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Mycotoxin Summary Results

Mycotoxin Report: October 2024 – March 2025

Continued Elevated DON Levels and Rising Incidence of Fumonisin

Following a challenging 2024 growing season in much of the US, mycotoxin levels increased in corn silage and TMR samples from October 1, 2024 through March 31, 2025. The trend for elevated DON was present in both types of samples, and most notable was the elevated fumonisin content in corn silage and TMR samples from the mid-Atlantic and East. Sample data is presented in Table 1 and 2 and Figures 1 and 2 for the 323 corn silage and 506 TMR samples, respectively.

Throughout the Northeast, DON and zearalenone contamination have been consistently high in the last several surveys. DON is at a high-risk level from Pennsylvania to the north through New York paired with medium risk for zearalenone in corn silage and TMR samples.

North Carolina, Virginia and Pennsylvania have similar DON concentrations as the last survey, medium to high risk, but fumonisin has increased significantly in corn silage and TMR to high risk. Kentucky and Tennessee have also seen a significant increase in fumonisin concentration in corn silage and TMR. Both states have a medium risk for DON but are at high risk for fumonisin.

In the Upper Midwest, TMR and corn silage concentrations of DON and zearalenone are shifting higher and fumonisin is becoming more prevalent in TMR samples. Singular mycotoxins are at medium risk levels for corn silage and TMR, but with several mycotoxins present in the corn silage and TMR samples the entire TMR has shifted into the high-risk category.

More than what the assay results say, what the cows tell us is the most important deciding factor for deploying a mycotoxin mitigation program. Paying close attention to milk components, manure consistency, health events, and reproduction will give indicators to how the cows are handling the mycotoxin load in the feed in addition to other challenge factors they are encountering. Using both the sample results and herd indicators will drive the decision for the amount of DTX to feed. Additionally, as we look forward to corn silage harvest, it is important to assess freshly chopped corn silage for mycotoxins in preparation for successfully transitioning to the next forage crop.

Agrarian Solutions provides complimentary mycotoxin testing in feed ingredients and TMR to ensure the right amount of DTX is fed to support performance. Contact your Agrarian representative for assistance testing feeds and analyzing test results throughout the summer heat stress and fall harvest seasons.

OCTOBER 2024 – MARCH 2025

Table 1

State	Total DON, ppm	Zearalenone, ppb	Total T2, HT2, ppb	Total Fumonisins, ppm
FL	ND	17	ND	0.33
IA	0.22	15	3	0.30
IL	1.02	55	ND	0.77
IN	0.91	64	ND	0.14
KS	0.20	ND	ND	4.78
KY	0.55	74	ND	1.05
MD	0.70	94	14	2.29
MI	1.34	116	15	0.15
MN	0.76	210	111	0.11
MO	0.80	170	190	1.10
NC	0.83	98	94	1.17
NE	0.21	ND	ND	0.15
NY	1.34	225	59	0.31
OH	1.70	124	6	0.36
PA	1.51	261	49	2.23
TN	2.16	220	ND	2.40
VA	1.14	153	23	4.07
VT	0.70	163	20	ND
WI	0.80	121	16	0.60
WV	0.69	132	15	1.77

= nd - none detected
= low risk
= medium risk
= high risk

ppm = parts per million
ppb = parts per billion

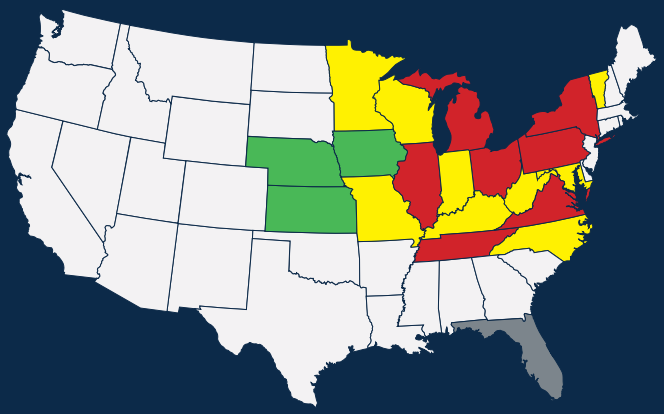
START DATE **October 1, 2024** | END DATE **March 31, 2025**

NO. OF SAMPLES 506

1 DON = DON + 3-Acetyl-DON + 15-Acetyl-DON; FUM = fumonisin B1 + fumonisin B2; T-2 = T-2 toxin + HT-2 Toxin

Figure 1

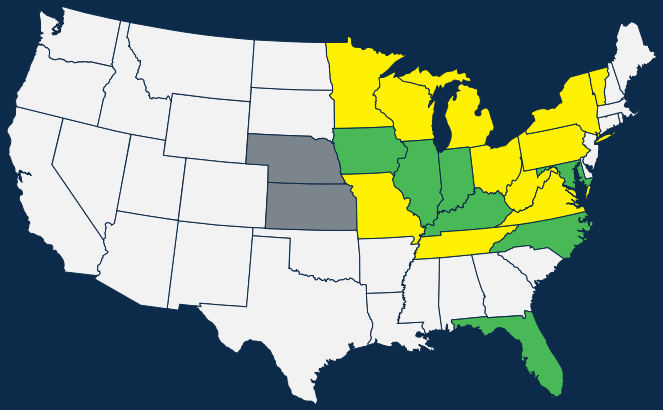
DON



ppm (parts per million)

nd | <.30 | .30-1.00 | >1.00

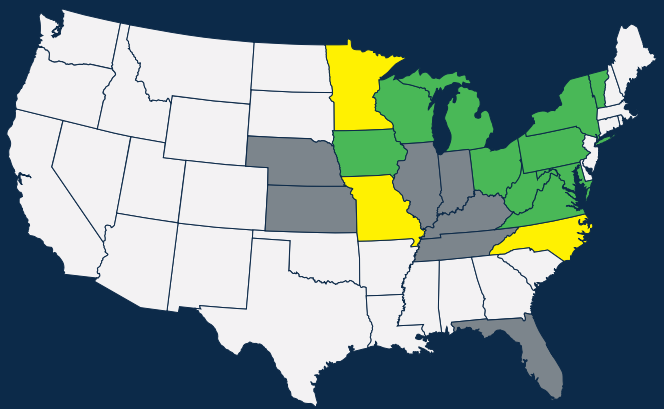
Zearalenone



ppb (parts per billion)

nd | <100 | 100-300 | 301+

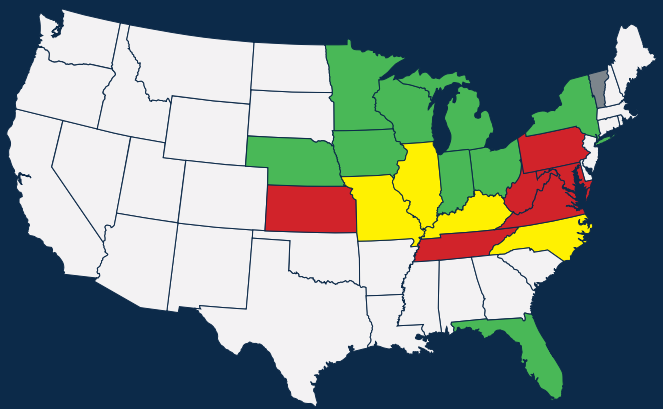
T-2 Toxin



ppb (parts per billion)

nd | <75 | 75-150 | 151+

Fumonisins



ppm (parts per million)

nd | <.60 | .60-1.50 | >1.50

October 1, 2024 - March 31, 2025 State Averages (all values in ppm or ppb)

Table 2

State	Total DON, ppm	Zearalenone, ppb	Total T2, HT2, ppb	Total Fumonisins, ppm
AL	ND	ND	ND	ND
AR	ND	ND	ND	0.15
FL	0.38	185	ND	ND
IA	0.95	77	6	0.02
ID	0.46	ND	ND	ND
IL	4.48	240	ND	0.30
IN	1.33	39	18	0.14
KS	.31	18	1	0.55
KY	1.33	96	ND	3.02
MD	0.14	ND	ND	2.57
ME	2.07	163	31	0.20
MI	1.38	287	81	ND
MN	0.86	102	46	0.12
NC	2.30	1,022	124	0.60
NY	2.15	295	61	0.18
OH	1.76	118	142	0.13
PA	2.28	361	21	2.77
TN	0.61	383	13	2.04
UT	1.80	ND	ND	ND
VA	1.38	331	7	6.84
VT	2.38	731	73	0.28
WI	1.07	90	23	0.34
WV	4.4	ND	ND	ND

= nd - none detected
= low risk
= medium risk
= high risk

ppm = parts per million
ppb = parts per billion

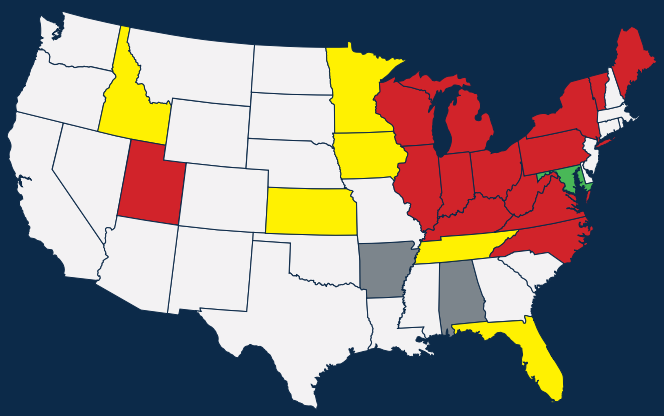
START DATE **October 1, 2024** | END DATE **March 31, 2025**

NO. OF SAMPLES 323

1 DON = DON + 3-Acetyl-DON + 15-Acetyl-DON; FUM = fumonisin B1 + fumonisin B2; T-2 = T-2 toxin + HT-2 Toxin

Figure 2

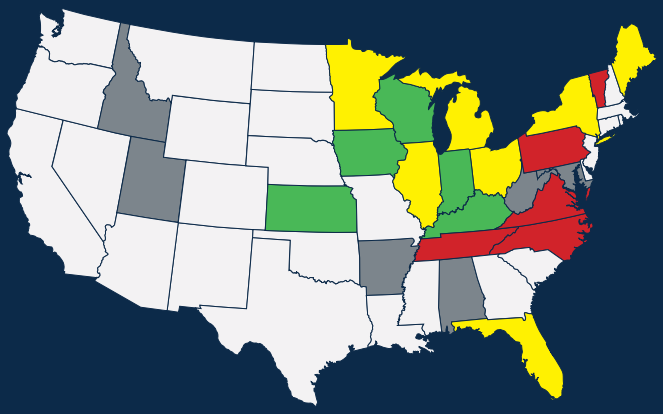
DON



ppm (parts per million)

nd | <.30 | .30-1.00 | >1.00

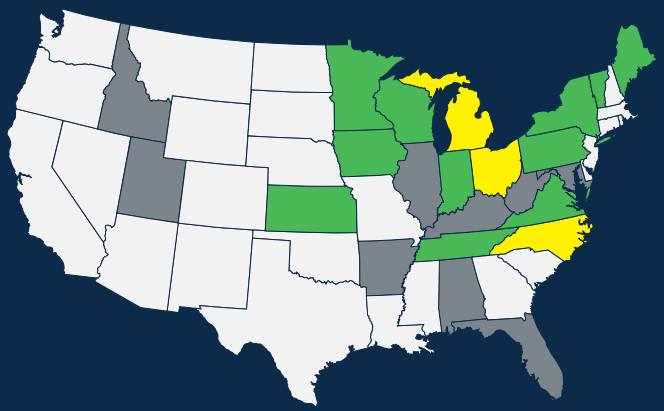
Zearalenone



ppb (parts per billion)

nd | <100 | 100-300 | 301+

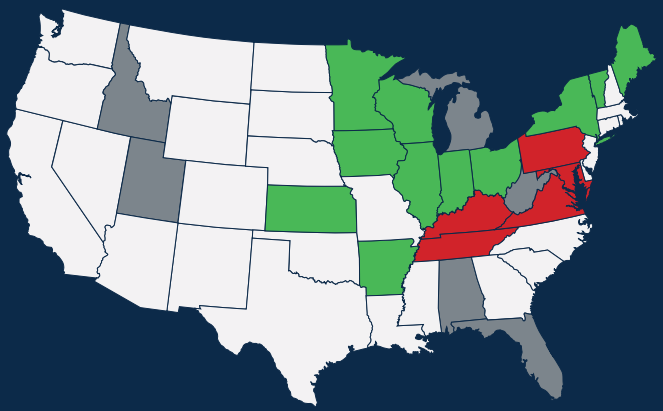
T-2 Toxin



ppb (parts per billion)

nd | <75 | 75-150 | 151+

Fumonisins



ppm (parts per million)

nd | <.60 | .60-1.50 | >1.50

October 1, 2024 - March 31, 2025 State Averages (all values in ppm or ppb)