What is the real value of selecting sheep for Resistance to worms?

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There is a steady swing towards understanding the value of selecting sheep for worm resistance. More flock breeders are selecting for low PWEC or YWEC breeding values and more ram breeders are providing this important information. Interestingly this trend is happening in wool, terminal and maternal flocks, as post weaning growth is valuable.

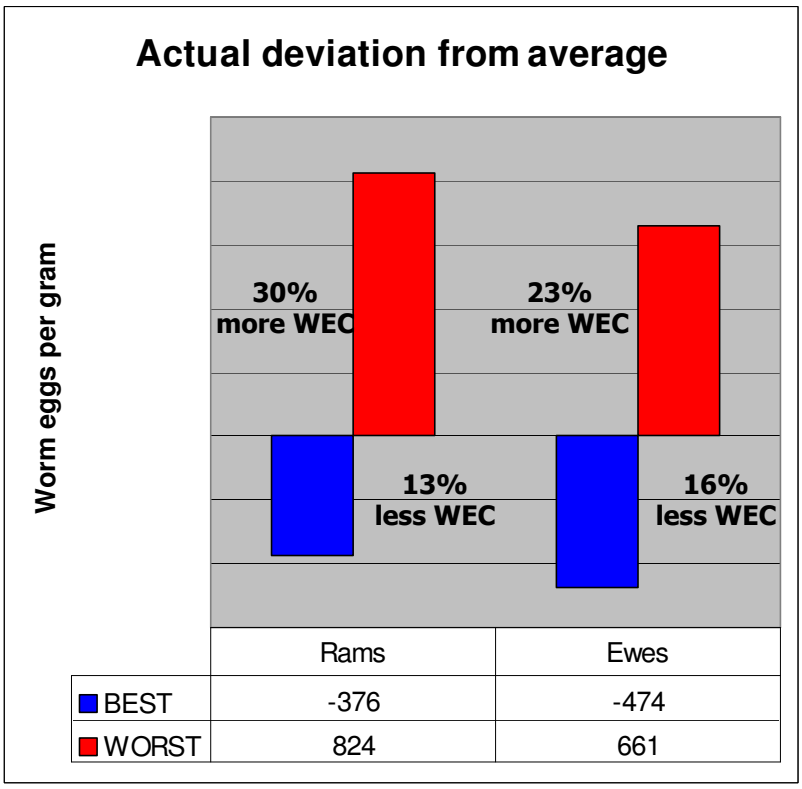
At Petali we are paying most attention to PWEC (post weaning worm egg counts) between 7-10 months of age. This is usually when we test the full drop of our young sheep for WEC and the autumn/winter is a period of significant worm challenge for weaners.

But is this a feel good exercise, or maybe just a marketing opportunity?

A real example of WEC selection

Following is an exercise to quantify the actual differences of Petali sires used in the 2007 drop (2009 sale rams), and show that selecting for low WEC can create significant changes in weaners during their first year.
Take the best 8 Petali sires for PWEC and compare with the worst 2 sires for PWEC;
BEST PWEC ASBV: -59, -56, -55, -49, -46, -45, -42, -38; averaging -49 (top 10% of breed)
WORST PWEC ASBV: +20, +16 averaging +18 (bottom 15% of breed)

The chart below shows the raw data averages from the progeny groups sired by these sires in 2007.



	Rams	Ewes
BEST	-376	-474
WORST	824	661

The rams sired by the BEST PWEC sires had 43% less Worm eggs (1200 less epg).

The ewes sired by the BEST PWEC sires had 39% less worm eggs (1135 less epg).

Our recommendation:

If you breed sheep in an environment where worms are limiting optimal production and may impact on animal welfare, then it is important to consider selecting rams with as low WEC ASBV's as you can. Genetics are a long-term investment, but you will return dividends in the first year.