

Dryland Legumes Workshop

*Farmer experiences with increasing
Legume*

Chris Dawkins, The Pyramid, Waihopai Valley.

Arrowleaf Clover



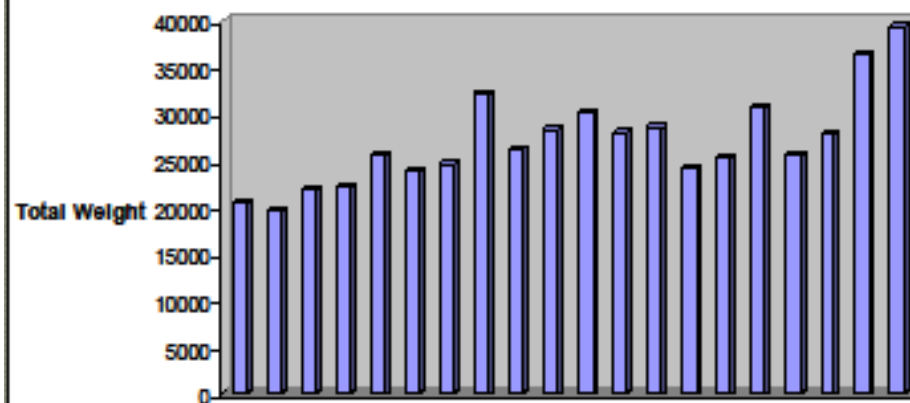
The Pyramid

- 445 ha, summer dry
- Built up the soil fertility levels to dairy farm levels, but need to increase production
- Need a high quality late spring/early summer legume to meet the specifications of a lamb supply contract.



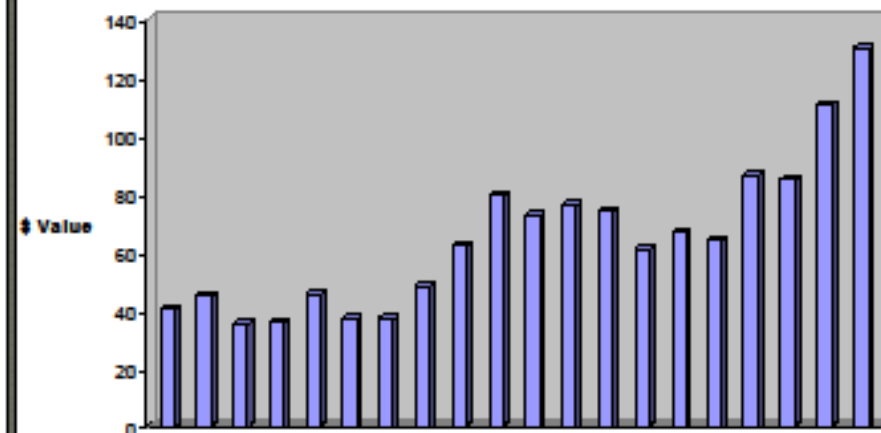
Total lamb carcass weight & \$\$ per head for Pyramid lambs

Lamb Performance



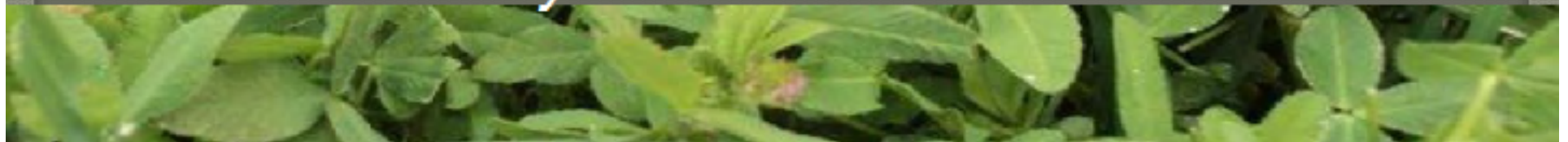
Years 1992/93 - 2001/02

Lamb Performance



Pasture Persistence Programme

- ◉ Carried out by AgResearch with funding from M&WNZ
- ◉ What are the limiting factors to drought tolerant pasture plants?
- ◉ *Found that management was the limiting factor, not necessarily climate or species or soil fertility.*



Pasture Persistence monitoring results



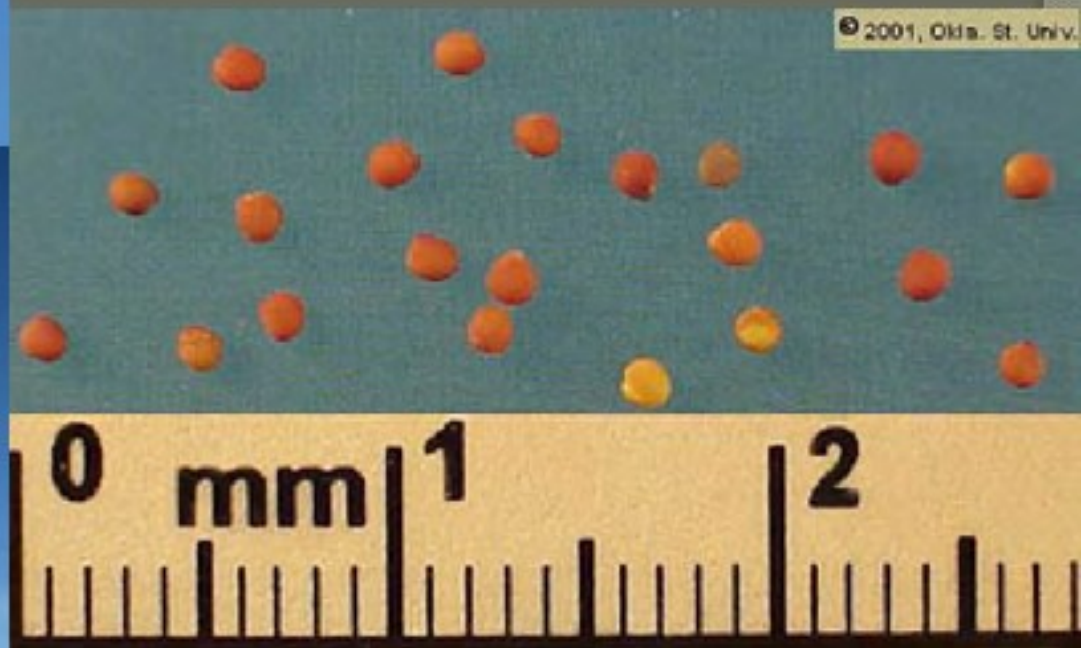
Why not use a better performing annual legume other than white clover?

Arrowleaf clover (*Trifolium vesiculosum*)

- **Plant:** temperate annual legume. Thick hollow stems reaching one metre in height.
- **Leaves:** Trifoliate, with leaflets up to 6 cm long & 3 cm wide, pointed at the tip.



Flowers and Seeds





March 2009

Field day at the Pyramid
standing in paddock of
Arrowleaf.

Same paddock...
Cut for hay in 2012



How is Arrowleaf used?

- Use to bridge a gap between sub clover peak (late Nov) and the lucerne (used when the Arrowleaf runs out).
- Wean lambs onto the Arrowleaf.
- Starts flowering early December (only allow Arrowleaf to reseed 1 year in 5).



Trials and Tribulations – lessons to be learnt.

- Wet Feet
- Scotch and Winged thistles
- Sensitivity to herbicides
- Management plan







