

Chief is a broad spectrum fungicide proven to reduce toxic spore counts protecting sheep and cattle from Facial Eczema.

What is Facial Eczema (F.E)

- Facial Eczema is caused by ingestion of microscopic, toxic spores from *Pithomyces* chartarum fungus, which grows in the base of pasture swards
- The toxin sporidesmin damages liver and bile ducts in sheep and cattle
- Malfunctioning causes build up of unwanted toxins (phylloerythrin), which leads sensitivity to sunlight, poor growth rates, skin symptoms, and reduced milk production





Active Ingredient

500 g/L Carbendazim

Chemistry Groups

Group 1 Fungicide

Packaging

- •5L
- 10L
- 20L

Application Rate

- · 300 mL/ha in 100 L/ha water
- Addition of an organosilicone or non-ionic surfactant is recommended to enhance efficacy

Withholding

 Apply 7-10 days before stock will graze the paddock

CHIEF® FUNGICIDE

Symptom and Effects

- Symptoms will occure approximatly 10 days following spore ingestion.
- Sub-clinical effects can reduce milk production by up to 50%
- Affects lambing up to 12% more barren ewes; decrease in ewes carrying multiple lambs; increase death rates and lower productivity in ewes in subsequent lambs (up to 25% in a lifetime)
- · Stock seek shade and can be restless at milking
- Physical skin symptoms showing up on the face and ears of sheep and udder and breech of cattle



Healthy liver & Damaaged liver
Photos from "Facing up to Facial Eczema", Beef + Lamb NZ, 2019

Other Prevention measures

Using two or three measures with Chief Fungicide is a recommend prevention strategy:

- · Protect animals with Zinc (e.g. zinc oxide drenches, slow-release capsules or Zinc sulfate in drinking water)
- · Breeding for FE tolerance
- · Use of alternative crops including chicory, brassicas or tall fescue pastures that have a low FE risk.

Treating pastures with CHIEF

- · 300 mL/ha in 100 L/ha water
- Addition of an organosilicone or non-ionic surfactant is recommended to enhance efficacy
- Apply before spore levels rise, when counts get to 20,000 –25,000
- Early application ensures spore levels are kept under control
- Treat pastures at least 7 days prior to grazing for best results

Use alternative cultivars for grazing

 Chicory, red and white clover and tall fescue cultivars are found to have lowest spore count, but only safe if free of weed grasses

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