Mastitis test kits – Keeping you in the loop

# Scoring

Complexity (1 out of 3)

Price (1 out of 3)

Scale (1 out of 3)

Bovine mastitis is an inflammation of the mammary gland caused from trauma or an infection, leading to abnormal and decreased milk production – but more importantly, causing great pain to the animals.

Affected cows may show clear signs of discomfort, including abnormal posture, increased sensitivity of the udder and teats to touch, rapid breathing and heart rate, and a high temperature. Unfortunately, mastitis is not always easy to detect in its early stages, particularly when the redness and swelling of the udder is not obvious.

Rapid mastitis tests aim to solve this problem by providing an inexpensive and efficient testing methodology.

# How

Mastitis test kits work by taking manual milk samples from cows with a suspected infection and running them through a series of tests using the diagnostic box.

These samples are put into cartridges which can then be loaded into slots on the diagnostic box, which uses internal sensors to detect abnormalities within the milk sample. Some diagnostic boxes are also able to identify the specific bacterial pathogen, and can measure how sensitive the bacteria will be to certain antibiotics.

The test results are supplied electronically via email to farmers.

To avoid cross-contamination, many test kits use single-use cartridges which can be ordered via subscription.

# Why

* For dairy farmers, herd health is of the utmost importance. Estimates suggest that between 5 and 10 per cent of a herd may suffer from mastitis during milking periods, and early detection is very important for health outcomes.
* From an animal welfare perspective, mastitis is a painful condition that must be treated as soon as possible in order to alleviate the animal’s suffering. Many treatments are also more effective the earlier they are commenced.
* For milk production, mastitis-affected milk specimens will not pass milk quality tests and as such will impact the output of a dairy farm until rectified.
* In addition, due to the diagnostic boxes identifying the specific pathogen, they can assist in choosing effective antibiotics. This is a core tenet of antimicrobial stewardship, which is a key concern on farms across Australia.

# Benefits

## Easy to use

* Set and forget – no interpretation of results is required.

## Rapid response

* Integrated email alert systems keep you informed about your herd’s health.

## Reliable

* Highly successful at detecting mastitis early.

# Getting started

1. Obtain mastitis test kits from reputable suppliers.
2. Conduct regular mastitis tests as part of herd health inspections.
3. Track long-term trends in infection and antibiotic use.

# More Info

For more information on how you can deploy this technology on farm, give us a call on 136 186 or visit agriculture.vic.gov.au.

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