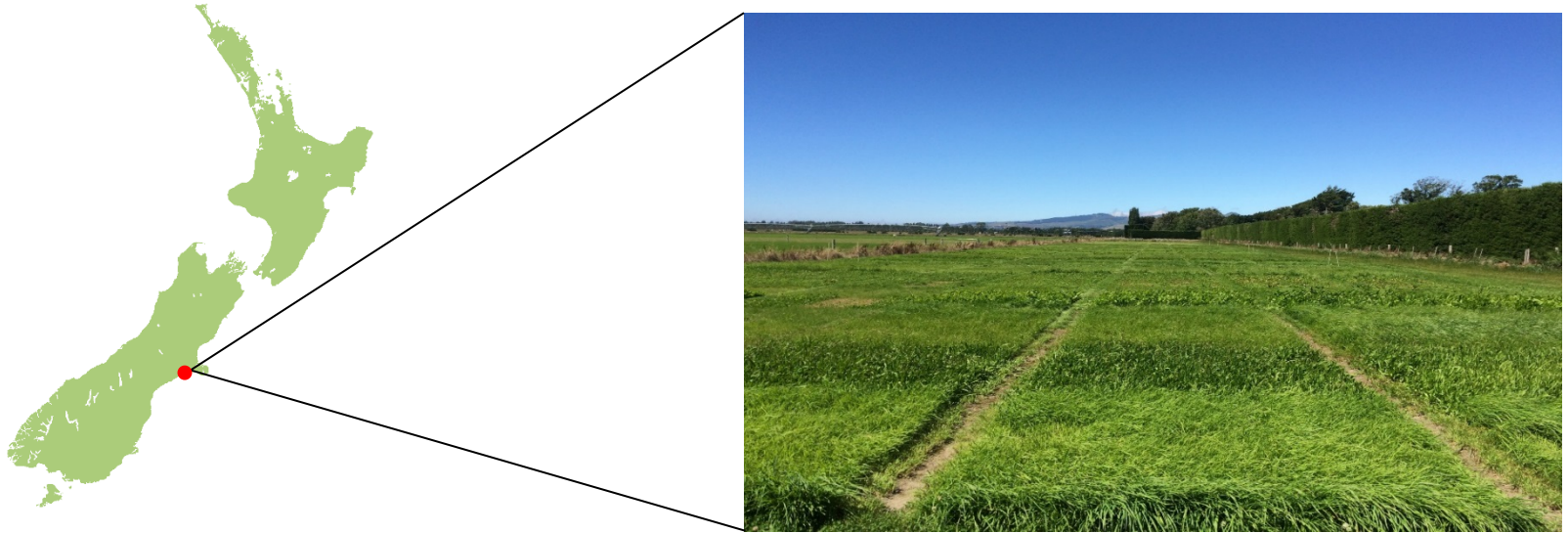


# N fertiliser effects on yield and N content in alternate pasture species

Kirsty Martin, Grant Edwards, Racheal Bryant, Miriam Hodge, Jim Moir, Keith Cameron



New Zealand's specialist land-based university

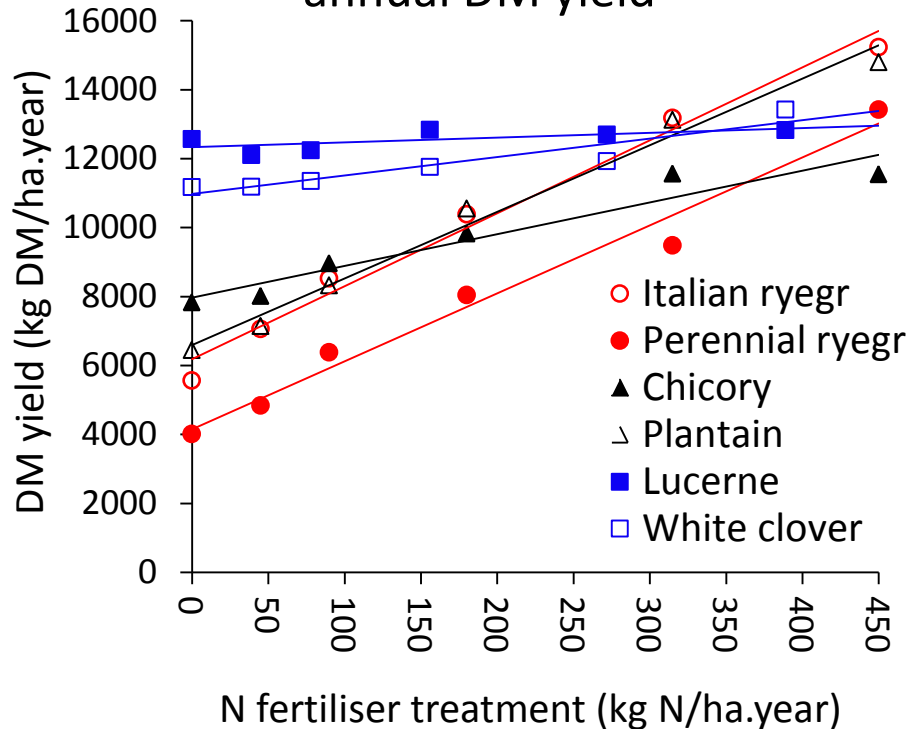
# Materials and methods

- Irrigated plot trial in Canterbury, NZ
- 6 pasture species (mono)
- 6 nitrogen fertiliser rates
- Cut and carry method
- Measured DM yield & N concentration

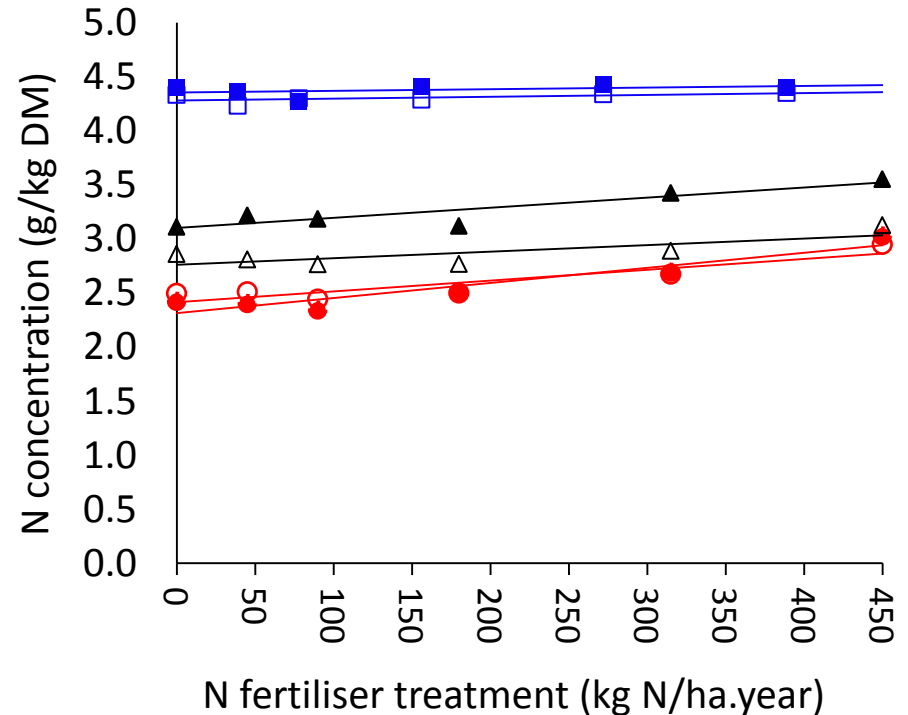
Pasture species	Functional group
Perennial ryegrass	Grass
Italian ryegrass	Grass
Chicory	Herb
Plantain	Herb
Lucerne	Legume
White clover	Legume

# Results

## Effects of N fertiliser treatments on annual DM yield



## Effects of N fertiliser treatments on N concentration



# Conclusion

Under irrigated Canterbury conditions:

- Legumes yielded more than other species at lower fertiliser rates and did not respond to N fertiliser
- Plantain and Italian ryegrass produced higher DM yields than perennial ryegrass and were highly responsive to N fertiliser
- N concentrations in the plant were highest in legumes, followed by herbs and then grasses