

Optimising the use of manure in southern cotton



Nil – zero fertilizer

T0 – $150\text{NH}_3\text{-N} + 27\text{DAP-N} + 130\text{urea-N} = 307 \text{ kg-N}$,

T1 – $150\text{NH}_3\text{-N} + 27\text{DAP-N} + 130\text{N} + \text{urea-N} + 2\text{t/ha manure} = 316 \text{ kg-N}$

T2 - $150\text{NH}_3\text{-N} + 27\text{DAP-N} + 130\text{urea-N} + 4\text{t/ha manure} = 325 \text{ kg-N}$

T3 – No top dressing = 177 kg-N

T4 – Top dressing urea only = 130 kg-N

T5 – $150\text{NH}_3\text{-N} + 27\text{DAP-N} + 2 \text{ t/ha manure}$, no top dressing = 186

T6– $150\text{NH}_3\text{-N} + 27\text{DAP-N} + 4\text{t/ha manure}$, no top dressing = 195

T7- $150\text{NH}_3\text{-N}$ only = 150 kg-N

T8 – $150\text{NH}_3\text{-N} + 130 \text{ urea-N}$ (no DAP-N) = 280 kg N/ha

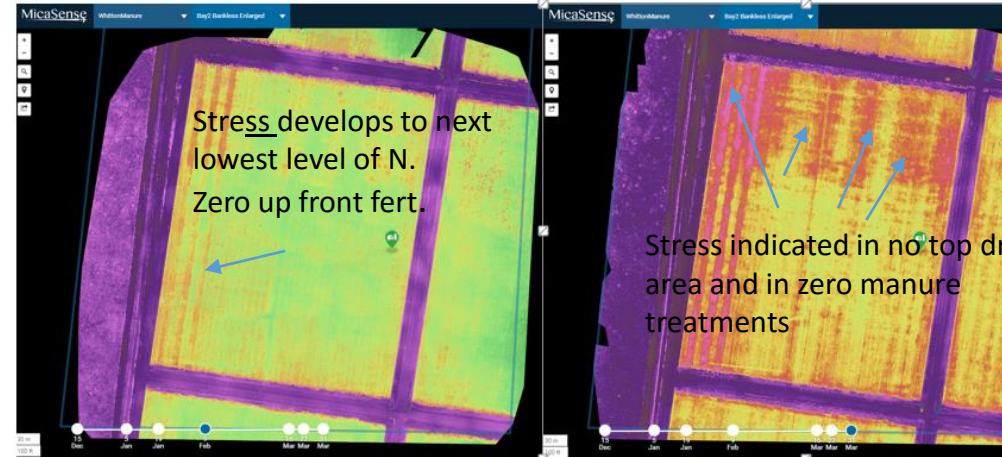
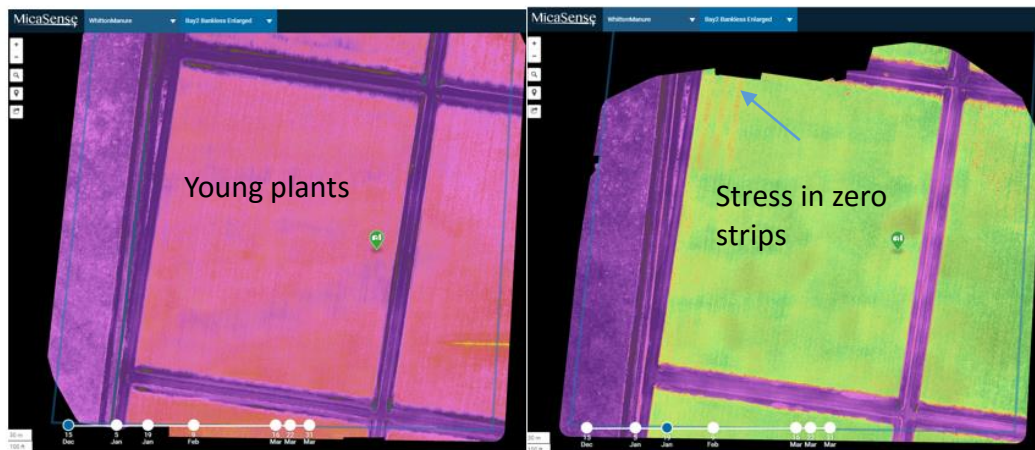
- Using Solvita labile Amino-N test – potential mineralisable-N = 50 kg/ha
- DAP vs no DAP = made no difference to establishment (~8 plants/m).
- Comparison of top dressing vs no top dressing – NDRE images through season indicate progressive plant stress which tends to be offset by manure.
- Comparison of fertilizer + manure vs fertilizer on soil quality, plant development, yield and lint quality to be determined.

15 Dec 2015

19th Jan 2016

9th Feb 2016

31st March 2016



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