

Risk Assessment



Customer Name:	Gl. Buurholt Hovedgaard	Sample ID:	DK462
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Species :	Sow/Gilts	Sample Description:	Wheat
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Toxins	Amount, ppb	Low Risk	Medium Risk	High Risk
Aflatoxin (B1)	0	20	35	50
Aflatoxins (B1+B2+G1+G2)	0	20	35	50
Ochratoxins (A+B)	2	20	35	50
Type B Trichothecenes*	71	250	500	750
Type A Trichothecenes**	4	50	100	150
Fumonisin (B1+B2+B3)	3887	1000	2000	3000
Zearalenone Group	0	25	50	75
Fusaric Acid	0	1000	2000	3000
Other <i>Penicillium</i> Mycotoxins***	0	40	70	100
Other <i>Aspergillus</i> Mycotoxins****	0	40	60	80
Ergot Toxins	2	500	1000	2000
REQ (Risk Equivalent Quantity)*****	73	20	35	50

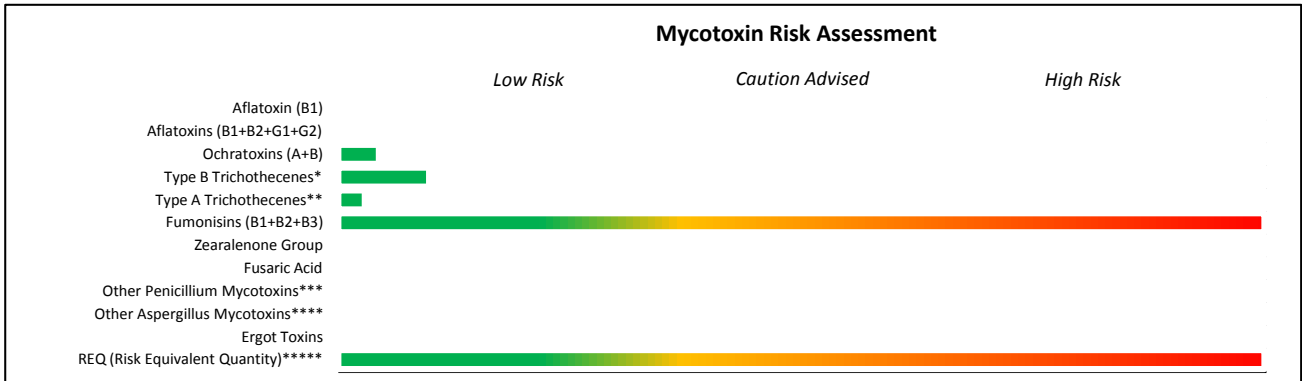
*Type B Trichothecenes = Deoxynivalenol (DON) + 15-acetyl DON + 3-acetyl DON + Fusarenon X + Nivalenol + DON-3-Glucoside

**Type A Trichothecenes = T-2 + HT-2 + Diacetoxyscirpenol (DAS) + Neosolaniol

****Penicillium* mycotoxins = Patulin + Penicillic acid + Roquefortine C + Mycophenolic acid + Wortmannin

*****Aspergillus* mycotoxins = Gliotoxin + Sterigmatocystin + Verruculogen

*****REQ = sum of mycotoxin risk based on their individual concentration in a sample and respective risk factor (REF)



Comments: This sample of wheat is contaminated with multiple mycotoxins.

Fumonisin is at high risk. These mycotoxins can cause digestive disorders, predispose the gut to pathogen colonization, and result in inconsistent manure quality. Damage can occur to internal organs such as the liver, lungs, heart, and brain, and pigs can develop pulmonary edema. Additionally, the immune system can be impacted which can increase the susceptibility to or severity of diseases. The presence of Ochratoxins, Type B and Type A Trichothecenes can further impact intestinal, organ, and immune health. Overall, sows may have poor body condition, decreased litter sizes, or increased variations between piglets.

The REQ is at high risk based on the level and combination of the 5 mycotoxins present. This indicates the overall impact of multiple mycotoxins on breeding pig performance, health, and immunity. The effects of mycotoxins on sows may be greater when mycotoxins are consumed over time. Health status and production level may also play a role in the severity of mycotoxin effects.

Recommendations: A moderate to high risk control program is recommended to control the effects of mycotoxins on the performance and health of sows and their piglets, based on the inclusion rate of this wheat in the final ration. The mycotoxin content of other feedstuffs in the diet should also be considered.