

Mycotoxins

Mycotoxins are naturally occurring compounds produced by fungi growing in the paddock or during storage. The incidence of mycotoxins are unpredictable and influenced by many factors (climatic, processing, transport and storage of fodder). Mycotoxins can also occur from other contaminants such as rodents, birds etc. In general, ruminants are considered to be relatively resistant to the action of most mycotoxins. However, constant presence of mycotoxigenic fungi in feed out fodder can have detrimental impacts on the cows' health and performance. Especially as the source is not always known and the impacts are not always obvious.

Most farm operators may use the colour of a given mould to give some indication of the type of mycotoxin but using this as the sole guide is risky. Ideally, we would advise at least a total mould and yeast count test to be done on the sample prior to feeding as mould identification tests hardly accurately confirm the presence of specific mycotoxins. Typically in Australia, Fusarium (through winter, cool autumn and spring seasons) and Aflatoxins (during summer periods) are the most common classes of toxins seen.

Mould CFU counts	Relative risk
0-100000 CFU/g	No issue – treat as normal.
100000-1000000 CFU/g	Feed within a balanced ration. Transition zone (use with some caution) Ensure this is not fed alone. Best to dilute with other fodders.
1000000-2000000 CFU/g	Use with a toxin management additive*. Animals and vat to be observed closely. Minimise amounts fed where possible.
2000000-5000000 CFU/g	Except drops in production, increasing risks around repro and above average wastage. Reduce nutrient energy value by 5% Strictly reduce amounts fed.
>5000000 CFU/g	DISCONTINUE FEEDING !

Adapted from Adams (2013)

Table 1: Mould CFU counts and their relative risks

*When choosing a toxin management additive, ensure that the product has a toxin binding ability in addition to a deactivation property to be effective against a wider range of mycotoxins.

Contact us to discuss effective feed additives and mould count test that could help manage mycotoxins issues in your herd.

