

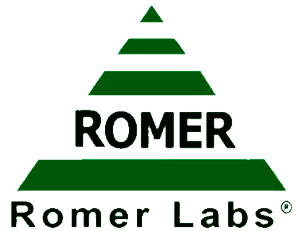
Mycotoxin Occurrence in 2020 US Corn Silage Jan 2021 Update

Jan 14, 2021

Mycotoxins & Analysis



LC-MS/MS



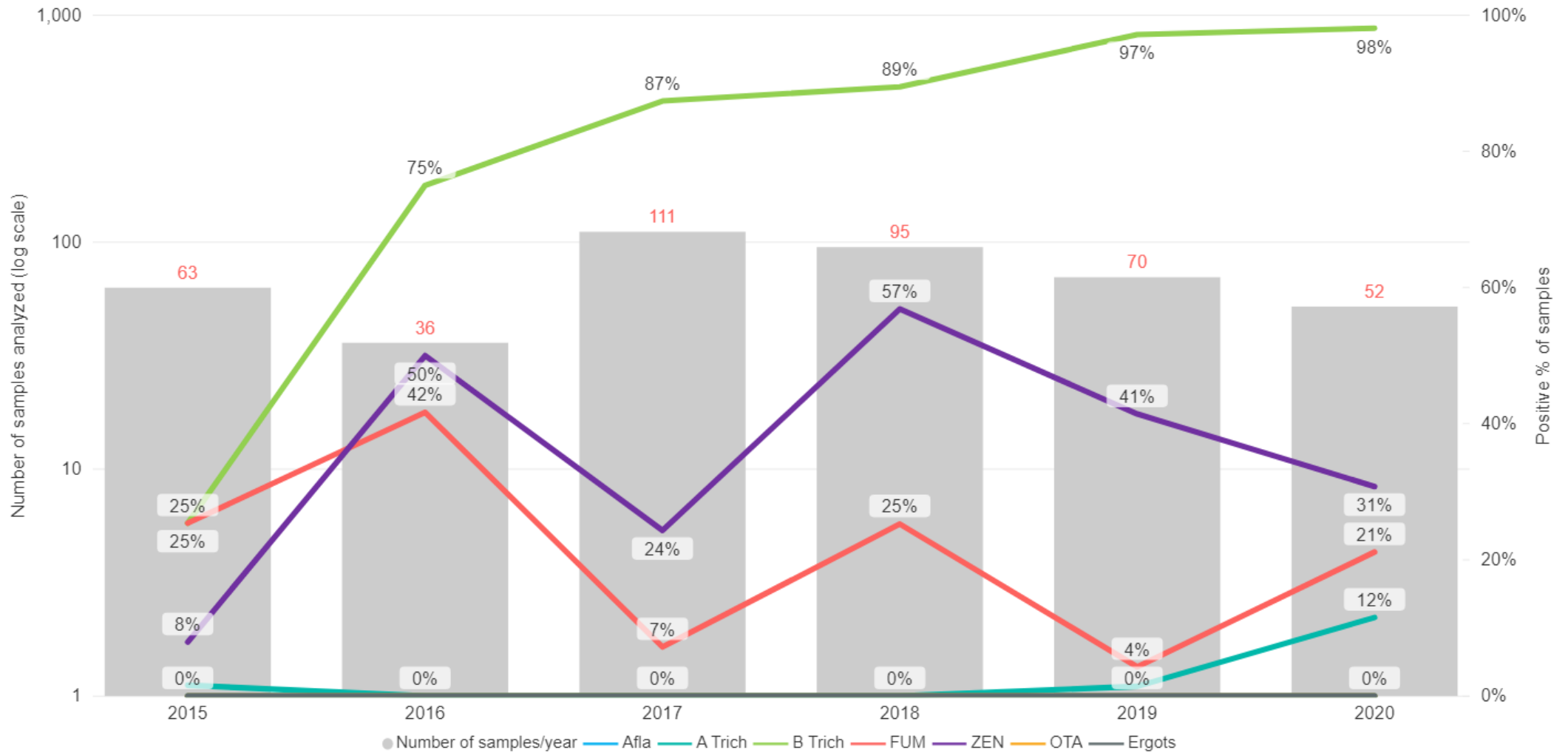
2 Labs

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	100.0
	HT-2	100.0
	Neosolaniol	100.0
	Diacetoxyscirpenol (DAS)	100.0
B-Trichothecenes (B-Trich)	Deoxynivalenol (DON/Vomitoxin)	100.0
	Acetyl-deoxynivalenol (A-DON)	100.0
	Nivalenol (NIV)	100.0
	Fusarenon X (FUS-X)	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

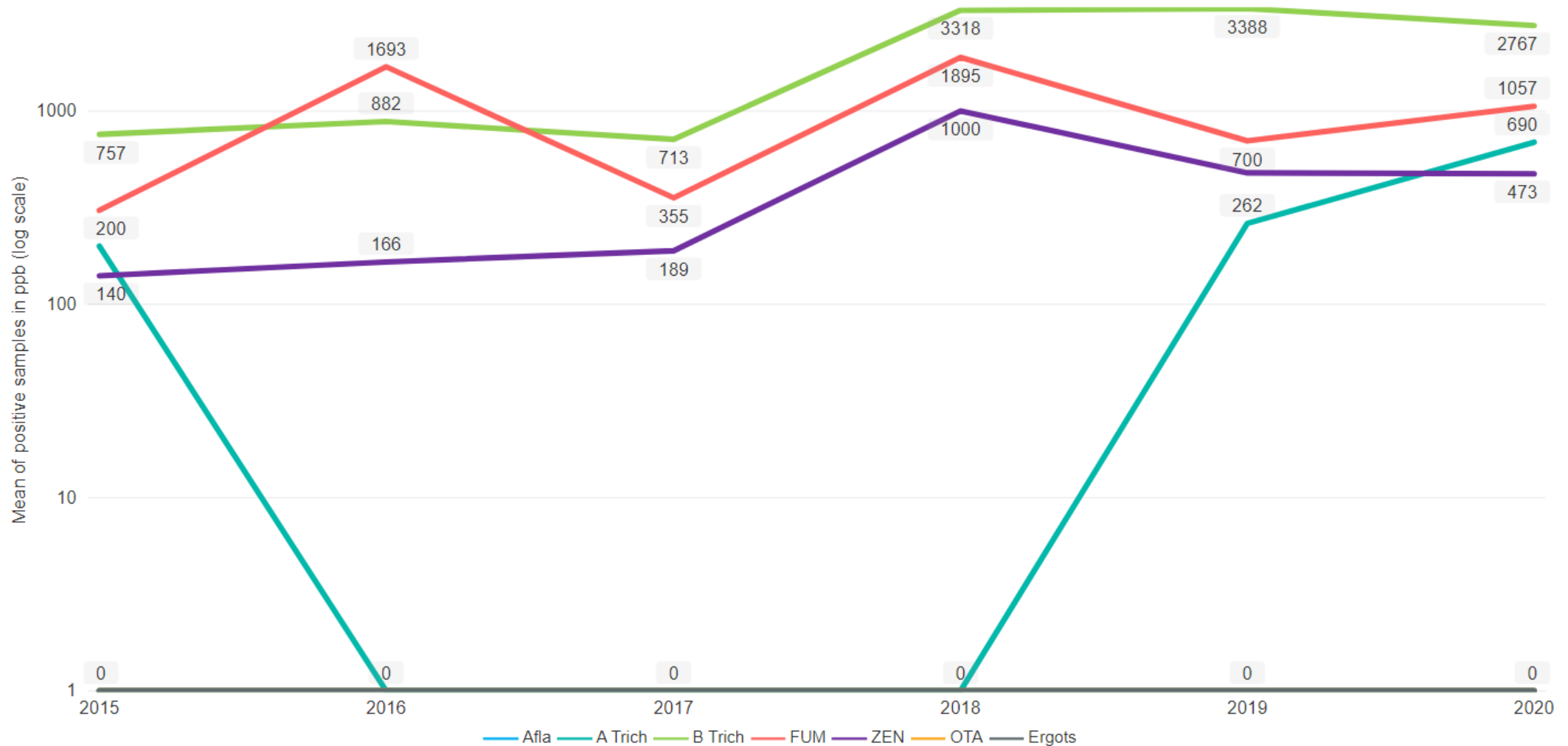


2020 US Corn Silage (dry matter basis)

MTX Occurrence Trend in 2020 US Corn Silage



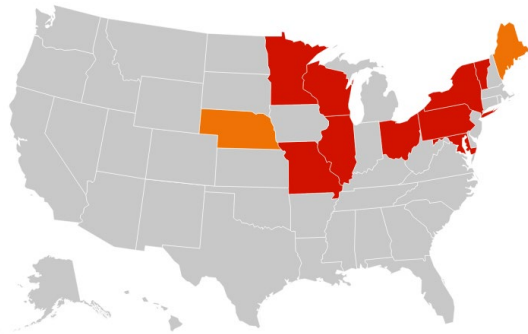
Mean of Positives Trend in 2020 US Corn Silage



2020 Corn Silage Risk by State



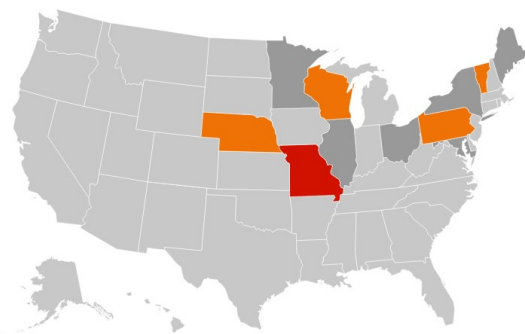
B-Trich



- State with average > 1,000 ppb
- State with average < 1,000 ppb
- State with samples < LOD (100 ppb)
- No sample submitted

State	Number of Samples	% Positive Samples	Avg of Positive Samples
OH	5	100%	8096
PA	10	100%	3379
NY	8	100%	2973
MD	1	100%	2404
VT	2	100%	2336
MO	4	100%	2235
MN	1	100%	1745
WI	12	92%	1596
IL	1	100%	1066
NE	5	100%	864
ME	3	100%	785

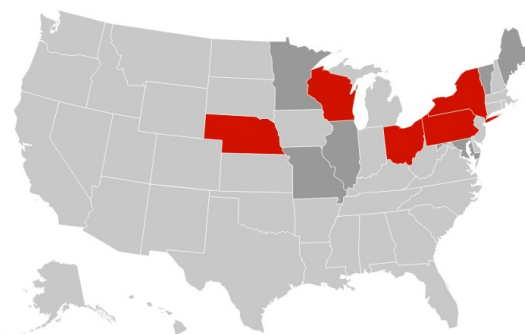
FUM



- State with average > 2,000 ppb
- State with average < 2,000 ppb
- State with samples < LOD (100 ppb)
- No sample submitted

State	Number of Samples	% Positive Samples	Avg of Positive Samples
MO	4	50%	3242
NE	5	40%	926
VT	2	50%	573
PA	10	40%	464
WI	12	17%	434
IL	1	0%	0
MD	1	0%	0
ME	3	0%	0
MN	1	0%	0
NY	8	0%	0
OH	5	0%	0

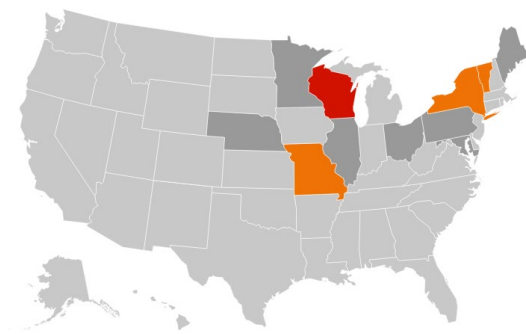
ZEN



- State with average > 100 ppb
- State with average < 100 ppb
- State with samples < LOD (51.7 ppb)
- No sample submitted

State	Number of Samples	% Positive Samples	Avg of Positive Samples
OH	5	40%	870
PA	10	60%	510
NY	8	50%	454
WI	12	17%	285
NE	5	40%	195
IL	1	0%	0
MD	1	0%	0
ME	3	0%	0
MN	1	0%	0
MO	4	0%	0
VT	2	0%	0

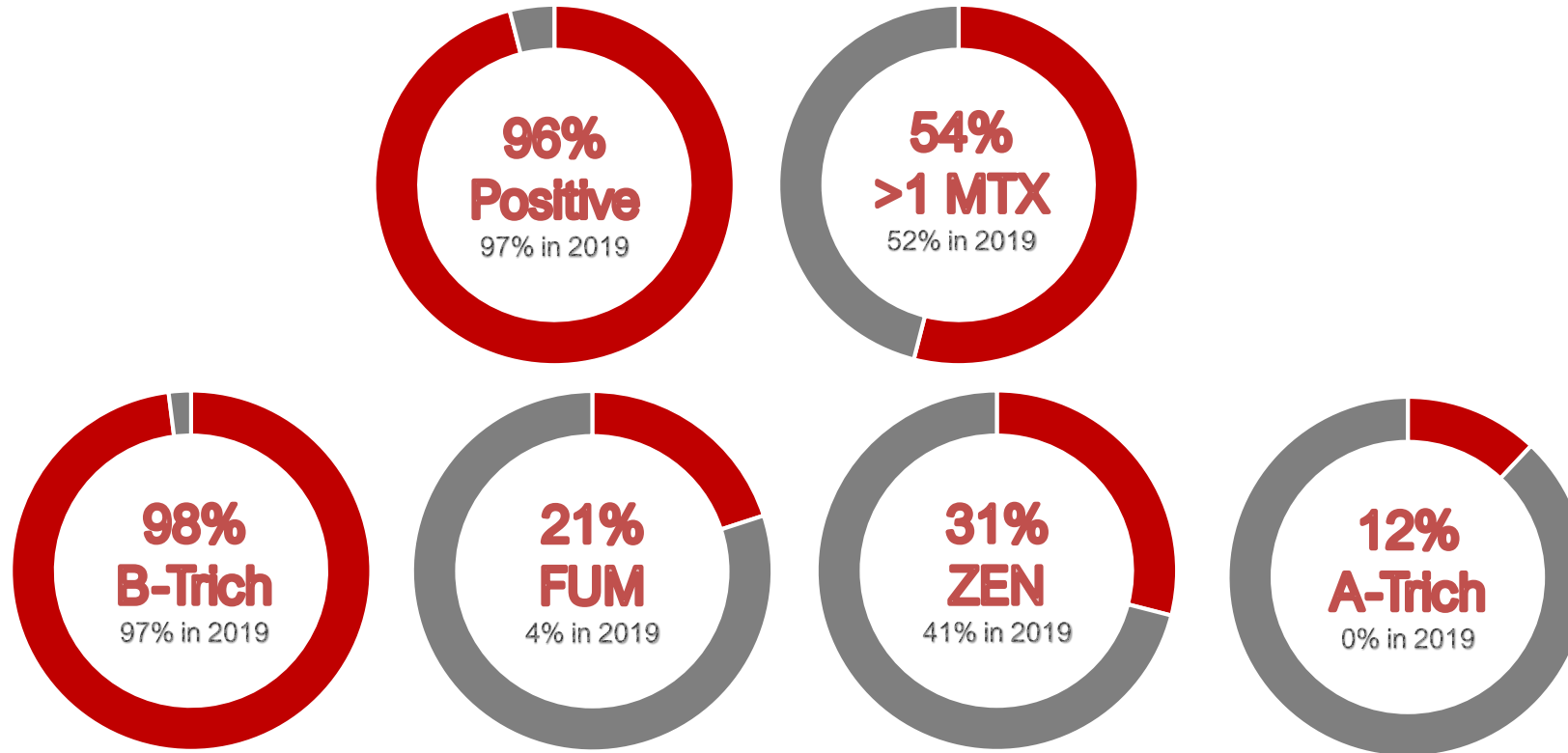
A-Trich



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

State	Number of Samples	% Positive Samples	Avg of Positive Samples
WI	12	17%	1535
VT	2	50%	306
MO	4	50%	272
NY	8	13%	218
IL	1	0%	0
MD	1	0%	0
ME	3	0%	0
MN	1	0%	0
NE	5	0%	0
OH	5	0%	0
PA	10	0%	0

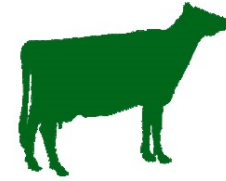
Mycotoxin Survey Summary - 2020 US Corn Silage



Questions?



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<https://www.biomin.net/us/survey/>