

November 2025

MILK SA SPORE COUNT SERVICE

A survey of several farms in the Gamtoos to Witelsbos area has shown an increase in the fungus *Pseudopithomyces toxicarius* spore counts, the causative agent of sporidesmin toxicity (facial eczema). See Graphic presentation below. Guidelines are to start inclusion of zinc oxide (ZnO) in rations when counts start to reach 20 000 spores per gram. Counts have varied between 5000 and 40 000 on the sampled farms and these are expected to rise sharply within the next three weeks.

This is a particularly dry year and the rye grass dying back allows the fungus to take hold. In times of humid weather, more spores are produced and the toxin produced is toxic to the liver. Recent data collected in this area demonstrate that there is an inverse relationship between Zn serum levels and GGT, the liver enzyme that increases when sporidesmin toxicity occurs, which indicates that Zinc at protective levels reduces the impact on the liver tissue.

Please consult your nutritionist. It is not easy to achieve the high dose required to effectively reduce the impact of the condition (inclusion rates of 12-14g ZnO per day for a 500kg cow are recommended). If the ZnO is mixed into the ration, cows receiving a smaller quantity of concentrates will be underdosed and cows at maximum production may be overdosed, so careful calculation of the 'average dose' is required. Please note that organic zinc has not been shown to work against the sporidesmin toxin, but organic zinc is an important antioxidant and should still be included. Optimal levels of selenium are also recommended since sporidesmin is a potent oxidising agent. Toxin binders are not effective against sporidesmin but may reduce the impact of the condition by binding other mycotoxins which are also hepatotoxic.

Spore counts vary considerably between farms and even between camps, so consult your herd vet to collect samples and check spore counts. Over the last two years, spore counts increased over December and remained high until late April, and on some farms, even end of May. Geographical location and pasture type play an important role, so this will vary from farm to farm, but a general announcement will be released again when spore counts are seen to be reducing.

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SPORE COUNTS BY AREA

