Feedbase Production Research

Dairy Australia
Your Levy at Work

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State Government Victoria
Department of Primary Industries

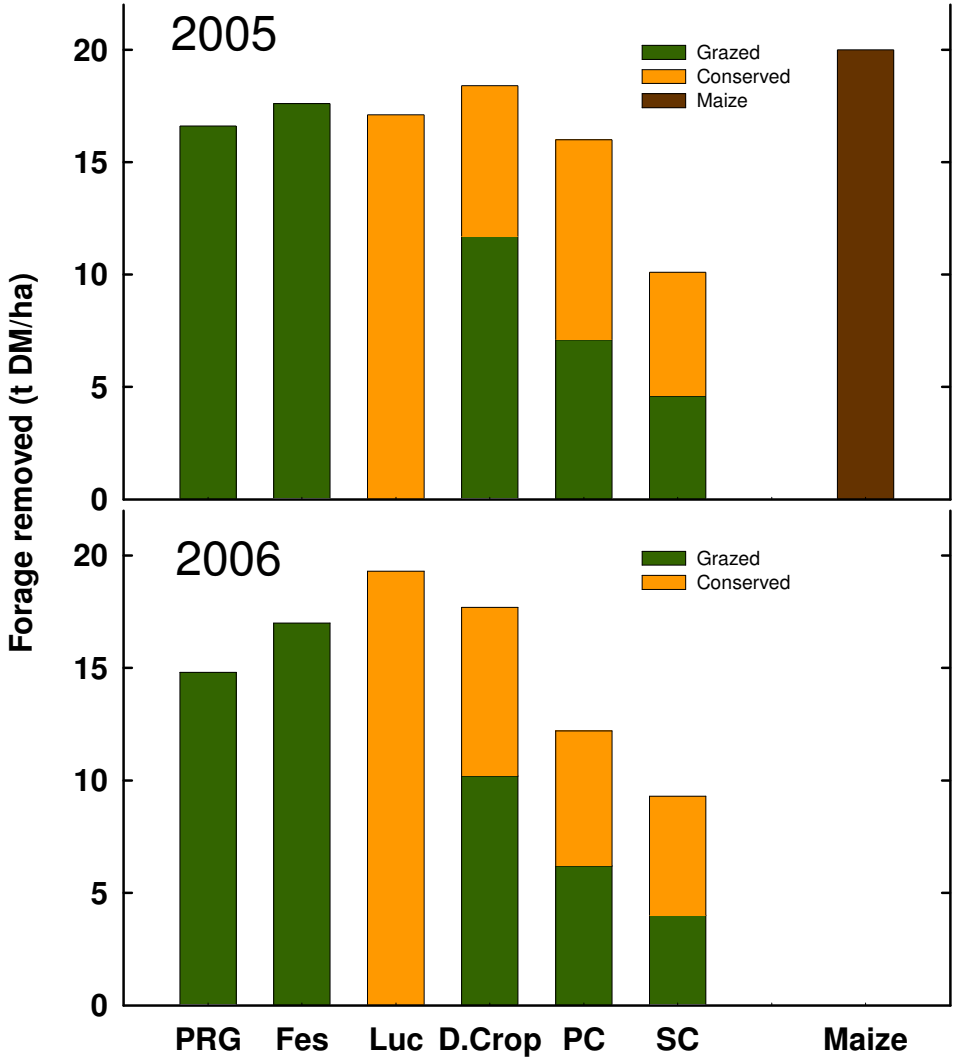
State Government Victoria

DEPARTMENT OF PRIMARY INDUSTRIES

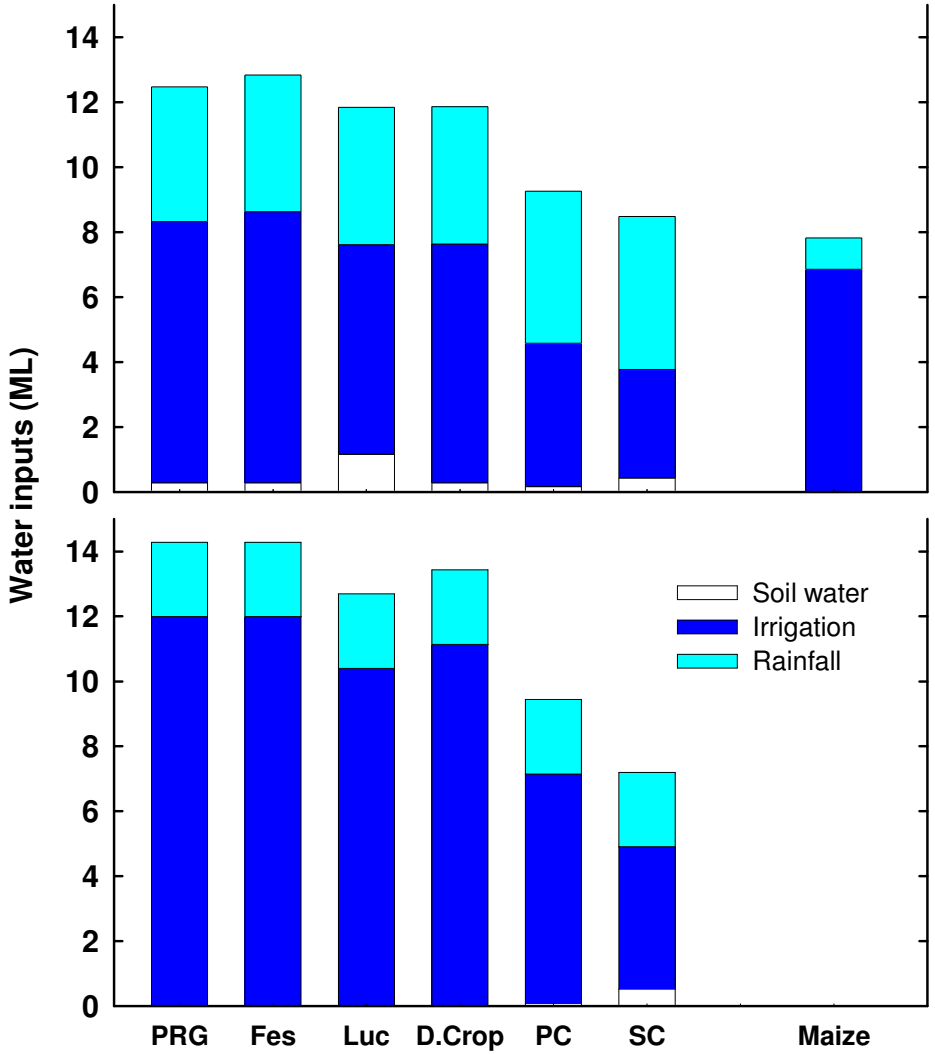
Northern Victorian studies

- Renovation of irrigated perennial pastures
  - Oversowing or resowing with annual or perennial ryegrass or tall fescue
- Soil amelioration to overcome subsoil limitations
  - Range of species and irrigation frequencies
- Comparison of forage systems
  - Onfarm monitoring of maize crops
  - Comparison of 2 annual, 1 double crop and 3 perennial systems
  - DM production, feed characteristics, water use and water productivity
- Current work
  - Variable irrigation of lucerne
  - Grazing management of tall fescue
  - Winter growing alternatives

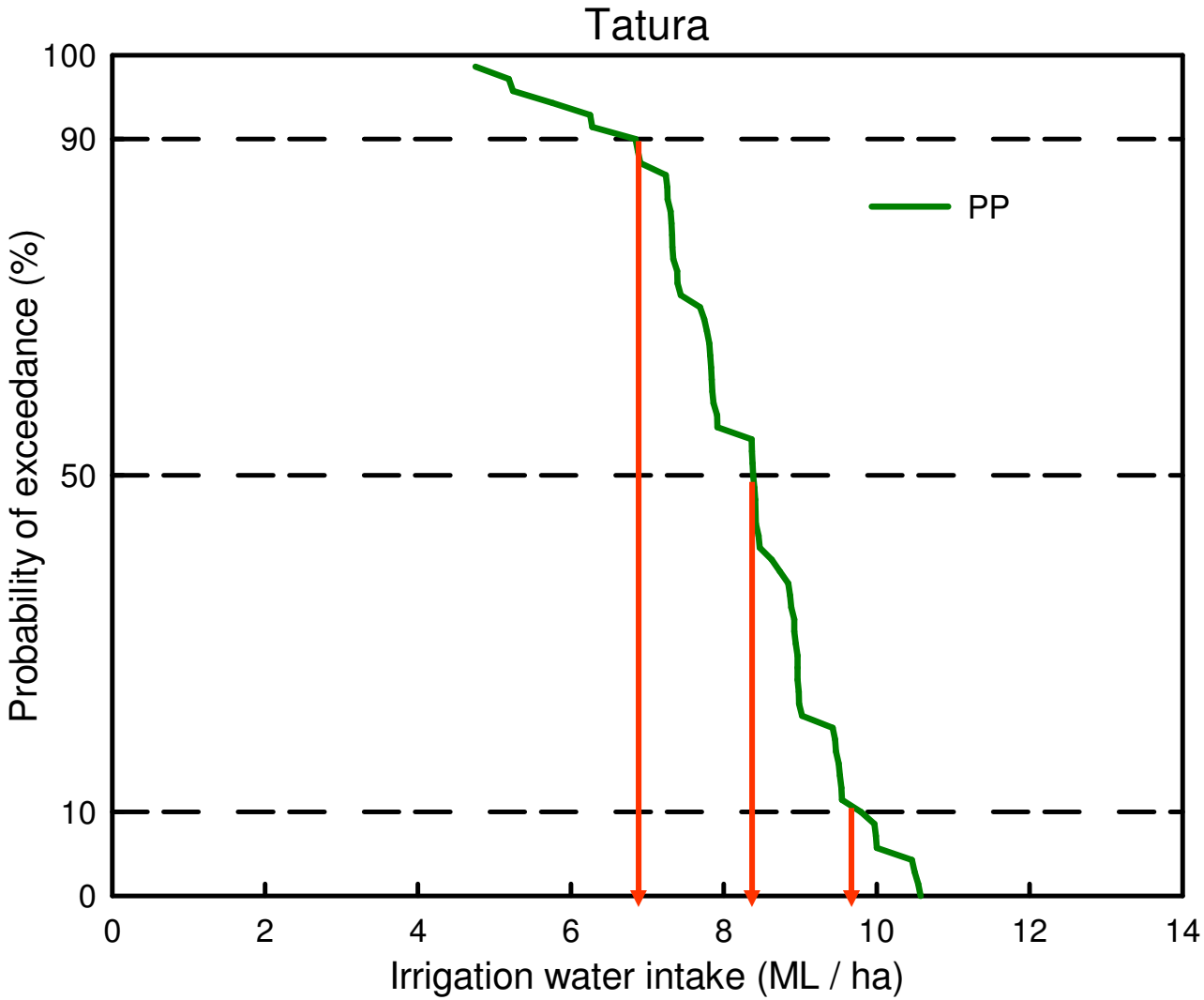
Forage systems - production



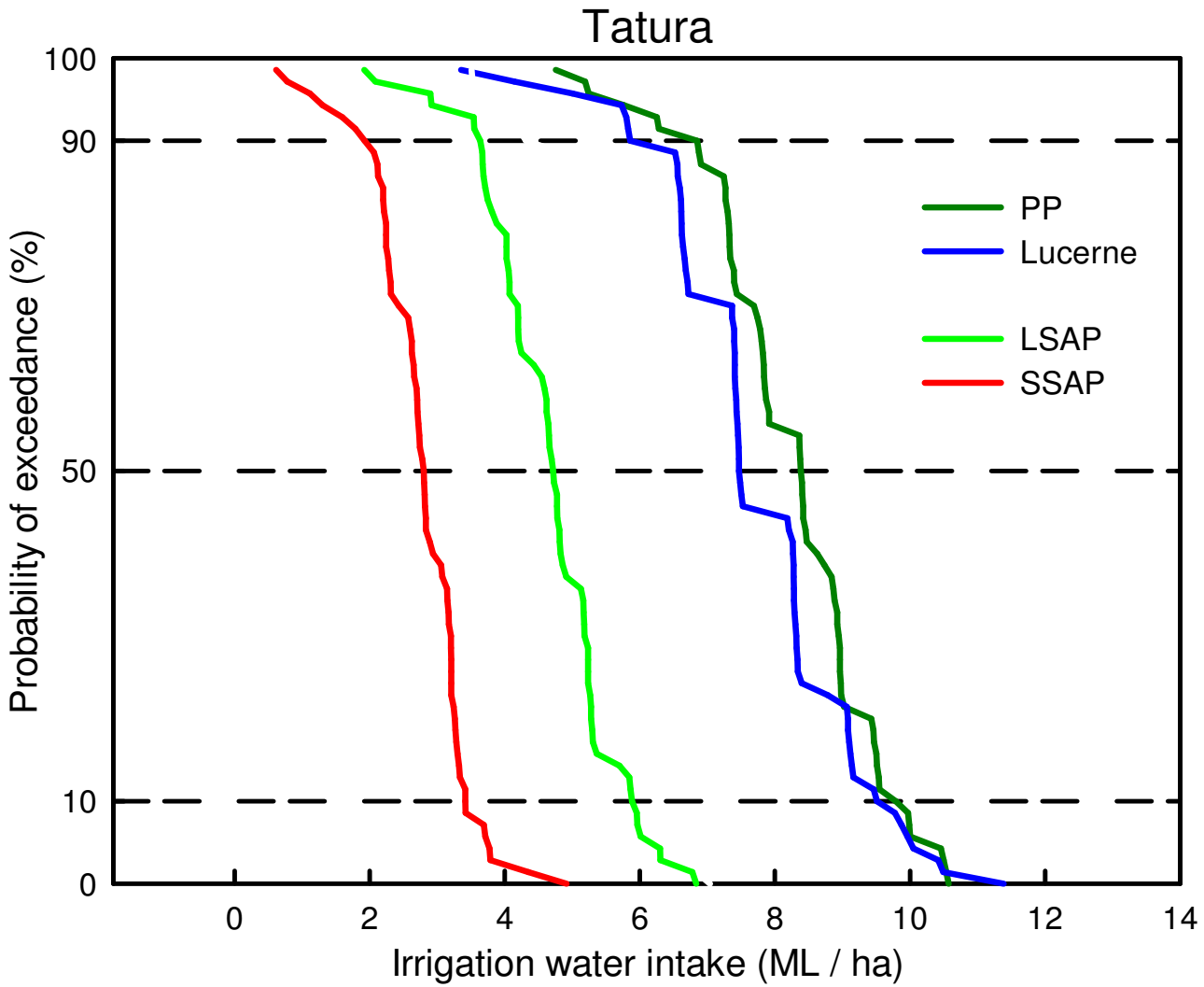
Forage systems – water use



Irrigation water requirements



Irrigation water requirements



Lucerne experiment

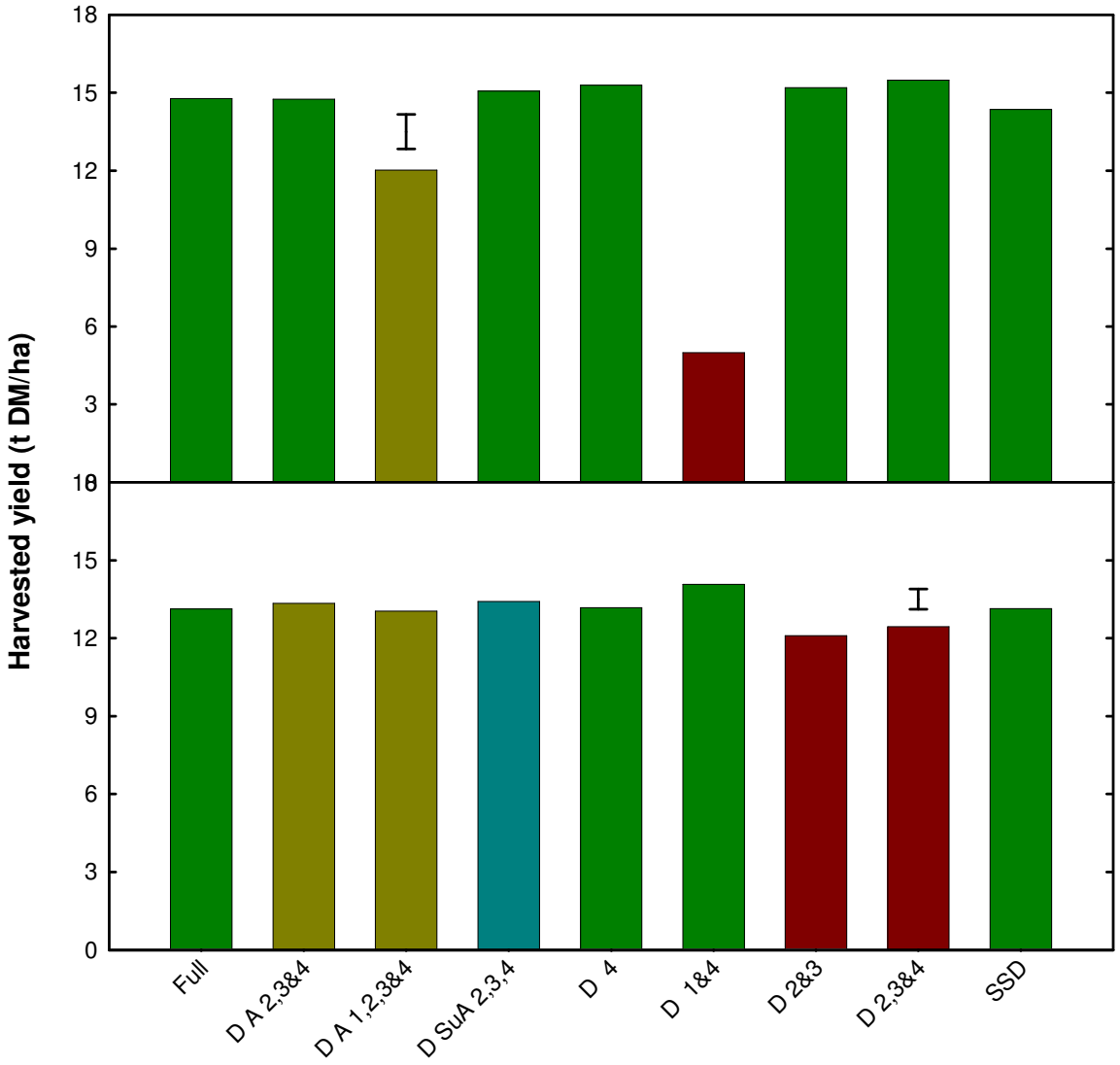
Treatments

1 Fully irrigated (70-90 mm E-R)
2 Dry Autumn years 2,3,4
3 Dry Autumn years 1,2,3,4
4 Dry Summer years 2,3,4
5 Dry year 4
6 Dry year 1&4
7 Dry year 2,3
8 Dry years 2,3&4
9 Sub Surface Drip

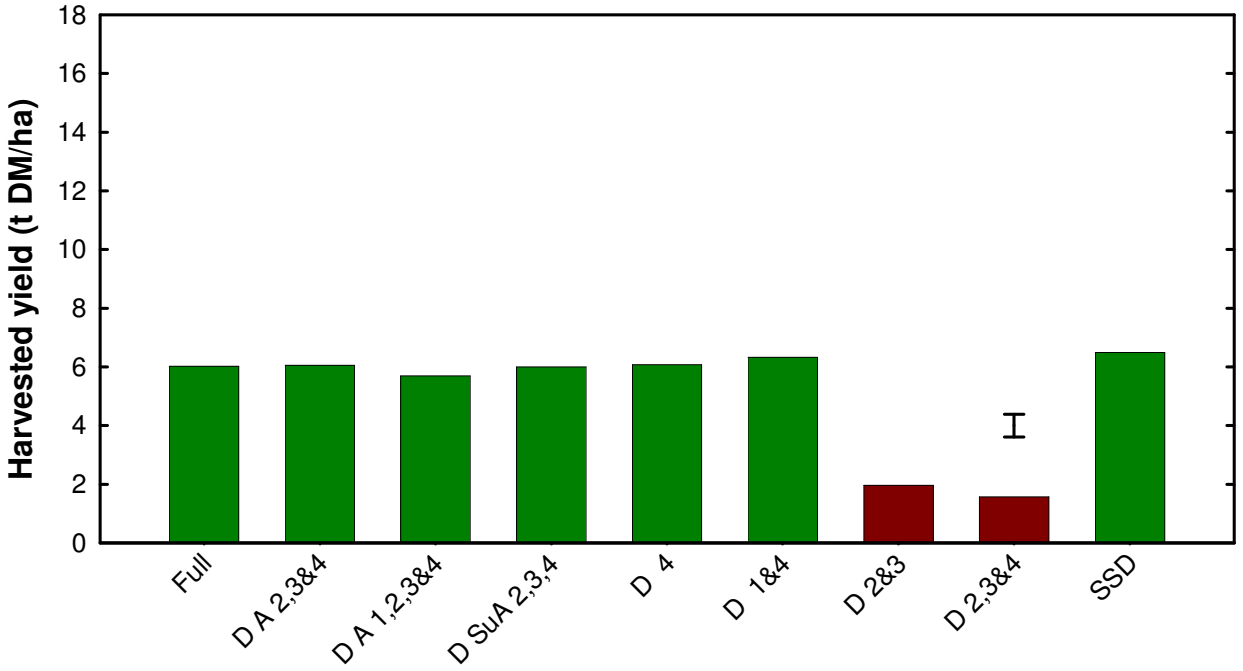
Sown April 2009 – SARDI 7 (moderate winter activity)
Treatments 1 - 8 border-check irrigated

Year 1 (2009/10)
All treatments to be fully irrigated in year 5 (2013/4)

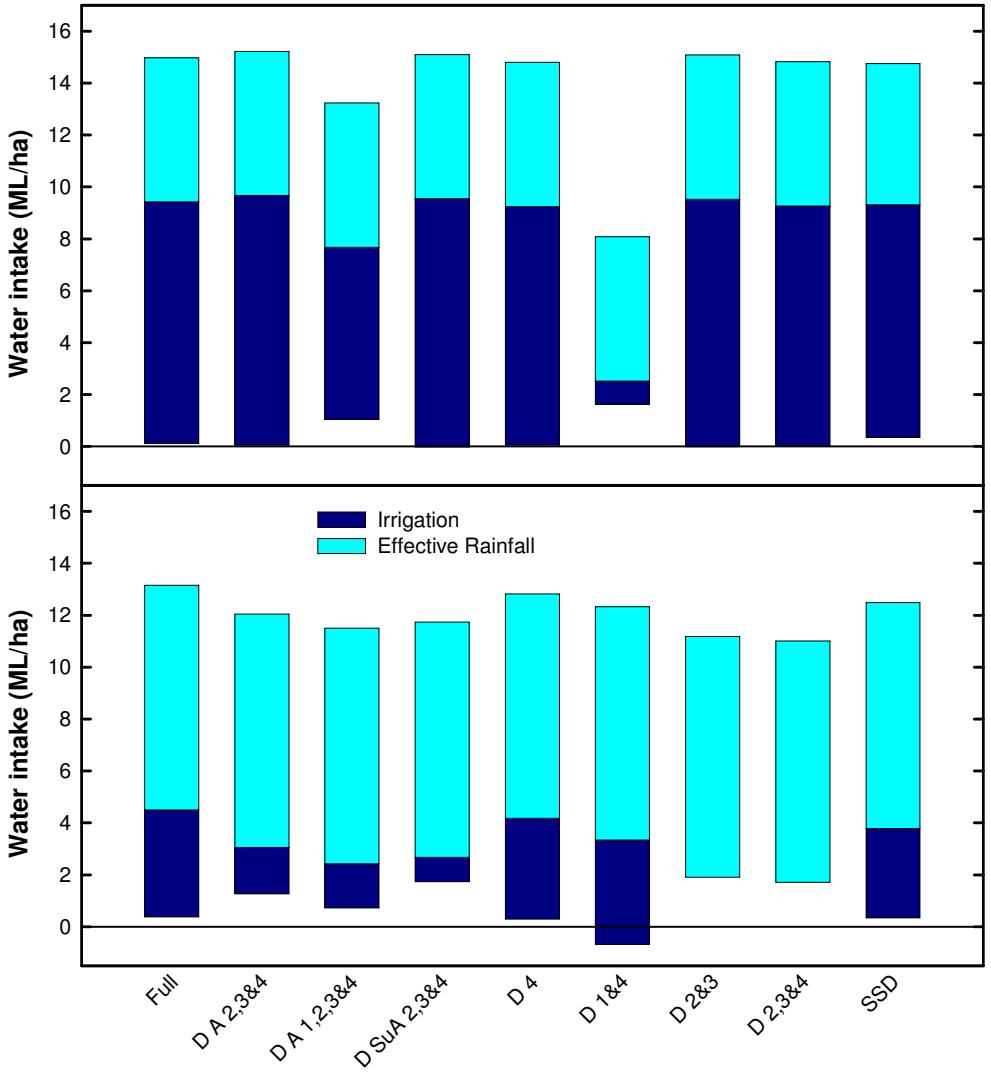
Lucerne yield (Year 1 and Year 2)



Lucerne yield – (Year 3) 2011/12



Water use (Year 1 and Year 2)



Future RD&E

- Ongoing need to work with farmers and service providers
- Place for alternate forages in the future feedbase
  - Improved understanding of
    - Plant x animal interactions – Finding the balance
    - Irrigation x forage interactions – better choices in changing circumstances
    - GHG impacts – adaptation and mitigation
    - Systems fit
- Management and risk complexities