

Water Productivity, Efficiency and Sustainability in Tropical Horticulture

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Project Scope

- On-farm demonstration sites exploring soil moisture technology.
- Monitoring current practices to establish baseline data.
- Training and support provided to the grower.
- Water Use Efficiency in yield/ML, and \$/ML
- Mango data collected from Kensington Pride and Keow Savoy sites.

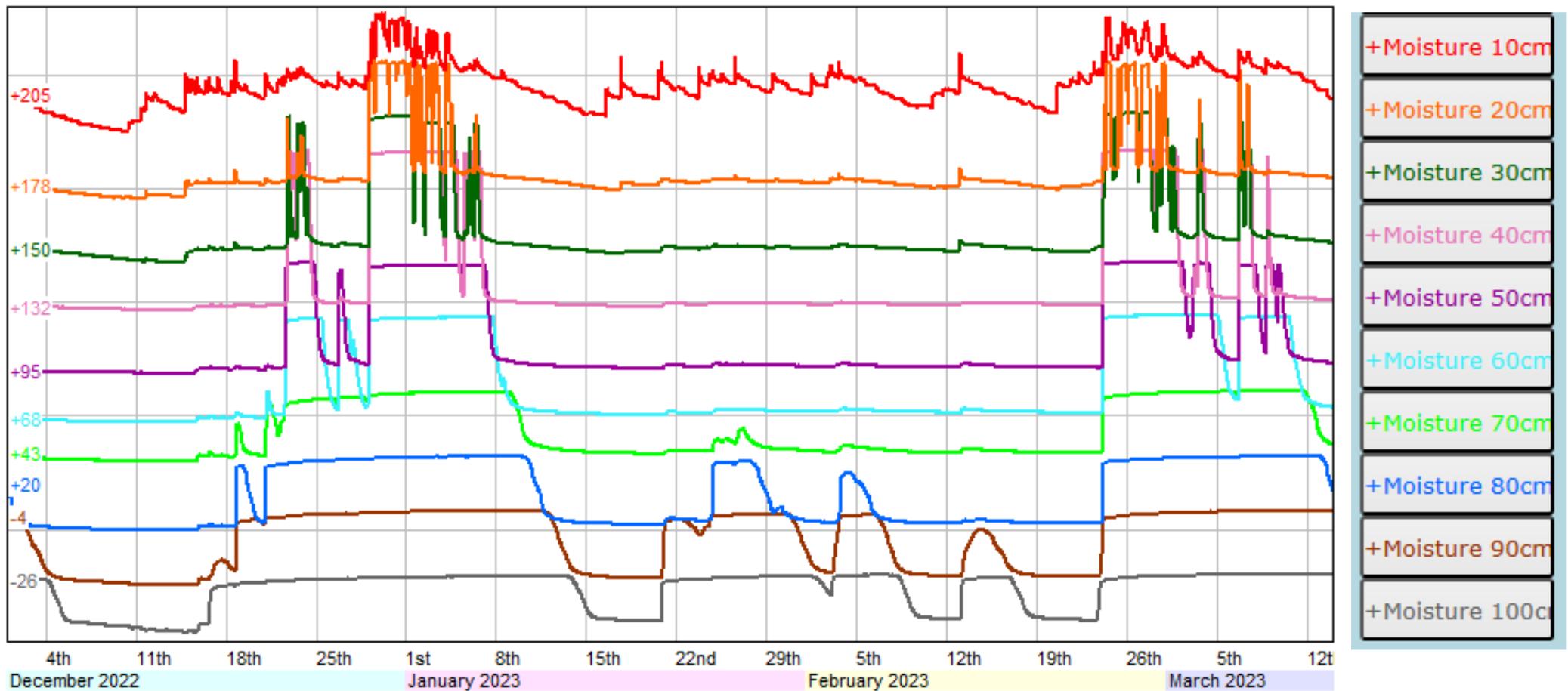


KP Mango Soil Moisture Monitoring site

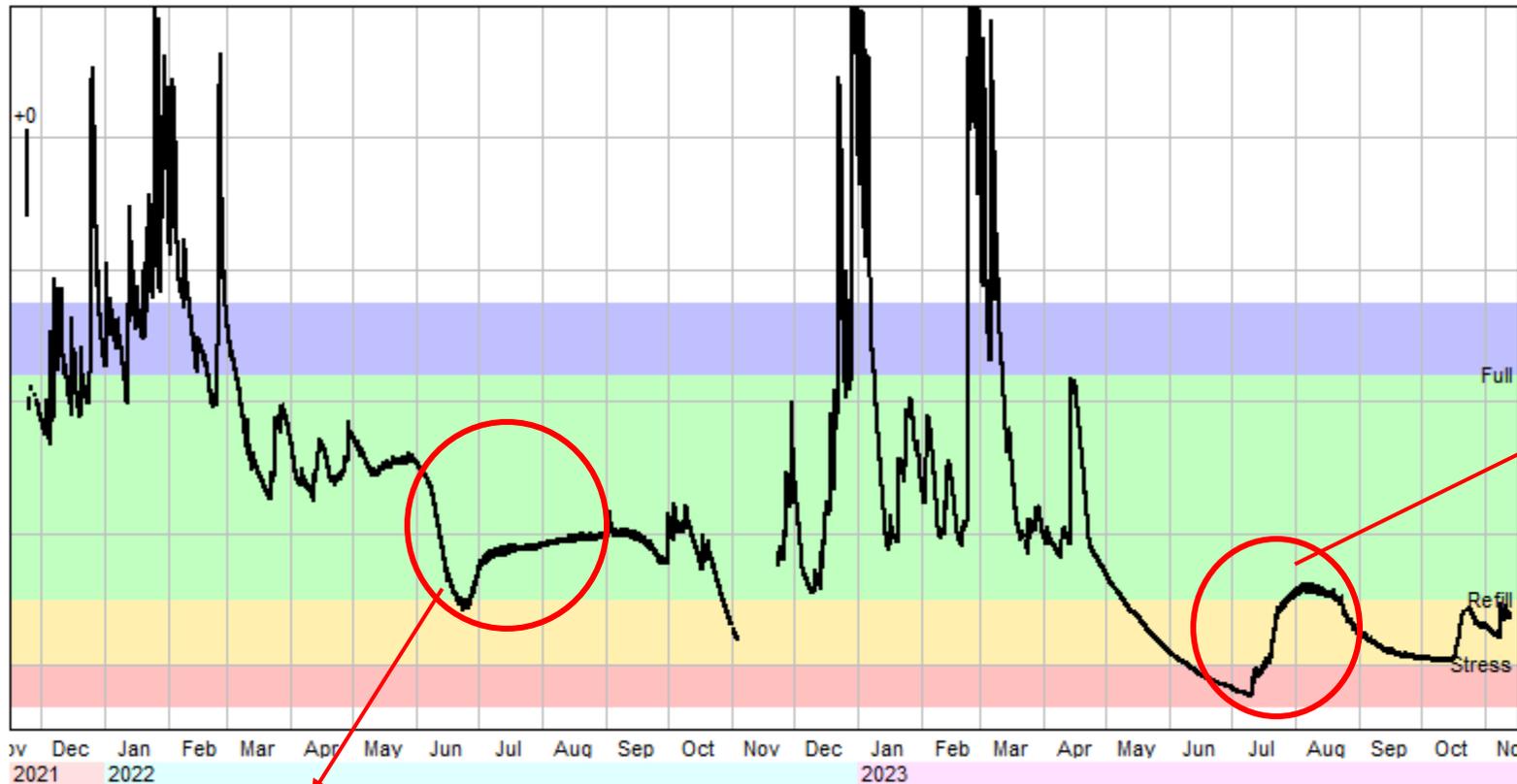
- Established commercial mango farm.
- Two 120cm EnviroPro probes.
- Recording soil moisture, temperature and electrical conductivity (E.C).
- Sensors at every 10cm.
- Recording air temp and humidity.
- Soil profile description at site
- Great grower engagement and interest.



KP mango soil moisture monitoring site: Stacked graph 2022 – 23 wet season results



KP Mango Soil Moisture Monitoring Site – Summed Graph



2023 season

- Last rainfall – mid April
- Flowering – mid July
- Very low yields

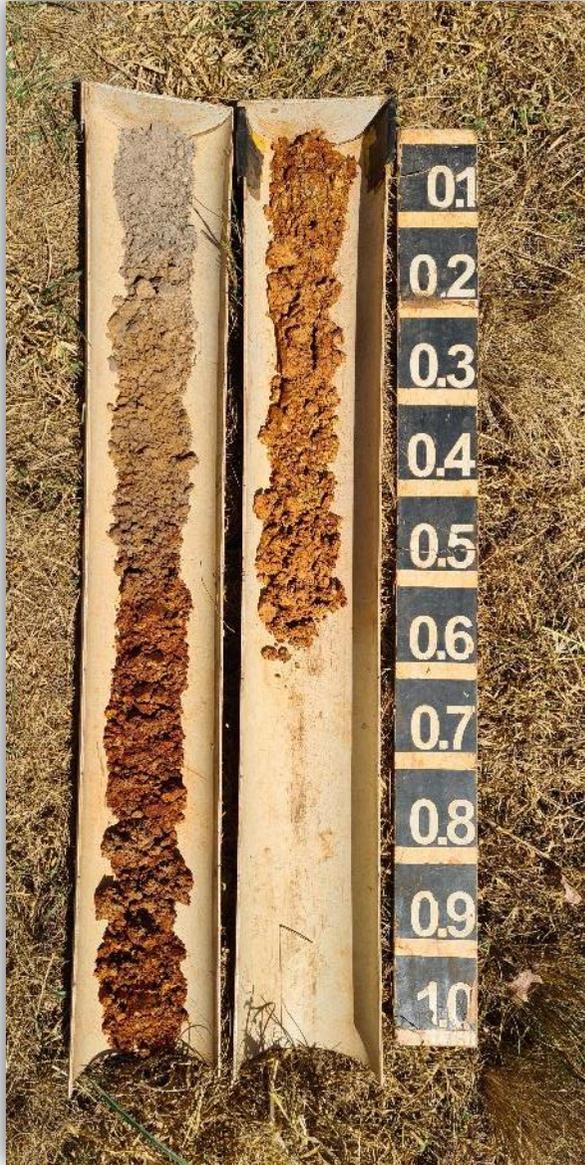
2022 season

- Last rainfall – end of May
- Flowering – mid June
- Good yields

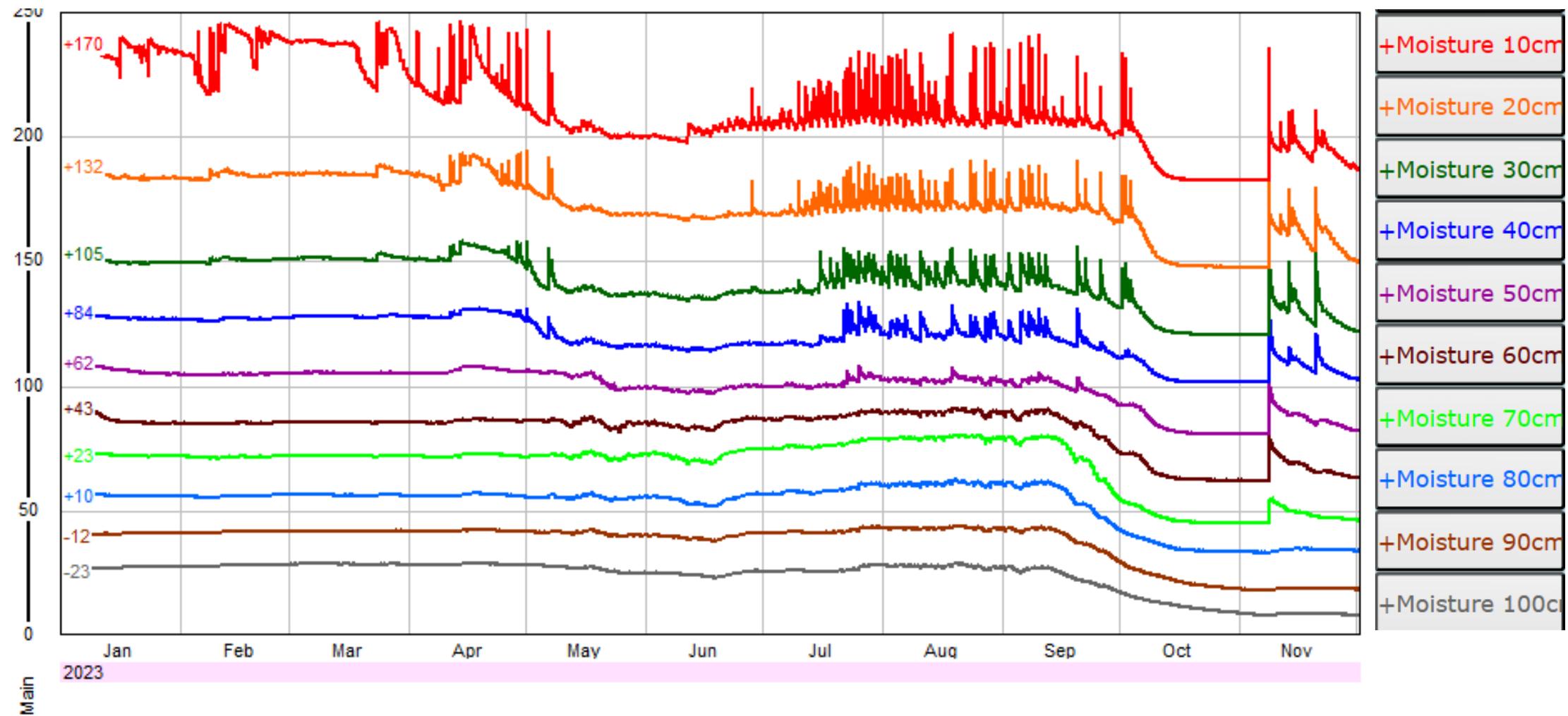
Keow Savoy Soil Moisture Monitoring site

- 1 x 120cm, 1 x 80cm EnviroPro probes.
- Recording soil moisture, temperature and electrical conductivity (E.C).
- Sensors at every 10cm.
- Recording air temp and humidity.
- Non-English Speaking Background grower.
- Prone to wet season soil saturation.

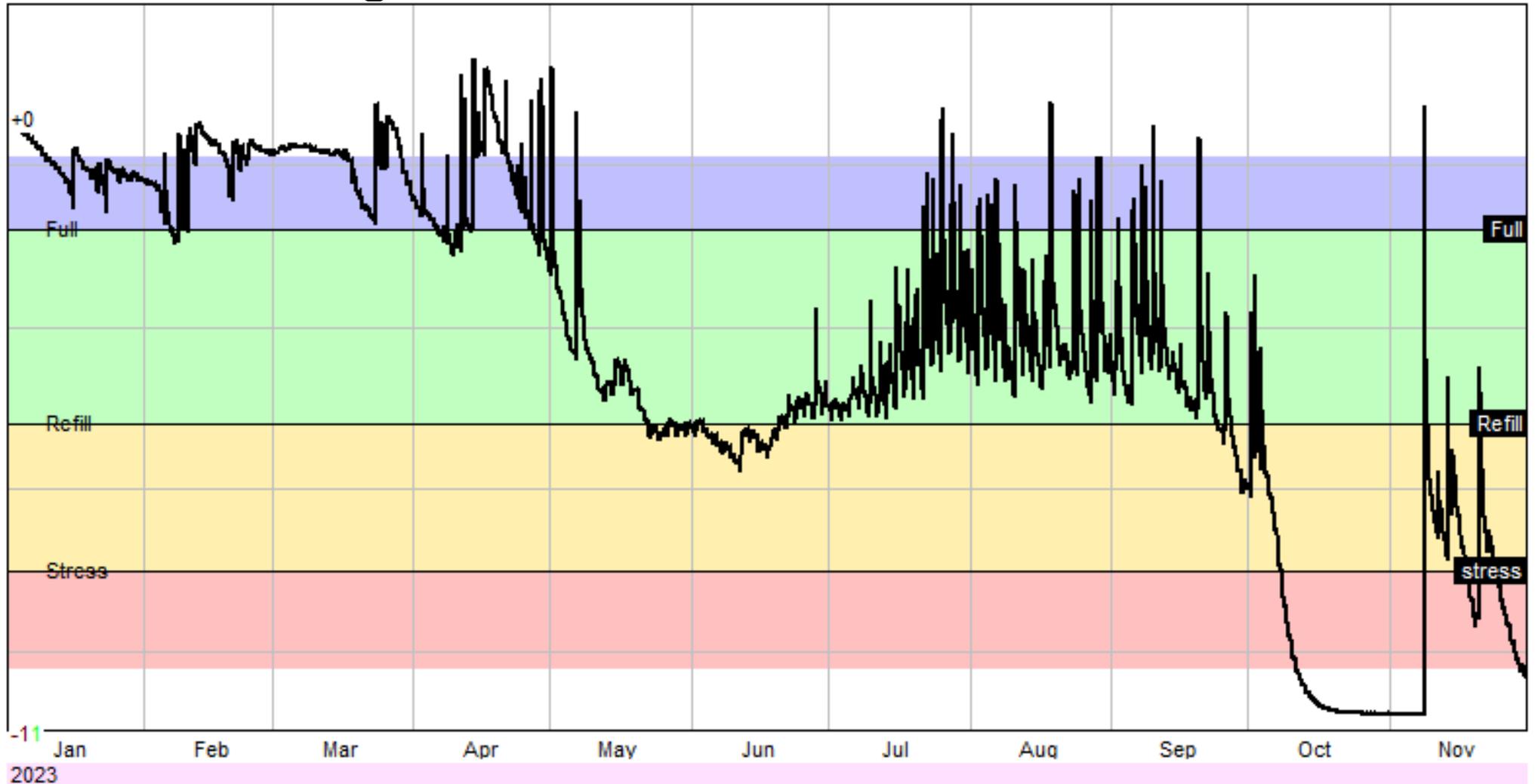




Keow Savoy mango soil moisture monitoring site: Stacked graph 2023 season results



Keow Savoy soil moisture monitoring data – Current irrigation practices – 2023 season results



Future direction.

- Project will continue until the end of 2025.
- Ongoing research needs to continue with more on-farm sites across numerous seasons.
- Building capacity in data collection, analysis and application.
- Best irrigation management practices.





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NT Farmers are dedicated to serving the interests of
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