



Te Ahikawariki / VICE Slakes and Nitrachek Project

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Slakes Project



Project Outline

- Compare Slakes and LRMW aggregate stability results
- Correlate to VSA score, bulk density, and total carbon
- Engage growers
- Demonstrate paddock sampling and the Slakes app

Soil Aggregate Stability



Cyclone affected paddock



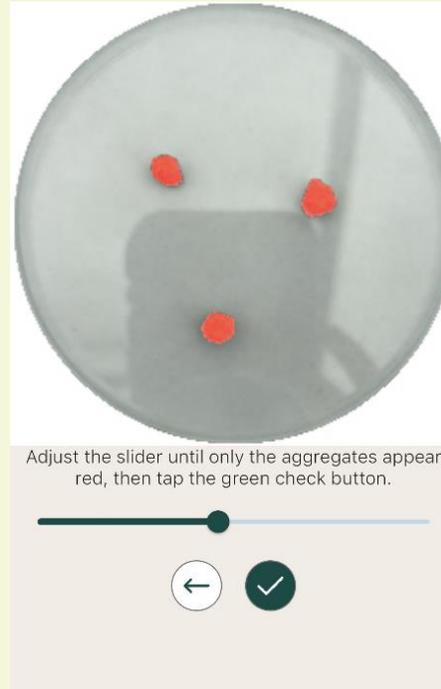
Micro Farm

Slakes sampling and Processing

- 20 cm slab of soil
- Split 0 – 10 cm and 10 - 20 cm
- Break the soil along natural fractures
- Collect 30 x 5 mm aggregates
- Microwave until dry



Slakes App



0.98



0.18



A test of soil dispersion

- Collect 5 mm dry aggregates
- Capture an image dry and an image 10 minutes after soaking in water
- Slakes app does the maths

Visual Results

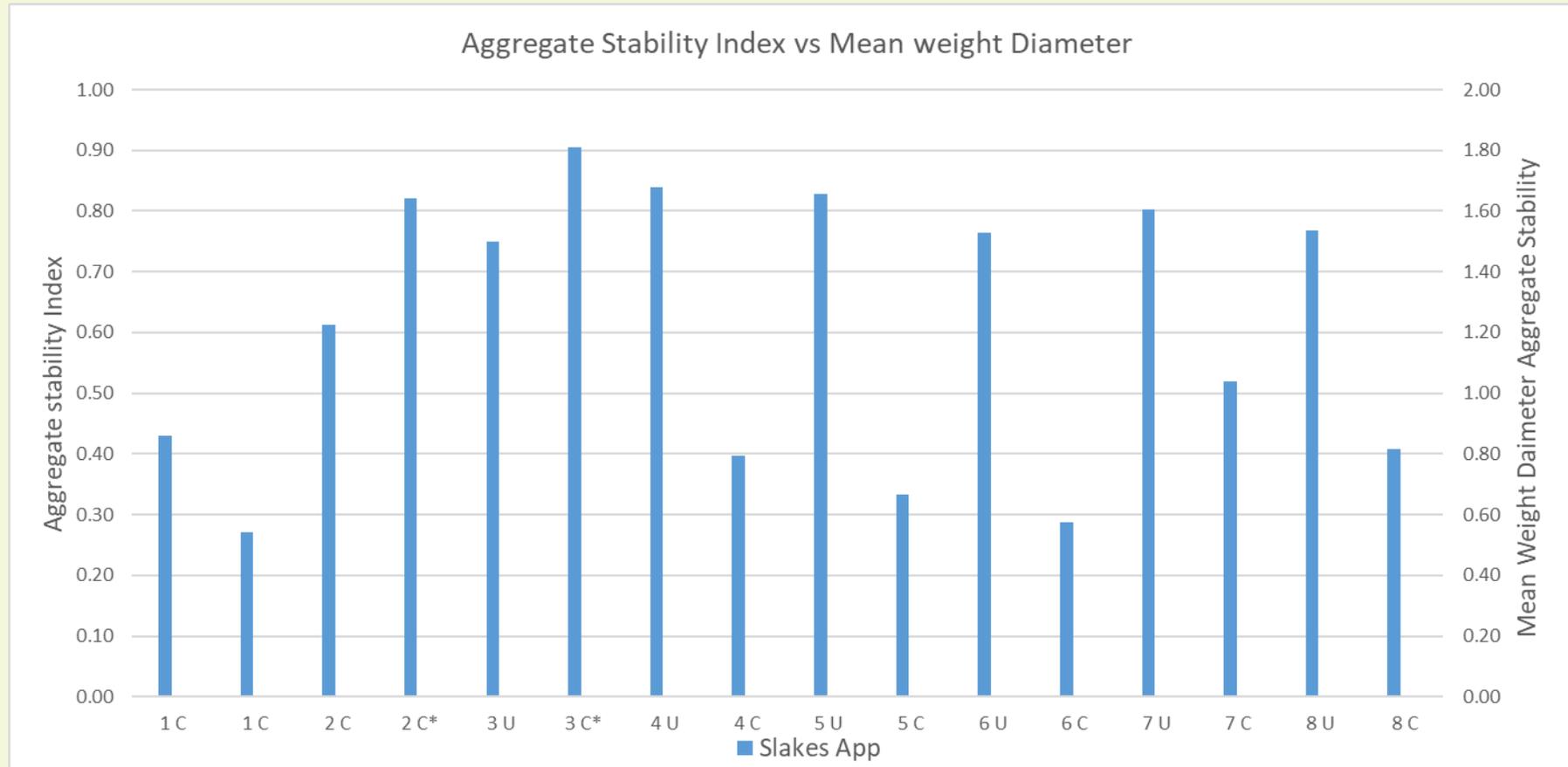


Dry

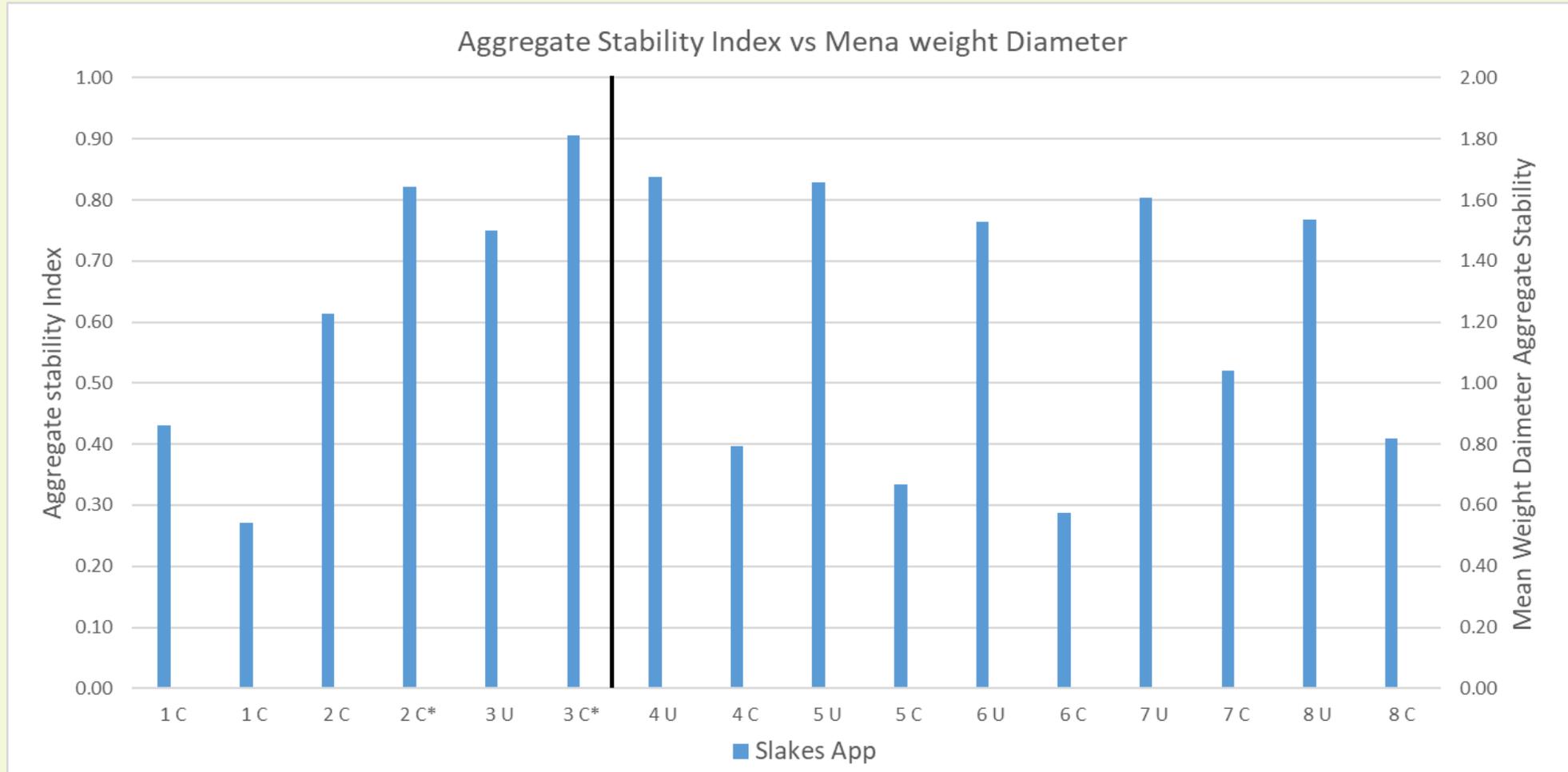


Submerged in water for 10 minutes

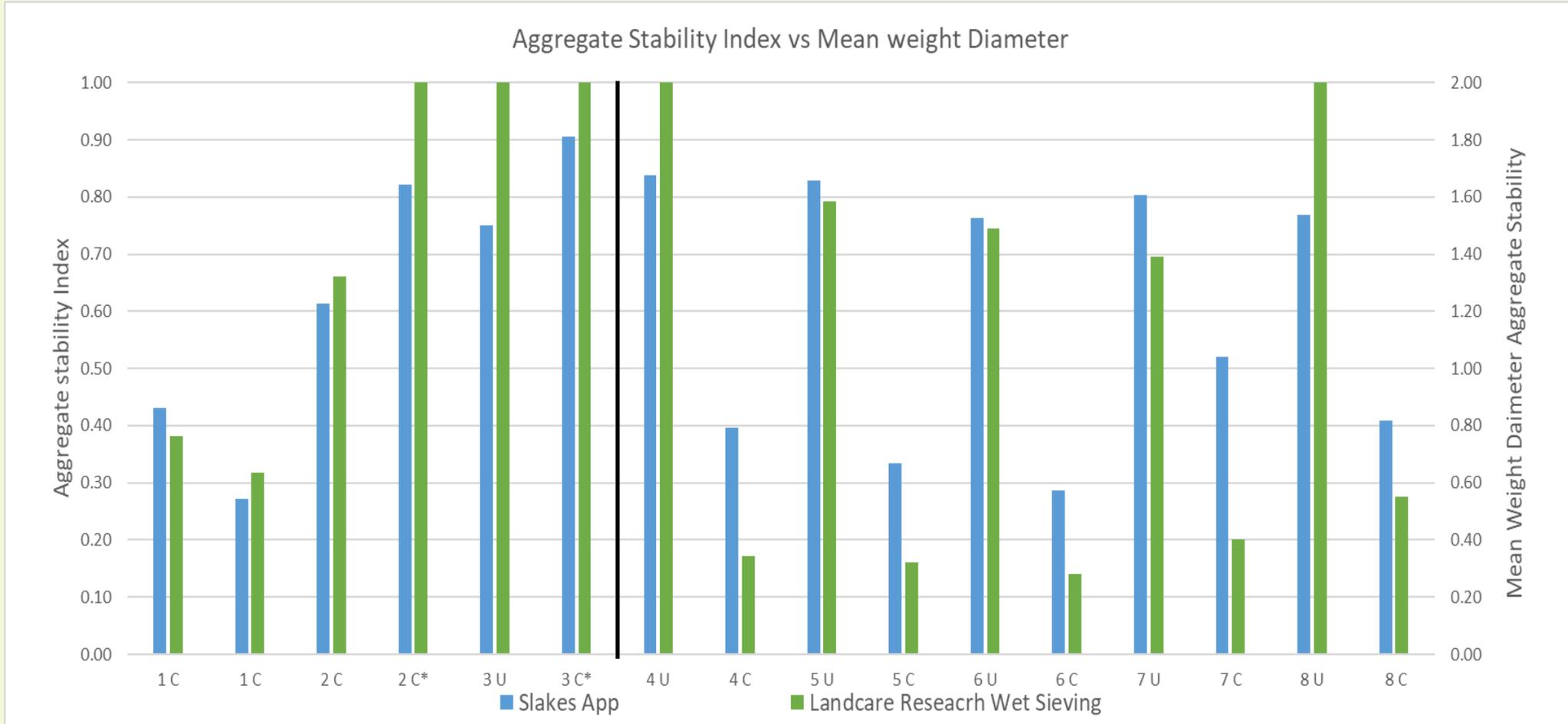
Slakes Results



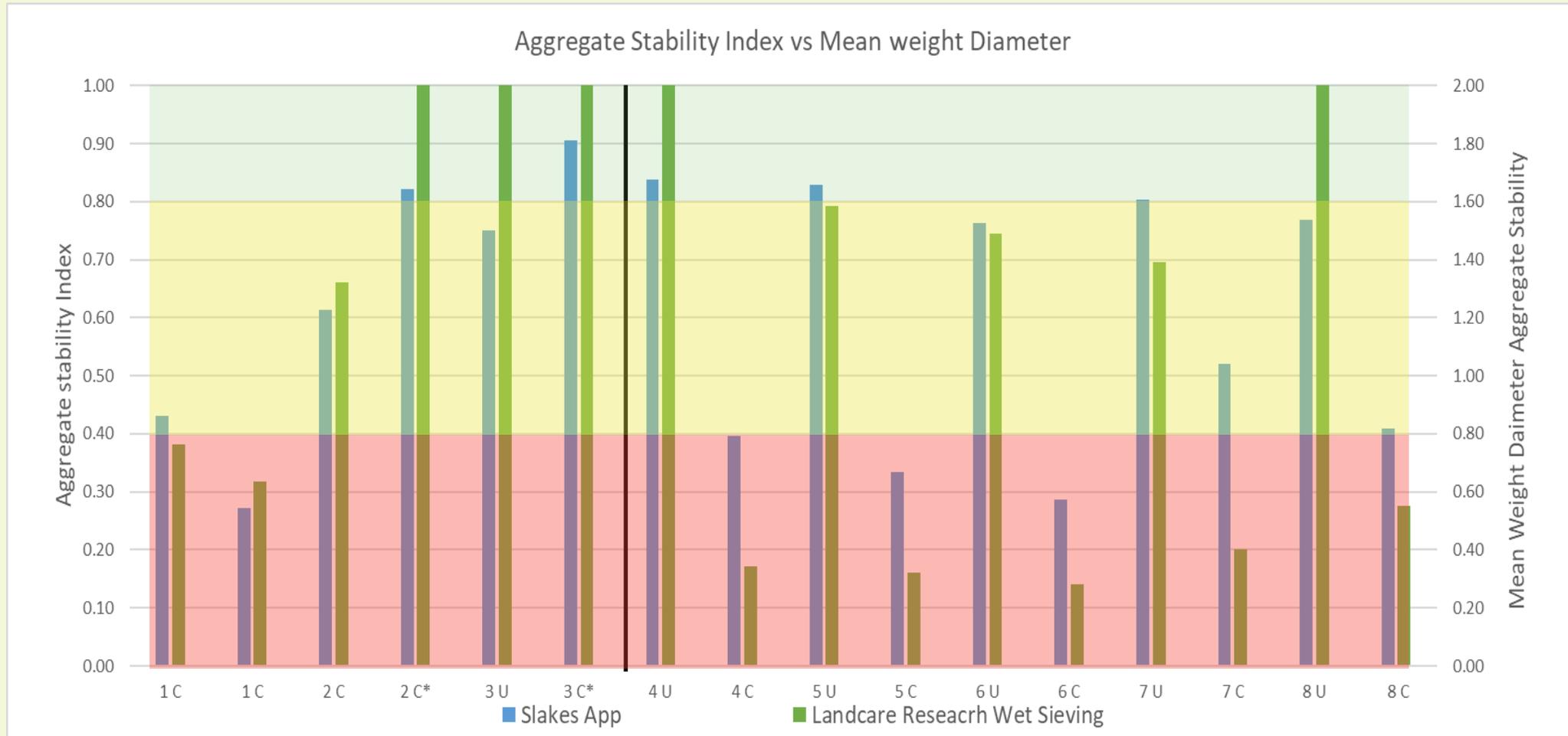
Slakes Results



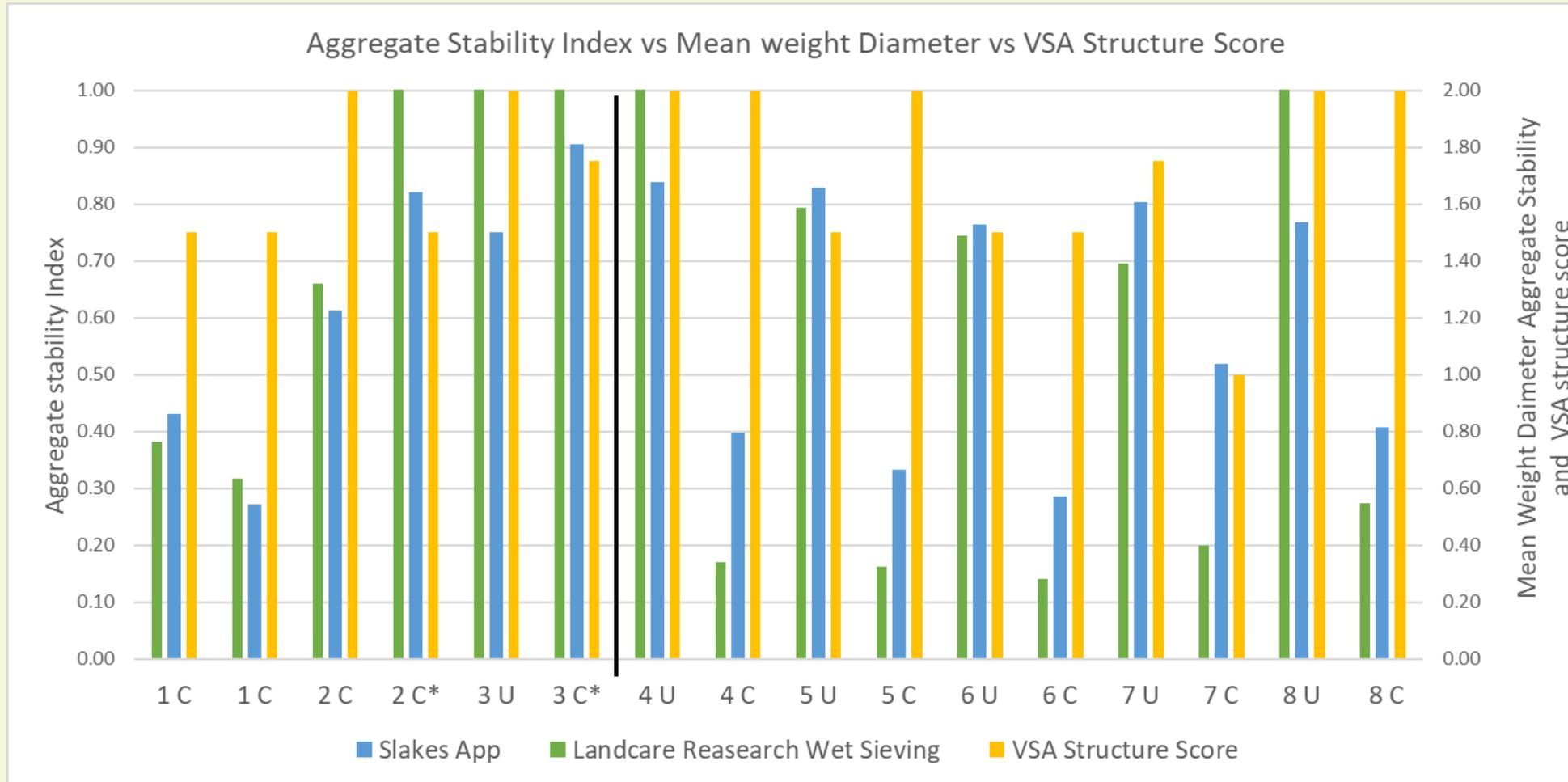
Slakes v Wet Sieving



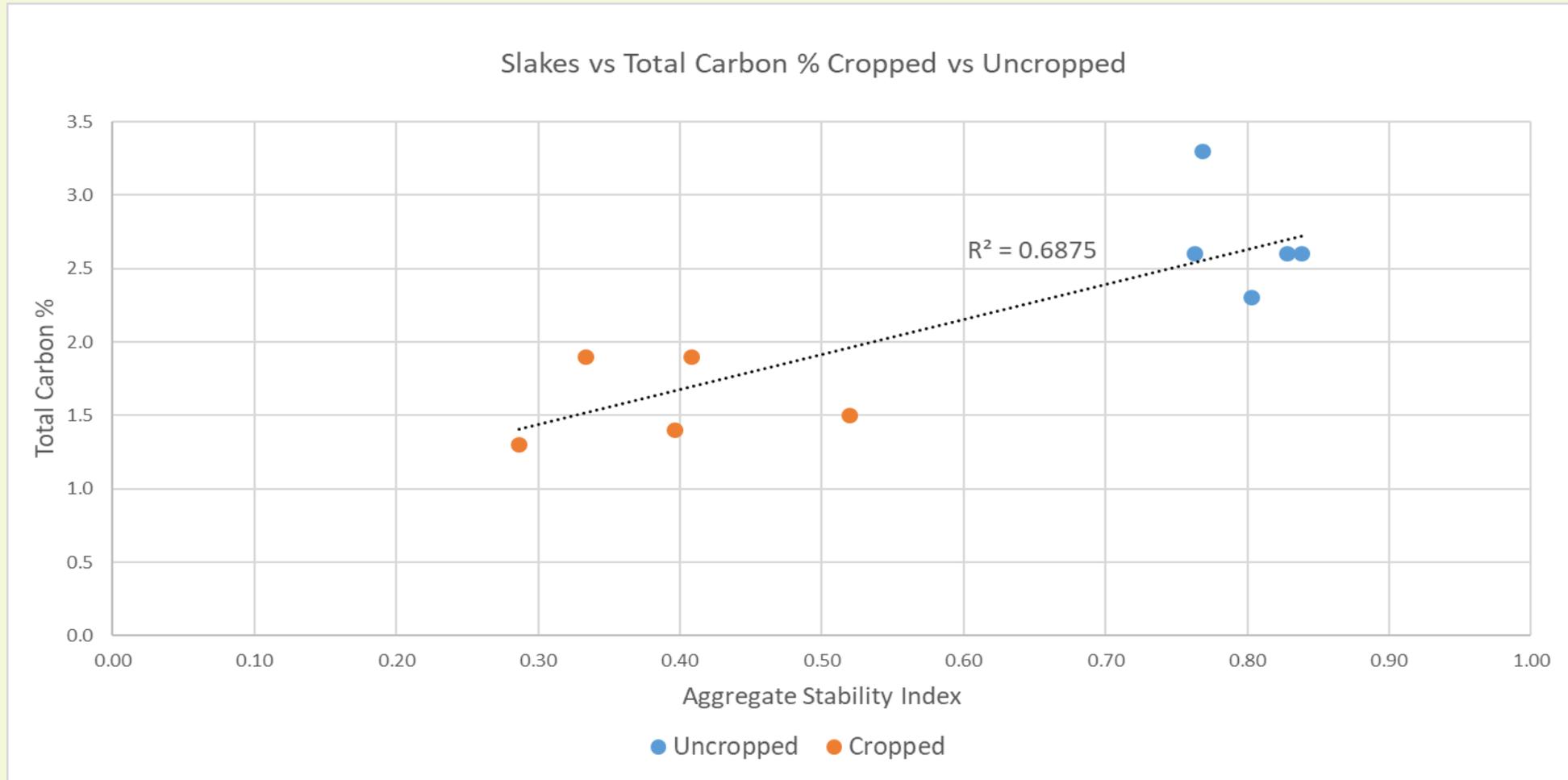
Slakes Interpretation



Slakes v Wet Sieving v VSA Structure



Slakes v Total Carbon %



Grower feedback



Nitrachek Project



Project Outline

- Compare Nitrachek results with Hills lab mineral N results
- Engage growers
- Demonstrate paddock sampling and the Nitrachek

Nitrachek Device



Thank you