

Table 1: Results and z-Scores for FB₁ and FB₂ in Maize

laboratory number	analyte					
	FB ₁			FB ₂		
	assigned value	389 µg/kg		assigned value	228 µg/kg	
	result µg/kg	recovery %	z-score	result µg/kg	recovery %	z-score
001	350	uncorr	-0.4	170	uncorr	-1.0
002	421	68	0.3	297	60	1.2
003	354	101	-0.3	202	99	-0.5
004	450.0	62	0.6	232	70	0.1
005	388	72	0.0	298	57	1.2
006	312	128	-0.8	167	102	-1.1
007	560	100	1.7	220	100	-0.1
008	302	100	-0.9	125	100	-1.8
009	1407	91	10.3	422	90	3.3
010	544.9	90	1.6	268.5	95	0.7
011	280	83,2	-1.1	245	84,5	0.3
012	106	94	-2.9	74	82	-2.7
013	392	95	0.0	220	65	-0.1
014	367	87	-0.2	251	91	0.4
015	550	100	1.6	240	100	0.2
016	459	103	0.7	258	102	0.5
017	265	100	-1.3	80	100	-2.6
018	336	95.1	-0.5	241	88.4	0.2
019	484	81	1.0	277	98	0.8
020♣	-	100		-	27	
021	760	104	3.8	352	102	2.1
022	<5			<5		
023	290	100	-1.0	180	100	-0.8
024	264	uncorr	-1.3	450	uncorr	3.8
025	394.17	96	0.1	253.92	90	0.4

z-scores outside the satisfactory range, i.e. $|z| > 2$, are shown in **bold**

uncorr = participant did not state recovery

♣ The total amount of fumonisin B₁ and B₂ is 536 µg/kg

Table 1 (continued): Results and z-Scores for FB₁ and FB₂ in Maize

laboratory number	analyte					
	FB ₁			FB ₂		
	assigned value	389 µg/kg		assigned value	228 µg/kg	
	result µg/kg	recovery %	z-score	result µg/kg	recovery %	z-score
026	561.37	88.00	1.8	247.98	93.00	0.3
027	1175.62	75	8.0	580.98	71	6.1
028	400	101	0.1	235	101	0.1
029	500	100	1.1	400	100	3.0
030	353	70	-0.4	178	70	-0.9
031	304.5	62.4	-0.9	179.6	62.4	-0.8
032	387	100	0.0	266	100	0.7
033	476	78	0.9	284	85	1.0
034	371.78	103	-0.2	142.66	106	-1.5
035	398.89	96.4%	0.1	234.82	92.3%	0.1
036	326	100	-0.6	240	100	0.2
037	354	87	-0.3	328	98	1.7
038	549	100	1.6	193	100	-0.6
039	279	79.8	-1.1	198	66.6	-0.5
040	332	100	-0.6	165	100	-1.1
041	349.09	93.1	-0.4	180.52	81.4	-0.8
042	371	95	-0.2	228	109	0.0
043	620	116	2.3	371	109	2.5
044	280	100	-1.1	241	100	0.2
045	379.86	uncorr	-0.1	276.01	uncorr	0.8
046	875.3	uncorr	4.9	309.5	uncorr	1.4
047	314	95	-0.8	228	120	0.0
048	359	100	-0.3	277	100	0.8
049	452.00	98	0.6	220.00	95	-0.1
050	201	uncorr	-1.9	110	uncorr	-2.0

z-scores outside the satisfactory range, i.e. $|z| > 2$, are shown in **bold**
uncorr = participant did not state recovery

Table 1 (continued): Results and z-Scores for FB₁ and FB₂ in Maize

laboratory number	analyte					
	FB ₁ 389 µg/kg			FB ₂ 228 µg/kg		
	assigned value	recovery %	z-score	assigned value	recovery %	z-score
051	421.28	uncorr	0.3	200.5	uncorr	-0.5
052	349.0	95.0	-0.4	176.0	80.0	-0.9
053	246.3	95.3	-1.4	138.4	86.7	-1.5
054	604	uncorr	2.2	91	uncorr	-2.4
055	433.5	84.42	0.5	286.5	91.08	1.0
056	960	86	5.8	546	87	5.5
057	56.5	100	-3.4	34.2	95	-3.3
058	289.0	uncorr	-1.0	214.0	uncorr	-0.2
059	297	89	-0.9	215	81	-0.2
060	354	100	-0.3	254	90	0.4
061	286	79	-1.0	163	80	-1.1
062	432	85	0.4	268	91	0.7
063	434	uncorr	0.5	259	uncorr	0.5
064	318.3	119.4	-0.7	192.0	119.2	-0.6
065	393.6	91.4	0.1	243.2	83.7	0.3
066	422	104	0.3	193	83	-0.6
067	270	101	-1.2	150	103	-1.3
068	400.0	70	0.1	200.0	70	-0.5
069	389.7	79.4	0.0	234.7	97.6	0.1
070♦						
071	244	100	-1.5	168	103	-1.0
072	476.00	90	0.9	273.00	83	0.8
073	540.9	uncorr	1.5	405.5	uncorr	3.1
074	303.0	100.7	-0.9	23.0	109.9	-3.5
075●	1.13			1.13		
076	412	100	0.2	269	100	0.7
077♣	650	60				

z-scores outside the satisfactory range, i.e. $|z| > 2$, are shown in **bold**

uncorr = participant did not state recovery

Comments submitted by participants: ♦ Total fumonisin (FB₁+FB₂)=852 µg/kg.

● Total fumonisin (B₁ + B₂). ♣ Results indicate total fumonisins (B₁, B₂ & B₃)

Table 2: Assigned Values and Target Standard Deviations

analyte	assigned value, µg/kg			target standard deviation	
	data points, n	robust mean, \hat{X}	robust standard deviation, $\hat{\sigma}$	uncertainty, u	derived from σ_p
FB ₁	62	389	109	13.9	Collaborative trial (RSD _R 25.4%) 98.7
FB ₂	62	228	66.1	8.40	Collaborative trial (RSD _R 25.4%) 58.0

Collaborative trial data reference - *J. AOAC Int.*, **84(6)**, 1828-1837. [4]

Table 3: Number and Percentage of Satisfactory z-Scores

analyte	number of satisfactory scores $ z \leq 2$	total number of scores	satisfactory %
FB ₁	63	72	88
FB ₂	59	72	82