

# Worms in lambs on Irrigated pasture

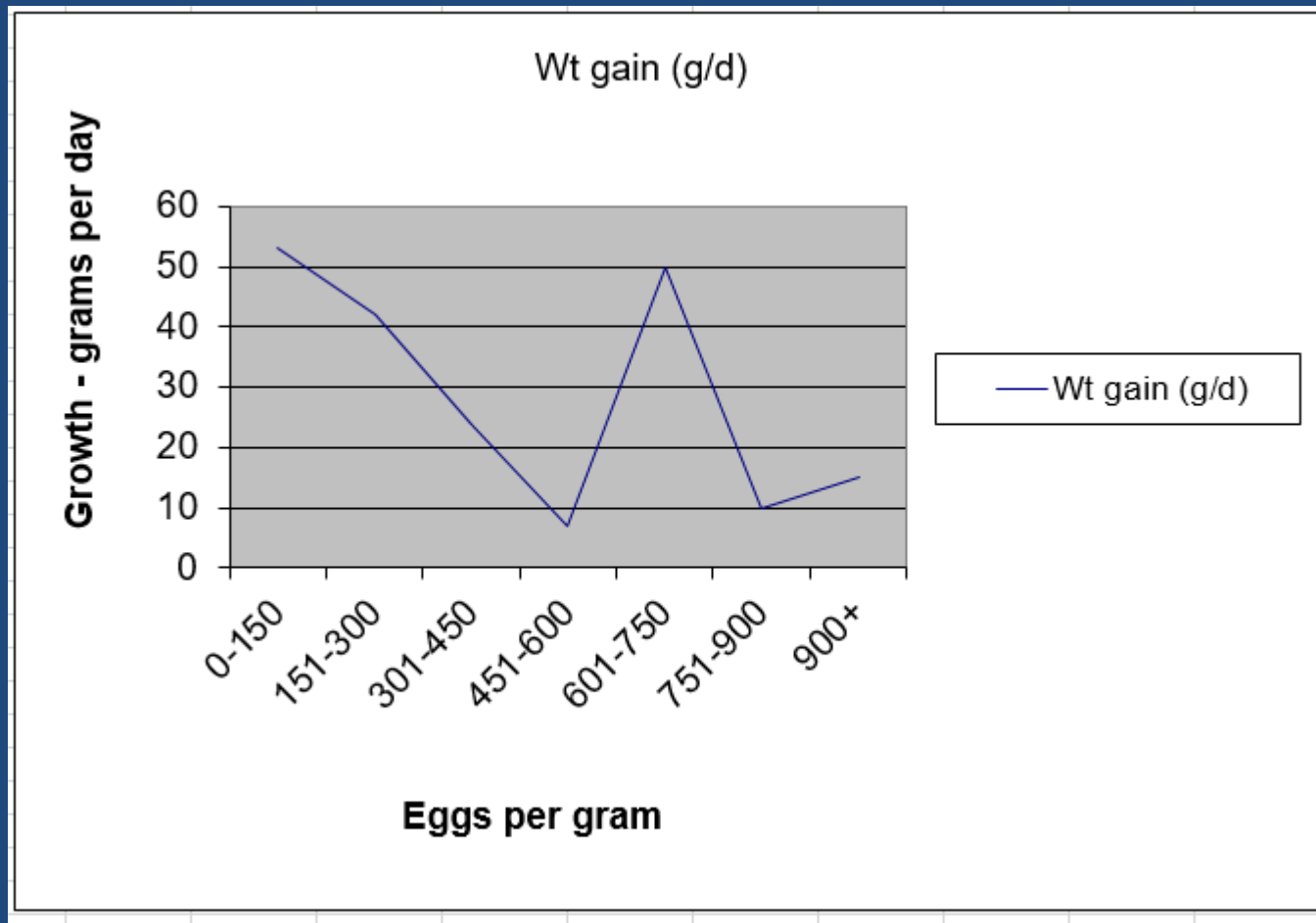
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# Outline

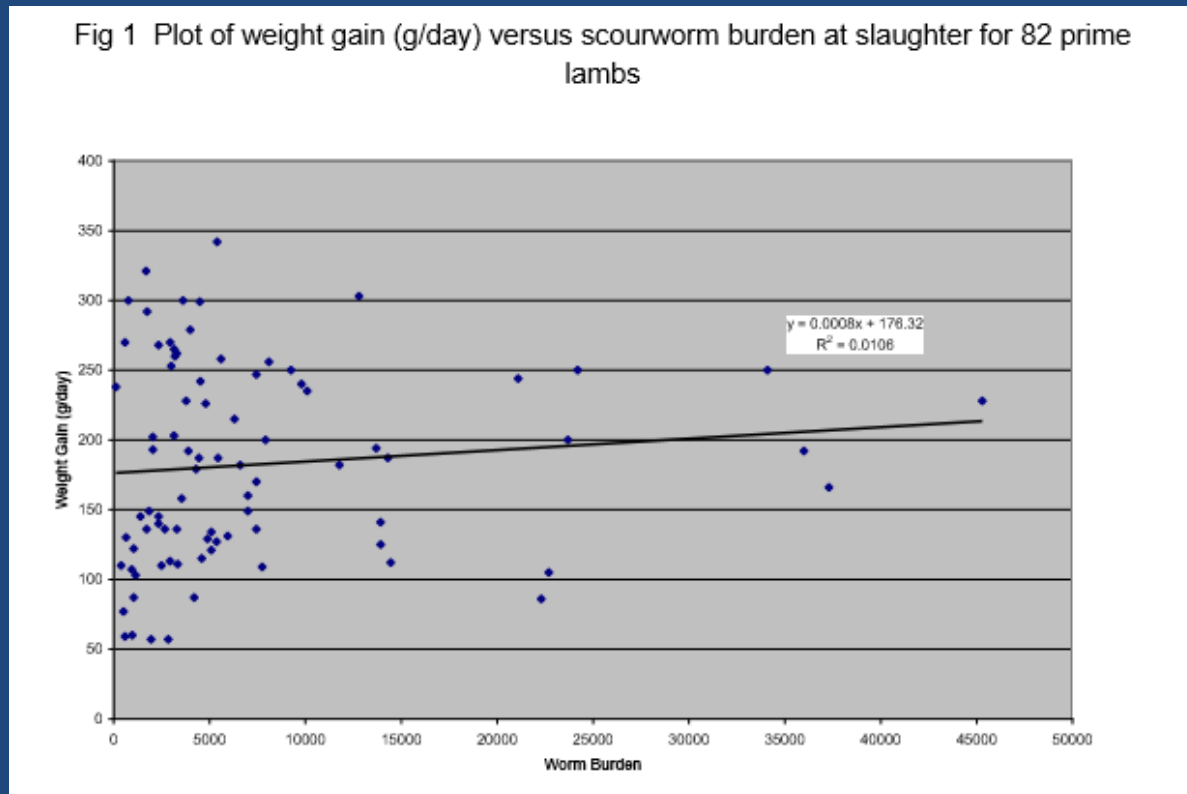
1. What sort of worm burden affects growth rate?
2. What worms are likely in summer/autumn on irrigated pastures and how do we monitor them?
3. Control programs

# What burden reduces growth?



# Correlation between total worm count and growth rate

- Carmichael, South Australia



# Total worm count and faecal egg count

Table 1 Mean worm egg counts (eggs/g faeces) on farm and at slaughter for 66 prime lambs in relation to increasing total Scourworm count

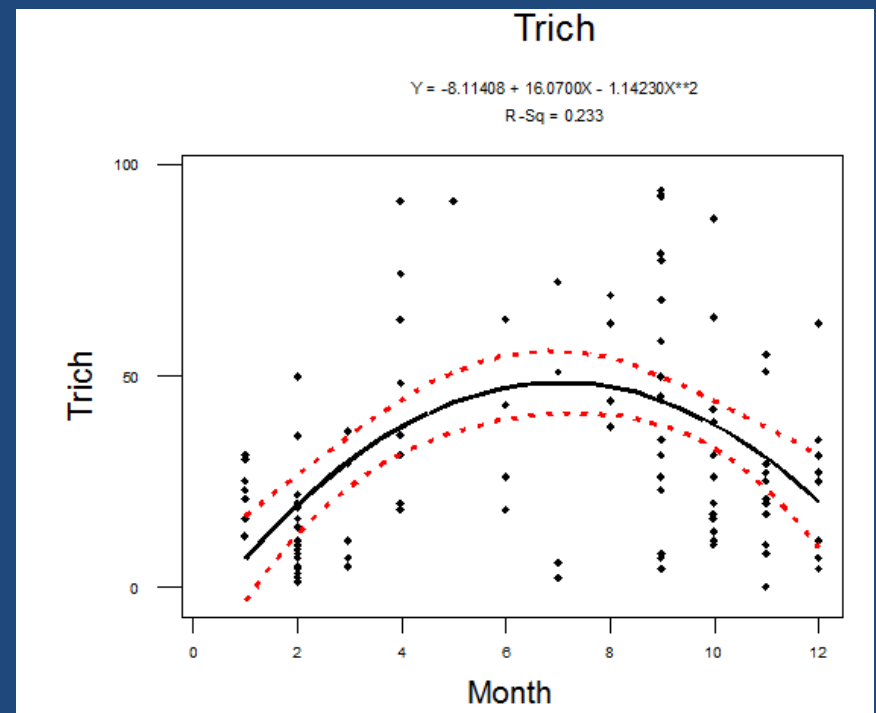
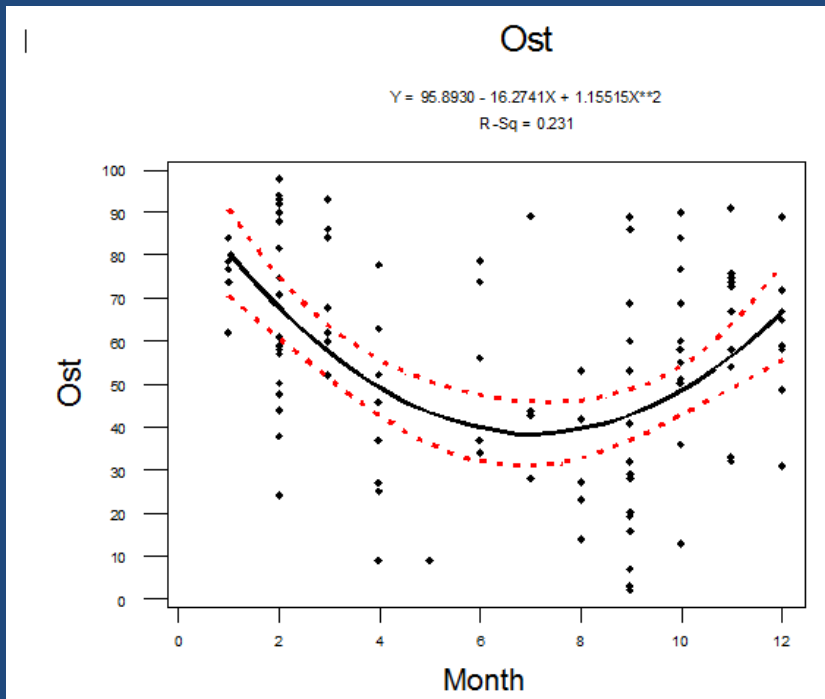
<b>No. of lambs</b>	16	19	14	11	6
<b>Total worm count</b>	<2500	2500-5000	5000-10000	10000-25000	>25000
<b>Field WEC (range)</b>	64 (0-250)	180 (0-625)	220 (0-675)	425 (100-975)	1119 (650-1550)

# South Australian examples

Table 2 Growth penalties from worm infections and environmental factors associated with faecal worm egg counts in prime lamb production enterprises in south-east Australia

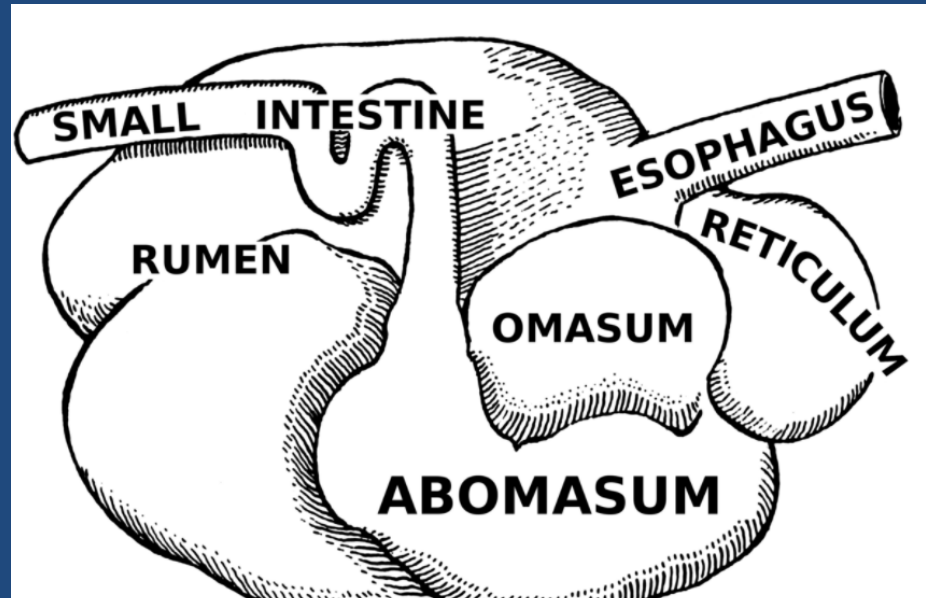
No. <sup>a</sup>	Start weight (kg)	Period (days)	WEC <sup>b</sup> (range)		Growth <sup>c</sup> (g/day)	Penalty <sup>c</sup> (g/day)	Comments (weather, management, pasture details <sup>d</sup> , worm burdens - TWC <sup>e</sup> )
			Start	End			
1a	39	27	33	95 (0 - 600)	272	7	Placed on contaminated paddock with heavy challenge of 3000 l/kg falling to 300 l/kg. Minimal penalty initially, but serious damage done. Adverse effects of pasture decline (high NDF and low ME), hot weather, shearing. TWC only 5700 worms. Overall penalty 33 g/day.
1b	47	49	95	266 (0 - 700)	123	47	
2a	22	49	0	206 (0 - 700)	246	2	Lambs weaned after 39 days but not drenched. Initially exposed to 2000 l/kg then average of 500 l/kg. Early good quality pasture. Entered summer with rising worm burdens. Serious stress of shearing in hot weather. Pasture decline after 2 months. Overall penalty 29 g/d.
2b	34	28	206	498 (100 - 925)	130	62	
2c	38	36	498	717 (50 - 2025)	48	39	

# Watch for brown stomach worm and barbers pole worm



# Barbers Pole worm

- A wet summer parasite

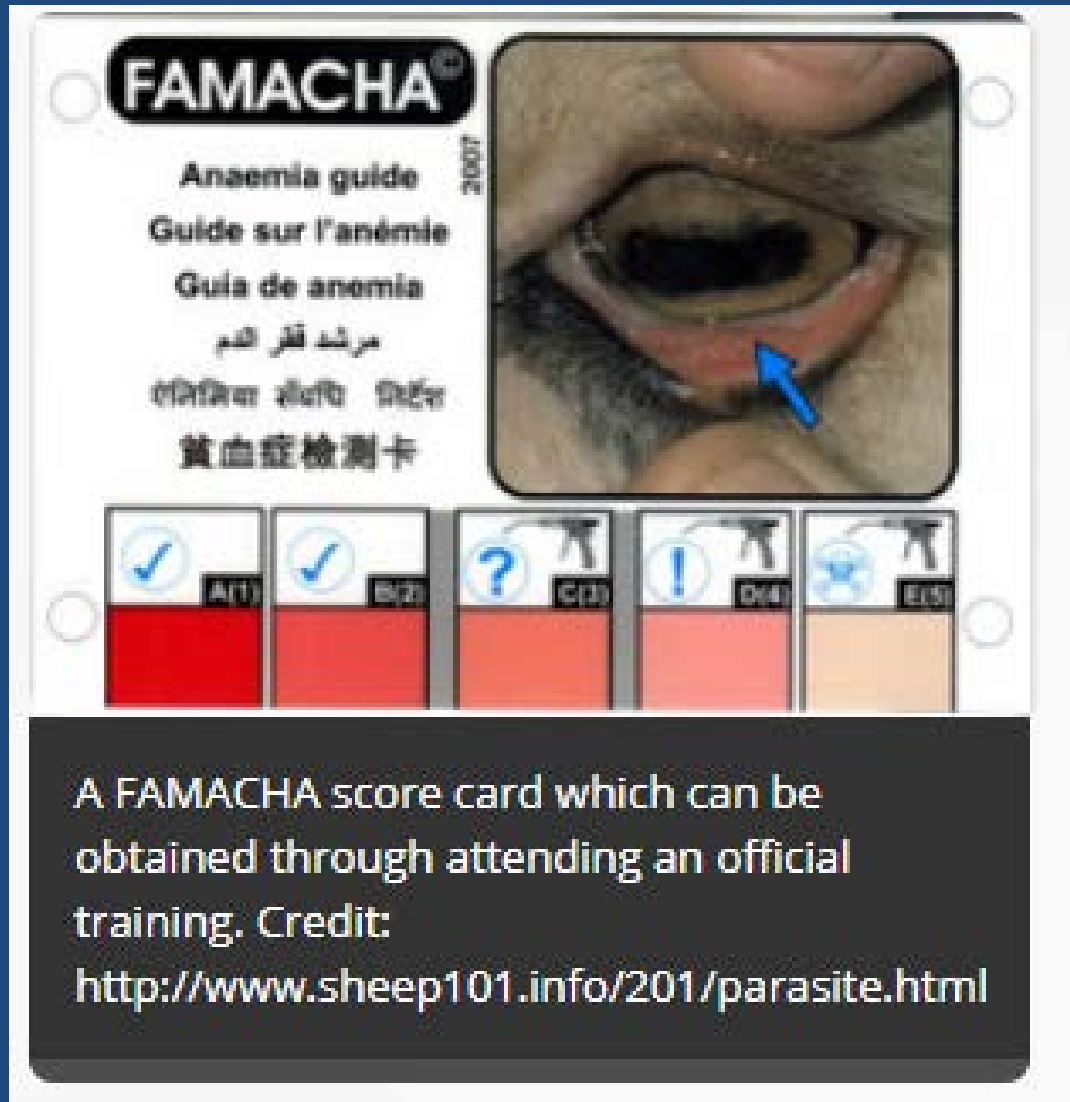




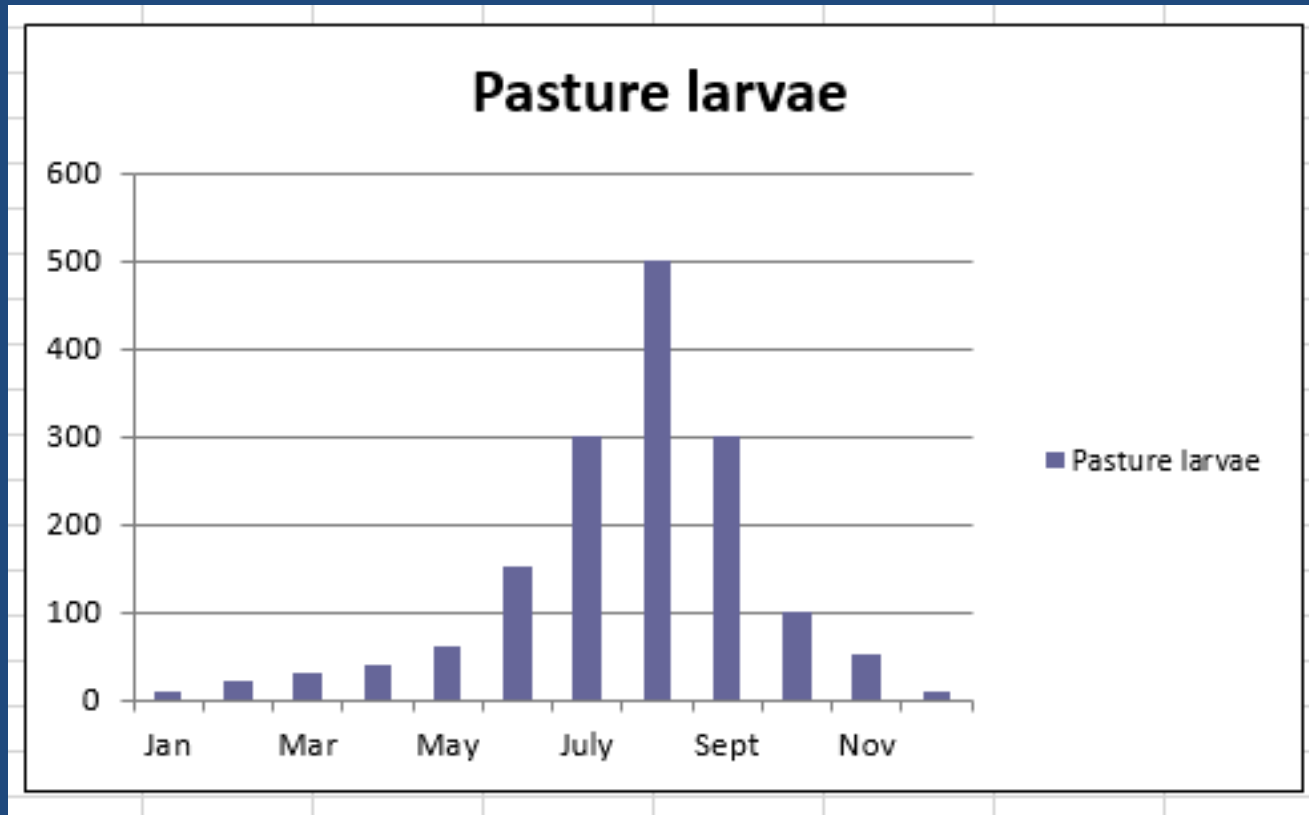
# Fluke



# FAMACHA



# Will irrigation create more summer/autumn worm problems?



# Carmichael, South Australia

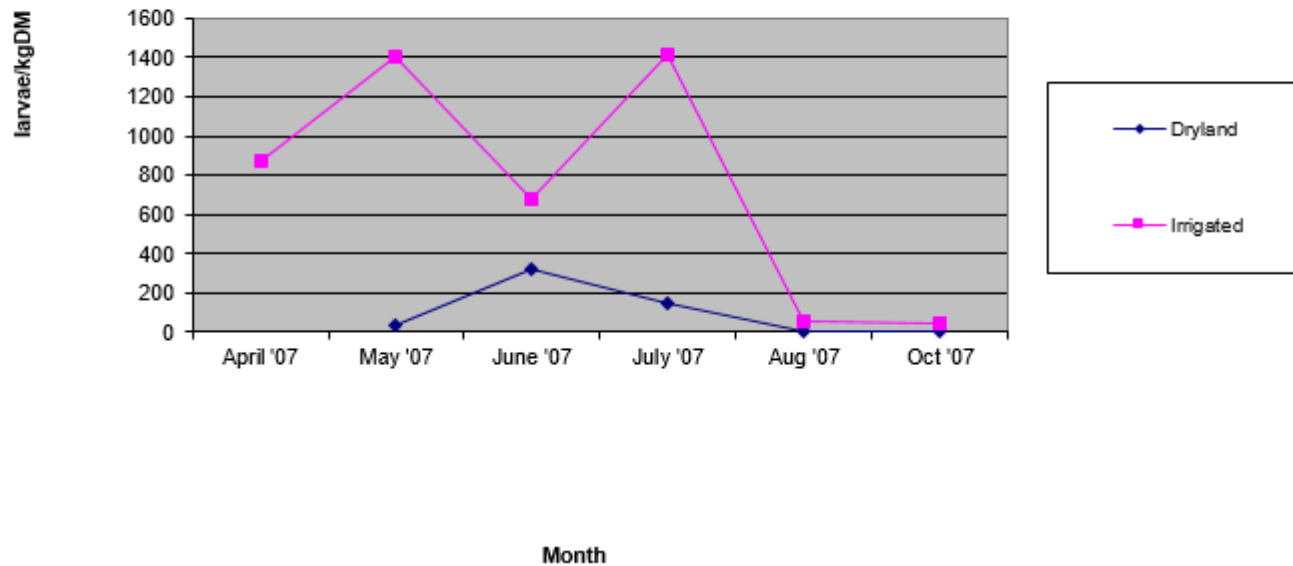
- “Irrigated paddocks have similar patterns of worm infection to dryland and are not as dangerous as perceived”

# Larval ecology, Tasmania

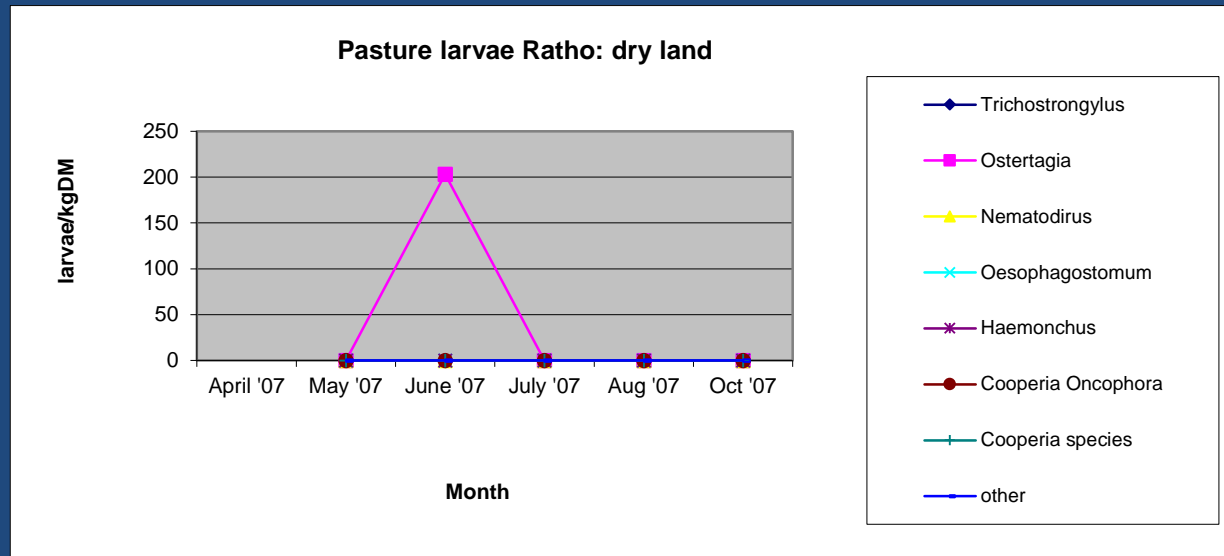
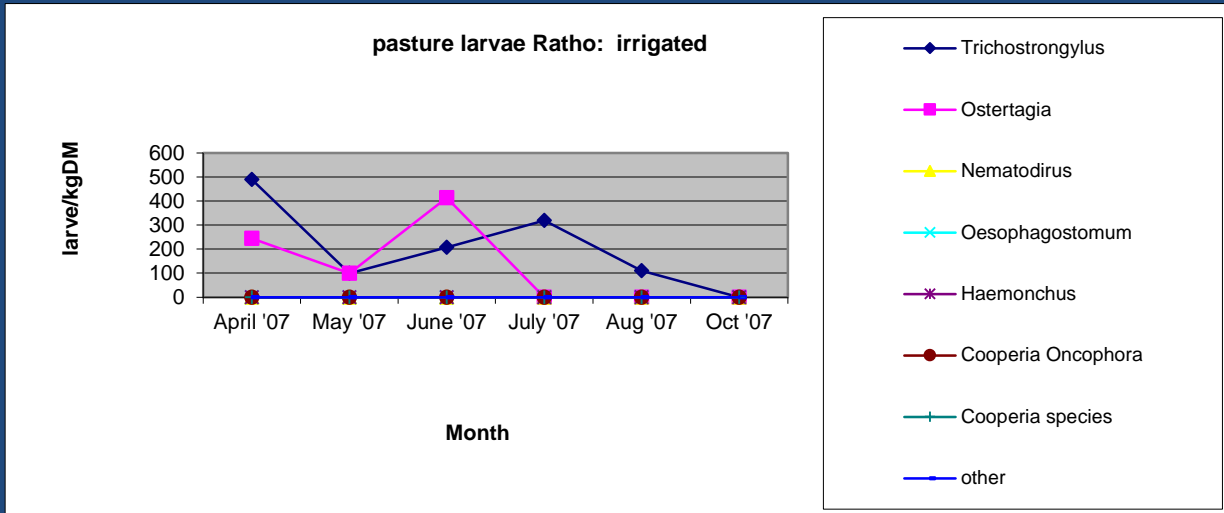
- Most worm larvae die out on pasture between August and December, no matter when deposited.
- Dec to April contamination produces the mid-winter peak in pasture larvae.
- Dryland – larvae wait in pellets, irrigated they migrate to pasture immediately.

# Bothwell 2007

Pasture larvaeBothwell: average



# Bothwell irrigated vs dryland Ratho







# Control programs

- Weaning Drench – must be effective drench
- Make sure your drench is working – re-sample at 10-14 days after drench.
- Monitor epg and growth rates at 3-4 week intervals
- Sample 'tail' separate from average lambs in large mobs.
- Treat with effective drench if  $\text{epg} > 400$  epg and  $\text{GR} < 200\text{g/day}$

# Clean paddocks

- A spell of 8 weeks before lambs go in helps a lot
- Hay/silage cutting in spring before lambs go in
- Cattle (over 18 months of age) grazing
- Must drench with effective drench as lambs go onto clean paddocks
- Ryegrass may be higher risk than Lucerne or clover – monitor more closely

# Questions?

