

# Mycotoxin Occurrence in 2022 US Corn Silage



FEBRUARY 2023

**MYCOTOXIN** *monthly*



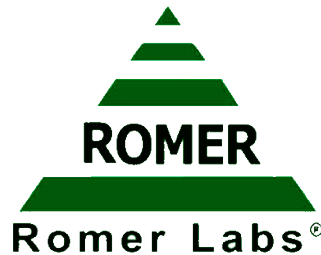
**DSM**

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# Mycotoxins & Analysis



**LC-MS/MS**



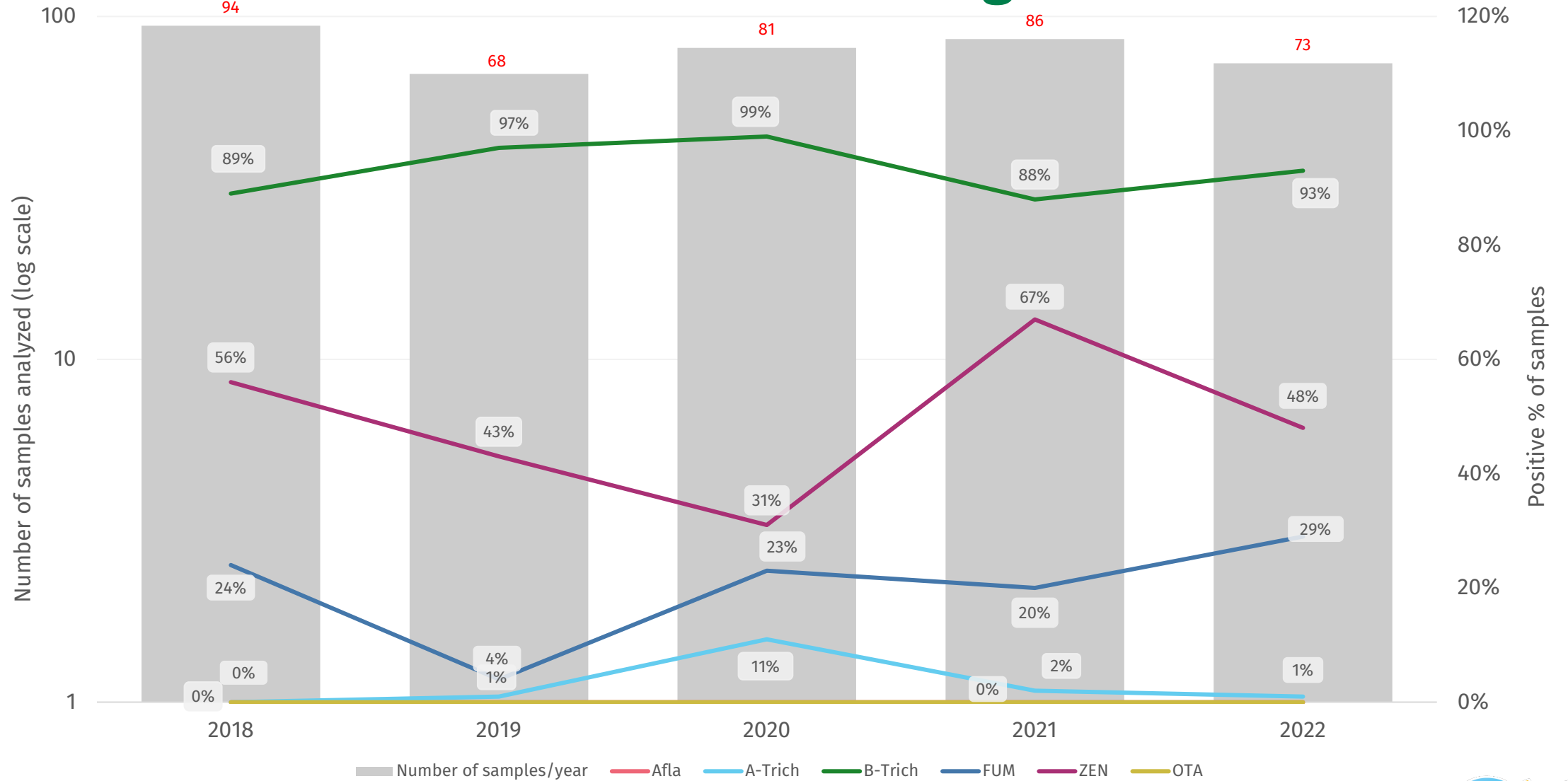
The survey results represent samples sent in for surveillance testing only and does not include any sample submitted following clinical signs.

Mycotoxin Group*	Mycotoxins	Limit of Detection (ppb)
Aflatoxins (Afla)	Aflatoxin B1	1.3
	Aflatoxin B2	1.2
	Aflatoxin G1	1.1
	Aflatoxin G2	1.6
A-Trichothecenes (A-Trich)	T-2 Toxin	100.0
	HT-2 Toxin	100.0
	Neosolaniol	100.0
	Diacetoxyscirpenol (DAS)	100.0
B-Trichothecenes (B-Trich)	Deoxynivalenol (DON/Vomitoxin)	100.0
	Acetyl-deoxynivalenol (AcDON)	100.0
	Nivalenol (NIV)	100.0
	Fusarenon X (FusX)	100.0
Fumonisin (FUM)	Fumonisin B1	100.0
	Fumonisin B2	100.0
	Fumonisin B3	100.0
Zearalenone (ZEN)	Zearalenone (ZEN)	51.7
Ochratoxin A (OTA)	Ochratoxin A (OTA)	1.1

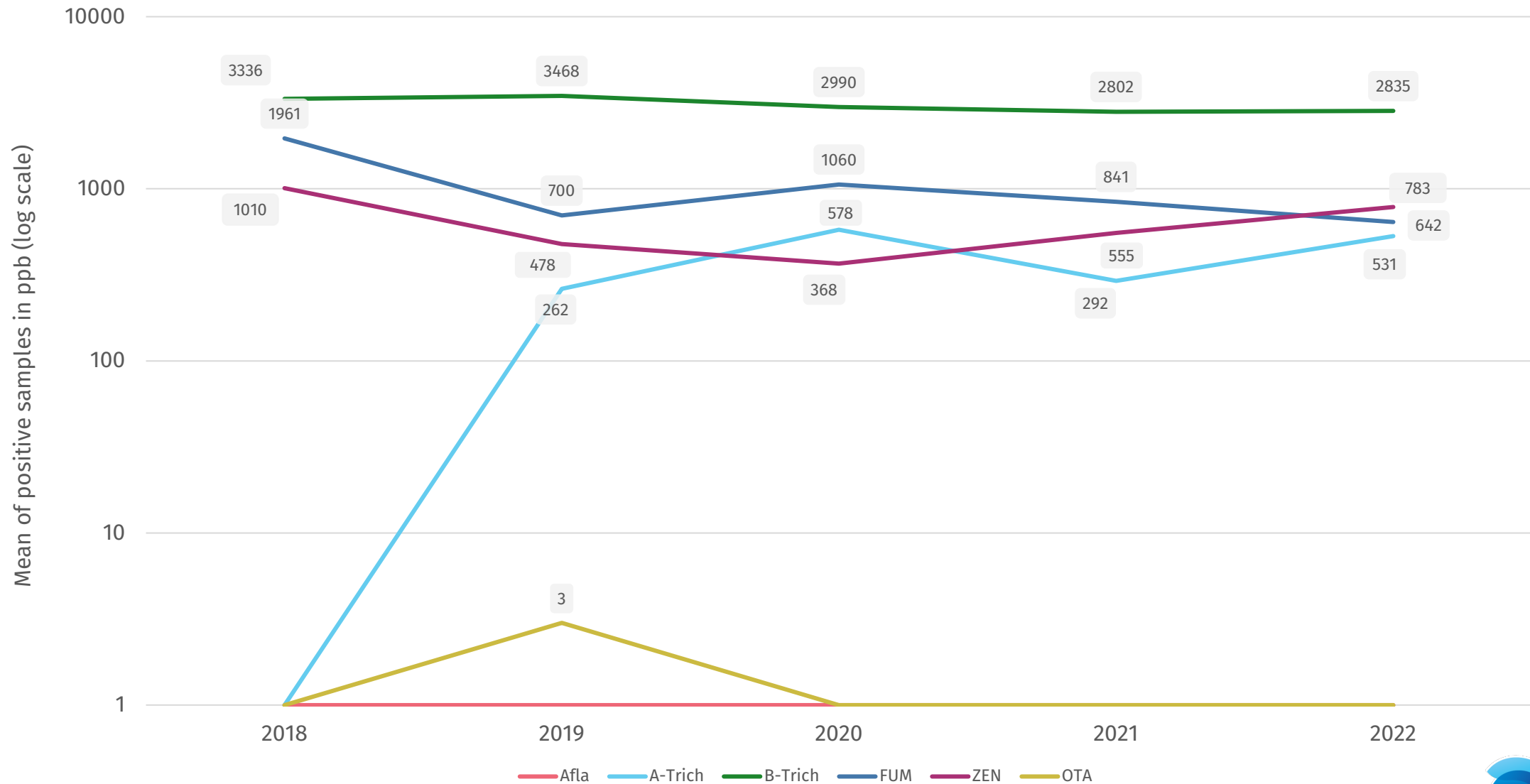
\*Results are reported as the summation of mycotoxin levels detected per Mycotoxin Group. (For example, B-Trich represents total contamination detected for DON + AcDON + NIV + FusX)

# 2022 US Corn Silage (dry matter basis)

# Occurrence Trend in 2022 US Corn Silage



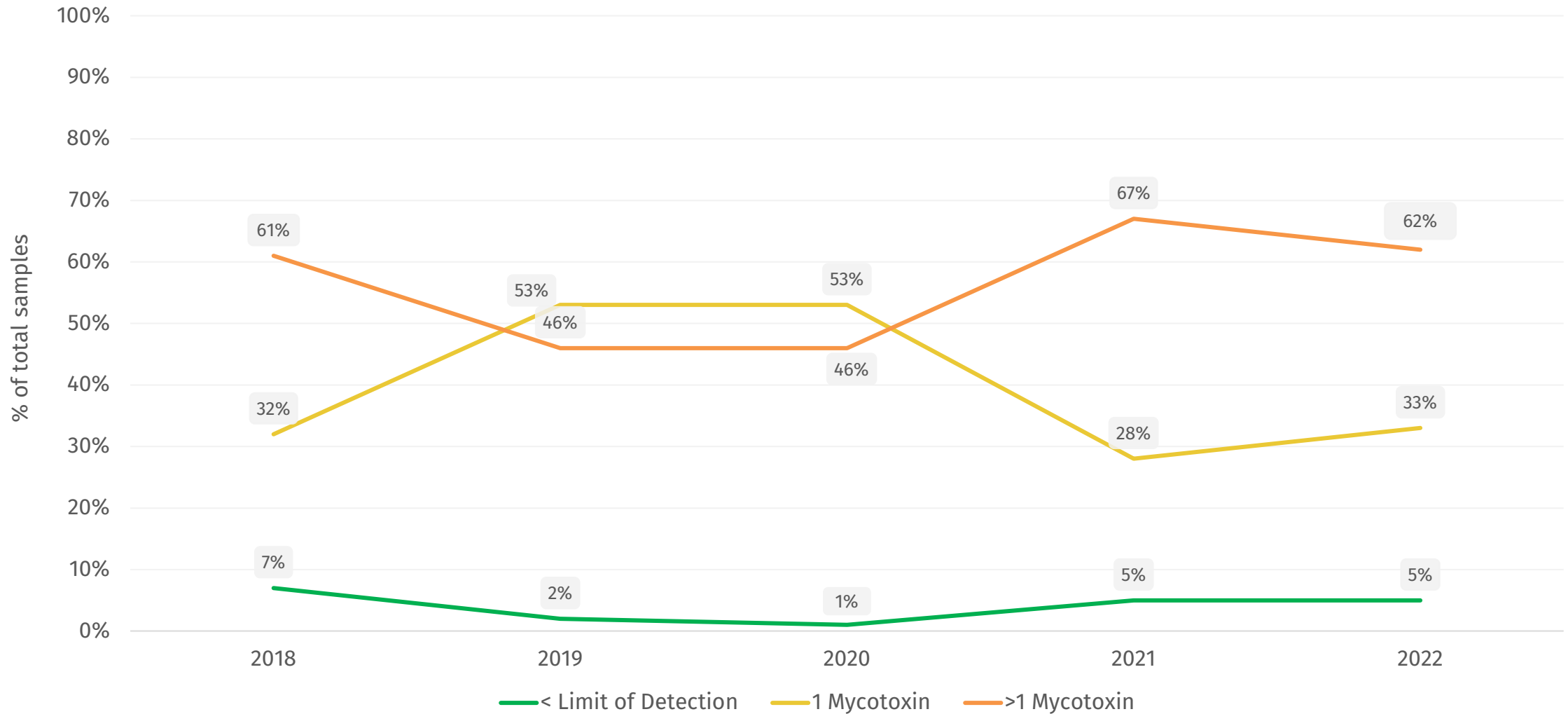
# Mean of Positives Trend in 2022 US Corn Silage



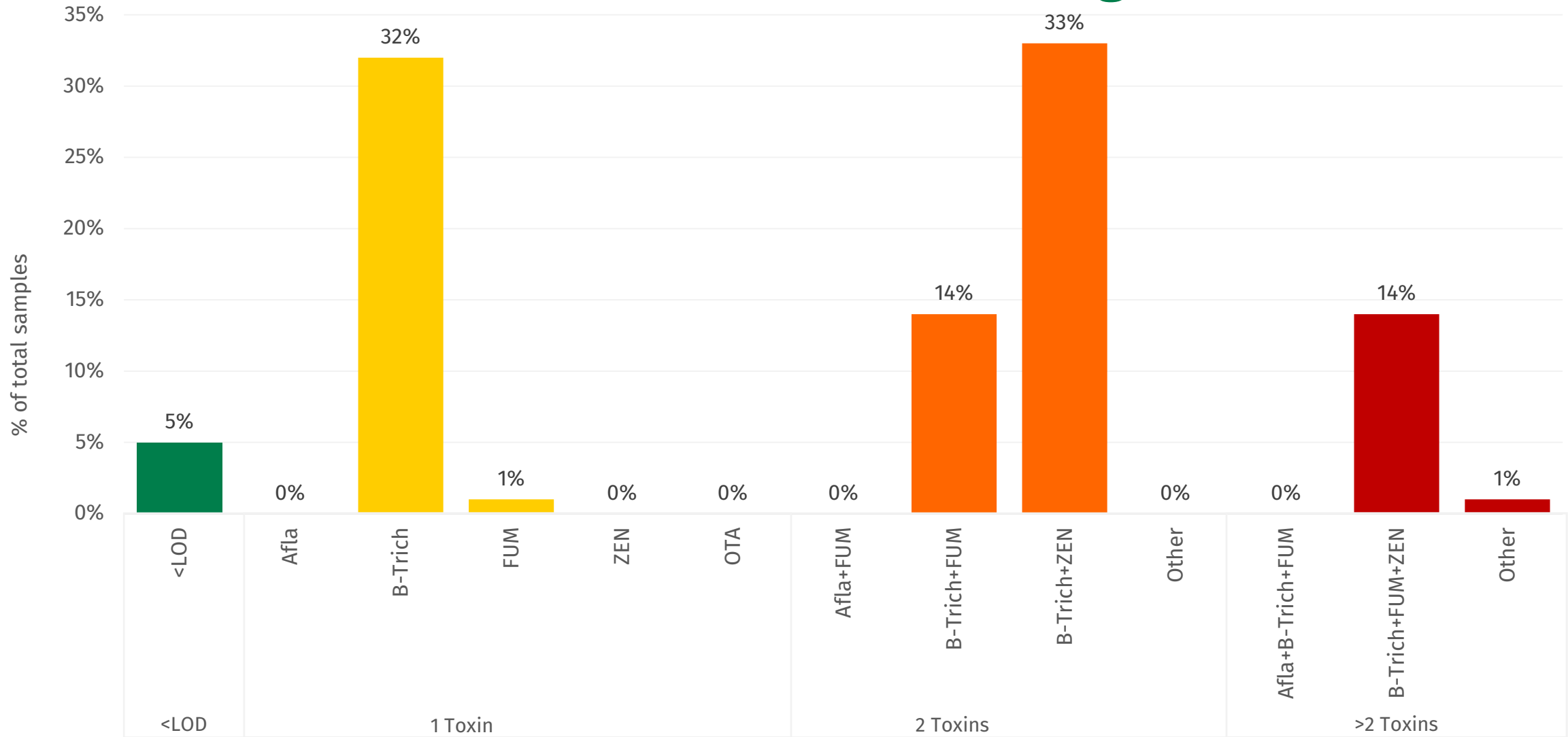
Based on the samples analyzed.



# Co-occurrence Trend in 2022 US Corn Silage



# Co-occurrence Profile in 2022 US Corn Silage

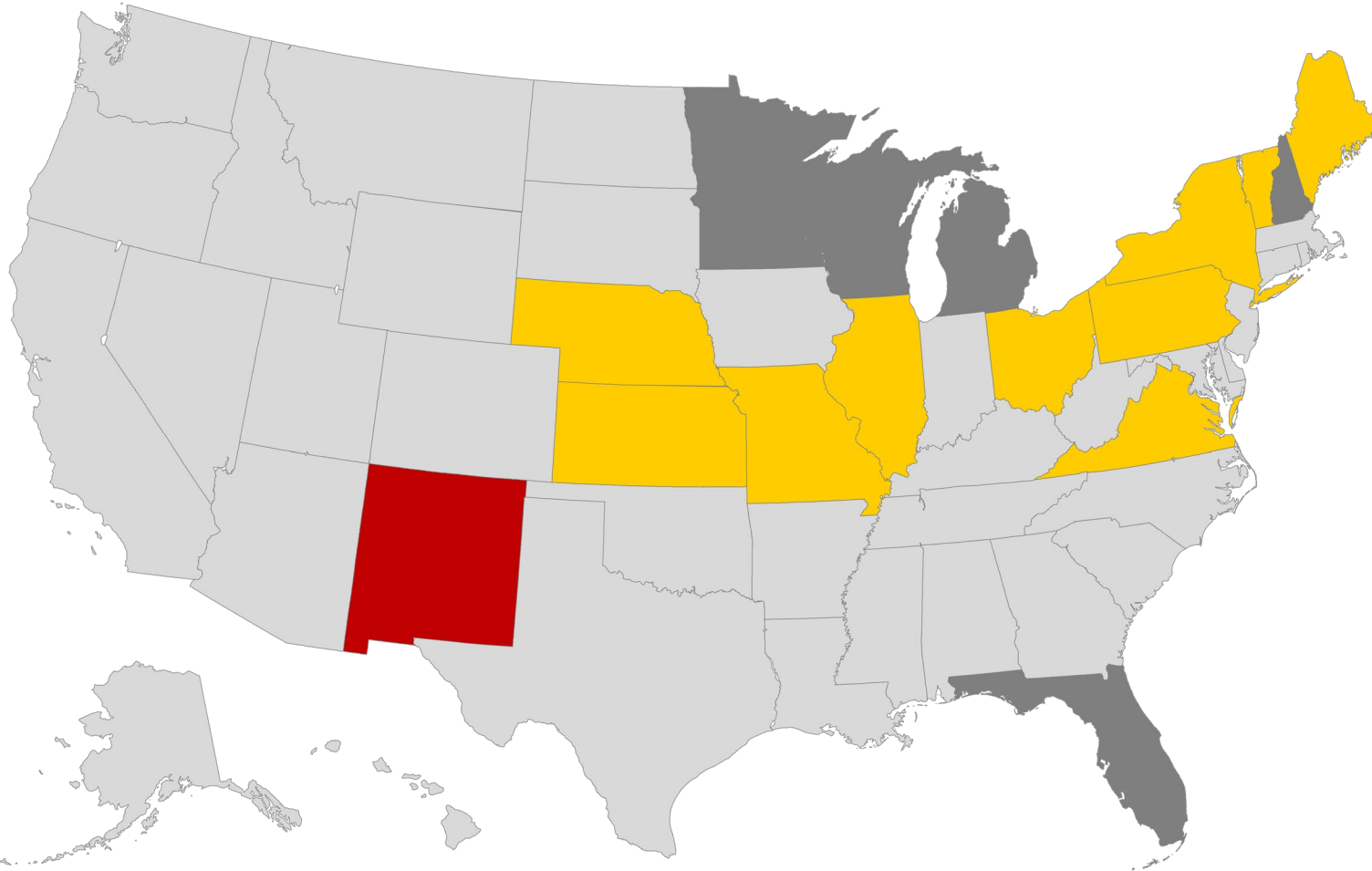








# 2022 Corn Silage Risk by State – FUM



State	Number of Samples	% Positive Samples	Avg of Positive Samples
NM	1	100	2744
KS	4	75	863
PA	4	50	821
ME	3	33	635
NY	25	24	549
VA	2	100	477
IL	4	50	313
VT	6	17	310
MO	1	100	256
OH	13	8	233
NE	2	50	199
FL	2	0	0
MI	1	0	0
MN	1	0	0
NH	2	0	0
WI	2	0	0

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- State with average > 2000 ppb
- State with average < 2000 ppb
- State with samples < LOD (100 ppb)
- No sample submitted

Based on the samples analyzed in this region.





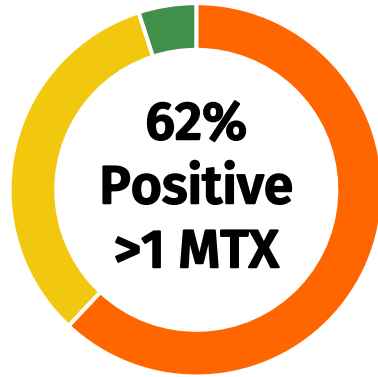
# Mycotoxin Survey Summary – 2022 US Corn Silage



73 corn silage samples submitted from 16 states



vs. 95% in 2021



vs. 67% in 2021

vs. 2021



- 93% positive / ↑ from 88%
- 2835 ppb / ↑ from 2802 ppb

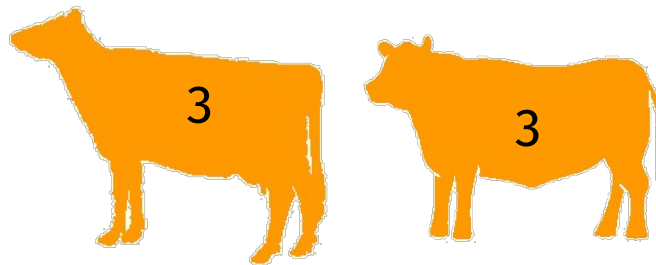
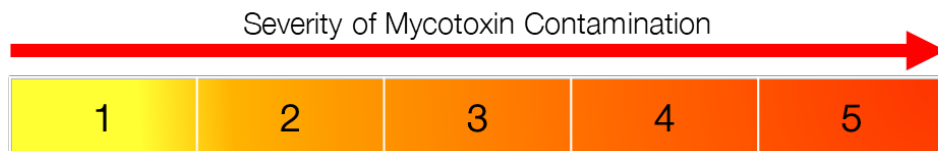


- 29% positive / ↑ from 20%
- 642 ppb / ↓ from 841 ppb



- 48% positive / ↓ from 67%
- 783 ppb / ↑ from 555 ppb

## Forecasted potential risk for livestock production\*:



\*Based on the samples analyzed.

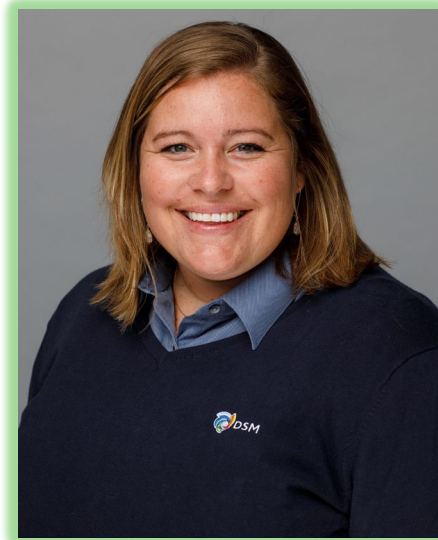


# Questions?

# Thank you!



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