

**GENERAL INSTRUCTIONS FOR SUBMISSION OF CATTLE TICKS  
FOR ACARICIDE RESISTANCE TESTING – LARVAL PACKET TEST**

General instructions for submission of cattle ticks (*Rhipicephalus australis*) for acaricide resistance testing (**Larval Packet Test**).

In following these instructions you will be selecting the ticks most likely to show early emergence of chemical resistance.

**INSTRUCTIONS FOR THE COLLECTION OF TICKS:**

- **IF POSSIBLE COLLECT FULLY ENGORGED TICKS PRIOR TO TREATMENT OR WHEN TICKS APPEAR TO BE VISIBLY UNAFFECTED BY 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.
- **40-50 FULLY ENGORGED TICKS ARE REQUIRED-20 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. Avoid damaging/squeezing the tick on removal.
- **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-** It is ideal that ticks reach the laboratory within a couple of days of collection. Ticks must be kept cool (not refrigerated).  
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 (Resistance Tick Advice Form- example included),** available from BSL or a Biosecurity Officer. Please supply as much information as possible on the advice sheet **include current and previous acaricide use.**
- **TRANSPORT SAMPLES WITHOUT DELAY BY MAIL/COURIER TO LABORATORY** (use protective packaging such as cardboard). **It is ideal for ticks to 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>