

Optimising crop growth in a hyper-texture contrast Sodosol through delving and amendment application

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- Sodosol with hyper-texture contrast; silicified cap on top of B horizon (ESP ~ 20)
- Surrounded by highly productive Vertosols, so used primarily for grazing



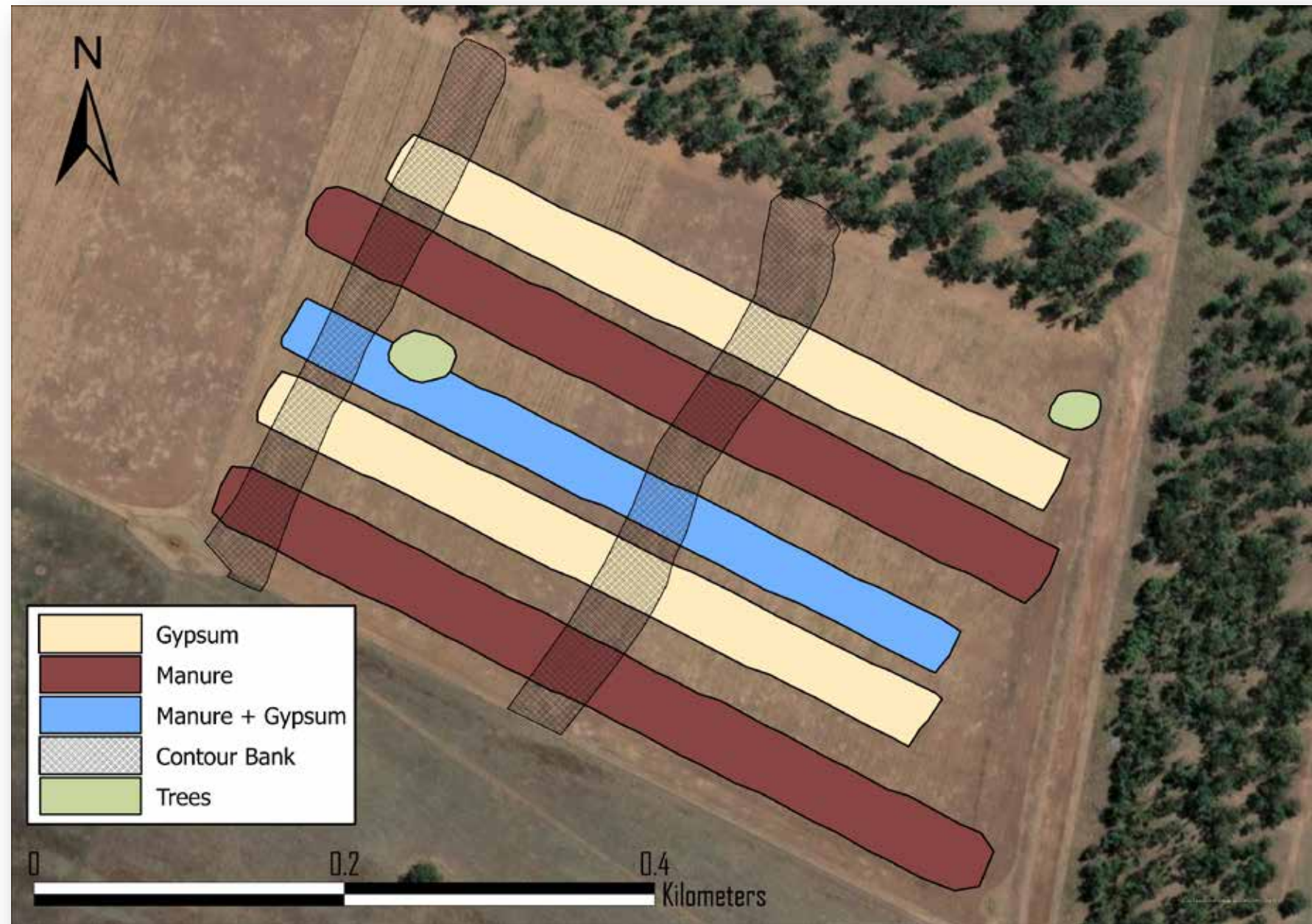


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- § Challenging soil; low CEC, high ESP, low water-holding capacity of topsoil; low OC apart from surface
 - § Clay delving to increase water-holding capacity
 - § Pre-delving amendments (manure, gypsum) to mitigate potential drawbacks
 - § Is there a yield response?

Paddock Strip Trials

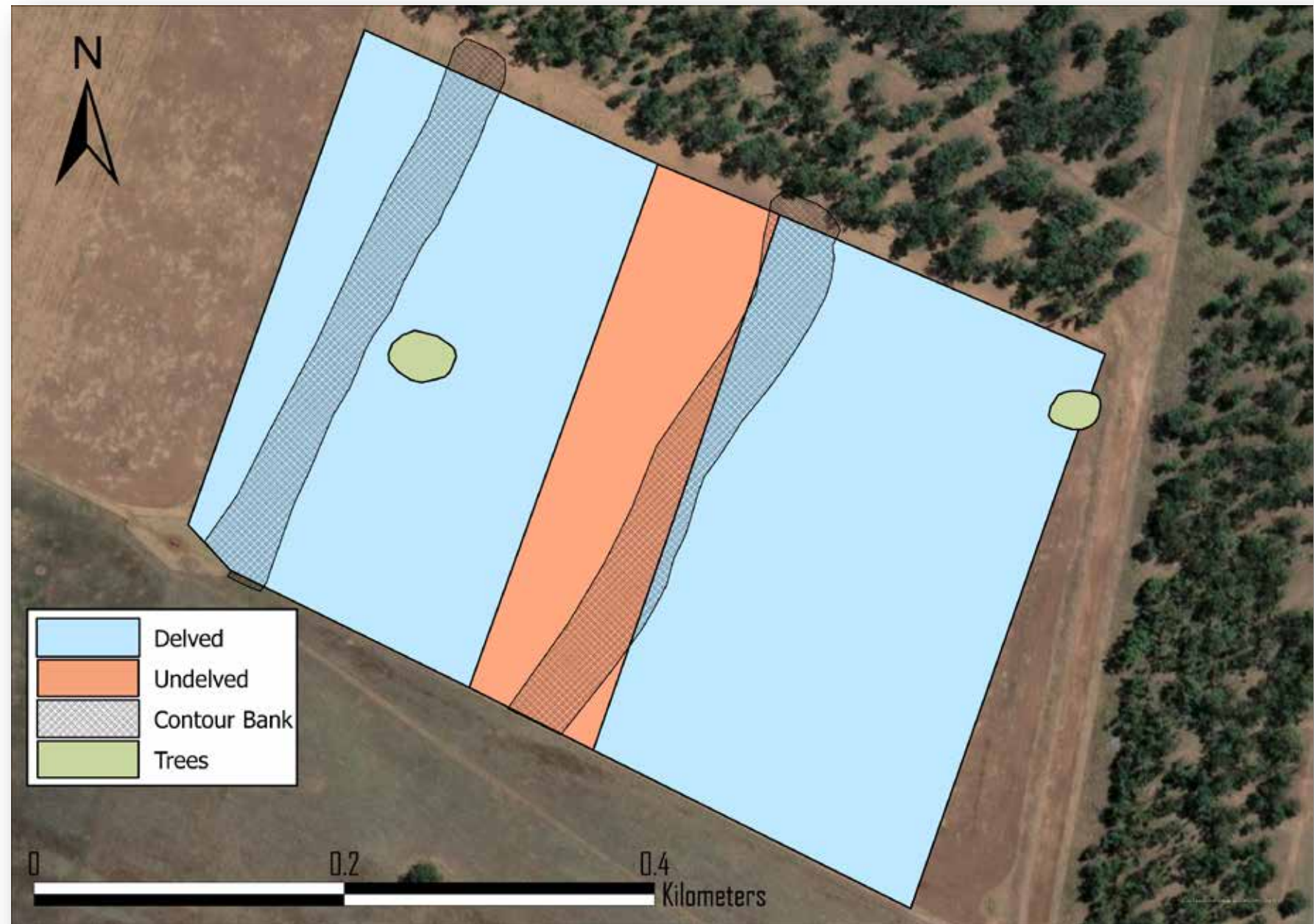
§ Surface application of amendments: 8th June 2021

- Gypsum spreading: 2.5t/ha x 10.4 ha
- Feedlot manure spreading: 10t/ha x 10.4ha

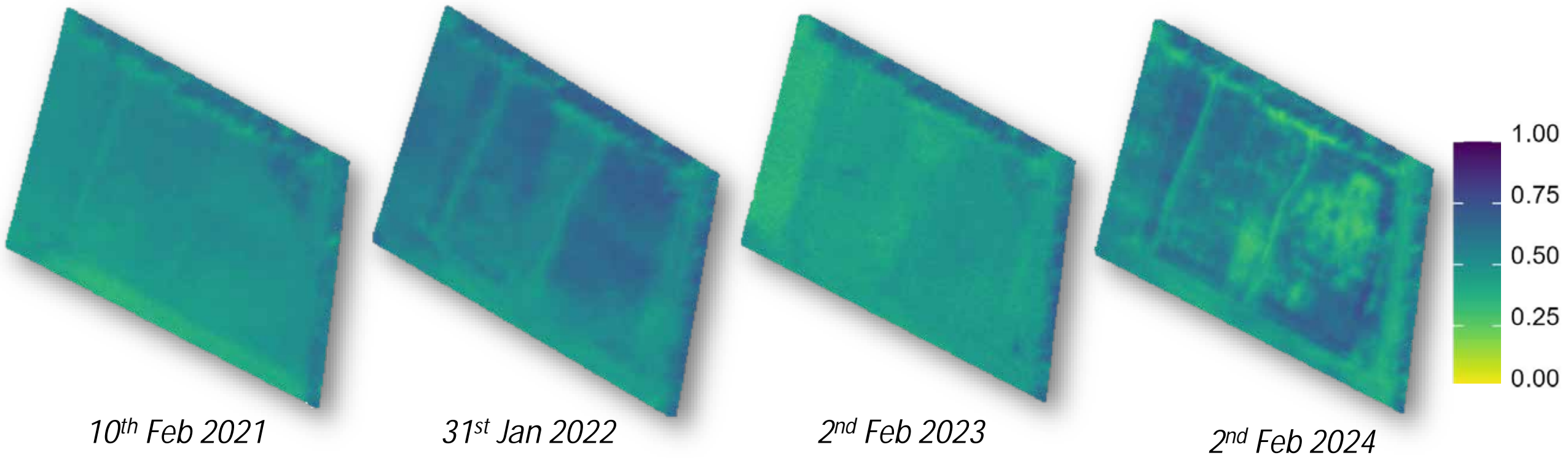


Paddock Delving Trial

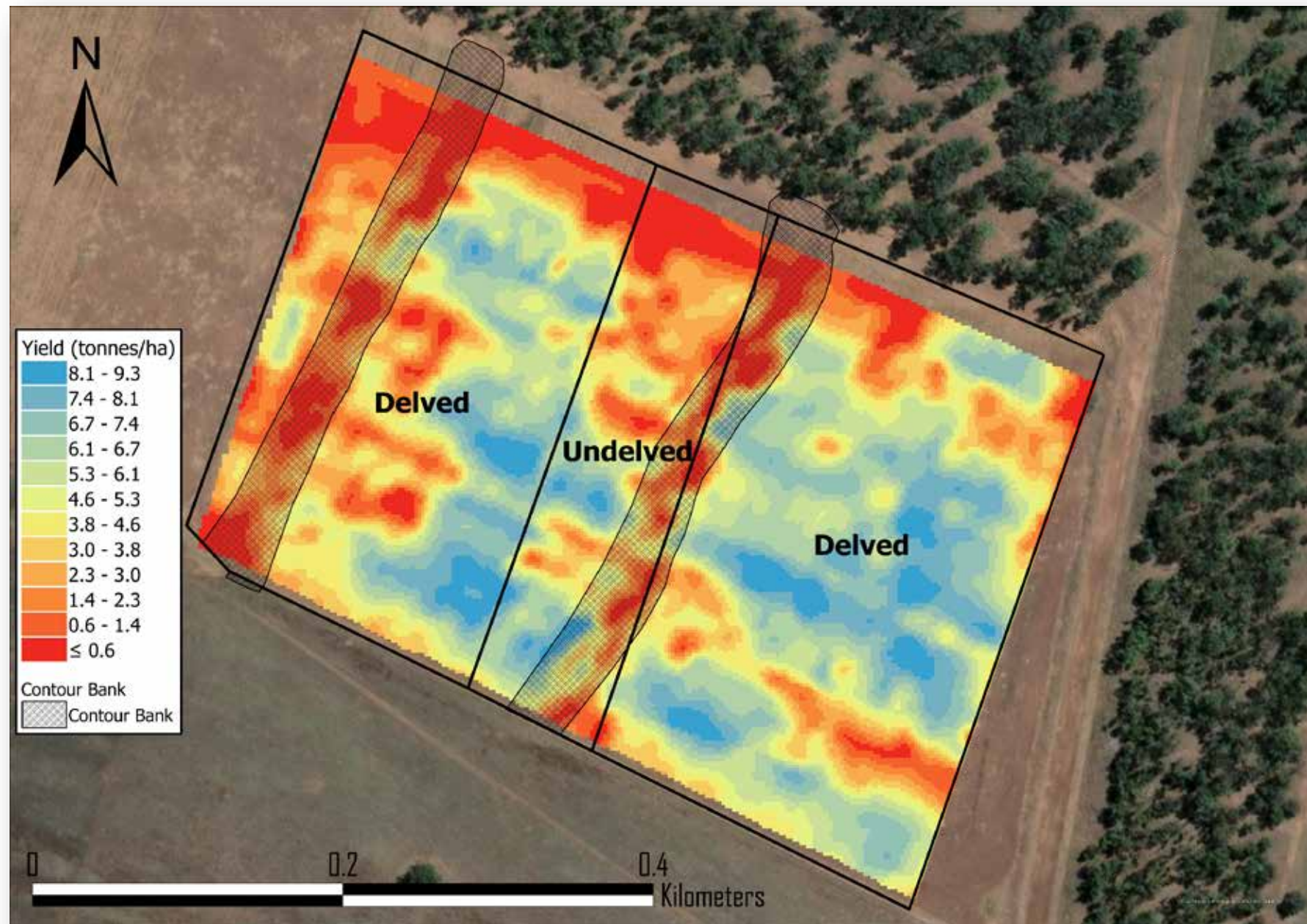
§ Delving completed 22nd
June 2021

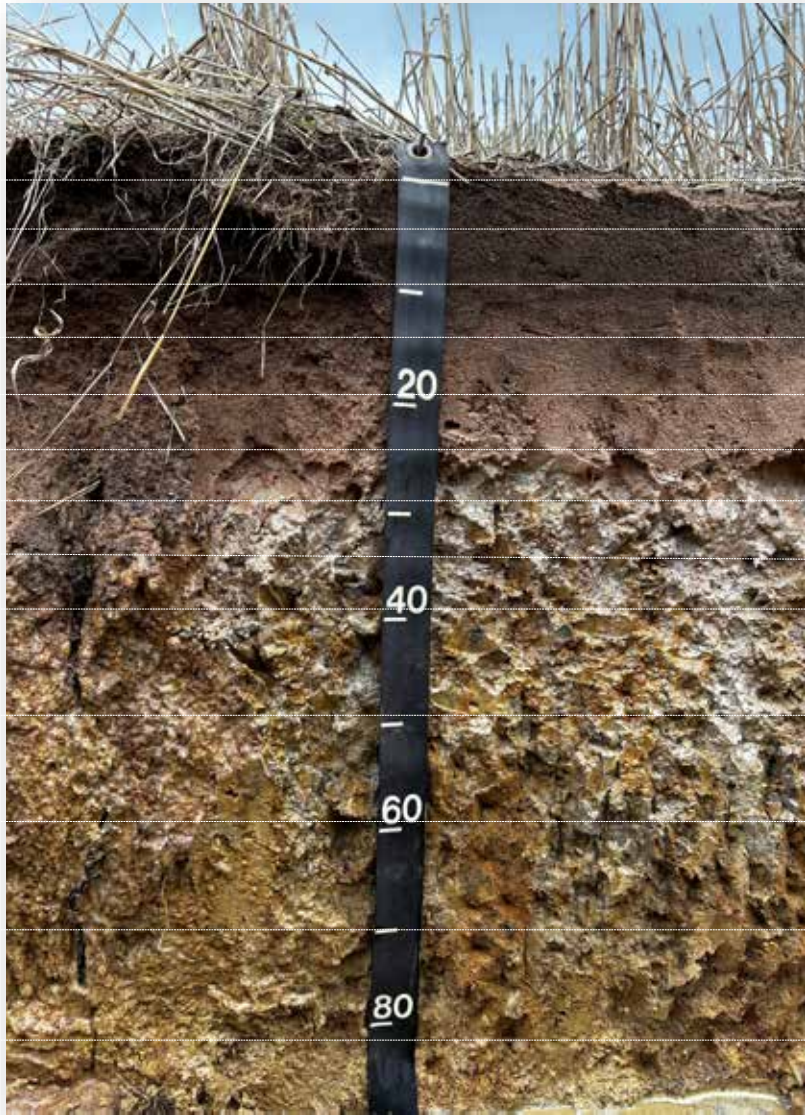


NDVI Timeseries

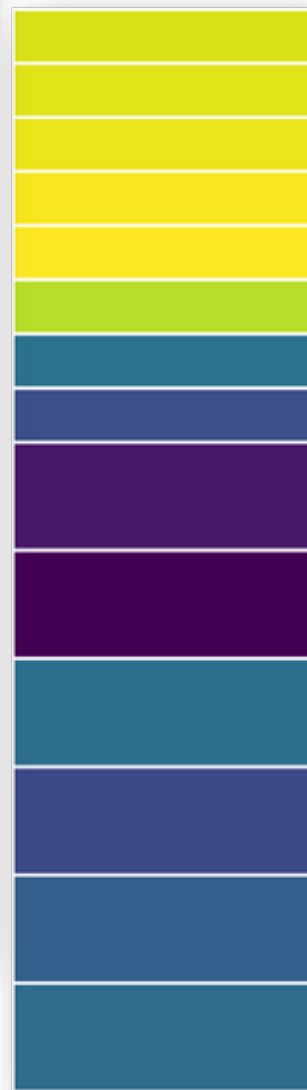


Wheat Yield – 2024 Season

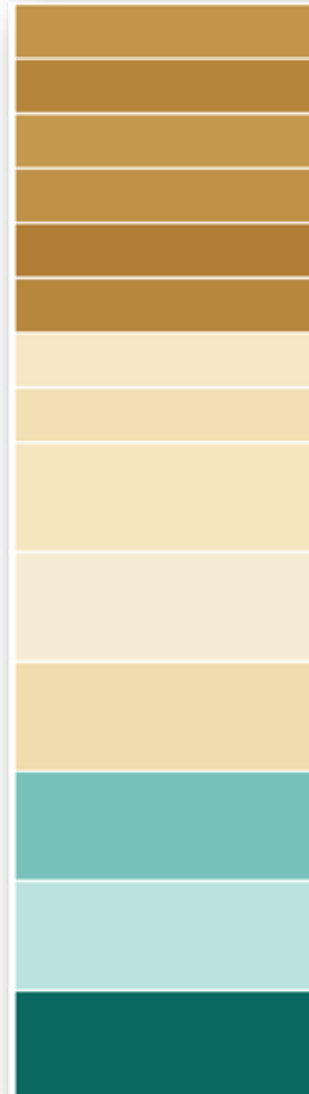
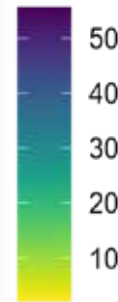




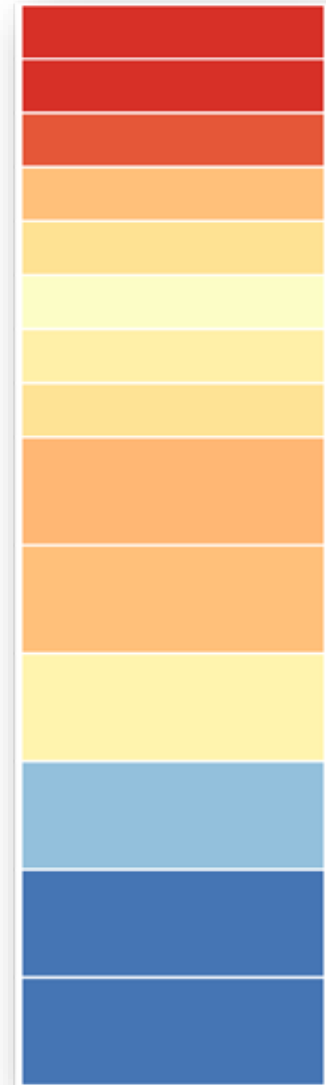
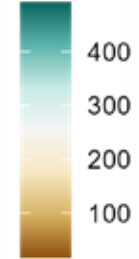
Undelved Control Pit



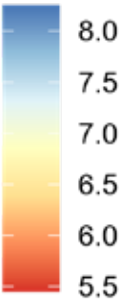
Clay
Fraction %



EC ($\mu\text{S/cm}$)

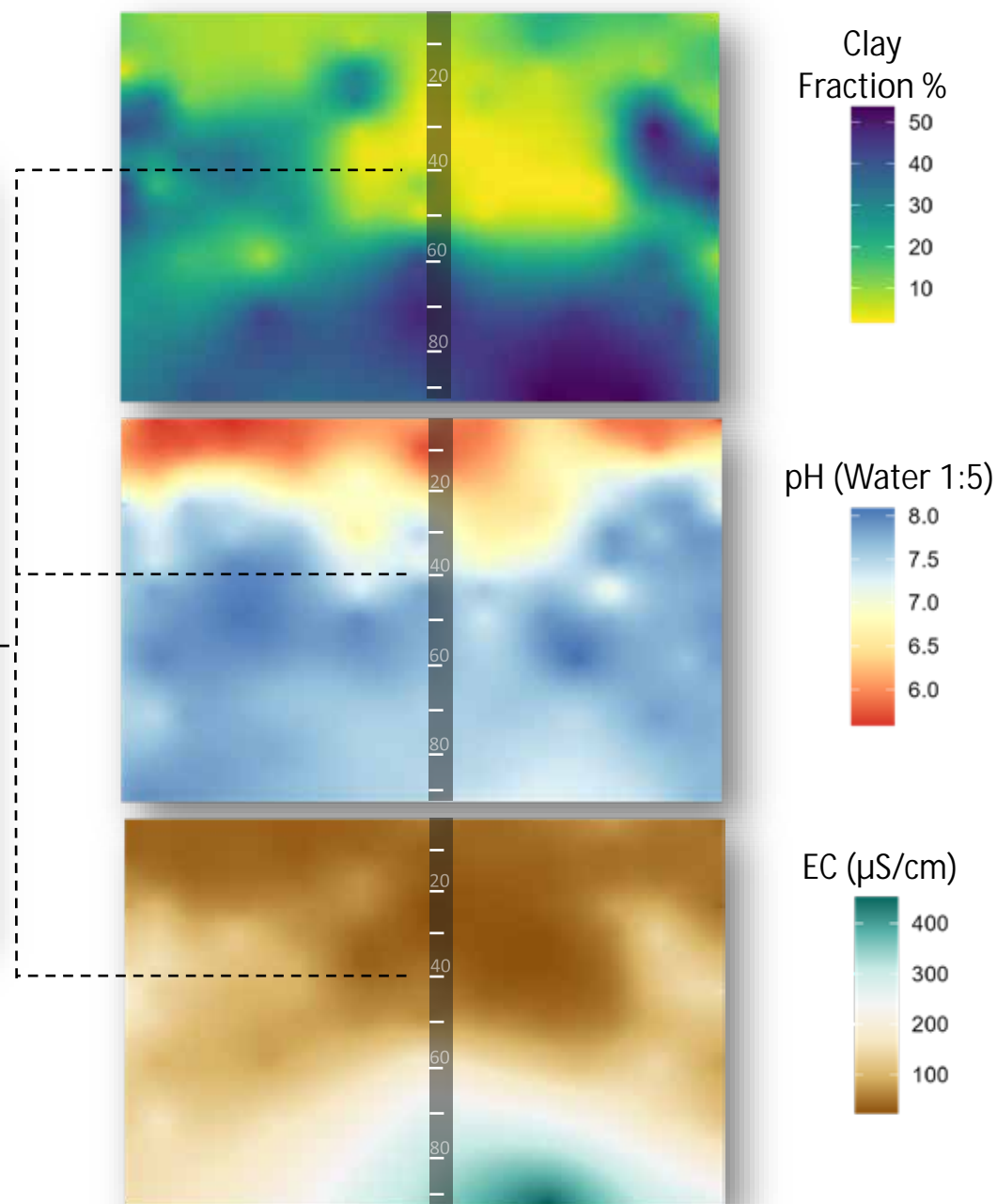


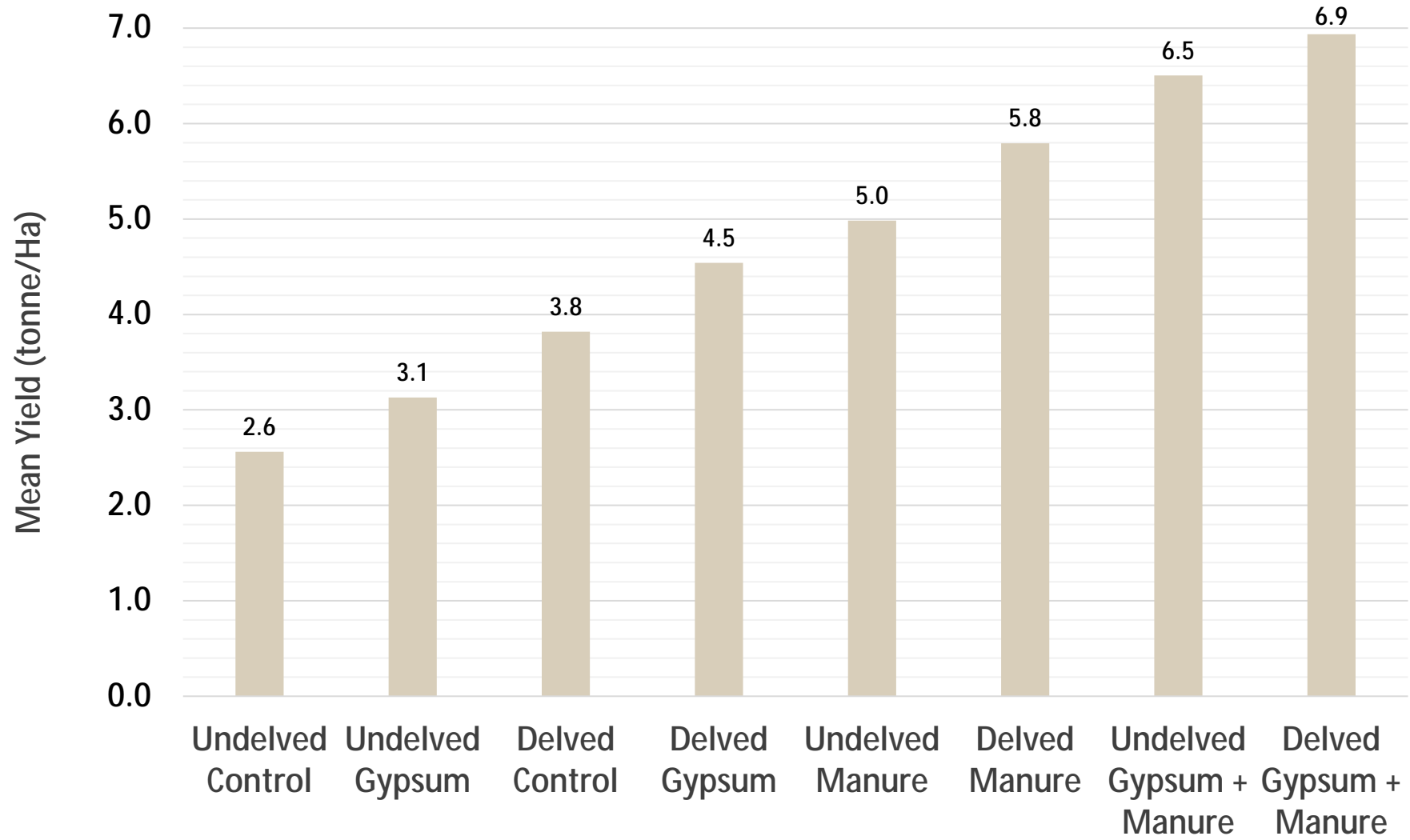
pH (Water 1:5)





Delved Treatment Pit





2024 Average Wheat Yield



