Information for veterinarians submitting to the Biosecurity Sciences Laboratory

Advice on sampling and testing for Johne’s disease in cattle

There is a new national approach to Johne’s disease (JD) management and the beef and dairy cattle industries have each developed strategies for managing JD biosecurity risks. Further information on these tools can be found on their websites at www.animalhealthaustralia.com.au and http://www.dairyaustralia.com.au.

In order for producers to meet and maintain eligibility for a particular J-BAS or Dairy Score, laboratory testing may be required. The Queensland Government Biosecurity Sciences Laboratory (BSL) at Coopers Plains currently offers the following tests for this purpose:

HT-J faecal PCR
- Screening test only
- HT-J PCR is recommended over the ELISA due to increased risk of false-positive results with the ELISA
- Any animals or groups of animals that react positively should be investigated through faecal culture or by slaughter and tissue culture/histopathology.
- Conducted on individual or pooled (up to 5 samples per pool) faeces:
  - a minimum of 30 g (70 mL screw-top container ½ to ¾ full) of faeces is collected per rectum from individual animals and labelled sequentially from 1
  - samples should arrive at the laboratory within 48 hours of collection and must be kept chilled during this time
  - do not pool on-farm; pooling (where appropriate) will be done at the laboratory
- Please contact the laboratory for pricing
- Turnaround time of 2-4 weeks
- Individual animal identification and sampling records should be kept so that reactors can be identified for further testing if required

ELISA
- Screening test only
- HT-J PCR is recommended over the ELISA due to increased risk of false-positive results with the ELISA
- Any animals or groups of animals that react positively should be investigated through paired faecal culture (sampled 3-6 months apart) or by slaughter and tissue culture/histopathology.
- Conducted on serum:
  - 10 mL clotted blood should be collected from individual animals and labelled sequentially from 1
- Please contact the laboratory for pricing
- Turnaround time depends upon prior notice as kits are not routinely kept in stock and will need to be ordered
- Individual animal identification and sampling records should be kept so that reactors can be identified for further testing if required
Faecal culture
- Conducted on individual or pooled (up to 5 samples per pool) faeces:
  - a minimum of 30 g (70 mL screw-top container ½ to ¾ full) of faeces is collected per rectum from individual animals and labelled sequentially from 1
  - samples should arrive at the laboratory within 48 hours of collection and must be kept chilled during this time
  - do not pool on-farm; pooling (where appropriate) will be done at the laboratory
- Can be conducted on faecal slurry (Herd Environment Culture) for dairy herds only:
  - see JD Herd Environmental Culture Test Protocol for collection protocol instructions
- Please contact the laboratory for pricing
- Turnaround time of 14-16 weeks
- Individual animal identification and sampling records should be kept so that reactors can be identified for further testing if required

Tissue culture and histopathology
- Conducted on slaughtered cattle
- Please contact the laboratory to discuss sampling requirements and costs.

All costs associated with private assurance testing for JD, including the consignment of samples to the laboratory and resolution testing of reactors, will be borne by the submitter. In addition to the testing costs, there is a laboratory processing fee per submission.

If you have any questions regarding the submission of samples for JD testing, please contact the laboratory and ask to speak with the Duty Pathologist.

Contact us
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