beef+lamb new zealand

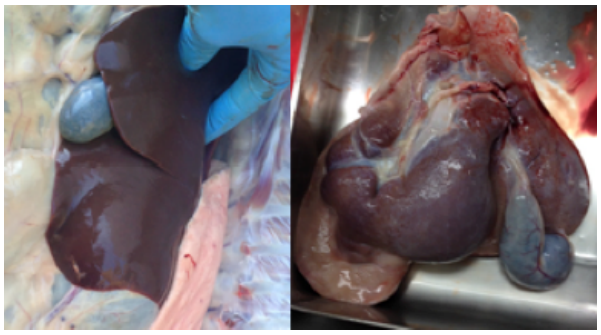
FACT SHEET

DECEMBER 2016

FACING UP TO FACIAL ECZEMA

Facial Eczema (FE) is caused by spores of a fungus growing on the litter in the base of the sward. The spores contain a toxin which attacks the liver. FE is a serious disease that affects sheep and cattle and can be fatal.

The fungus is always in the pasture, but when temperatures and moisture levels are high, and grass minimum temperatures remain above 12–13^{0}C overnight, the fungus suddenly goes on the rampage, growing rapidly and producing vast numbers of toxic spores.



Healthy liver (left) and FE-damaged liver (right).

The symptoms of FE can be distressing.

The liver damage associated with FE results in production losses that are much greater than may first appear. Even when no symptoms are visible, FE can reduce lifetime productivity by up to 25 per cent.

There are practical ways in which you can reduce your losses. You should use two or three methods together:

- Breeding for increased tolerance to FE should be your first line of defence. Buying FE-tolerant rams will make a great difference in only a few years, but you have to be consistent in only bringing tolerant rams into your flock.
- You can give all or part of your flock a zinc bolus, which lasts six weeks, or dose with zinc oxide weekly or fortnightly to reduce liver damage. For large numbers, you can spray zinc oxide on pasture.
- Quit stock early, build up feed reserves, and aim for light rotational grazing. Aim to be lightly stocked through the danger period.
- Spore counting offers a method of determining whether your animals are at risk. Faecal spore counts will tell you whether stock are ingesting toxic spores but later in the FE season and when spore counts are high, the delay between sampling and getting the result may mean the animals have already ingested a toxic load of spores. Faecal spore counts are best used early in the season when spore counts are low.
- Spore counts on grass samples collected from a pasture will tell you whether that paddock is a risk if grazed, particularly if grazed hard. Pasture spore counts will help you identify the safer parts of the farm (the shady, windy places).

- Most vet clinics have a spore counting service. If one is not available, get together with other farmers and organise a spore counting service (persuade your vet clinic to offer the service, hire someone to do the counts).
- Fungicide sprayed before the onset of the FE season will reduce spore counts for five to six weeks. Use these pastures for your replacement ewe lambs and hoggets.
- Neighbouring farmers should get together to share knowledge and hear advisers.

Don't relax precautions too soon—a few cool nights or heavy rain doesn't mean danger has passed. Once spore counts rise, pastures remain toxic until the spores disappear.

GOOD PRACTICE CHECKLIST

KNOW THE DANGER PERIODS AND AT RISK PASTURES

- Be vigilant during danger periods— January to May in most years.
- Identify danger to animals from spore counts—on farm or local.
- Use historical records to identify most at risk paddocks.

USE TWO OR MORE OF THE FOLLOWING PROTECTION MEASURES

Breeding animals for FE tolerance is a medium to long term strategy that:

- Underpins other protective measures.
- Can achieve significant tolerance in 5–10 years if managed well.
- Requires consistent use of certified rams from flocks testing and breeding for FE tolerance.

Protecting animals with zinc:

- Zinc dosing has a prophylactic effect, reducing the effects of the toxin in animals and protecting against FE.
- Can be administered as a zinc bolus or, for cattle, as zinc sulphate in drinking water.
- Zinc oxide can also be effective sprayed on pasture animals that are grazing.

Spraying pastures with an appropriate fungicide:

- Applied while spore counts are low the fungicide greatly reduces subsequent rises in spore numbers thereby reducing intakes of toxic sporidesmin.

Management during danger periods:

- Use alternative crops such as chicory, brassicas, pure fescue pasture.
- Practice lax grazing to avoid the toxic spores which are concentrated in the lower part of the sward.
- Identify "safe" paddocks from historical records of spore counting.

MORE INFORMATION

This factsheet was developed from the resource book "Facing up to Facial Eczema (Version 2)". If you have further questions, talk to your vet or one of the Beef + Lamb New Zealand Extension Managers. And check out the resource book "Facing up to Facial Eczema (Version 2)" available to download at www.beeflambnz.com.