**Cattle field drench test protocol (Faecal Egg Count Reduction Test)**

Cattle drench efficacy testing is best done at the highest sensitivity practically available.

Dawbuts lab uses Mini-FLOTAC at 5eggs per gram for this purpose.  For each treatment group use 15 head of cattle.

**Pre-test (1 week before trial)**

Take fresh dung samples from 15 head of cattle.

Send to lab to be tested using pooled count to confirm worm egg count (WEC) is sufficient for drench test (>100epg).

Obtain the necessary drenches (preferably oral drench or injectable).

**Day 0 (treatment day)**

Draft off 15 head of cattle per group from the middle of the mob (avoid heaviest and scrawniest) and take ear tag numbers, randomly assign onto treatment groups. Best done by weighing and assigning. If scales not available, use visual assessment or odd and even ear tag numbers. Record ear tag numbers and treatment groups.

The day 0 test (1 tray containing 30 samples i.e. 2 samples per well), is collected randomly from mob prior to drenching) and acts as the control group.

Calculate dose rate for each animal. Then treat 15 head each with:

1. Treatment A
2. Treatment B
3. Treatment C

If pour-on treatments are used, to avoid cross-contamination, separate mobs for at least 72 hours after treatment. Do not run trial cattle with untreated cattle or cattle treated with other pour-on products.

**Day 14**

Using gloved hand, take 15 samples per rectum from each mob and place in labelled collection trays (1 tray per treatment group).

Submit to lab using pre-paid Express Post envelopes.

Notes

* 1. Starting worm egg count (100epg) equates to 20 eggs per head x 15 head = 300 eggs in Day 0 count if individual counts done by Mini-FLOTAC. Note that this sensitivity will satisfy Dobbins’ recommendation for >90 eggs in control group, even at starting WEC down to 50 epg. This will allow for tight confidence intervals and rigour in estimates of efficacy against each worm species detected.
  2. Follow same protocol for testing a single product (Treatment A only).