



Mycotoxin Occurrence in 2022 Canadian Corn Grain

JUNE 2023

MYCOTOXIN *monthly*



DSM

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Mycotoxins & Analysis



LC-MS/MS



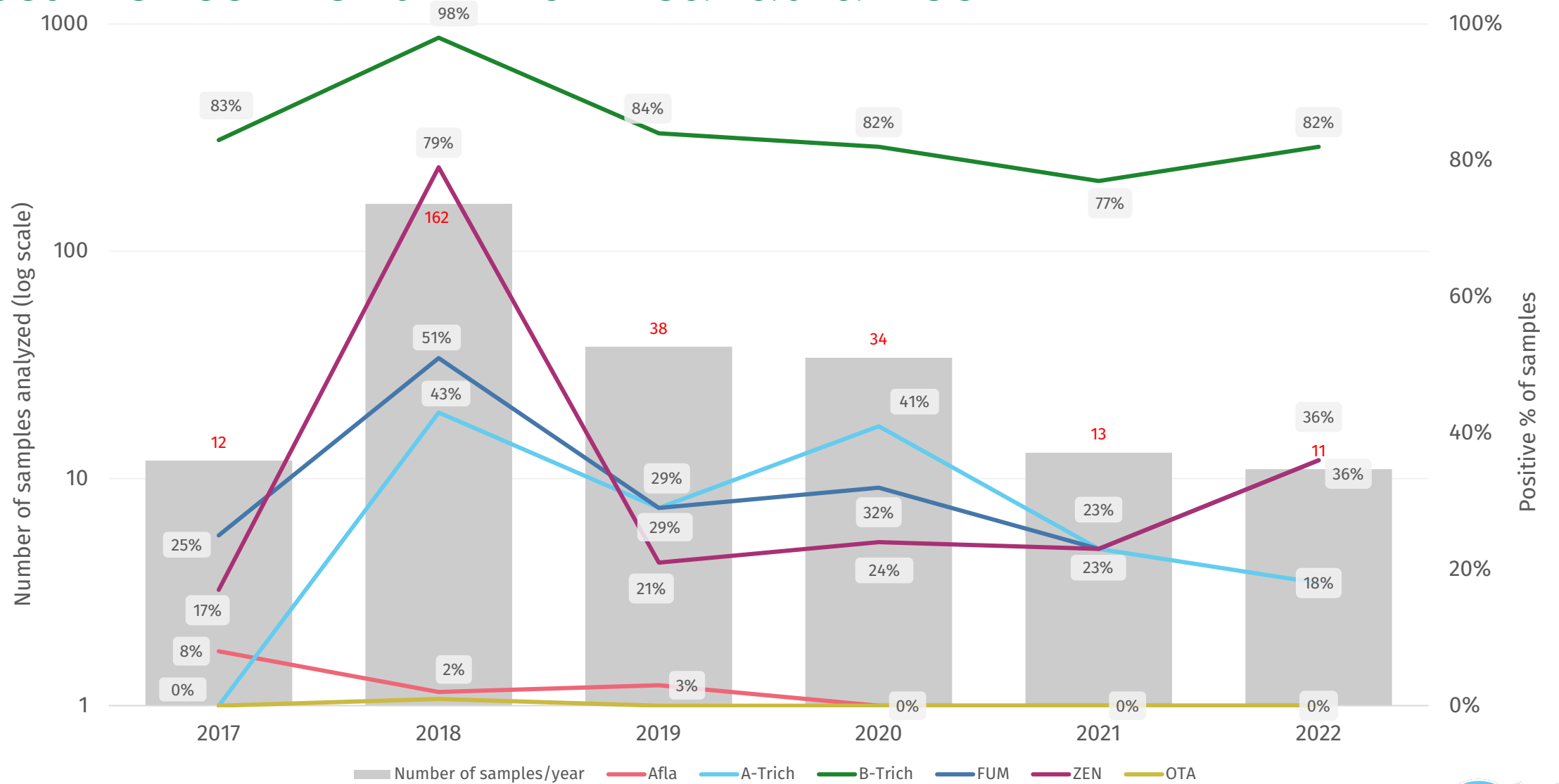
The survey results represent samples sent in for surveillance testing only and does not include any sample submitted following clinical signs.

Mycotoxin Group	Mycotoxins	Limit of Detection (ppb)
Aflatoxins (Afla)	Aflatoxin B1	1.0
	Aflatoxin B2	1.0
	Aflatoxin G1	1.0
	Aflatoxin G2	1.0
A-Trichothecenes (A-Trich)	T-2 Toxin	60.0
	HT-2 Toxin	60.0
	Diacetoxyscirpenol (DAS)	60.0
B-Trichothecenes (B-Trich)	Deoxynivalenol (DON/Vomitoxin)	60.0
	3-Acetyldeoxynivalenol (3-AcDON)	60.0
	15-Acetyldeoxynivalenol (15-AcDON)	60.0
Fumonisin (FUM)	Fumonisin B1	100.0
	Fumonisin B2	100.0
Zearalenone (ZEN)	Zearalenone (ZEN)	30.0
Ochratoxin A (OTA)	Ochratoxin A (OTA)	3.0
Sterigmatocystin (STC)	Sterigmatocystin (STC)	30.0
Mycophenolic Acid (MPA)	Mycophenolic Acid (MPA)	30.0

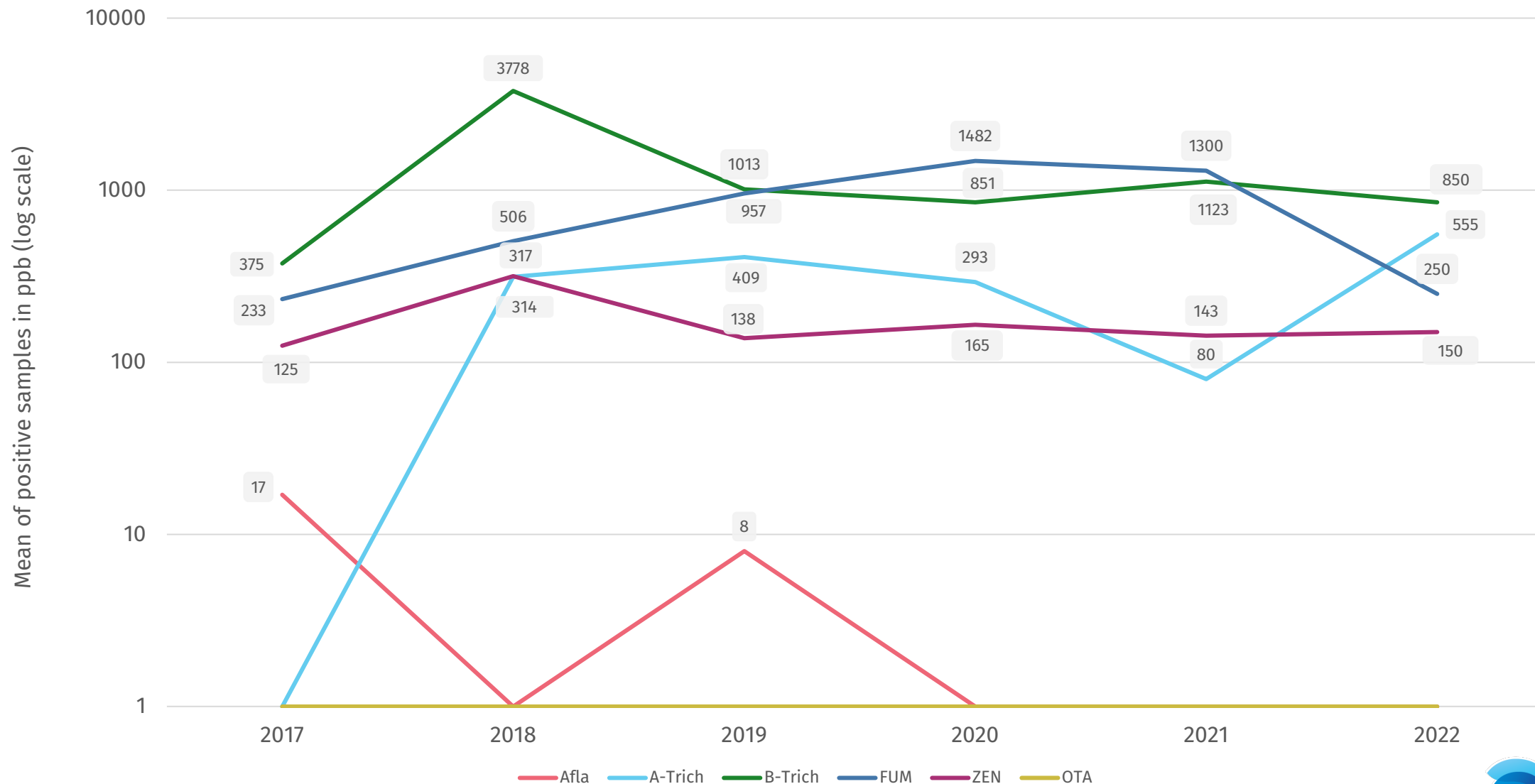
*Results are reported as the summation of mycotoxin levels detected per Mycotoxin Group.
(For example, B-Trich represents total contamination detected for DON + 3-AcDON + 15-AcDON)

2022 Canadian Corn (dry matter basis)

Occurrence Trend in 2022 Canadian Corn



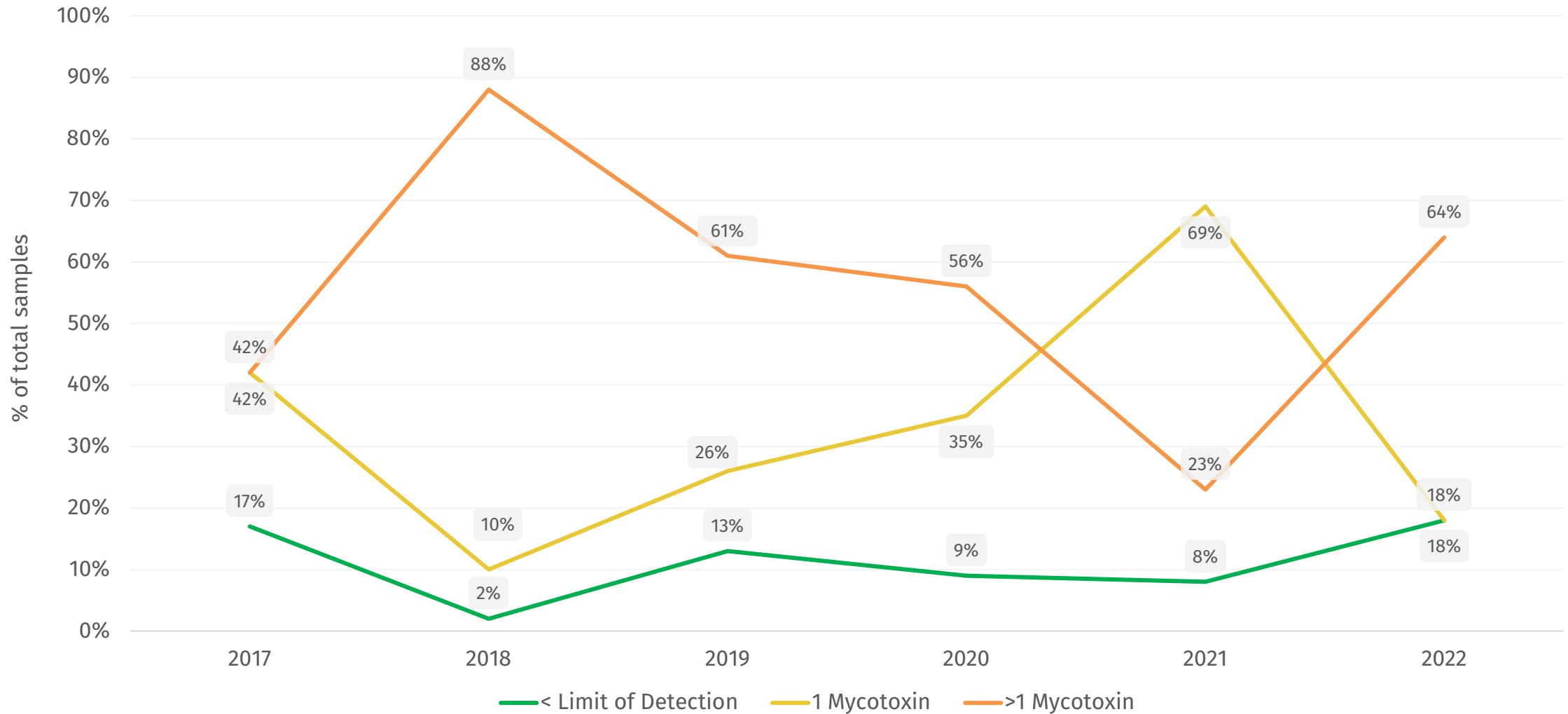
Mean of Positives Trend in 2022 Canadian Corn



Based on the samples analyzed.



Co-occurrence Trend in 2022 Canadian Corn



2022 Corn Risk by Province – B-Trich



State	Number of Samples	% Positive Samples	Avg of Positive Samples
Ontario	4	50	1220
Quebec	7	100	744



- Province with average > 1000 ppb
- Province with average < 1000 ppb
- Province with samples < LOD (100 ppb)
- No sample submitted

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Based on the samples analyzed in this region.



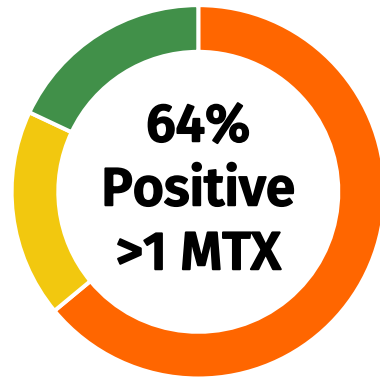
Mycotoxin Survey Summary – 2022 Canadian Corn



11 corn samples submitted from 2 provinces



vs. 92% in 2021



vs. 23% in 2021

vs. 2021

B-Trich

- 82% positive / ↑ from 77%
- 850 ppb / ↓ from 1123 ppb

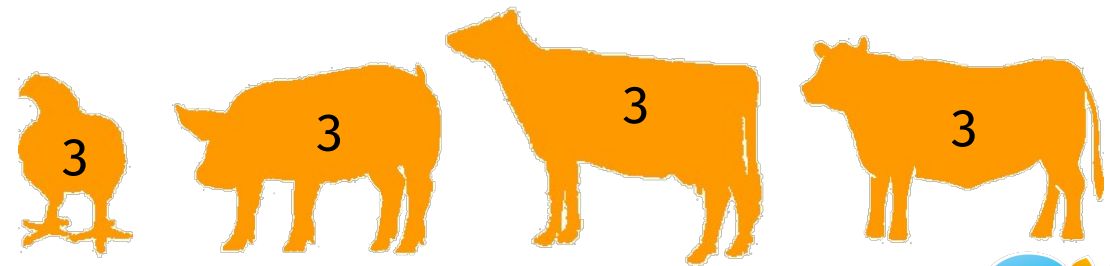
FUM

- 36% positive / ↑ from 23%
- 250 ppb / ↓ from 1300 ppb

ZEN

- 36% positive / ↑ from 23%
- 150 ppb / ↑ from 143 ppb

Forecasted potential risk for livestock production*:



*Based on the samples analyzed.

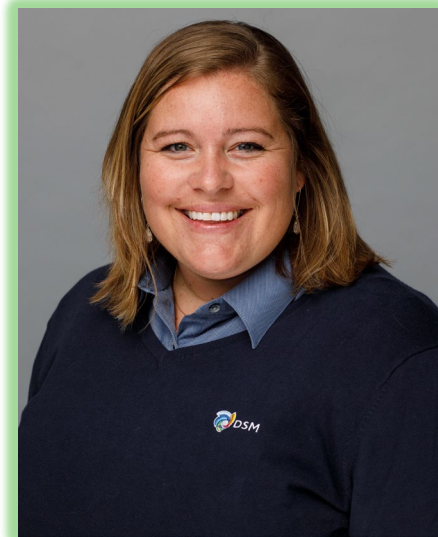


Questions?



Thank you!

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