

Breeding for Disease Resistance in Sheep

Produced for the CRC for Premium Quality Wool undergraduate program by; Dr. Rob Woolaston & Dr. Sandra Eady, CSIRO Animal Production.



Threats to existing control measures

- Gastro-intestinal parasites
 - Anthelmintic resistance
- Sheep Blowfly
 - Animal welfare issues (mulesing)
 - Pesticide residues
 - Resistance to pesticides
- Lice
 - Pesticide residues
 - Pesticide resistance



Breeding for disease resistance - What is the down-side?

- Extra trait to improve
 - effect on selection pressure
 - correlations with production traits
- Physiological cost?
- May need to deliberately challenge
 - Challenge varies spatially and temporally
- Difficulties with economic weights



Other complications

- Alternative control measures uncertain
- Production losses difficult to quantify
- Treatment costs usually non-linear
- Distributions rarely continuous or normal