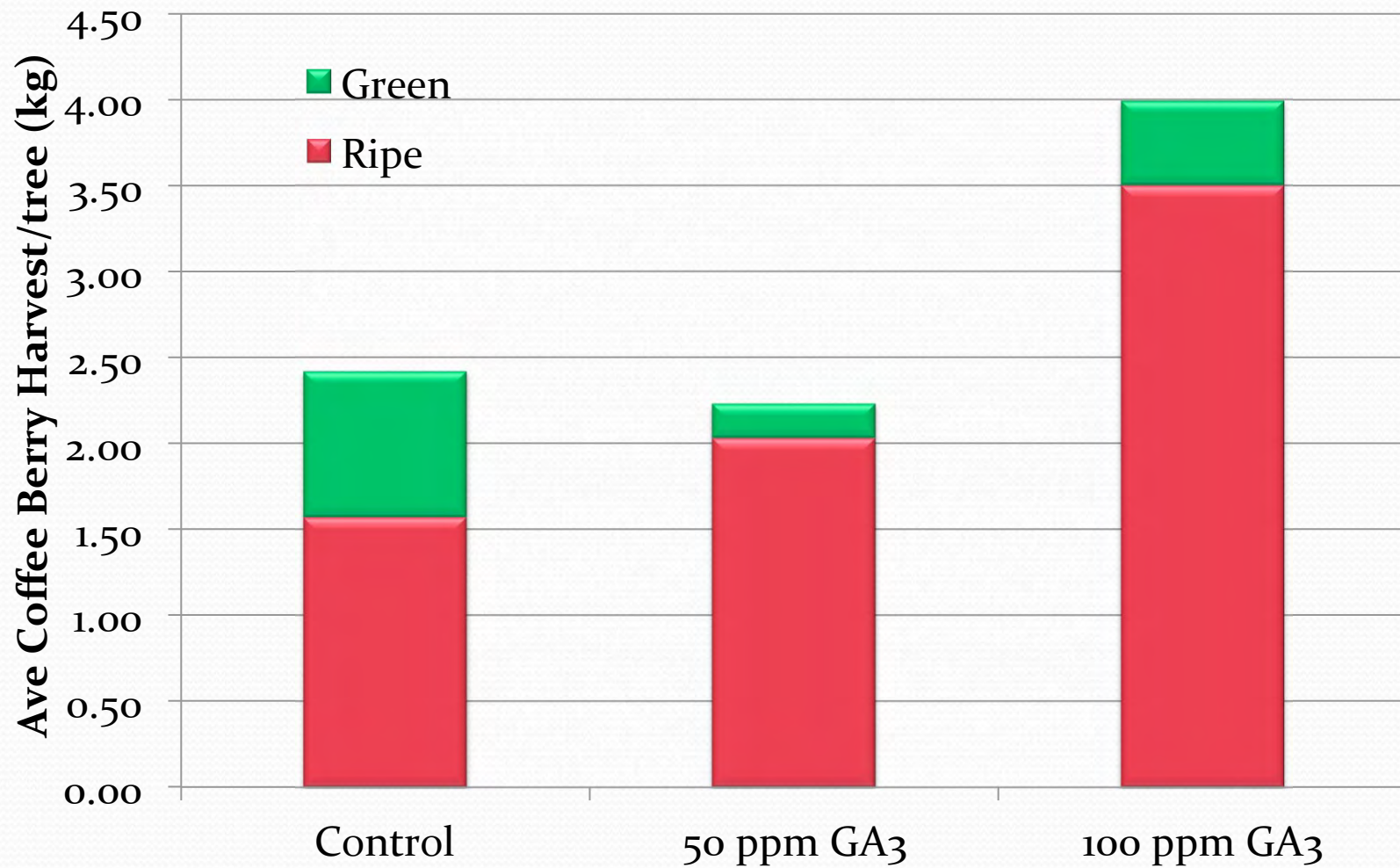
Ripe berries (kg) each harvest date



Kauai Coffee, typica field



Total harvest per typica tree on Kauai

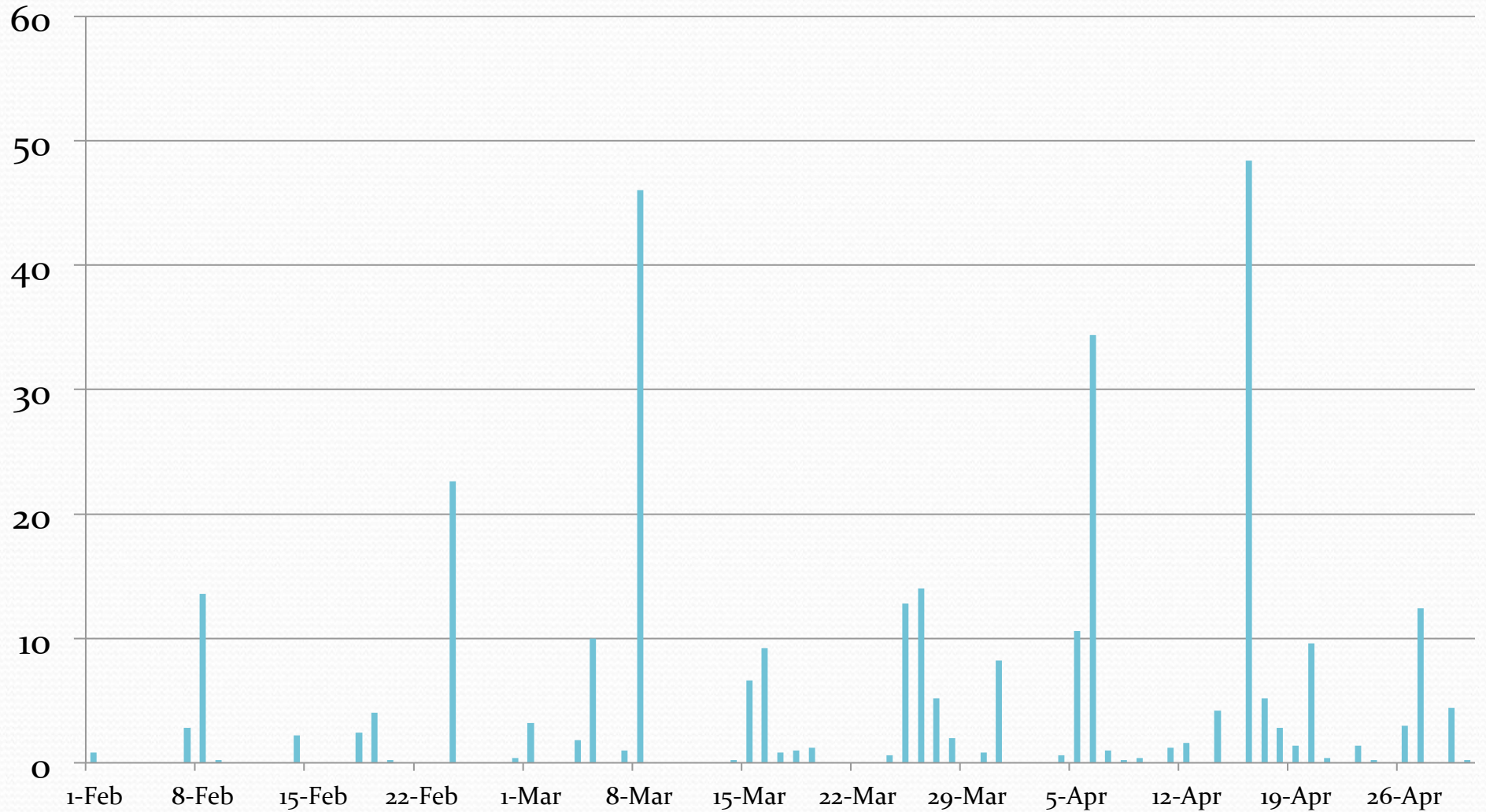




Abscisic Acid

- Naturally produced plant hormone
- Induces stomatal closures, to decrease transpiration
- Produced in response to environmental stress such as drought, temperature stress or salt stress
- Involved in bud dormancy

Rainfall (mm) in Kona flowering field trial 2011

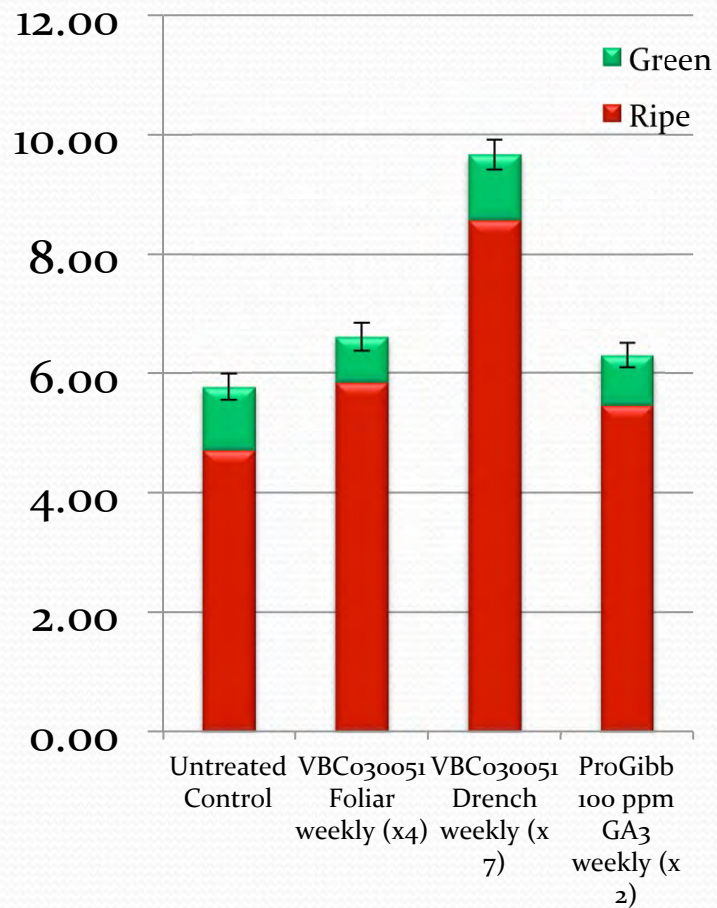


VBC30051 applications

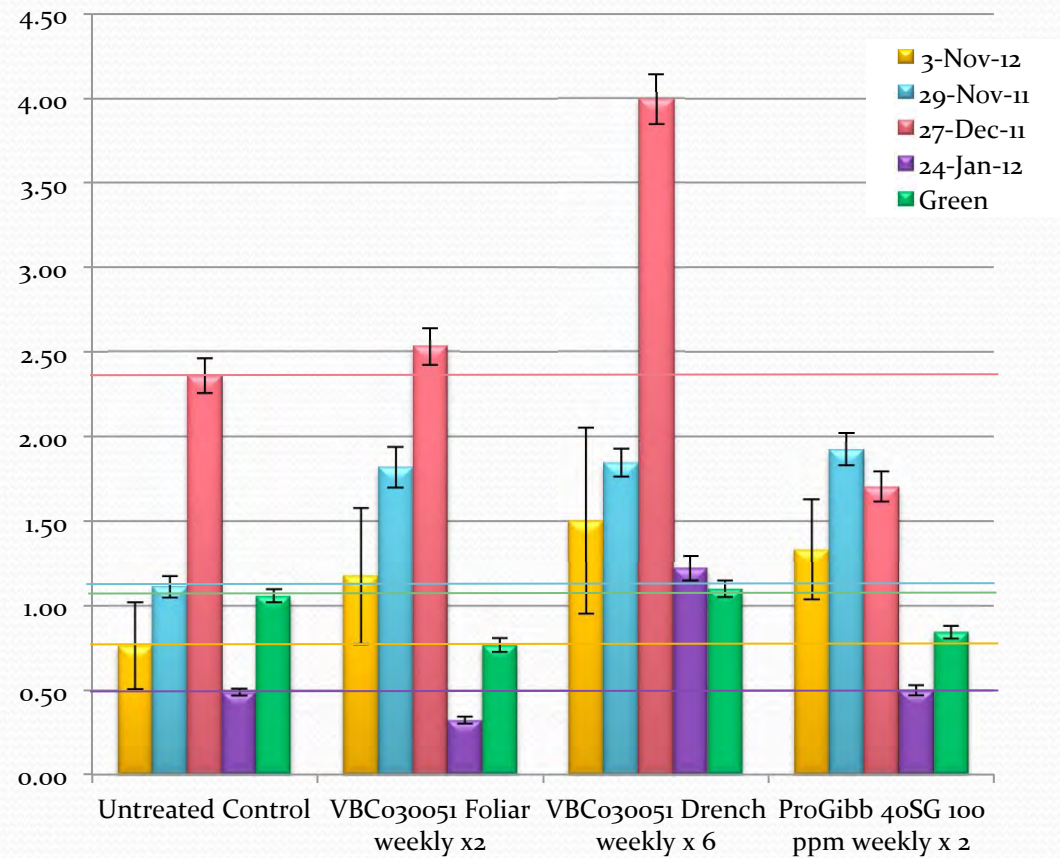
4/7 4/14 ProGibb

Total Coffee Berry Harvest Kona 2011

Total Green and Ripe Berries



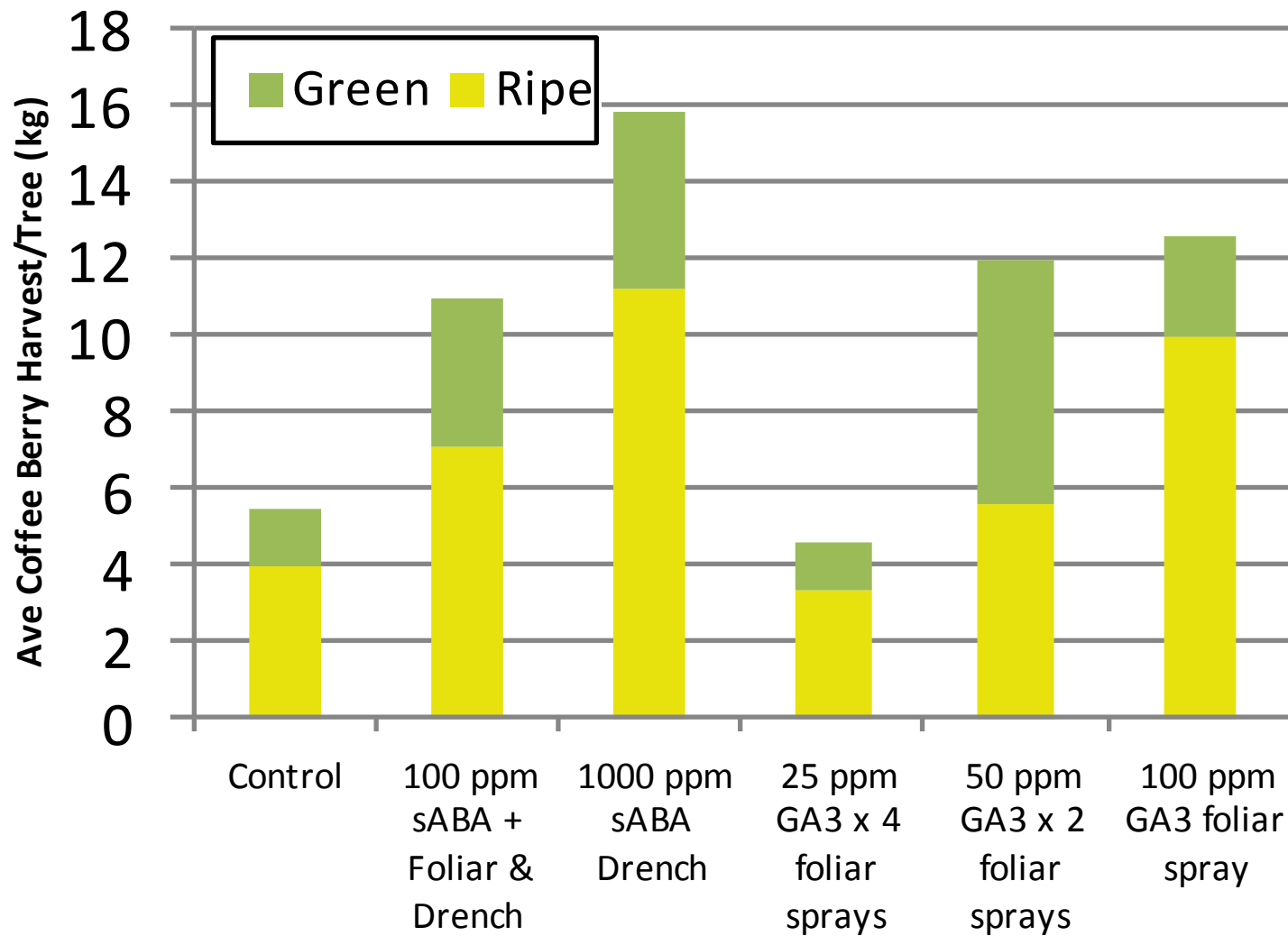
Total Berries harvested on each harvest date



Kauai Coffee Yellow Catuai Field



Total Yellow Catuai Berry Harvest Kauai 2011



In progress- rainfall and plant growth regulator interaction in Kona



Latest Conditions

- Relay State: Deactivated (Open)
- Water Content: 0.3357 m³/m³
- Temperature: 20.96 °C
- Rain: 0.0 mm
- Battery: 4.35 V

Latest Connections

Next connection expected in 11 minutes

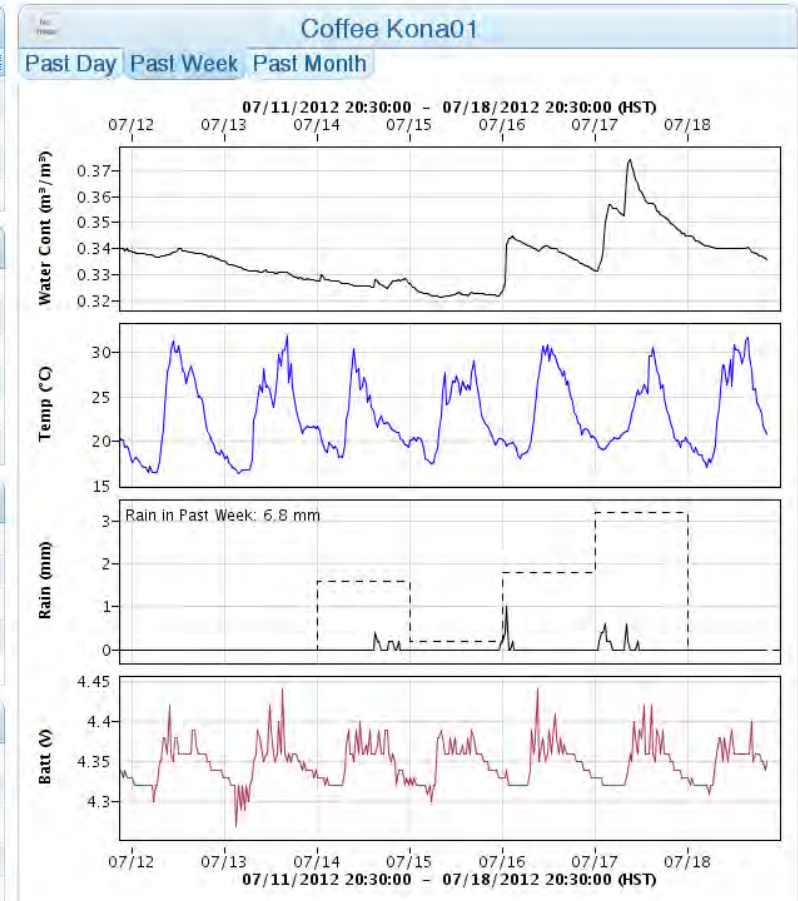
- Today at 20:56 HST
- Today at 19:56 HST
- Today at 18:57 HST
- Today at 17:58 HST
- Today at 16:59 HST

Latest Data

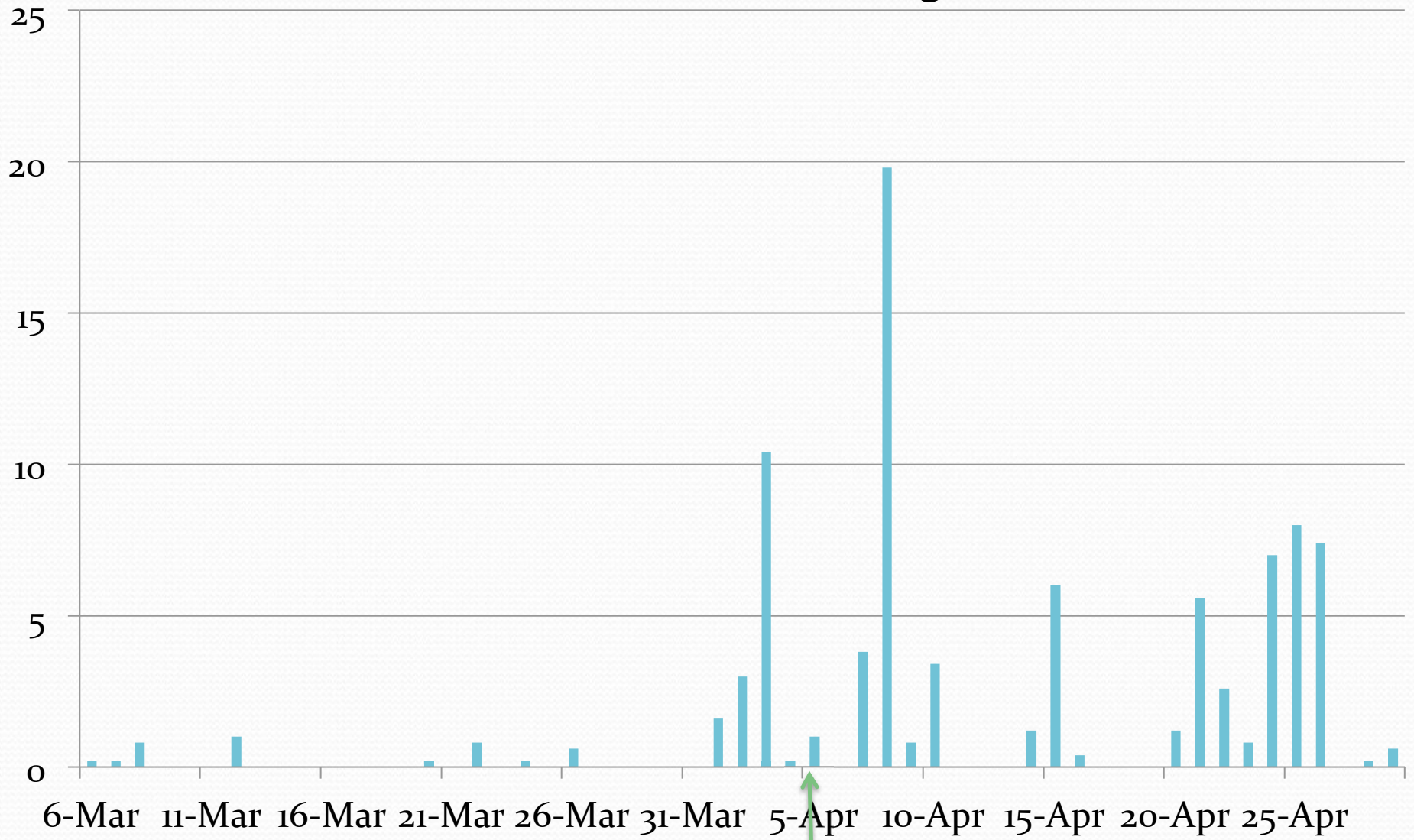
- Greenwell_Mar 06 2012_2.csv
- Greenwell_Mar 06 2012_2.dtf
- Greenwell Flowering 01_1.csv
- Greenwell Flowering 01_1.dtf
- Experiment_0.dtf

Device Information

- Status: Logging every 30 min
- Memory: Wrapping
- Battery Level: 100%
- Nickname: Coffee Kona01
- Serial Number (SN): 10106021
- Model: HOBO U30 Station - GSM-TCP
- Firmware Version: 1.117



Rainfall (in mm) at Kona flowering trial 2012



VBC30051 applications

4/5 ProGibb

Waialua Coffee, Oahu



Mahalo to:



Darsen Aoki



Greenwell Farms – Tommy and Pepe
Waialua Coffee - Mike
Kauai Coffee Company –
Wayne, Greg, Jon and David
Dr. Chifumi Nagai –HARC
Stoller- Noel and Brian
Valent Bioscience – Dan and Johnny

