Mycotoxin Monthly Survey

April 2024

dsm-firmenich

Mycotoxins & Analysis

LC-MS/MS

Actlabs
Quality Analysis... Innovative Technologies

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
Fumonisins (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)

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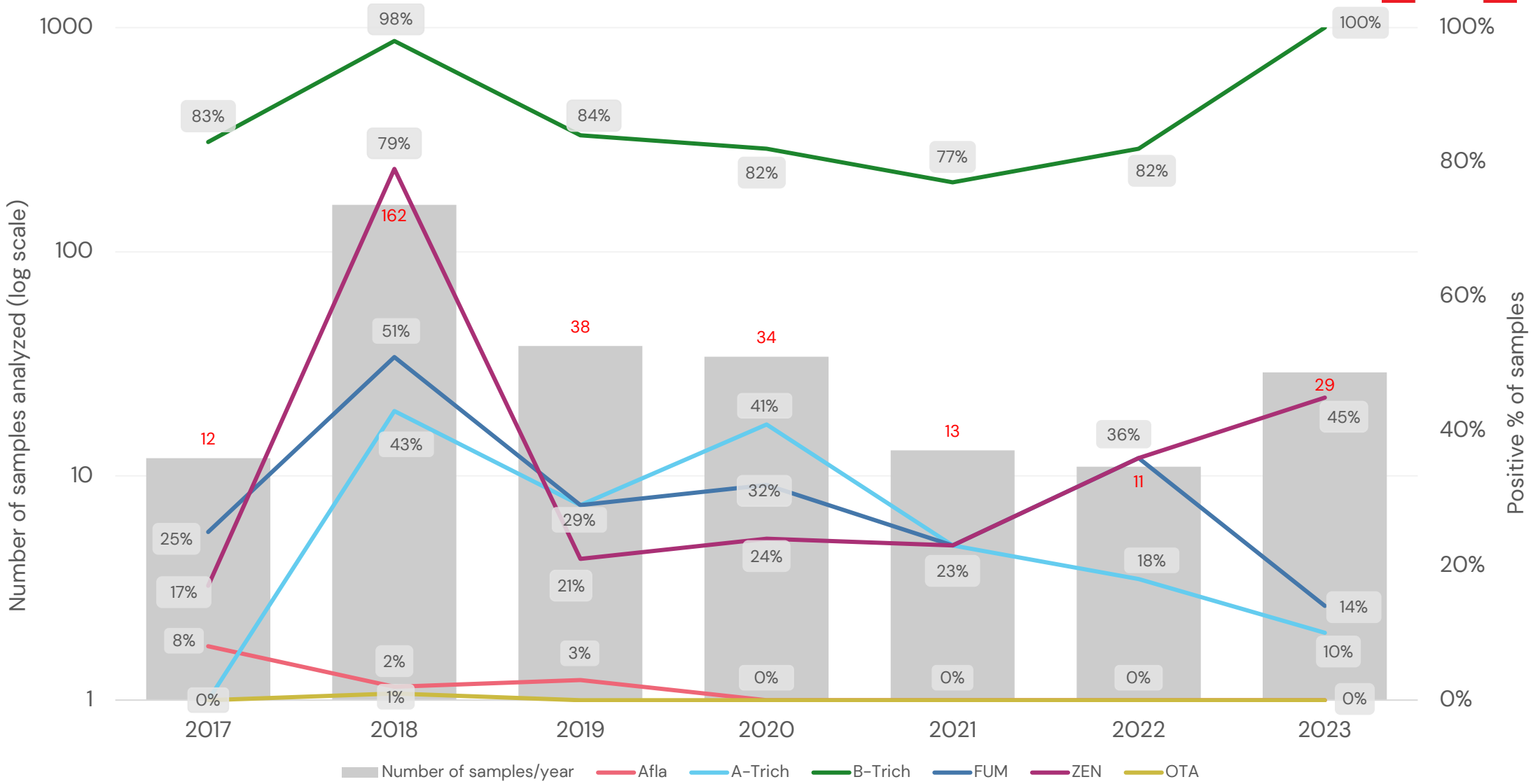
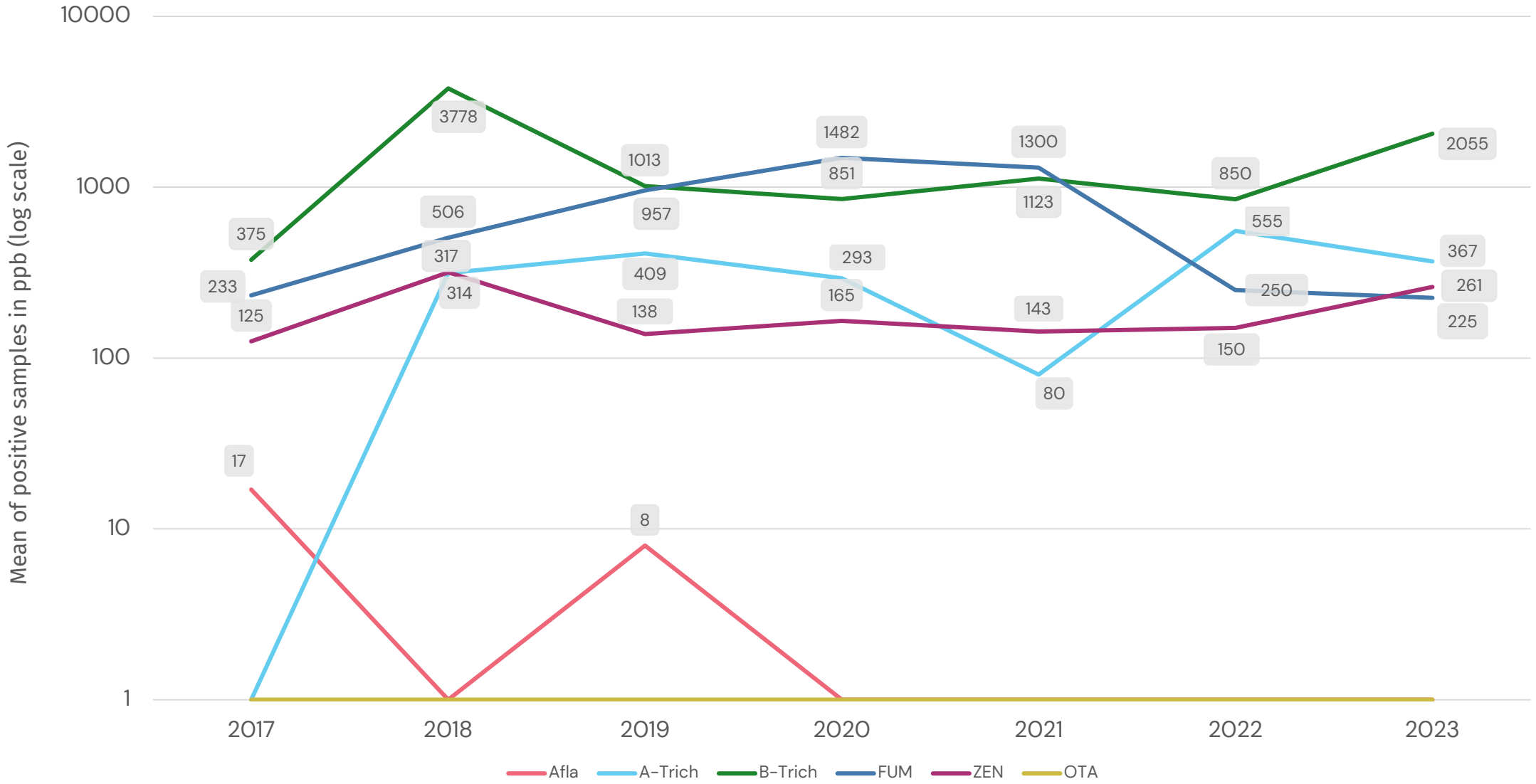
Occurrence Trend in 2023 Canadian Corn



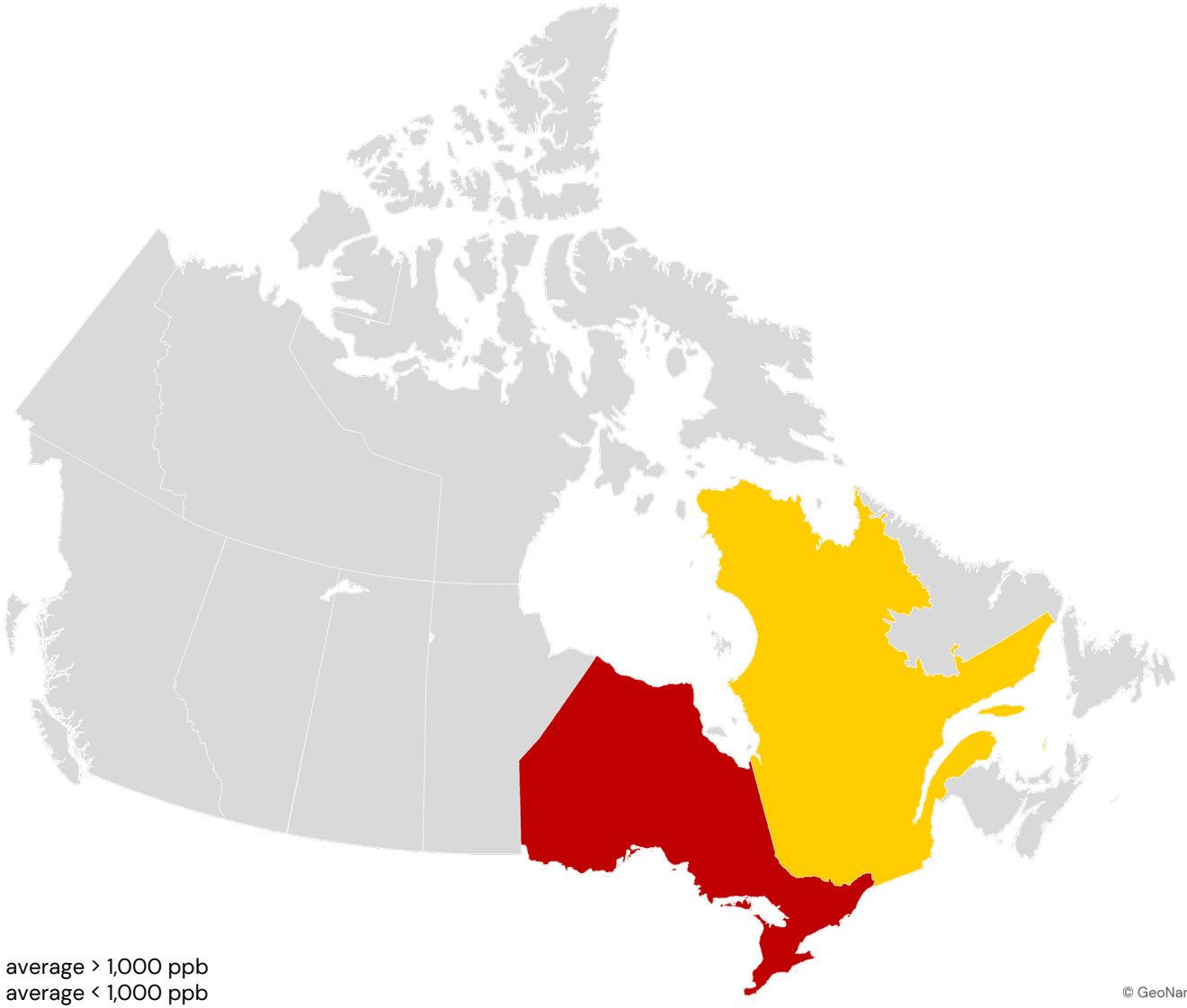
Based on the samples analyzed in this region.

Mean of Positives Trend in 2023 Canadian Corn



Based on the samples analyzed in this region.

2023 Corn Risk by Province – B-Trich

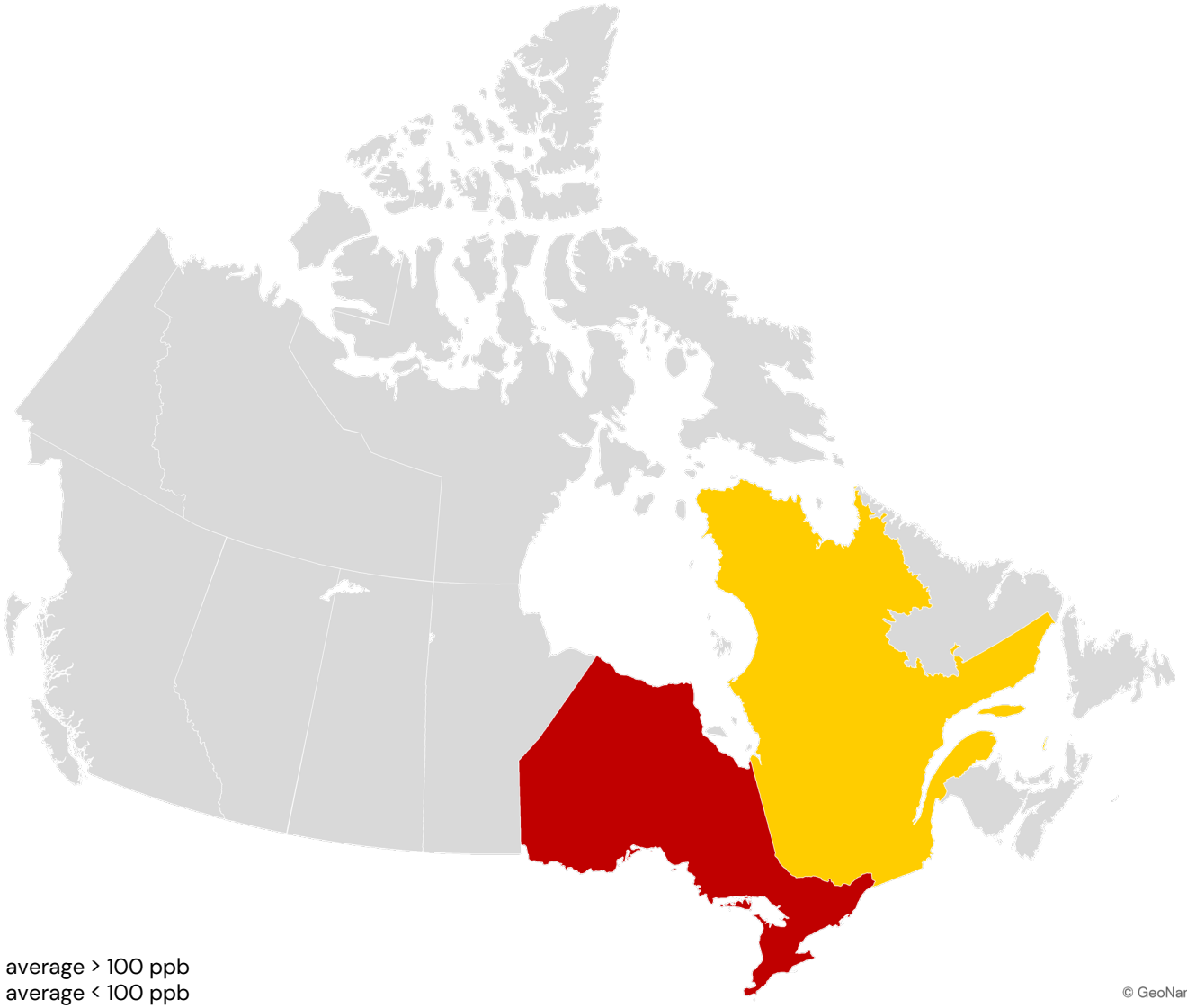


Province with average > 1,000 ppb
Province with average < 1,000 ppb
Province with samples < LOD (60.0 ppb)
No sample submitted

State	Number of Samples	% Positive Samples	Avg of Positive Samples
Ontario	14	100	3284
Quebec	15	100	908

Based on the samples analyzed in this region.

2023 Corn Risk by Province – ZEN



Province with average > 100 ppb
Province with average < 100 ppb
Province with samples < LOD (30.0 ppb)
No sample submitted

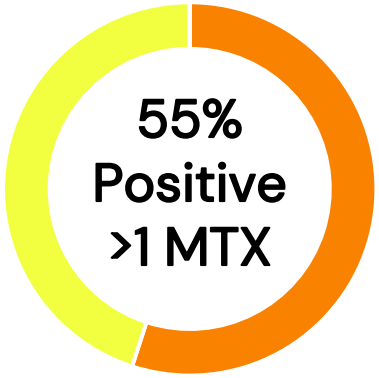
State	Number of Samples	% Positive Samples	Avg of Positive Samples
Ontario	14	64	336
Quebec	15	27	93

Based on the samples analyzed in this region.

Mycotoxin Survey Summary – 2023 Canadian Corn

29 corn samples submitted from 2 provinces

vs. 82% in 2022



vs. 64% in 2022

vs. 2022

B-Trich	• 100% positive / ↑ from 82% • 2055 ppb / ↑ from 850 ppb
FUM	• 14% positive / ↓ from 36% • 225 ppb / ↓ from 250 ppb
ZEN	• 45% positive / ↑ from 36% • 261 ppb / ↑ from 150 ppb

- Continued monitoring and surveillance of new crop ingredients is warranted
  - On-going characterization of contamination patterns and trends
  - Both B-Trich and ZEN appear to be occurring more frequently and in higher concentrations than what was observed in 2022 crop

*Based on the samples analyzed.

Questions?

Thank you!

Paige Gott, PhD
Strategic Product Manager
paige.gott@dsm-firmenich.com
+1-210-727-6533

Erin Schwandt, PhD
Sr. Ruminant Technical Manager
erin.schwandt@dsm-firmenich.com
+1-785-473-3485

Lan Zheng, PhD
Swine Technical Manager
Lan.zheng-tugwell@dsm-firmenich.com
+1-913-201-5166

Chasity Pender, PhD
Sr. Poultry Technical Manager
chasity.pender@dsm-firmenich.com
+1-210-842-0178

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