

CONTROL MASTITIS FOR HYGIENIC MILK PRODUCTION

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Introduction

Mastitis is a disease characterized by inflammation of the udder and is caused by bacteria (*Staphylococcus aureus* and *Staphylococcus agalactiae*). Some livestock keepers believe the disease results from 'bad eye' or the envy of neighbours with ill feelings on their herd. Milk from an infected camel may contain blood, flakes and changes colour from white to yellow or red. The disease causes heavy milk losses and can cause disease in human beings.

Symptoms and signs of mastitis in camel

- One or more quarters of the udder is swollen, red and painful
- Reduced milk production
- Difficult milking as the teat canal may be blocked
- In severe cases, one or more teats may be permanently blocked

Mode of spread of the disease

The bacteria causing the disease can spread from one infected cow to a healthy cow and from one quarter to a healthy one through:-

- Poor milking hygiene (dirty utensils, udder clothes, dirty hands and dirty boma or milking shed)
- Contact with wound on the udder or teats
- Milkers not exhaustively milking the cow or touching a healthy udder/teat after milking an infected teat/udder.
- Teat injury which may be caused by tying the teats or from tick bites among others.

How to screen for mastitis

Sub clinical mastitis (early stage) can only be detected using California Mastitis Test (CMT) kit.

Requirements

- Clean Water (preferably bottled water)
- CMT solution
- CMT paddle
- Strip cup



Procedure

- Mix CMT reagent (if not premixed) with water and follow the manufacturer's instructions
- Place the paddle directly facing each quarter of the udder (as below)



Squeeze 2 ml of milk from each teat into the corresponding dish on the CMT paddle



Gently agitate the paddle to mix well with milk

- Add 2 ml of CMT solution in each dish
- Wait for about 30 to 60 seconds and observe the results



- Milk from a teat with mastitis will coagulate (gel-like formation) on the dish (cell B in the picture)
- Blood clots and flakes may be seen on sieves or strip cup

Control of mastitis

- Ensure the cow shed and milking parlour is always clean
- Check the udder daily
- Identify the infected lactating cows in the herd and milk them last/ milk infected quarter last
- Wash hands before and after milking each cow
- Wash the udder of the cow before milking using sterile cloth (clean cloth rinsed in warm water)
- Use easy to wash and hygienic containers for milking and storage of milk
- Ensure the teat is completely stripped of milk



Poor maintained boma



Well maintained clean boma

Treatment

Consult a veterinary doctor when you see symptoms

Points to remember

- Some reagents are supplied as concentrates and require dilution. Dilute with water according to manufacturer's recommendations.

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