

# **Mycotoxin Monthly Survey**

## **April 2024**

# Mycotoxins & Analysis



LC-MS/MS

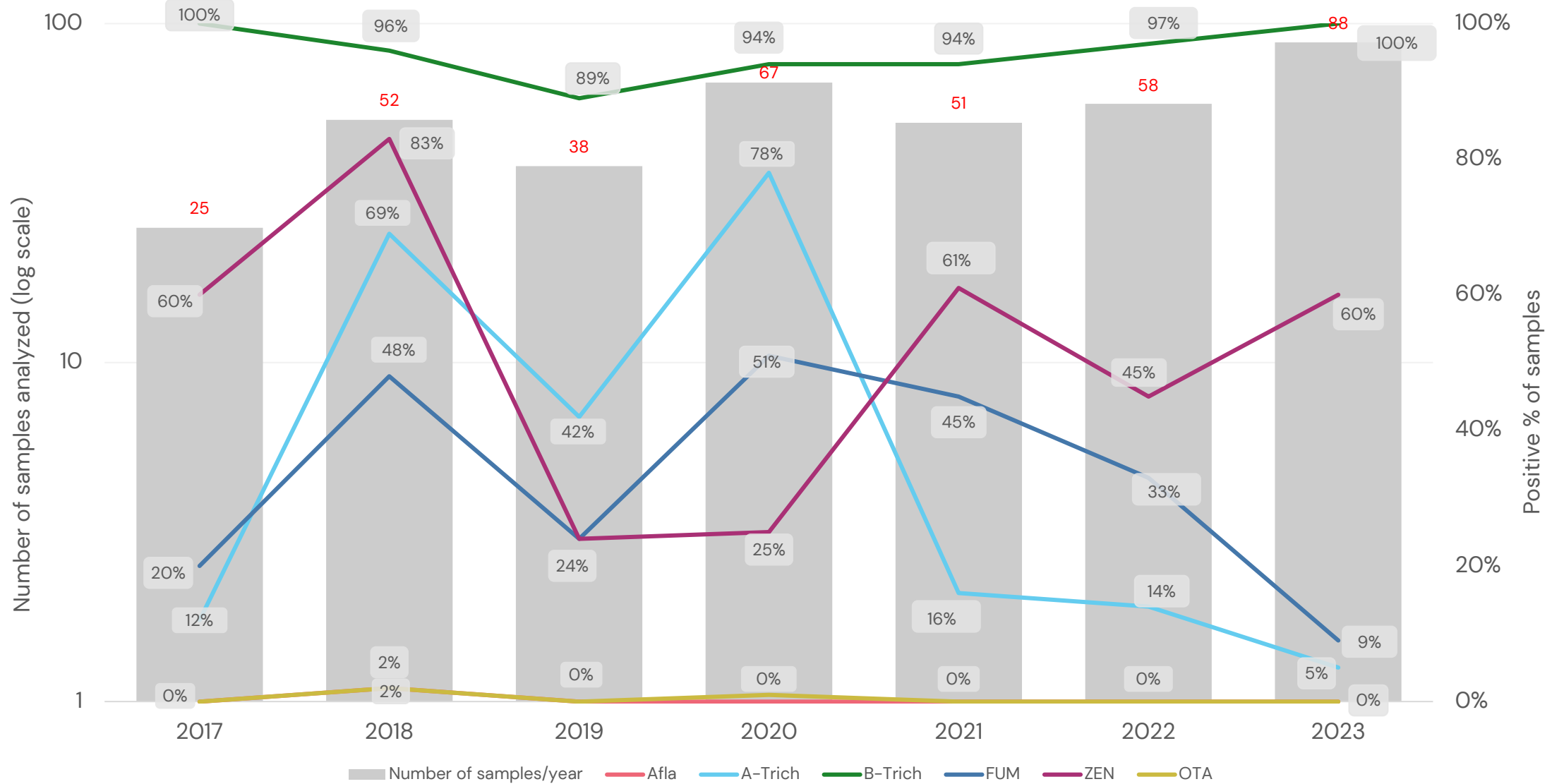


The survey results\* represent samples sent in for surveillance testing only and does not include any sample submitted following clinical signs.

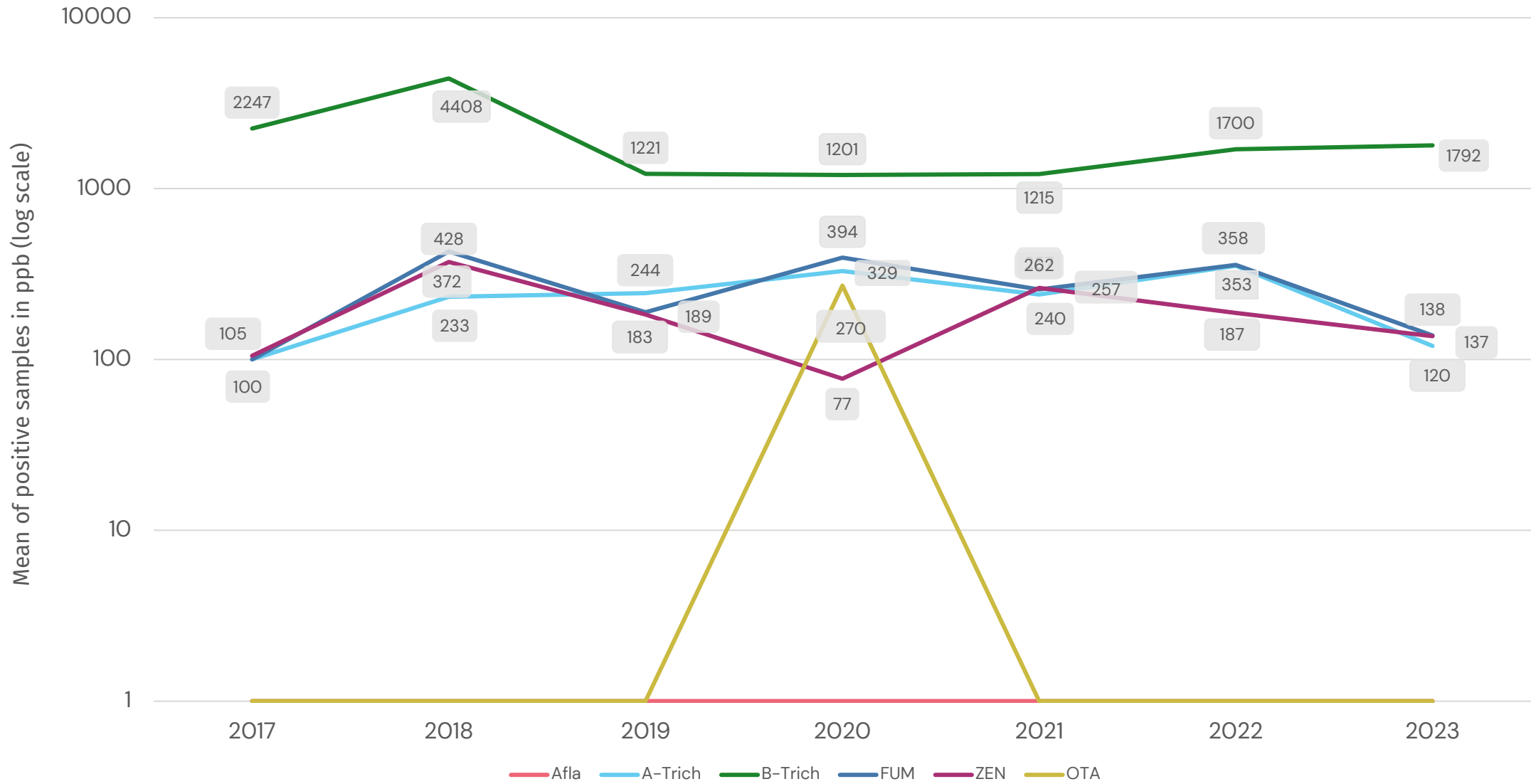
Mycotoxin Group	Mycotoxins	Limit of Detection (ppb)
Aflatoxins (Afla)	Aflatoxin B1	1.0
	Aflatoxin B2	1.0
	Aflatoxin G1	1.0
	Aflatoxin G2	1.0
A-Trichothecenes (A-Trich)	T-2 Toxin	60.0
	HT-2 Toxin	60.0
	Diacetoxyscirpenol (DAS)	60.0
B-Trichothecenes (B-Trich)	Deoxynivalenol (DON/Vomitoxin)	60.0
	3-Acetyldeoxynivalenol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

# Occurrence Trend in 2023 Canadian Corn Silage



# Mean of Positives Trend in 2023 Canadian Corn Silage



# 2023 Corn Silage Risk by Province – B-Trich



State	Number of Samples	% Positive Samples	Avg of Positive Samples
Ontario	37	100	2485
Quebec	51	100	1290

- State with average > 1,000 ppb
- State with average < 1,000 ppb
- State with samples < LOD (105.0 ppb)
- No sample submitted

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Based on the samples analyzed in this region.

# 2023 Corn Silage Risk by Province – ZEN



State	Number of Samples	% Positive Samples	Avg of Positive Samples
Ontario	37	51	148
Quebec	51	67	131

- State with average > 100 ppb
- State with average < 100 ppb
- State with samples < LOD (1.0 ppb)
- No sample submitted

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Based on the samples analyzed in this region.

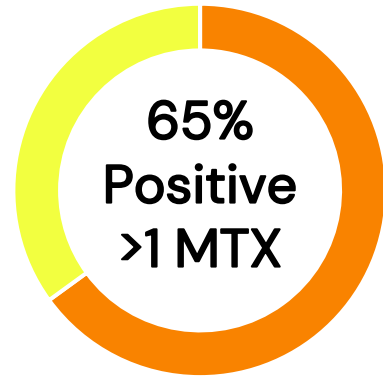
# Mycotoxin Survey Summary – 2023 Canadian Corn Silage



88 corn silage samples submitted from 2 provinces



vs. 97% in 2022



vs. 59% in 2022



- vs. 2022
- 100% positive / ↑ from 97%
  - 1792 ppb / ↑ from 1700 ppb



- 60% positive / ↑ from 45%
- 137 ppb / ↓ from 187 ppb

- Continued monitoring and surveillance of new crop ingredients is warranted
  - On-going characterization of contamination patterns and trends
  - ZEN appears to be occurring more frequently but at somewhat lower concentrations than what was observed in 2022 crop
  - Both the occurrence and concentration of B-Trich appear to be slightly greater than what was observed in 2022 crop

# Questions?

# Thank you!



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