Trichothecene (TCT) Fact Sheet



Background Information: Trichothecenes are a family/group of *Fusarium*-produced mycotoxins comprising over 200 related compounds of widely varying toxicity. Type A Trichothecenes are generally considered to be more toxic than Type B Trichothecences. Some common Type A Trichothecenes are T-2, HT-2, Neosolaniol, and DAS (Diacetoxyscirpenol). Some common Type B Trichothecenes are Vomitoxin (DON -Deoxynivalenol), 3-Acetyl DON, 15-Acetyl DON, Nivalenol, and Fusarenon X. It is very common to have samples contaminated with two or more Trichothecenes, which may result in synergistic effects as well as individual effects.

Major crops affected: Cereal grains and their corresponding silages.

Associated Mold: Fusarium sp.

Conditions favoring production: Cool and wet weather

Symptoms: Digestive disorders (vomiting, diarrhea, gastroenteritis, hemorrhages, necrosis, ulcers, reduced feed intake, & feed refusal); reduced feed efficiency, reduced weight gain or slowed growth; anorexia, dermatitis, weight loss, depression, edema, blood disorders, oral lesions/irritations, infertility, immunosuppression, and even death (severe cases).

Dairyland Lab Detection Limits/Packages for Trichothecenes

	Individual Request	Mycotoxin Basic	Mycotoxin Select	Mycotoxin Complete	Detection Limit
Vomitoxin (DON)	X	X	X	X	0.1 ppm
T-2/HT-2	Х	Х	Х	Х	5 ppb
3 & 15 Acetyl DON			Х	Х	0.1 ppm
Nivalenol				Х	0.1 ppm
Fusarenon X				Х	0.1 ppm
Neosolaniol				Х	100 ppb
DAS (Diacetoxyscirpenol)				Х	100 ppb

Sources

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