

# *Dryland Legumes*

## *Workshop*

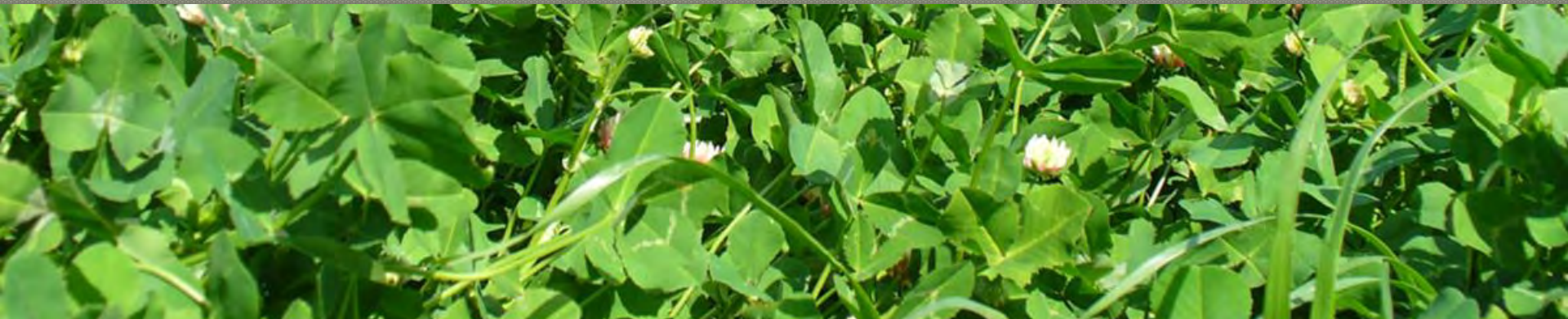
*Farmer experiences with increasing Legume*

Warwick Lissaman, 'Breach Oak', Seddon.

**Balansa Clover**



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## Balansa clover (*Trifolium michelianum* )

- Balansa is a top flowering annual, more winter active and relatively early flowering cf sub clover.
- Loves the wet areas, where sub clover doesn't thrive
- High Potential yield,
- Hollow Stem
- Must ensure seed set in first year to ensure continuation
- Small seed = seedling is also small and requires bare ground to get best germination and establishment.



# Warwick's Comments

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- Stock seem to like it, area where grows best is the wettest part of paddock, ewes and lambs tend to avoid wet under foot conditions suggests to me that animal production limited by soil conditions not the plant palatability.
- High potential yield if shut to allow to flower and set seed, hay opportunity once seed mature, or standing grazing for cows and calves, Hollow stem means it tends to lodge.
- All annuals must set seed in first year, Hard seed enables some seed to be viable for a number of years after seed mature.
- Small seed = seedling is also small and requires bare ground to get best germination and establishment, Pedro Evans says “flog it hard”, create the scorched earth situation

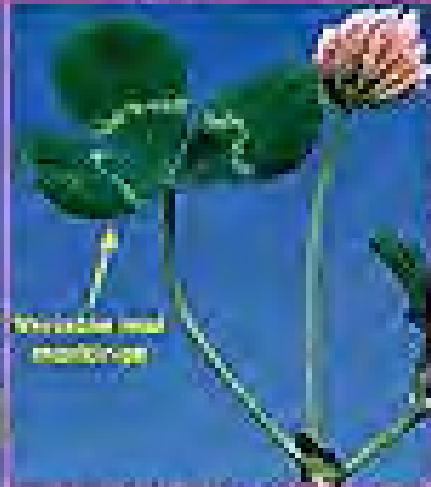


# Balansa ID

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**BALANSA CLOVER**  
*Trifolium michelianum*

L1  
**LEGUME**





+The Pines Paddock,  
+ Over-sown with Balansa and Sub March 2008, and  
allowed to seed Nov 2008 and some flowering in 2009  
+ Photo 16 Oct 2010, Scale is a 30cm ruler

## Warwick's Comments

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- The Pines Paddock, - not much clover in 2007/08
- Grazed paddock from Oct 20 – Nov 12, initially stocking rate making little impact so increased mob size, shifted two days late as paddock almost bare when left, thought I had stuffed it



'Pine paddock'  
23 Nov 2010



**This paddock had been hard grazed (too hard) only 10 days prior**

**'Hill Top' paddock, 23 Nov 201**

- **Sown Mar 2010**
- **Had been shut since 30 Sept, approx 1 month,**
- **Balansa dominates in the wetter patches, smothering the volunteer grasses like barley grass**



**'Hill Top' drier end of paddock  
photo 23 Nov 2010**



- Photo doesn't do it justice, was able to find plants with stems 1.2m + in length.
- Hollow stem means it tends to lodge, shutting up also means allowing things like barley grass to seed also.
- Balansa flowers browning off, but not yet mature enough to graze.

# Build seed bank in first year



**Early flower – late Sept**



**Late flower – mid Oct**



**Seed maturing – early Nov**



**Mature seed – late Nov**

# Warwick's Comments

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## ◉ Key messages:

- Need to shut to allow to re seed in 1<sup>st</sup> year
- Flowering from late September, once two-4 flowers per stem have set and matured seed, grazing of hay can take place.



# Balansa Clover



- At home
- 2<sup>nd</sup> and 3<sup>rd</sup> year management
- Scorched earth best
- Potential uses,
  - Wet Areas
  - Companion plant

# Warwick's Comments

- Appears to be at home in immediate environment, and is turning up around the farm in areas not sown; maybe better suited than sub clover in some cases — where soil types are wet in winter but are droughty in summer months.
- Cattle appear to hold a critical dispersal role, as would hay.
- If grazed during flowering in 2<sup>nd</sup> and subsequent years, some reseedling will be required, (with moisture) will throw up flowers into the summer months, let something mature.
- Too much cover in wet summers, means less seedling establishment following autumn
- Potential uses:
  - include areas too wet for lucerne, or parts of lucerne paddocks
  - with annual rye or cereal,
  - on own prior to summer brassica;
  - into runout lucerne;
  - broadcast onto hill especially when pastures open following hot summer / autumn drought.

# Balansa Clover



Wet area in foreground of new lucerne paddock 2011/12

## Potential Uses:

- Probably not a good companion in lucerne seed crops – what if grazed??.
- What is the companion plant for the legume?
- So often we hear that 2-6 kg/ha clover is sown with 15-20 kg/ha of grass; rarely do we hear, I sowed 10-15 kg/ha of clover and 2-6 kg of grass.
- Opportunity knocks?

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