



AAFCO
Association of American Feed Control Officials



Mycotoxin Contaminants Scheme

Dairy Feed

Test Material Code # 202262

Method Summary Report

(Precision Report Follows)

Labs Reporting: 63

Methods Reported: 96

Issue Date : 05/31/2022

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	Revised Horwitz SD (offp)	Uncertainty (U) Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
600.01	Total Aflatoxin, Neogen Veratox Aflatoxin (ppb)	11	11	16.48	2.644	16.48	5.626	2.120	34.13%	1.349	22.00%
600.20	Total Aflatoxin, LC (ppb)	10	10	23.01	6.715	23.01	7.781	3.076	33.82%	1.252	22.00%
600.14	Total Aflatoxin, Vicam Aflatest (ppb)	5	5	15.76	8.037	15.76	5.387	2.409	34.17%	0.8936	22.00%
600.24	Total Aflatoxin, LC-MS/MS (ppb)	5	5	25.34	5.023	25.34	8.548	3.823	33.73%	0.6000	22.00%
600.08	Total Aflatoxin, Romer AgraQuant Total Afl 4-40ppb (ppb)	3	3	23.35	3.499	23.35	7.895	4.558	33.81%	0.8400	22.00%
600.13	Total Aflatoxin, r-Biopharm Ridascreen FAST Afl SC (ppb)	3	3	28.39	13.57	28.39	9.547	5.512	33.63%	1.490	22.00%
600.98	Total Aflatoxin, Other Rapid Test Kit (ppb)	3	3	20.42	3.203	20.42	6.928	4.000	33.93%	1.633	22.00%
600.12	Total Aflatoxin, r-Biopharm Ridascreen FAST Afl (ppb)	2	2	16.15	4.952						
600.21	Total Aflatoxin, LC-PCD FI (ppb)	2	2	23.28	8.528						
600.99	Total Aflatoxin, Miscellaneous (ppb)	2	2	50.87	48.56						
600.04	Total Aflatoxin, Charm ROSA Fast 5 Aflatoxin Quant (ppb)	1	1	15.00							
600.22	Total Aflatoxin, Vicam Aflatest, LC-FI (ppb)	1	1	27.37							
600.23	Total Aflatoxin, LC-MS (ppb)	1	1	32.53							
601.23	Aflatoxin B1, LC-MS/MS (ppb)	19	19	20.34	6.398	20.61	6.992	2.005	33.92%	2.054	22.00%
601.20	Aflatoxin B1, LC (ppb)	7	7	16.31	5.544	16.31	5.567	2.630	34.14%	0.9323	22.00%
601.21	Aflatoxin B1, LC-PCD FI (ppb)	3	3	20.69	5.728	20.69	7.016	4.051	33.92%	0.5873	22.00%
601.24	Aflatoxin B1, Vicam Aflatest, LC-FI (ppb)	2	2	16.40	8.215						
601.98	Aflatoxin B1, Other Rapid Test Kit (ppb)	2	2	11.93	9.228						
601.91	Aflatoxin B1, Romer AgraQuant Afl B1 (ppb)	1	1	17.73							
601.92	Aflatoxin B1, r-Biopharm Ridascreen Afl B1I (ppb)	1	1	12.65							
601.99	Aflatoxin B1, Miscellaneous (ppb)	1	1	65.52							
602.23	Aflatoxin B2, LC-MS/MS (ppb)	19	16	5.519	3.035	5.010	1.766	0.5519	35.25%	0.2309	22.00%
602.20	Aflatoxin B2, LC (ppb)	7	7	3.472	0.8181	3.437	1.224	0.5783	35.61%	0.1103	22.00%
602.21	Aflatoxin B2, LC-PCD FI (ppb)	3	3	4.140	0.8704	4.140	1.467	0.8469	35.43%	0.2813	22.00%
602.24	Aflatoxin B2, Vicam Aflatest, LC-FI (ppb)	2	2	4.042	1.575						
603.23	Aflatoxin G1, LC-MS/MS (ppb)	17	3	1.147	0.7602	1.147	0.4208	0.3037		0.0000	22.00%
603.21	Aflatoxin G1, LC-PCD FI (ppb)	1	1	0.4220							
603.99	Aflatoxin G1, Miscellaneous (ppb)	1	1	19.63							
603.20	Aflatoxin G1, LC (ppb)	1		0.2500							

Method Code	Analyte and Method	Total # Labs Submitting	# Labs in Robust Calcs	Raw Mean	Raw SD	Assigned Value Robust Mean	Revised Horwitz SD (offp)	Uncertainty (U) - Robust	% RSD - Robust	Average Range (R-bar)	Thompson Horwitz %RSD
603.24	Aflatoxin G1, Vicam Aflatest, LC-FI (ppb)	1		15.00							
604.20	Aflatoxin G2, LC (ppb)	2	1	0.2420							
604.21	Aflatoxin G2, LC-PCD FI (ppb)	1	1	0.1158							
604.23	Aflatoxin G2, LC-MS/MS (ppb)	15	1								
604.24	Aflatoxin G2, Vicam Aflatest, LC-FI (ppb)	2	1	0.2420							
604.98	Aflatoxin G2, Other Rapid Test Kit (ppb)	1	1	18.50							
610.23	Deoxynivalenol, LC-MS/MS (ppb)	19	19	3,414	804.4	3,385	1,000	286.8	29.54%	191.0	13.31%
610.01	Deoxynivalenol, Neogen Veratox for DON (ppb)	12	12	2,561	1,395	2,670	794.0	286.5	29.73%	141.7	13.80%
610.20	Deoxynivalenol, LC (ppb)	6	6	1,905	1,539	1,905	571.5	291.7	30.01%	89.71	14.52%
610.98	Deoxynivalenol, Other Rapid Test Kit (ppb)	5	5	3,071	1,842	3,071	909.5	406.8	29.62%	326.1	13.51%
610.99	Deoxynivalenol, Miscellaneous (ppb)	4	4	3,716	1,237	3,716	1,095	547.6	29.47%	285.0	13.13%
610.05	Deoxynivalenol, Romer AgraQuant DON (ppb)	3	3	3,088	636.6	3,088	914.6	528.1	29.62%	23.33	13.50%
610.08	Deoxynivalenol, r-Biopharm Ridascreen FAST DON SC (ppb)	2	2	3,909	2,028						
610.04	Deoxynivalenol, Charm ROSA Fast 5 DON Quant (ppb)	1	1	4,350							
610.06	Deoxynivalenol, r-Biopharm Ridascreen DON (ppb)	1	1	3,185							
610.07	Deoxynivalenol, r-Biopharm Ridascreen FAST DON (ppb)	1	1	3,250							
610.22	Deoxynivalenol, LC-MS (ppb)	1	1	2,607							
610.25	Deoxynivalenol, GC-MS (ppb)	1	1	7,320							
620.01	Total Fumonisin, Neogen Veratox Fumonisin (ppb)	9	9	2,233	1,282	2,483	739.8	308.2	29.79%	224.5	13.95%
620.23	Total Fumonisin, LC-MS/MS (ppb)	6	6	3,174	663.6	3,173	939.2	479.3	29.60%	119.9	13.44%
620.09	Total Fumonisin, r-Biopharm Ridascreen FAST FUM (ppb)	5	5	2,901	776.4	2,901	860.6	384.9	29.67%	448.2	13.63%
620.07	Total Fumonisin, Romer AgraQuant Total Fumonisin (ppb)	3	3	3,210	1,254	3,210	949.7	671.6	29.59%	60.00	13.42%
620.11	Total Fumonisin, Vicam Fumonitest (ppb)	3	3	1,556	627.2	1,556	469.3	271.0	30.17%	80.68	14.97%
620.02	Total Fumonisin, Neogen Veratox Fumonisin 5/10 (ppb)	2	2	3,295	289.9						
620.99	Total Fumonisin, Miscellaneous (ppb)	2	2	2,767	1,128						
620.04	Total Fumonisin, Charm ROSA Fast 5 FUMQ (ppb)	1	1	3,250							
620.12	Total Fumonisin, Vicam Fumonitest 200 (ppb)	1	1	3,200							
620.20	Total Fumonisin, LC (ppb)	1	1	3,100							
620.98	Total Fumonisin, Other Rapid Test Kit (ppb)	1	1	3,600							
621.23	Fumonsin B1, LC-MS/MS (ppb)	18	18	2,274	1,261	2,114	632.5	186.4	29.92%	272.5	14.29%
621.21	Fumonsin B1, LC-FI OPA der. (ppb)	3	3	1,378	510.9	1,378	417.1	240.8	30.27%	42.31	15.24%
621.20	Fumonsin B1, LC (ppb)	1	1	1,828							
621.98	Fumonsin B1, Other Rapid Test Kit (ppb)	1	1	3,850							
622.23	Fumonisin B2, LC-MS/MS (ppb)	18	17	622.9	315.6	588.2	182.2	55.24	30.98%	38.20	17.33%
622.21	Fumonisin B2, LC-FI OPA der. (ppb)	3	2	431.2	110.1	431.2	134.7			7.560	18.16%
623.23	Fumonisin B3, LC-MS/MS (ppb)	11	11	253.2	243.5	195.8	62.48	23.55	31.92%	38.21	20.45%
630.23	Ochratoxin A, LC-MS/MS (ppb)	16	16	115.0	33.24	115.6	37.44	11.70	32.37%	11.56	22.00%
630.20	Ochratoxin A, LC (ppb)	9	9	107.0	34.35	107.0	34.73	14.47	32.44%	13.26	22.00%
630.01	Ochratoxin A, Neogen Veratox Ochratoxin (ppb)	3	3	161.4	243.1	161.4	51.77	36.61	32.08%	12.60	21.05%
630.05	Ochratoxin A, r-Biopharm Ridascreen FAST Och A (ppb)	3	3	84.98	26.10	84.98	27.74	16.02	32.65%	12.94	22.00%

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630.03	Ochratoxin A, Romer AgraQuant Ochratoxin (ppb)	2	2	135.7	23.60						
630.06	Ochratoxin A, Vicam OchraTest (ppb)	2	2	78.11	32.69						
630.99	Ochratoxin A, Miscellaneous (ppb)	2	2	101.3	78.32						
630.21	Ochratoxin A, LC-PCD FI (ppb)	1	1	119.0							
640.23	T-2 Toxin, LC-MS/MS (ppb)	16	13	46.16	12.88	45.22	15.02	5.206	33.21%	2.881	22.00%
640.03	T-2 Toxin, Romer AgraQuant T-2 (ppb)	2	2	58.98	32.88						
640.98	T-2 Toxin, Other Rapid Test Kit (ppb)	2	2	149.9	58.41						
640.05	T-2 Toxin, r-Biopharm Ridascreen FAST T-2 (ppb)	1	1	39.48							
640.21	T-2 Toxin, LC-PCD FI (ppb)	1	1	36.70							
640.99	T-2 Toxin, Miscellaneous (ppb)	1	1	38.08							
640.25	T-2 Toxin, GC-MS (ppb)	1		20.00							
641.23	HT-2 Toxin, LC-MS/MS (ppb)	11	10	61.78	23.77	57.07	18.83	7.445	33.00%	2.338	22.00%
641.21	HT-2 Toxin, LC post-col photochem der. FI (ppb)	1	1	27.40							
642.21	T-2 Toxin + HT-2 Toxin, Neogen Veratox T-2 + HT-2 (ppb)	6	6	128.8	31.40	128.8	41.57	21.22	32.28%	10.29	21.78%
642.98	T-2 Toxin + HT-2 Toxin, Other Rapid Test Kit (ppb)	2	2	165.1	139.6						
642.99	T-2 Toxin + HT-2 Toxin, Miscellaneous Technique (ppb)	2	2	99.58	34.02						
642.04	T-2 Toxin + HT-2 Toxin, LC-MS (ppb)	1	1	118.5							
650.24	Zearalenone, LC-MS/MS (ppb)	17	17	591.5	225.7	607.1	187.9	56.97	30.95%	46.35	17.24%
650.20	Zearalenone, LC (ppb)	9	9	537.0	60.82	542.8	168.5	70.21	31.05%	33.82	17.54%
650.01	Zearalenone, Neogen Veratox Zearalenone (ppb)	7	7	500.1	255.4	500.1	155.6	73.51	31.12%	40.69	17.76%
650.98	Zearalenone, Other Rapid Test Kit (ppb)	4	4	563.0	216.4	563.0	174.6	87.31	31.02%	51.80	17.44%
650.04	Zearalenone, Romer AgraQuant ZON (ppb)	3	3	686.9	146.2	686.9	211.9	122.3	30.85%	7.423	16.93%
650.07	Zearalenone, r-Biopharm Ridascreen FAST ZON SC (ppb)	3	3	375.1	25.84	375.1	117.6	83.18	31.36%	23.73	18.54%
650.99	Zearalenone, Miscellaneous (ppb)	3	3	283.0	235.0	283.0	89.43	63.23	31.60%	0.3333	19.34%
650.06	Zearalenone, r-Biopharm Ridascreen FAST ZON (ppb)	2	2	465.9	65.15						
650.21	Zearalenone, LC-FI, ISO (ppb)	1	1	501.2							
650.23	Zearalenone, LC-MS (ppb)	1	1	884.5							

Notes: Robust statistics not used if < 6 labs reporting. In this case Means and SD's may be reported based on Raw Data with obvious blunders removed. Robust Assigned Values indicated in bold font. Horwitz and Revised Horwitz SD's assigned regardless of participant number.



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Mycotoxin Contaminants Scheme

Dairy Feed

Test Material Code # 202262

Method Precision Report

Methods Reported: 26

Labs Reporting: 63

Issue Date : 05/31/2022

Method Code	Analyte and Method	Total # Labs Submitting	# Labs used in Precision Calcs	Precision Mean	Precision SD	Between Labs SL	Within Labs sr	Reproducibility SR	Between Labs %RSD	Within Labs %rsd	Reproducibility %RSD	sR/sr
600.01	Total Aflatoxin, Neogen Veratox Aflatoxin (ppb)	11	11	16.48	2.644	2.463	1.360	2.814	14.94%	8.25%	17.07%	2.070
600.14	Total Aflatoxin, Vicam Aflatest (ppb)	5	5	15.76	8.037	8.018	0.7801	8.056	50.86%	4.95%	51.10%	10.33
600.20	Total Aflatoxin, LC (ppb)	10	9	23.01	6.715	6.902	0.7543	6.943	30.67%	3.35%	30.85%	9.205
600.24	Total Aflatoxin, LC-MS/MS (ppb)	5	5	25.34	5.023	5.004	0.6050	5.041	19.75%	2.39%	19.89%	8.332
601.20	Aflatoxin B1, LC (ppb)	7	7	16.31	5.544	5.511	0.8535	5.577	33.80%	5.23%	34.20%	6.534
601.23	Aflatoxin B1, LC-MS/MS (ppb)	19	18	20.34	6.398	6.402	1.706	6.626	31.81%	8.48%	32.92%	3.884
602.20	Aflatoxin B2, LC (ppb)	7	7	3.472	0.8181	0.8148	0.1047	0.8215	23.47%	3.01%	23.66%	7.848
602.23	Aflatoxin B2, LC-MS/MS (ppb)	19	15	5.519	3.035	2.088	0.2419	2.102	42.15%	4.88%	42.43%	8.690
610.01	Deoxynivalenol, Neogen Veratox for DON (ppb)	12	12	2,561	1,395	1,392	117.7	1,397	54.37%	4.59%	54.57%	11.88
610.20	Deoxynivalenol, LC (ppb)	6	5	1,905	1,539	1,715	12.02	1,715	92.42%	0.65%	92.42%	142.7
610.23	Deoxynivalenol, LC-MS/MS (ppb)	19	17	3,414	804.4	620.3	149.2	637.9	18.94%	4.55%	19.48%	4.277
610.98	Deoxynivalenol, Other Rapid Test Kit (ppb)	5	5	3,071	1,842	1,829	306.1	1,854	59.56%	9.97%	60.39%	6.058
620.01	Total Fumonisin, Neogen Veratox Fumonisin (ppb)	9	9	2,233	1,282	1,270	251.0	1,295	56.88%	11.24%	57.98%	5.158
620.09	Total Fumonisin, r-Biopharm Ridascreen FAST FUM (ppb)	5	5	2,901	776.4	728.3	380.2	821.6	25.11%	13.11%	28.32%	2.161
620.23	Total Fumonisin, LC-MS/MS (ppb)	6	5	3,174	663.6	668.0	50.14	669.8	21.86%	1.64%	21.92%	13.36
621.23	Fumonsin B1, LC-MS/MS (ppb)	18	17	2,274	1,261	645.0	249.6	691.6	31.95%	12.36%	34.26%	2.771
622.23	Fumonisin B2, LC-MS/MS (ppb)	18	15	622.9	315.6	201.5	22.02	202.7	36.62%	4.00%	36.84%	9.202
623.23	Fumonisin B3, LC-MS/MS (ppb)	11	10	253.2	243.5	63.43	35.97	72.91	34.77%	19.72%	39.97%	2.027
630.20	Ochratoxin A, LC (ppb)	9	8	107.0	34.35	31.12	8.949	32.38	30.72%	8.83%	31.97%	3.619
630.23	Ochratoxin A, LC-MS/MS (ppb)	16	16	115.0	33.24	32.45	10.15	34.00	28.22%	8.82%	29.57%	3.352
640.23	T-2 Toxin, LC-MS/MS (ppb)	16	12	46.16	12.88	9.196	2.804	9.614	21.09%	6.43%	22.05%	3.429
641.23	HT-2 Toxin, LC-MS/MS (ppb)	11	9	61.78	23.77	9.777	2.211	10.02	17.82%	4.03%	18.27%	4.533
642.21	T-2 Toxin + HT-2 Toxin, Neogen Veratox T-2 + HT-2 (ppb)	6	6	128.8	31.40	30.61	9.881	32.17	23.77%	7.67%	24.98%	3.256
650.01	Zearalenone, Neogen Veratox Zearalenone (ppb)	7	6	500.1	255.4	190.0	17.35	190.8	44.26%	4.04%	44.45%	11.00
650.20	Zearalenone, LC (ppb)	9	9	537.0	60.82	55.20	36.13	65.97	10.28%	6.73%	12.29%	1.826
650.24	Zearalenone, LC-MS/MS (ppb)	17	16	591.5	225.7	209.3	33.38	211.9	36.84%	5.88%	37.31%	6.348

Notes: Precision Calculations provided for methods with 5 or more labs contributing to calculations.