

# MOOSLETTER

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## Teatseal

Teatseal has been promoted recently by its manufacturer, and we thought it appropriate to put “our spin” on the product to help you decide on your best dry cow options.

Teatseal provides a non-antibiotic approach to protecting uninfected quarters from environmental mastitis bacteria during the dry period. Teatseal is an inert compound that physically prevents bacteria entering the udder through the teat canal, but is not irritant or damaging to the udder and teats. Teatseal is effective during the dry period, the period immediately before calving and until the Teatseal is removed soon after calving. Teatseal has been available in Australia for 6 years, but is not widely used.

Teatseal is inserted immediately after the last milking at drying off. Being the consistency of tooth paste, it forms a ‘plug’ in the lower udder and teat, and is removed by stripping after calving or by the calf while suckling soon after birth. Teatseal persists in the udder and teat for months (the manufacturers say 100 days), and provides protection for much longer than antibiotic dry cow therapies.

Teatseal will not treat existing infections, and should not be used in cows with high cell counts or known infection. Cows with a cell count over 200,000 should be treated with an antibiotic Dry Cow Therapy.

Because Teatseal is not an antibiotic, the importance of **STRICT HYGEINE** during insertion cannot be over-emphasised. Bacteria introduced to the udder through treatment at drying off will not be killed by Teatseal.

Some cows will leak some milk after treatment, but this does not result in Teatseal being expelled enough to reduce its effectiveness.

Teatseal is visible in the foremilk of cows after calving, with flecks persisting for up to 3 weeks. These lumps of material should not reach the vat if the milk filter is intact, and do not cause any



problems with the milking plant. Teatseal has no effect on screening tests for antibiotic residues and does not effect milk starter cultures.

Teatseal has no effect on calves that suckle treated cows. Some calves that lack vigour appear to have trouble sucking out the Teatseal, so supplementing calves with colostrum should be considered.

### **Under what circumstances could I use Teatseal?**



Most studies show that for cows with a 'normal' 6 to 10 week dry period, there is no significant difference between cows treated with Teatseal and a good antibiotic Dry Cow Therapy. This is usually measured by comparing the number of cows developing mastitis in the first 100 days of calving. Teatseal starts to perform better when the dry period is longer than 10 weeks. This is because Teatseal is still present and protecting the cow at calving, whereas in the antibiotic treated cows the protective effect is gone or diminished.

Teatseal is particularly useful in herds where environmental infections are occurring at around calving, especially in cows with a dry period greater than about 8 weeks.

It is not appropriate to use Teatseal in herds where no individual cell counting is used.

### **Can I use Teatseal AND antibiotic Dry Cow together in the same cow?**

The short answer is yes, although this is an "off-label" use of both drugs. We can say that some of our clients are practicing this as a routine, with satisfactory results. These herds had been under high pressure from environmental bacteria, and antibiotic dry cow therapy alone was not enough to adequately control mastitis at calving.

### **Can I use Teatseal in heifers?**

Teatseal can be used in heifers, but this would only be recommended where environmental mastitis in freshly calved heifers has been a problem in previous years. The Teatseal is inserted about 1 month prior to calving. Surprisingly, most farmers don't find this procedure as stressful as expected.

### **What does it cost?**

Teatseal costs \$3.10, Elaclox DCX costs \$1.92 and Cevravin DC is \$3.65 per tube. These prices are discounted for larger quantities and if paid for when dispensed.

Estimates put the cost of mastitis at over \$200 per clinical episode – this includes the cost of treatment, discarded milk, reduced production, increased culling, the occasional death and the possibility of graded milk.

Anything that helps in the control of mastitis is worth considering.

# New Cow Vet starts at Tatura

We welcome Lauren Stevenson to Tatura Vet Clinic. Many farmers will have already met Lauren, who started with Tatura Vet Clinic a month ago. Lauren has had 3 years experience in dairy practice in northern Tasmania – Smithton – and is keen to continue work with dairy cows at Tatura.

## A NEW REMINDER FOR AN OLD DISEASE

This autumn we have seen a relatively high incidence of black leg.

Black leg is a highly fatal infection caused by the ingestion of the spore forming bacteria *clostridium chauvoei*. It affects mainly young cattle, between 6 months and 2 years of age, on a high plain of nutrition. Animals become infected by eating the bacterial spores which can live in the soil for many years. The bacteria then gain entrance to the body through small tears in the mucus membrane of the digestive tract before localizing in large muscle masses or the heart.

Clinical signs are not often observed but can include severe lameness, hot, painful swelling of the upper part of the limb, depression, anorexia and fever. Death may take up to 12-36 hours but in most cases the affected animals will be found dead without being previously observed sick.

Due to our history of anthrax in the region, it can be difficult to tell the difference between a case of black leg and anthrax since they both commonly occur in the warmer months of the year and present as sudden death. Animals suffering this fate should be tested for anthrax as a precaution. This procedure is simple and only requires a blood sample and is still currently funded by the DPI.



The most disappointing aspect of seeing cases of black leg, and the other common clostridial diseases including tetanus, malignant oedema, black disease and enterotoxaemia is that they are **almost entirely preventable by vaccination**.

Calves require 2 vaccinations 4-6 weeks apart and then annual boosters. Due to the common incidence of black leg between the ages of 6 months and 2 years, the first 2 injections and the first annual booster at 12 months of age are the most important treatments in preventing blackleg on your farm.

There are a number of brands, all effective and all cost about \$0.35 per dose. You could use 3,000 doses of vaccine for the cost of one dead replacement heifer (\$1,000)! Some brands of vaccine are combined with leptos vaccine – and will cost you more – but leptos is the subject of another newsletter.