INTERPRETATION GUIDELINES FOR MOLD & YEAST COUNTS

Mold Counts

10-10,000	Relatively Safe
10,000-100,000	Transition Zone
100,000-10,000,000	Caution Advised
Over 10,000,000	Feeding may not be recommended.

Yeast Counts

≤ 1,000,000	ok for hay, dry corns or grain	Results:	Smell
≤ 4,000,000-5,000,000	ok for corn silage or haylage		Stomach upset-off feed
≤ 20,000,000	ok for HMSC		May be able to neutralize with buffer
> 1,000,000	on fermented feeds may indicate unstable feed		

MOLD IDENTIFICATION

Mold	Color	Toxin Producer	Comments
Penicillium	Blue/Green	Yes	Several potential toxins associated with certain species. Most common toxin producer in silage.
Aspergillus	Yellow/Green	Yes/Aflatoxin	Found in drought, heat stress conditions or insect infected fields.
Fusarium	Red/White/Pink	Yes/Zearalenone Vomitoxin T-2 Toxin Fumonism	Common in cold, wet seasons, certain strains produce extremely potent toxins.
Mucor	White	No	Found especially in sealed corn. Grow at low temps.
Rhizopus	Black	No	Requires high moisture and an advanced decay mold.
Cladosporium	White	No	Symptoms simmilar to yeast. Grow at low temps.

PREDETERMINED DANGEROUS LEVELS

Aflatoxin - 20 ppb (Upper Limit)

	Cattle (sc/cs/hay)	**Dairy Cows**	**Swine**
Low Level	<5.0 ppb	<20.0 ppb	---------
Moderate-High	5.0 ppb - 10.0 ppb	20.0 ppb - 100.0 ppb	---------
High Level	20.0 ppb or More	100.0 ppb or More	---------

Molds which can produce Aflatoxin:

Aspergillus flavus	Most Common
Asperfillus parasitticus	Most Common

Zearalenone - 6.0 ppm (Upper Limit)

	Cattle (sc/cs/hay)		**Swine (sm grain)**	
Low Level	<1000 ppb	<1.0 ppm	<200 ppb	<.20 ppm
Moderate-High	1100-5500 ppb	1.1-5.5 ppm	<450 ppb	<.45 ppm
High Level	>6000 ppb	>6.6 ppm	<500 ppb	<.50 ppm

Molds which can produce Zearaelenone:

Fusarium graminearum	Most Common

Vomitoxin - 6.0 ppm (Upper Limit)

	Cattle (sc/cs/hay)	**Swine (sm grain)**
Low Level	<1.0 ppm	<1.0 ppm
Moderate-High	1.1 - 5.9 ppm	Approx 1.0 ppm
High Level	>6.0 ppm	> 1.0 ppm

Molds which can produce Vomitoxin:

Fusarium species	Most Common

T - 2 Toxin - 500 ppb (Upper Limit)

	Cattle (sc/cs/hay)		**Swine (sm grain)**
Low Level	<150 ppb	<.15 ppm	---------
Moderate-High	<450 ppb	<.45 ppm	---------
High Level	>500 ppb	>.50 ppm	---------

Mold which can produes T - 2 toxin:

Fusarium species	Most Common