



Mold growth can occur in dairy feeds only when nutrients are available, correct temperatures exist, oxygen is present and unbound water is present. Elimination of any one of these four factors through management will prevent mold growth.

When mold growth is controlled, the microbiological quality of the feed increases, thus production benefits is realized.

It is generally thought that if yeast and mold go unchecked the production of toxins which is an indicator of aflatoxin and mycotoxins are present. The formation of Fusarium molds prefers cooler temperatures while Aspergillus and Pennicillium species prefer warmer climates.

It is a general practice to add an inhibitor such as propionic acid to control the production of yeast and mold but lets not forget that good management practice on the farmers part is key for better feed quality.

Agri Analysis uses 3M Petrifilm Yeast and Mold Count Plates for determining colony population. These petrifilm plates are certified for official analysis and used for the food and beverage industry.

Pipet onto the liquid culture medium 1 ml of unknown and incubate plate. The colonies can be counted with a standard colony counter.

Feeding Risks At Various Mold Spore Counts

MOLD SPORE COUNT PER GRAM	FEEDING RISKS AND CALCULATIONS
Air-Dried	
Under 500,000	Relatively Low Count
1/2 to 1 Million	Relatively Safe
1 to 2 Million	Discount Energy (x .95); Feed with Caution
2 to 3 Million	Closely Observe Animals and Performance; Discount Energy (x .95)
3 to 5 Million	Dilute Feed with Other Feeds; Discount Energy (x .95); Observe Closely
Over 5 Million	Discontinue Feeding

Ref: Department of Dairy and Animal Science, The Pennsylvania State University