



The affect of mycotoxins on reproduction

Feeds containing mold-produced spores are a growing concern for dairy producers. Mold spores reduce the nutrient quality of grain and produce secondary metabolites, known as mycotoxins. These poisons affect the digestive, immune and reproductive functions of the dairy cow and can allow other diseases to invade from an already depleted immune system.

While there are hundreds of mycotoxins, only a few can be adequately identified for further study. Researchers now understand that these toxins, even at low levels and in combination with others, are far more debilitating than high levels of individual toxins due to a cumulative effect.

Growing, harvesting and management of feeds

Key soil-borne molds, such as *Fusarium* and *Aspergillus*, increase during periods of extreme weather. These weather changes, along with current economics of feed crop production, have changed tillage and production practices allowing increases in mold growth potential.

Spores containing mycotoxins lay dormant in storage. When silage is packed, essentially the oxygen is squeezed out and limited. However, the problem that occurs when silage is dry is that even though packed correctly the feedstuffs act as a sponge and spring back, never eliminating the excess oxygen. When oxygen is not adequately eliminated, these silage-spoiling organisms never get their metabolism shut down. In addition, when silage is re-exposed to oxygen at feed-out, added growth occurs at an incredible rate. Common practices such as loosening silage for feed-out or single daily feed mixing, allows mixed feeds an excellent opportunity to produce high toxin levels before consumption.

Nutrition, mycotoxins and reproduction

Nutritional factors, such as high MUNs (Milk Urea Nitrogen), acidosis and mycotoxins, all can have a negative effect on herd health status because they stress the immune function of the cow. Any damage to immune function debilitates reproductive performance. It may be clinical or sub-clinical but it happens every time. Optimum reproduction can only be achieved when the affect of mold produced mycotoxins, along with other nutritional problems, are controlled.

Preventive action

Mycotoxin testing is one option to determine the level of challenge. Dairy producers should take action when



suspect feed ingredients are being fed, symptoms are observable, or tests show the presence of multiple toxins at any level.

More and more dairies are routinely using the Select Bio Cycle family of products to maintain high reproductive levels and reduce herd health challenges caused by undetected moldy feed ingredients or related nutritional problems.

For more information on the Select Bio Cycle family of products and for assistance in submitting a feed sample visit with your NorthStar representative. ★

While you're at it, test for:

- Johne's**
- Leukosis**
- BVD**



No extra labor. Just call. It's that easy!



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