Yield of Italian ryegrass mixed with red clover and balansa clover

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Note:

This presentation was made on 7 Nov 2012 in Gore at the New Zealand Grassland Association Annual Conference.

It is associated with the following scientific publication:

Ryan-Salter, T.P. and Black, A.D. 2012. Yield of Italian ryegrass mixed with red clover and balansa clover. *Proceedings of the New Zealand Grassland Association*, **74**, 201-208. Online access: <u>http://www.grassland.org.nz/publications/nzgrassland_publication</u> <u>2293.pdf</u> Can Italian ryegrass/clover mixtures produce more high quality forage than straight Italian ryegrass?

- 2. Does this depend on the seed mix
 - species of clover
 - amount of each species



Mixture experiment

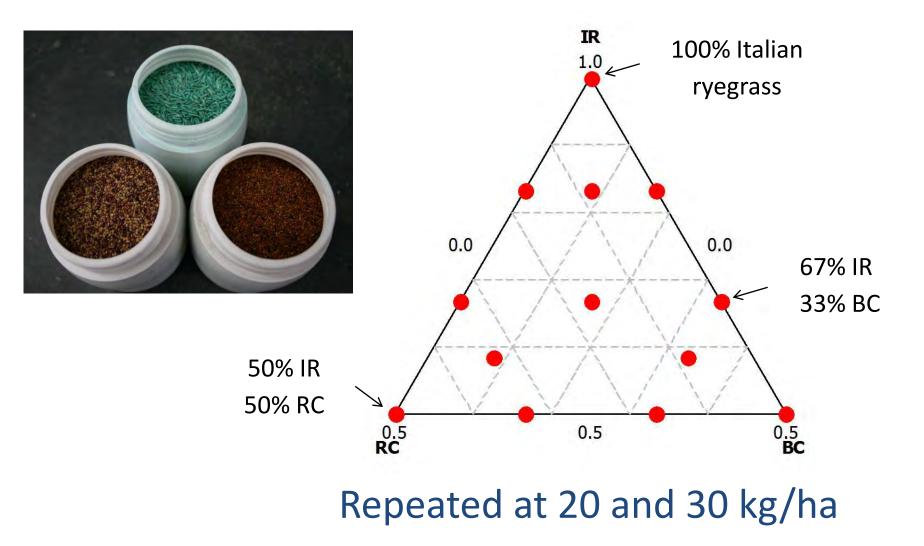
- Italian ryegrass, red clover, balansa clover
- 26 seed mixtures:
 - IR pure sward (1)
 - Two-species mixtures (6)
 - Three-species mixtures (6)
 - Repeated at 20 and 30 kg/ha



- Sown March 2011
- Yield and composition measured over 12 months



Mixture experiment

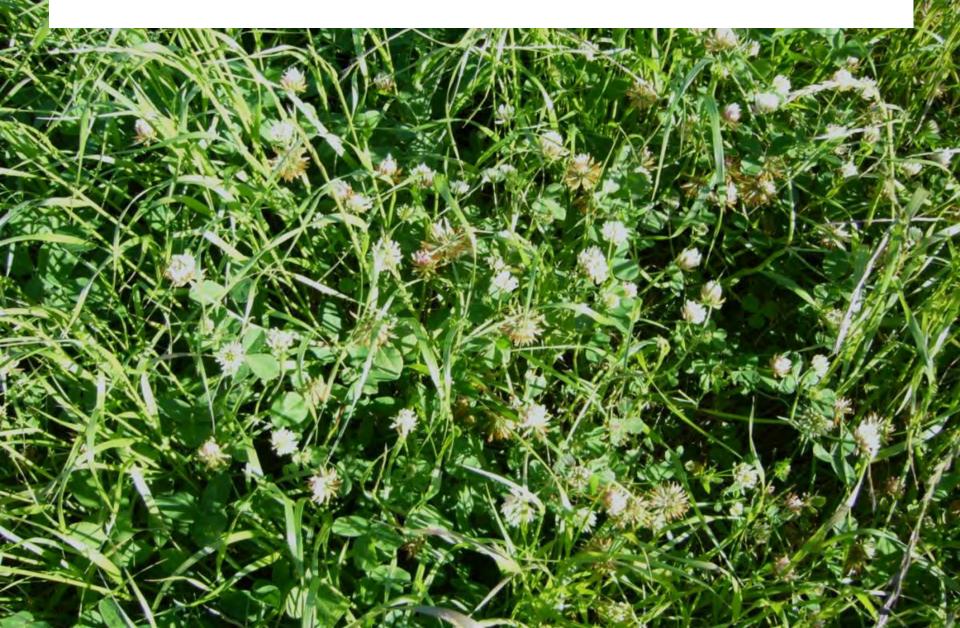


April 2011

July 2011

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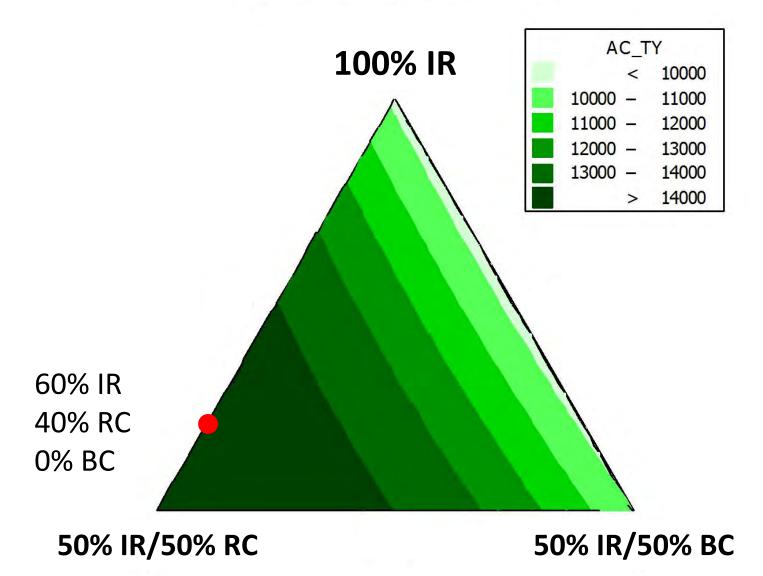
October 2011



February 2012

March 2012

Accumulated total yield



(Source: Ryan-Salter & Black 2012)

October 2012





Conclusions

- Italian ryegrass mixed with red clover gave 41% more yield than straight Italian ryegrass.
- There were no benefits from mixing balansa clover with Italian ryegrass.
- Italian ryegrass/red clover yield benefit was the same at 20 and 30 kg seed/ha.
- Optimum seed mix was 12 kg/ha IR, 8 kg/ha RC and no BC.

