Soil organic carbon:

In Australian cotton soils

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PLANT INDUSTRY & NSW DPI
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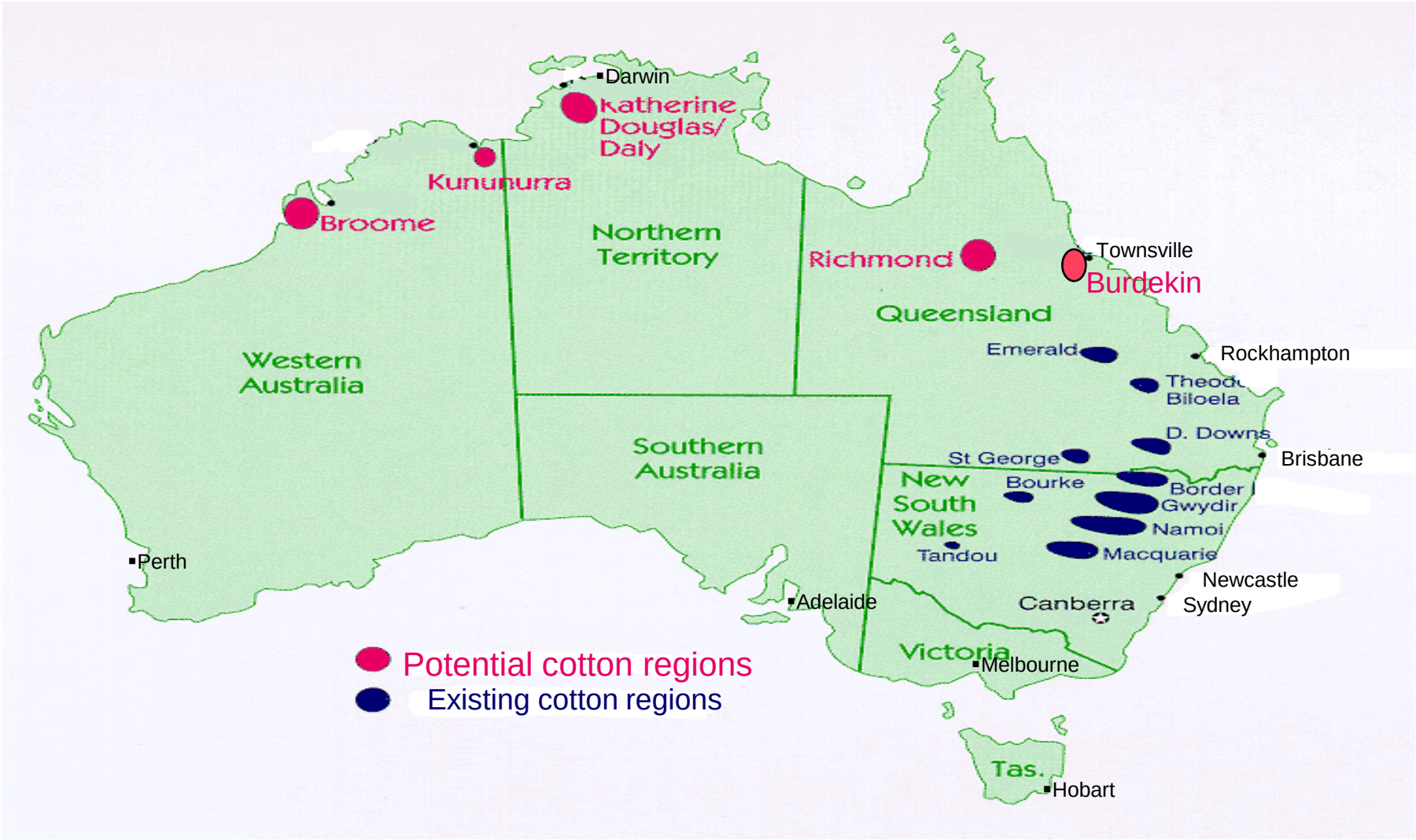
Cotton Catchment Communities CRC

NSW GOVERNMENT Primary Industries

CSIRO

Cotton regions in Australia



Long-term experiments: Australian Cotton Research Institute

C1: Cracking clay with sub-soil constraint of high sodicity

Continuous cotton v cotton-wheat rotation

Conventional tillage v minimum tillage

D1: Cracking clay with sub-soil constraint of sodicity

Permanent hills & minimum tillage

Rotation crops: wheat, vetch, stubble standing or incorporated

F6: Cracking clay with no sub-soil constraint

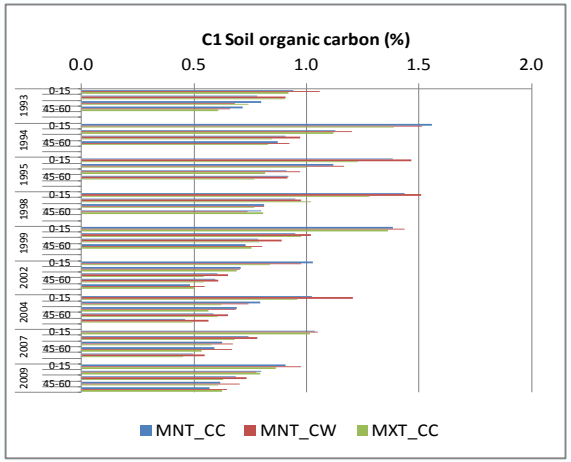
Permanent hills & minimum tillage

Rotation crops: faba bean, vetch, wheat, stubble incorporated

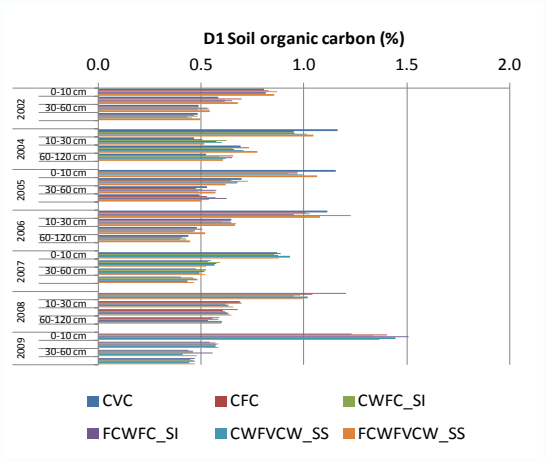
D1: rotation, permanent hills, min till

F6: rotation, permanent hills, min till

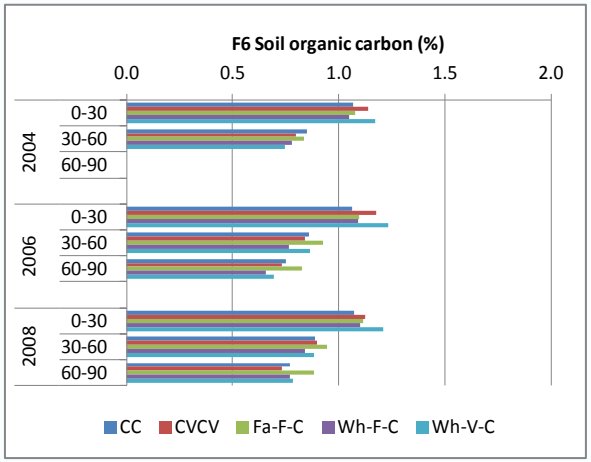
C1 Tillage

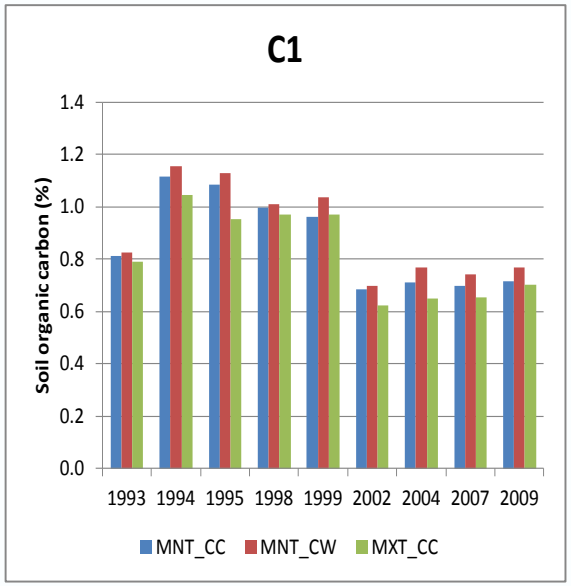


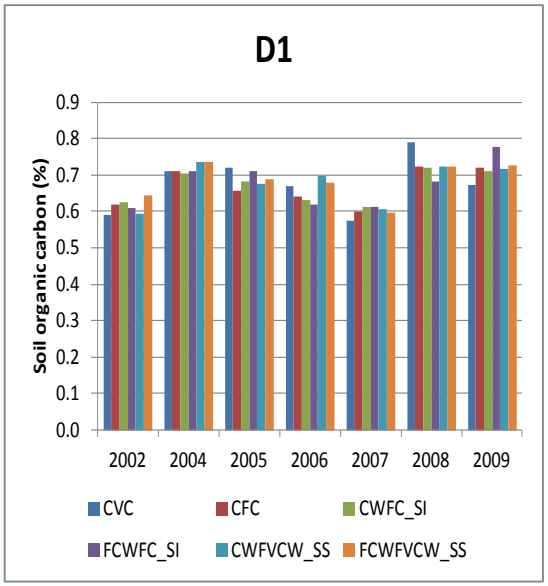
D1 Rotation: permanent hills min till

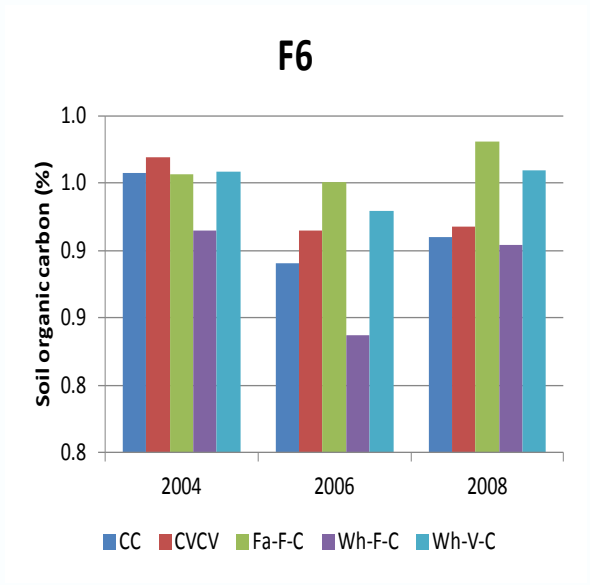


F6 Rotation: permanent hills min till





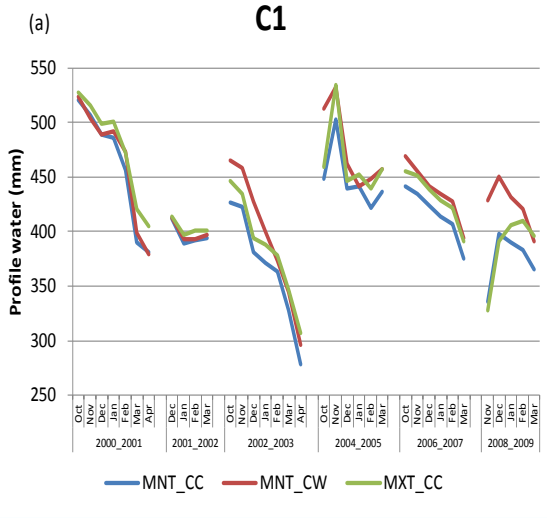


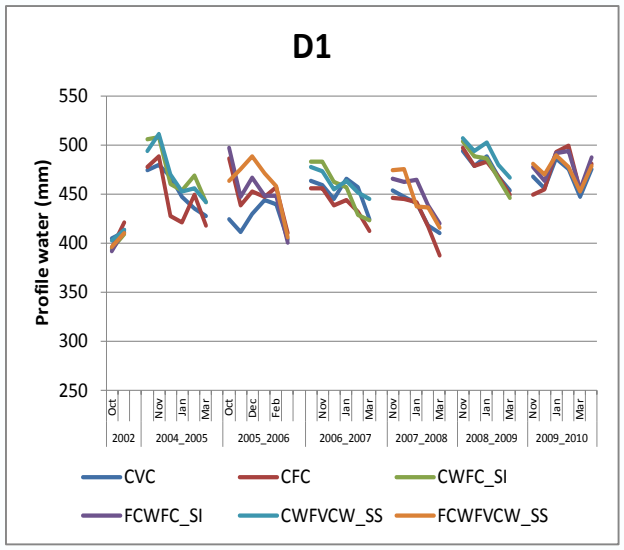


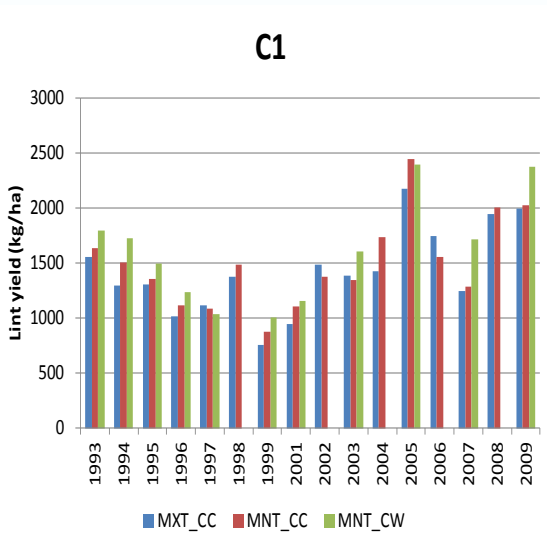
C1 Tillage

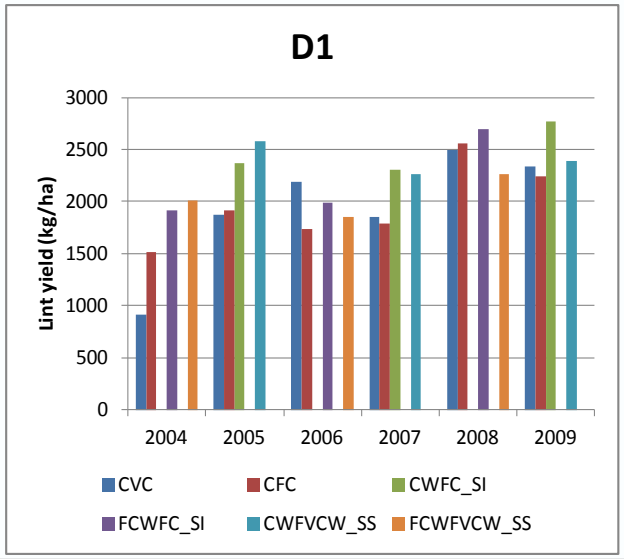
D1 Rotation: permanent hills min till

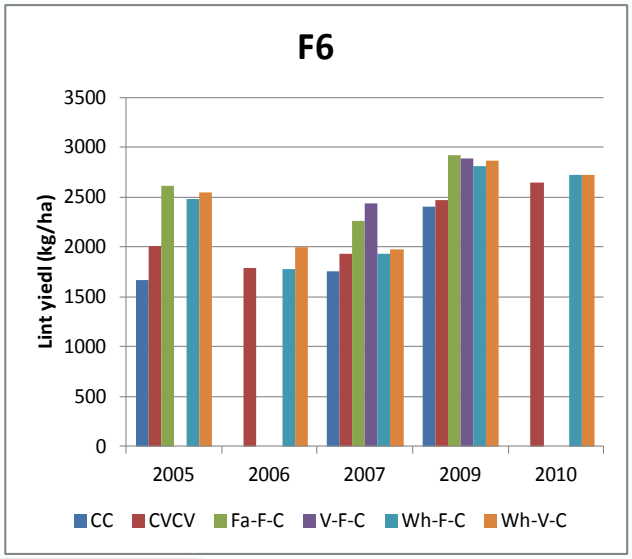
F6 Rotation: permanent hills min till



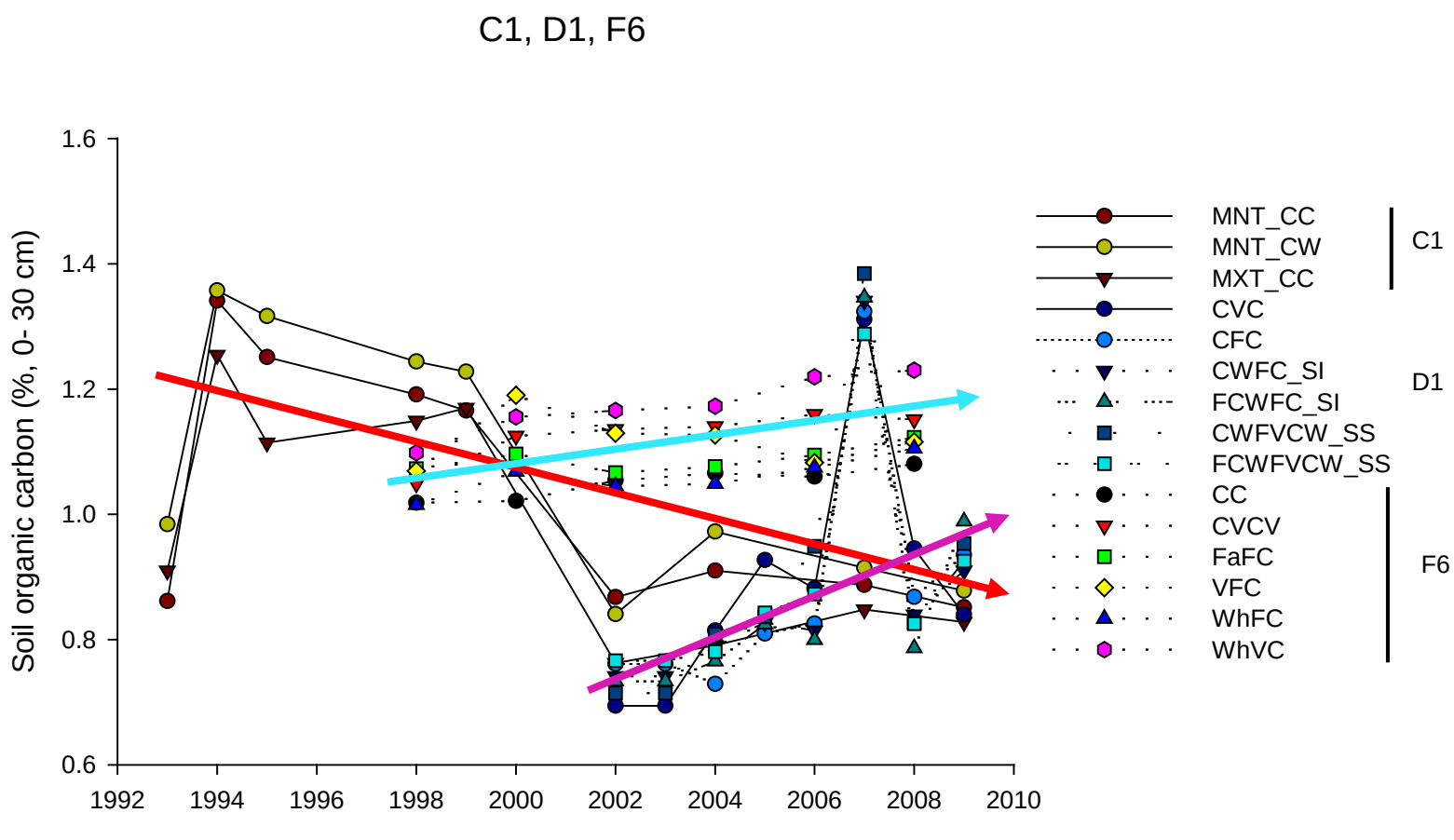








Summary SOC (0-30 cm) all experiments



Conclusions

- Tillage decreases level of SOC (C1)
- Rotations, permanent hills & minimum till increases level of SOC (D1, F6)
- SOC decreases with depth (C1, D1, F6)

Basket picker, cotton modules

Round bale picker & modules

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Thank you

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