GENERAL INSTRUCTIONS FOR SUBMISSION OF CATTLE TICKS FOR ACARICIDE RESISTANCE TESTING - AIT

General instructions for submission of cattle ticks (*Rhipicephalus australis*) for acaricide resistance **(fluazuron)** testing: **Adult Immersion Test.**

The Adult Immersion Test (AIT) is used to assess the fluazuron resistance status of strains of *R. australis* submitted to the laboratory.

Ideally 30 – 60 fully engorged ticks are required for testing. At a minimum of 30, this allows 10 ticks each for two testing concentrations plus a control. The ticks must reach the laboratory in good condition and before they have begun to lay.

INSTRUCTIONS FOR THE COLLECTION OF TICKS:

- **IF POSSIBLE COLLECT TICKS PRIOR TO TREATMENT** OR **A MINIMUM OF 49 DAYS POST TREATMENT.**
- **COLLECT TICKS SAMPLES IN THE LATE AFTERNOON OR EARLY MORNING**.
  Female ticks engorge in the last 12 hours of their cycle on the animal and most drop off in the early morning just after sunrise.
- **30-60 FULLY ENGORGED TICKS ARE REQUIRED**. 30 – 60, **healthy**, fully engorged ticks are sufficient. However, it is safer to send a larger sample if you can collect them.
  Collect only the fat fully engorged ticks. Half engorged and small ticks lay few eggs and are of little use to the Parasitologist.
- **PUT TICKS IN A VENTILATED, ESCAPE-PROOF CONTAINER**. Ticks can die or be seriously affected if not treated properly and become poor specimens for the Parasitologist to work with.
- **DON'T USE COTTON WOOL OR DAMP PAPER TOWEL**
  Include 3-4 blades of green grass with the ticks – this helps maintain moisture.
  Keep away from all chemicals, sunlight and excessive heat.
- **COMPLETE SUBMISSION FORM (Resistant Tick Advice Form- example included),** available from BSL or a Biosecurity Officer. Please supply as much information as possible, **include current and previous acaricide use**.
- **DISPATCH PROMPTLY BY MAIL/COURIER TO LABORATORY** (use protective packaging such as cardboard). **It is important that ticks for fluazuron testing reach the laboratory before egg laying commences. At optimum temperatures ticks will begin to lay eggs around 2-3 days after dropping from the animal.**

DELIVERY:

Specimen Receipt (Loading Dock 12)**,**
Biosecurity Sciences Laboratory,
Health and Food Sciences Precinct,
39 Kessels Road, Coopers Plains QLD 4108

POSTAL:

Biosecurity Sciences Laboratory,
Health and Food Sciences Precinct,
PO Box 156,
Archerfield BC QLD 4108

PH: 07 3708 8746

https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/sample-testing/submitting