SAGL Project Report:

2024– 2025 Maize Post Storage, Pre-Processing Quality Status

Project Title:

Mycotoxin Levels in Post-Storage and Pre-Processing Maize during the 2024–2025 Processing Season

Funding: The Maize Trust

Executing Laboratory: The Southern African Grain Laboratory NPC (SAGL)

Martin Brits, Wiana Louw

wiana.louw@sagl.co.za **012 807 4019**

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The Southern African Grain Laboratory NPC

Summary

The 2024–2025 season marks the 10th consecutive year of reporting mycotoxin levels in South African post-storage, pre-processing maize. This annual multi-mycotoxin monitoring program, funded by the Maize Trust, has been conducted since 2015 and include results for aflatoxins, fumonisins, deoxynivalenol and 15-acetyl deoxynivalenol, zearalenone, T-2 Toxin, HT-2 toxin and ochratoxin A. Diplodiatoxin, an emerging mycotoxin in maize, was included in the multi-mycotoxin analyses for the 4th time.

A total of 362 maize samples were analysed, 348 were locally produced and 14 from imported maize. In total 174 white maize and 188 yellow maize samples were analysed. All white and yellow maize samples analysed during cycle 3 contained at least 1 mycotoxin. The mycotoxin prevalence in cycle 1 and 2 were similar to the previous season. The white and yellow maize samples that tested positive for more than 1 mycotoxin during cycle 3, were the highest across all the seasons and cycles.

Consistent with previous survey findings, none of the white and yellow maize samples contained HT-2 toxin, T-2 toxin or ochratoxin A.

The 174 white maize samples were mostly sourced from food processing mills. Aflatoxin B_1 (AFB_1) was detected in only 1 white maize sample in cycle 2 with a concentration of 24.6 µg/kg, an unusual occurrence as aflatoxin contamination is rarely observed in commercially produced maize within South Africa.

The percentage white maize samples containing total fumonisin (B_1+B_2) increased from 56 % in cycle 1 to 82 % in cycle 3. The detection frequency reported for cycle 3 was the highest since the 2016-2017 season. Mean concentrations calculated as the average of the positive samples increased from 140 in cycle 1 to 712 µg/kg in cycle 3. While only 2 samples (3834 and 2899 µg/kg) exceeded the 2000 µg/kg maximum residue limit (MRL) for maize flour and maize meal ready for human consumption, no samples exceeded the 4000 µg/kg MRL for raw maize grain intended for further processing.

The mean deoxynivalenol (DON) concentration in cycle 1 (221 µg/kg) was consistent with levels reported in cycle 3 of 2022–2023 and all cycles of the 2023–2024 season, but increased to 800 µg/kg in cycle 3 of the current season. Although there had been a clear decrease in the percentage of white maize samples containing DON since cycle 3 of the 2022–2023 season, the detection frequency increased to 89 % for samples analysed during cycle 3. Fifteen (15) samples analysed in cycle 2 and 3 exceeded the MRL of 1000 µg/kg for DON in flour, meal, semolina, and flakes derived from wheat, maize, or barley, and 4 samples in cycle 3 exceeded the 2000 µg/kg MRL for unprocessed cereal grains (wheat, maize, and barley) destined for further processing.

The percentage white maize samples containing zearalenone (ZEA) and diplodia-toxin reported the highest detection frequencies this season during cycle 3, at 47 % and 63 % respectively. The mean ZEA concentration reported for cycle 2 (102 µg/kg), were the highest since cycle 1 of the 2018–2019 season. The seasonal maximum diplodia-toxin concentration of 588 µg/kg was recorded in cycle 3.

The 188 yellow maize samples were mostly sourced from feed processing mills. None of the yellow maize samples contained Aflatoxin B_1 (AFB_1).

The percentage of yellow maize samples containing total fumonisin (B_1+B_2) showed a higher frequency in cycle 2 compared to cycle 3. This pattern is characteristic since the 2019-2020

season. The detection frequency reported for cycle 1 (21 %) was the second lowest over the ten seasons. Mean concentrations calculated as the average of the positive samples increased from 516 in cycle 1 to 696 µg/kg in cycle 3. Only 1 sample (7038 µg/kg) in cycle 2 exceeded 5000 µg/kg, which is the MRL for complete and supplement feed for horses.

The mean deoxynivalenol (DON) concentration of 191 µg/kg in cycle 1 was the lowest recorded following a decreasing trend that began in cycle 1 of the 2022–2023 season. The concentration increased to 828 µg/kg in cycle 3, which is the highest mean value reported across the 10 year monitoring period. While the percentage of yellow maize samples containing DON followed the same upward trend as the mean concentrations, the detection frequency in cycle 3 remained lower than the levels reported for the 2020–2021 season. 21 samples analysed in cycle 2 and 3 exceeded the MRL for DON in complete and supplement feed for pigs and pets, and 3 samples analysed in cycle 2 exceeded the MRL in complete and supplement feed for calves up to 4 months, lambs, and kids.

The percentage of yellow maize samples containing Zearalenone (ZEA) increased from 2 % in cycle 1 to 65 % in cycle 3, this is the highest detection frequency reported over the 10 year period. Mean ZEA concentrations fluctuated across the 3 cycles, reaching a maximum of 121 µg/kg in cycle 2. This concentration is comparable to the levels recorded during cycle 1 of the previous season. 5 samples analysed in cycle 2 and 3 exceeded the MRL for ZEA in complete and supplement feed for adult dogs and cats (other than for reproduction), and only 1 sample analysed in cycle 2 exceeded the MRL in complete and supplement feed for calves, dairy cattle, sheep, lambs, goats, kids.

Diplodia-toxin detection frequency increased to 65 % in cycle 3, representing the highest incidence recorded over the 4 year monitoring period. The mean concentration for the final cycle reached a 4 year maximum of 355 µg/kg, with a seasonal maximum concentration of 1410 µg/kg recorded in cycle 2.

Number of samples analysed over the ten seasons

A total of 2 927 maize samples has been analysed since the post-storage, pre-processing monitoring program began in 2015. During the first 3 seasons, fewer samples were analysed (Table 1). Since the 2018-2019 season, the samples numbers increased and varied between 300 to 383 maize samples per year. During the current production season, 362 maize samples were analysed, consisting of 174 white maize and 188 yellow maize samples.

Table 1. Number of white and yellow maize samples analysed during the 3 collection cycles over ten production seasons from 2015 to 2025

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
White cycle 1	37	15	27	68	51	49	48	56	61	61
Yellow cycle1	34	28	29	37	65	54	57	59	65	66
White cycle 2	59	17	31	53	61	60	68	56	50	51
Yellow cycle 2	27	16	19	35	45	53	53	68	63	67
White cycle 3	30	26	23	56	60	61	57	94	40	62
Yellow cycle 3	33	44	20	51	60	55	61	50	70	55
Total white	**126**	**58**	**81**	**177**	**172**	**170**	**173**	**206**	**151**	**174**
Total yellow	**94**	**88**	**68**	**123**	**170**	**162**	**171**	**177**	**198**	**188**
Total Maize	**220**	**146**	**149**	**300**	**342**	**332**	**344**	**383**	**349**	**362**

Number of samples that tested positive for mycotoxins over the ten seasons

The percentage of white and yellow maize that tested positive for at least 1 mycotoxin for the 3 cycles are shown in Figure 1A. For cycle 1, 65 % of the yellow maize samples contained at least 1 mycotoxin. This was the lowest percentage recorded across all cycles in 10 production seasons. Results from the same cycle showed that 69 % of the white maize samples tested positive. For the samples analysed during cycle 2, yellow maize samples that tested positive for at least 1 mycotoxin were 78 %, slightly higher than in cycle 1. White maize samples (65 %) were slightly lower than the percentage for cycle 1. The results from cycle 3 showed that all the white and yellow maize analysed contained at least 1 mycotoxin. For white maize there was a clear increase in the percentage samples (from 56 % to 100 %) that tested positive over the last 4 seasons for cycle 3 samples. Yellow maize had the highest percentage ever recorded for samples analysed during cycle 3.

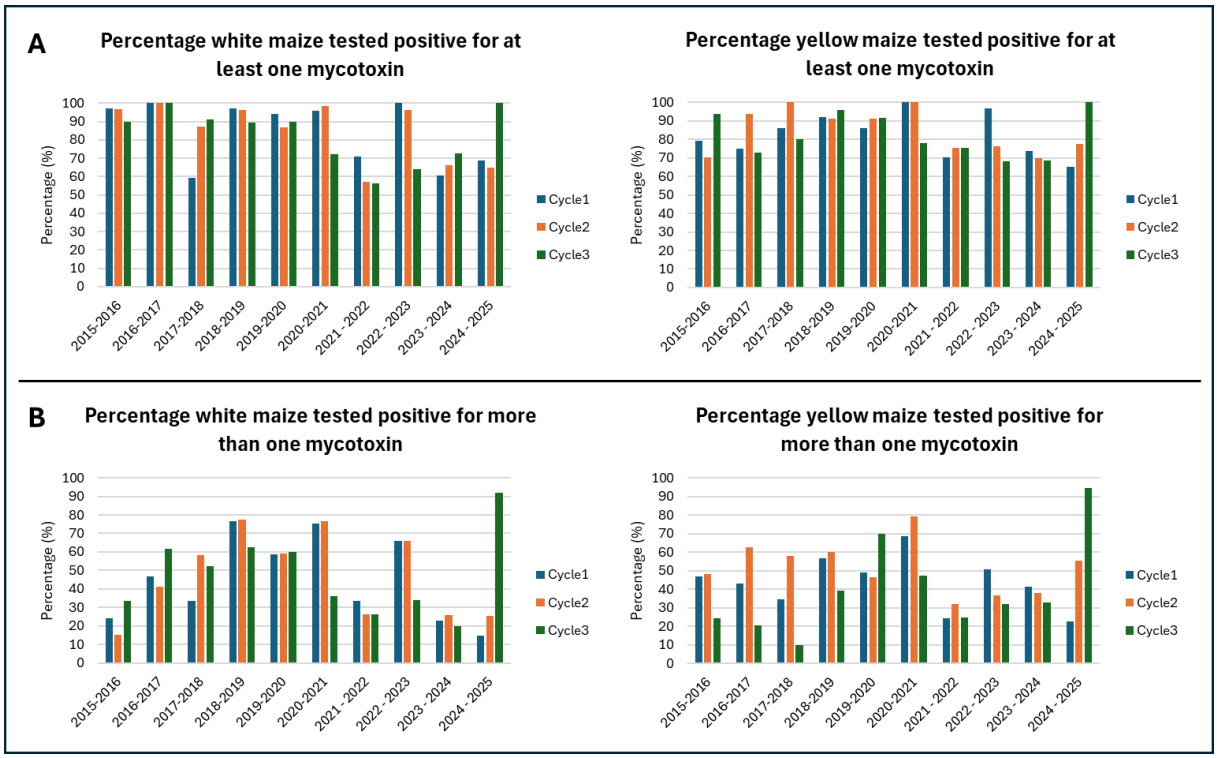


Figure 1. A, The percentage white and yellow maize tested positive for at least 1 mycotoxin per cycle, and B, percentage white and yellow maize tested positive for more than 1 mycotoxin over ten seasons from 2015 to 2025

The percentage of white and yellow maize that tested positive for more than 1 mycotoxin for the 3 cycles are illustrated in Figure 1B. Both white (15 %) and yellow maize (23 %) showed the lowest percentage positive results over the last 10 seasons for samples analysed during cycle 1. For cycle 2, there was a slight increase for the percentages for both white (25 %) and yellow maize (55 %). White maize showed a similar percentage to the previous season (26 %), where yellow maize showed a clear increase from 32 % to 55 % over the past 4 seasons for cycle 2 samples.

The results for cycle 3, showed that 92 % of the white and 95 % of the yellow maize analysed during the cycle 3 contained more than 1 mycotoxin, highest across all the seasons and cycles.

Mycotoxins in white maize

As shown in Table 1, 174 white maize samples were submitted for the 2024-2025 season. Participating food processing mills provided 162 white maize samples, while from processing mills for both food and feed submitted 11 samples, 1 white maize sample from a food processing mill was received with no information for the intended use. 171 samples were provided from locally produced white maize and 3 from imported maize.

The number of samples per cycle are shown in Table 2 along with a summary of the number and percentage positive samples, and the average, and maximum concentration levels of key mycotoxins. The mean concentration of each mycotoxin was calculated as the average of the positive samples, excluding results below the limit of quantitation (LOQ). The maximum concentrations are reported as the highest concentration measured for a sample in each of the 3 cycles.

Table 2. Mycotoxin contamination of white maize received in 2024 – 2025 for processing.

Cycle 1 (November 2024 – January 2025)						
Number of samples analysed	**61**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	0	34	12	0	3	4
Percentage positive samples (%)	0	56	20	0	5	7
Average concentration of positive (µg/kg)	-	140	221	-	46	147
Maximum concentration (µg/kg)	-	627	602	-	56	338

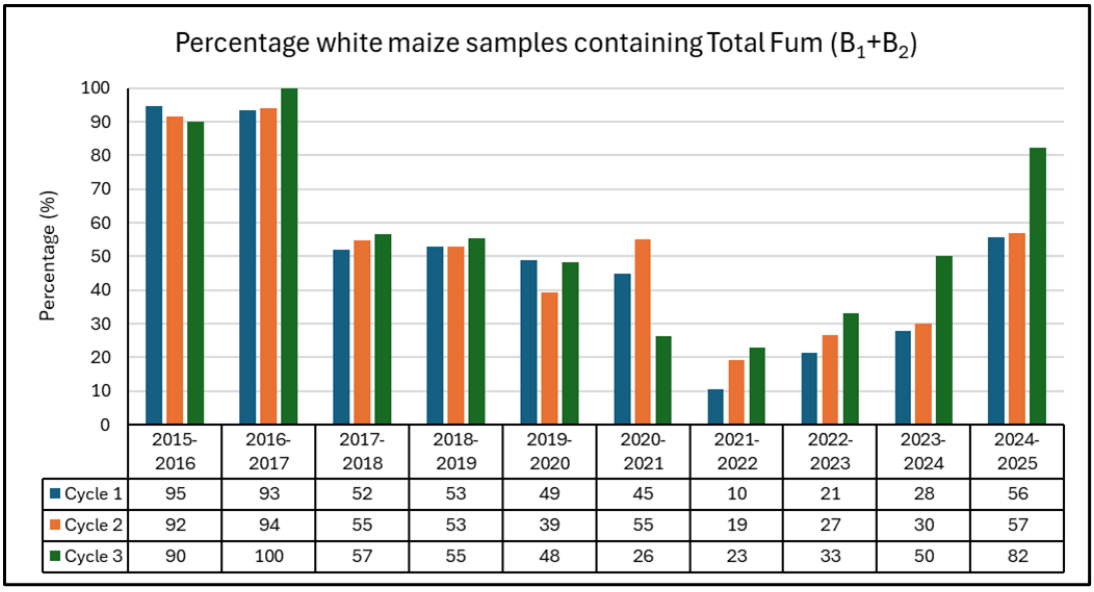
Cycle 2 (March 2025 – April 2025)						
Number of samples analysed	**51**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	1	29	11	1	5	8
Percentage positive samples (%)	2	57	22	2	10	16
Average concentration of positive (µg/kg)	24.6	313	481	118	102	79
Maximum concentration (µg/kg)	24.6	1693	1430	118	229	113

Cycle 3 (June 2025 – July 2025)						
Number of samples analysed	**62**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	0	51	55	25	29	39
Percentage positive samples (%)	0	82	89	40	47	63
Average concentration of positive (µg/kg)	-	712	800	194	71	136
Maximum concentration (µg/kg)	-	3834	3304	366	274	588

Total fumonisins (Total FUM (B_1+B_2)) in white maize

Current South African regulations specify a maximum residue limit (MRL) for Total FUM (B_1+B_2) of 4000 µg/kg in raw maize grain intended for further processing, and a MRL of 2000 g/kg for maize flour and maize meal, ready for human consumption [1].

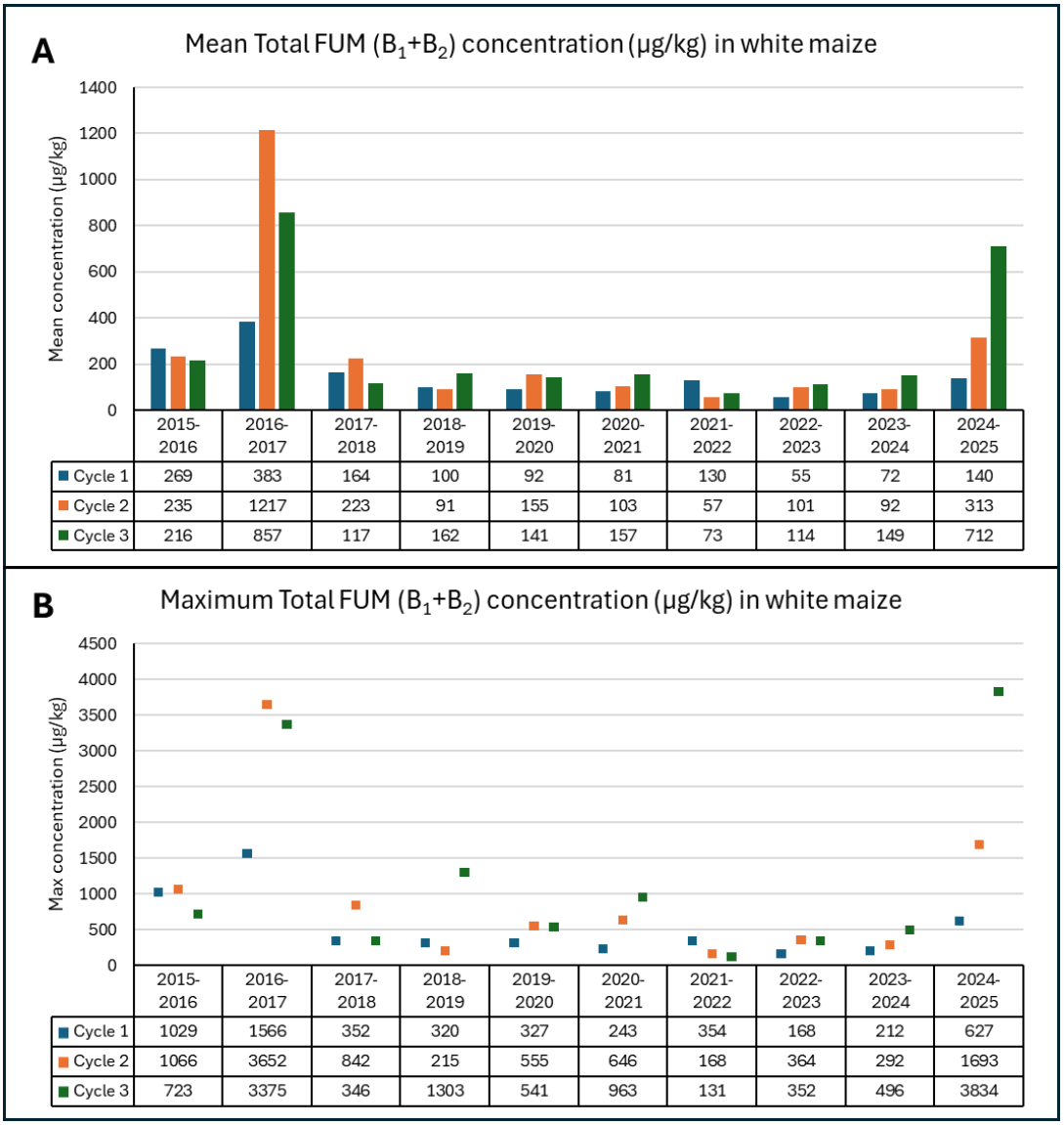
- **Detection frequency:** The percentage white maize samples containing Total FUM (B_1 + B_2) were 56 % for cycle 1, 57 % for cycle 2, and 82 % for cycle 3 (see Figure 2).
    - This is the highest percentage contamination for each cycle since the 2016-2017 season.
    - The contamination reported for cycle 3 followed a similar trend as the previous season, showing an approximate increase of 20 % from the samples analysed in cycle 1 and 2.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	95	93	52	53	49	45	10	21	28	56
Cycle 2	92	94	55	53	39	55	19	27	30	57
Cycle 3	90	100	57	55	48	26	23	33	50	82

Figure 2. Total FUM (B_1+B_2) occurrence in white maize over 30 sampling cycles in 10 years

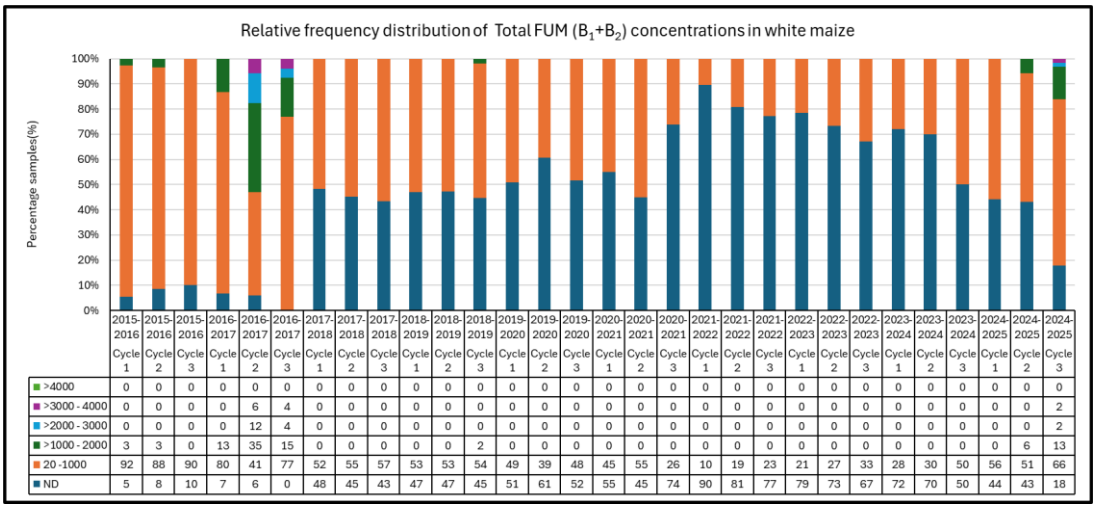
- **Average concentrations:** As shown in Figure 3A, the mean Total FUM (B_1+B_2) concentrations where 140, 313, and 712 µg/kg for cycle 1, 2, and 3.
    - An increasing trend in concentrations over the 3 cycles could be observed, consistent with the previous 2 seasons.
    - The concentrations measured during cycle 2 and 3 were the highest for all cycles since the 2016-2017 season (when only 58 samples were analysed).
- **Maximum levels:** The maximum Total FUM (B_1+B_2) concentrations for the 3 cycles, were 627, 1693, and 3834 µg/kg (Figure 3B).
    - No samples exceeded the 4000 µg/kg MRL for raw maize grain intended for further processing.
    - Two samples (3834 and 2899 µg/kg) exceeded the 2000 µg/kg MRL for maize flour and maize meal ready for human consumption.
- **Frequency distribution (%):** As depicted in Figure 4, the relative frequency distribution for Total FUM (B_1+B_2) indicates that the frequency of samples exceeding 1000 µg/kg increased in cycle 2 and 3, the first such occurrence since the 2022–2023 season.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	269	383	164	100	92	81	130	55	72	140
Cycle 2	235	1217	223	91	155	103	57	101	92	313
Cycle 3	216	857	117	162	141	157	73	114	149	712

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	1029	1566	352	320	327	243	354	168	212	627
Cycle 2	1066	3652	842	215	555	646	168	364	292	1693
Cycle 3	723	3375	346	1303	541	963	131	352	496	3834

Figure 3.A, The mean Total FUM (B_1+B_2) concentrations (µg/kg), calculated as the average of the positive samples. **3B**, The maximum Total FUM (B_1+B_2) concentrations (µg/kg) in white maize for the 3 cycles over ten seasons from 2015 to 2025



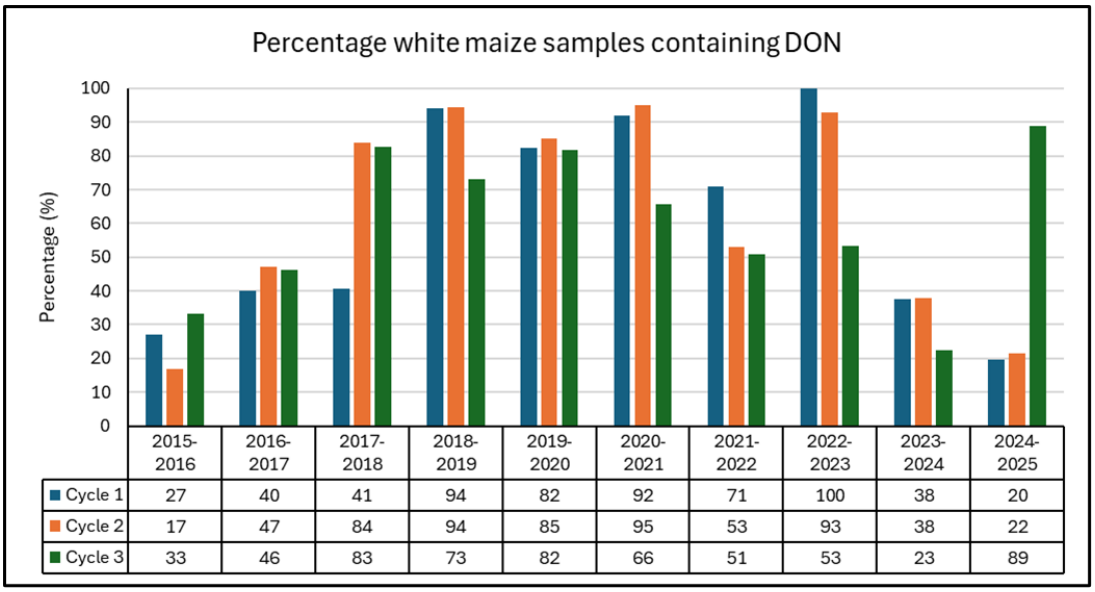
	2015-2016 Cycle 1	2015-2016 Cycle 2	2015-2016 Cycle 3	2016-2017 Cycle 1	2016-2017 Cycle 2	2016-2017 Cycle 3	2017-2018 Cycle 1	2017-2018 Cycle 2	2017-2018 Cycle 3	2018-2019 Cycle 1	2018-2019 Cycle 2	2018-2019 Cycle 3	2019-2020 Cycle 1	2019-2020 Cycle 2	2019-2020 Cycle 3	2020-2021 Cycle 1	2020-2021 Cycle 2	2020-2021 Cycle 3	2021-2022 Cycle 1	2021-2022 Cycle 2	2021-2022 Cycle 3	2022-2023 Cycle 1	2022-2023 Cycle 2	2022-2023 Cycle 3	2023-2024 Cycle 1	2023-2024 Cycle 2	2023-2024 Cycle 3	2024-2025 Cycle 1	2024-2025 Cycle 2	2024-2025 Cycle 3
>4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>3000 - 4000	0	0	0	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
>2000 - 3000	0	0	0	0	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
>1000 - 2000	3	3	0	13	35	15	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	13
20 -1000	92	88	90	80	41	77	52	55	57	53	53	54	49	39	48	45	55	26	10	19	23	21	27	33	28	30	50	56	51	66
ND	5	8	10	7	6	0	48	45	43	47	47	45	51	61	52	55	45	74	90	81	77	79	73	67	72	70	50	44	43	18

Figure 4. The relative frequency distribution of total fumonisin (B_1 + B_2) concentrations (µg/kg) in white maize for the 3 cycles over ten seasons from 2015 to 2025

Deoxynivalenol (DON) in white maize

The South African regulations specify a MRL for DON of 2000 µg/kg in unprocessed cereal grains (wheat, maize, and barley) destined for further processing, and 1000 µg/kg for flour, meal, semolina, and flakes derived from wheat, maize, or barley [1].

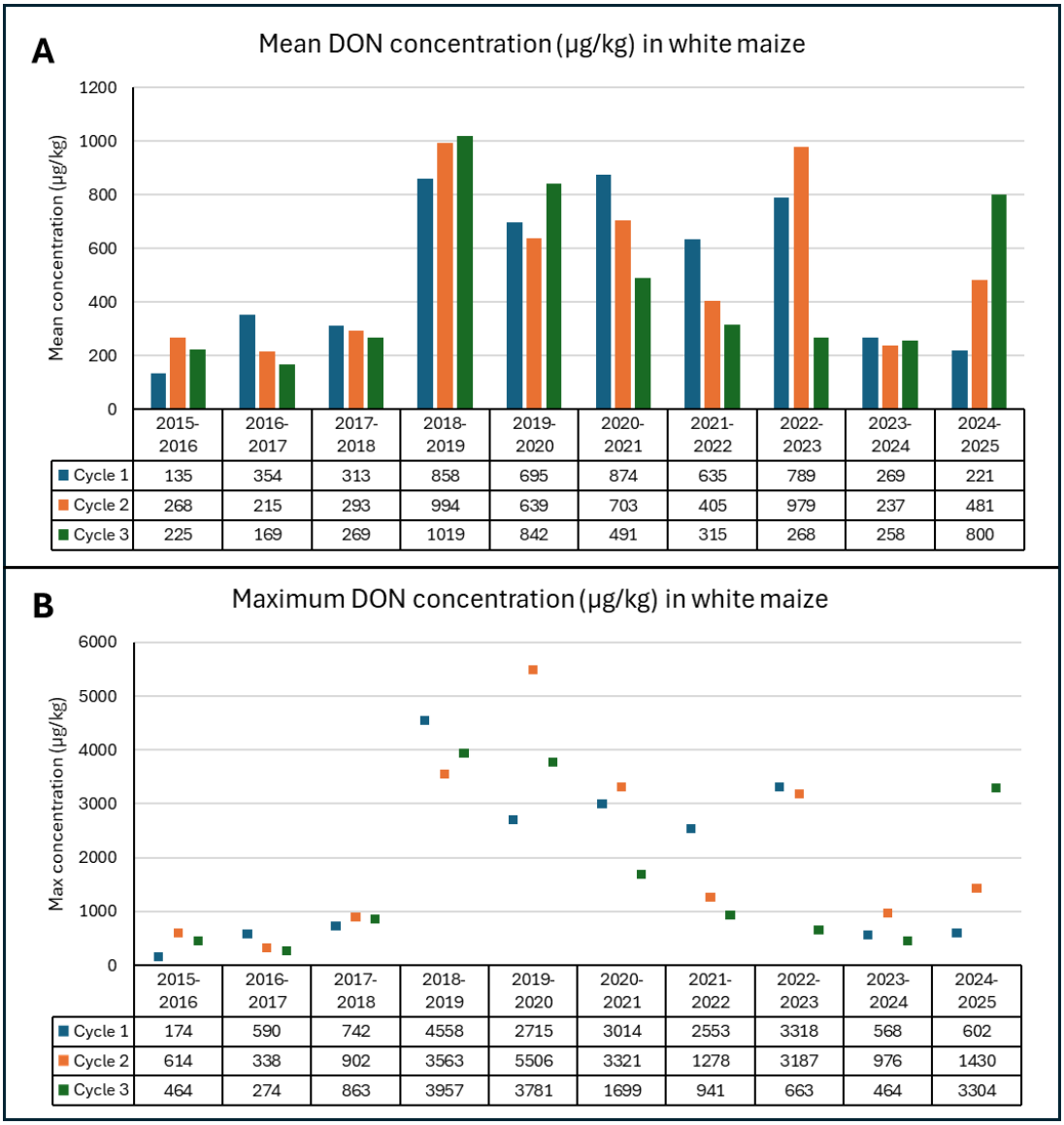
- **Detection frequency:** DON was present in 20 %, 22 %, and 89 % of the samples for cycle 1, 2, and 3 (Figure 5).
    - The contamination reported for cycles 1 and 2 were the lowest since the 2015-2016 season.
    - The percentage white maize containing DON in cycle 3 was similar to the contamination level during cycle 2 of the 2022-2023 season.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	27	40	41	94	82	92	71	100	38	20
Cycle 2	17	47	84	94	85	95	53	93	38	22
Cycle 3	33	46	83	73	82	66	51	53	23	89

Figure 5. DON occurrence in white maize over 30 sampling cycles in 10 years

- **Average concentrations:** As shown in Figure 6A, the average DON concentrations where 221, 481, and 800 µg/kg for cycle 1, 2, and 3.
    - This is the first time that a clear increasing trend in concentrations were observed over the 3 cycles.
    - The concentration measured during cycle 1 was the lowest since the 2016-2017 season, and cycle 2 level was higher than the previous season.
    - The DON concentration only measured during cycle 3, have shown a consistent decrease from 1019 to 258 µg/kg for samples analysed since the 2018-2019 season, followed by an increase (800 µg/kg) during this season.

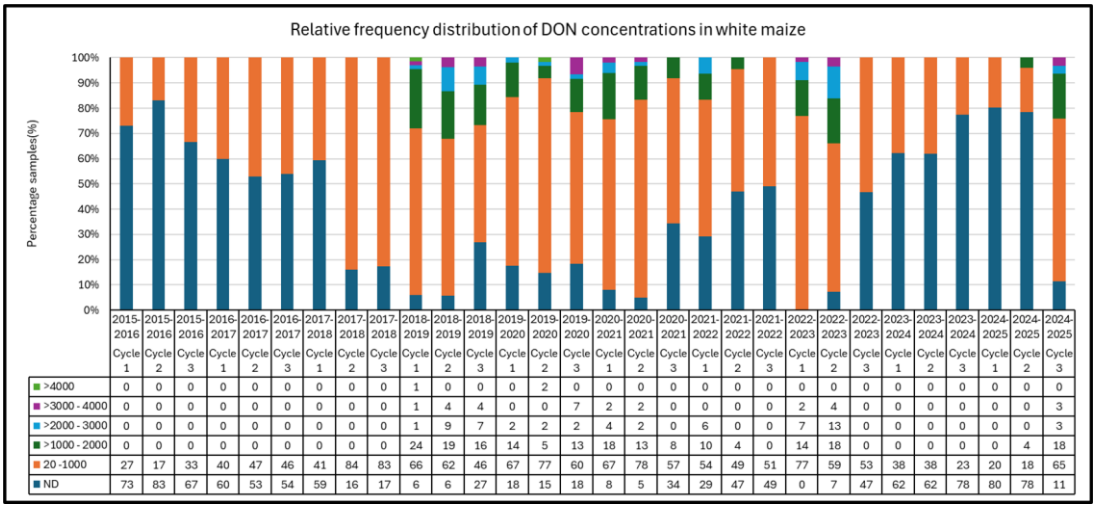


	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	135	354	313	858	695	874	635	789	269	221
Cycle 2	268	215	293	994	639	703	405	979	237	481
Cycle 3	225	169	269	1019	842	491	315	268	258	800

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	174	590	742	4558	2715	3014	2553	3318	568	602
Cycle 2	614	338	902	3563	5506	3321	1278	3187	976	1430
Cycle 3	464	274	863	3957	3781	1699	941	663	464	3304

Figure 6.A, The mean deoxynivalenol (DON) concentrations (µg/kg), calculated as the average of the positive samples. **6B**, The maximum DON concentrations (µg/kg) in white maize for the 3 cycles over ten seasons from 2015 to 2025

- **Maximum levels:** The maximum DON concentrations for the 3 cycles were 602, 1430, and 3304 µg/kg (Figure 6B).
    - Fifteen (15) samples analysed in cycle 2 and 3 exceeded the MRL (1000 µg/kg) for DON in flour, meal, semolina, and flakes derived from wheat, maize, or barley, with concentrations ranging from 1024 to 3304 µg/kg.
    - Four samples in Cycle 3 exceeded the 2000 µg/kg MRL for DON in unprocessed cereal grains (wheat, maize, and barley) destined for further processing, ranging from 2083 to 3304 µg/kg
- **Frequency distribution (%):** As shown in Figure 7, the relative frequency distribution for DON varies over the ten seasons, with Cycle 3 showing the first increase in samples exceeding 1000 µg/kg since 2022–2023.



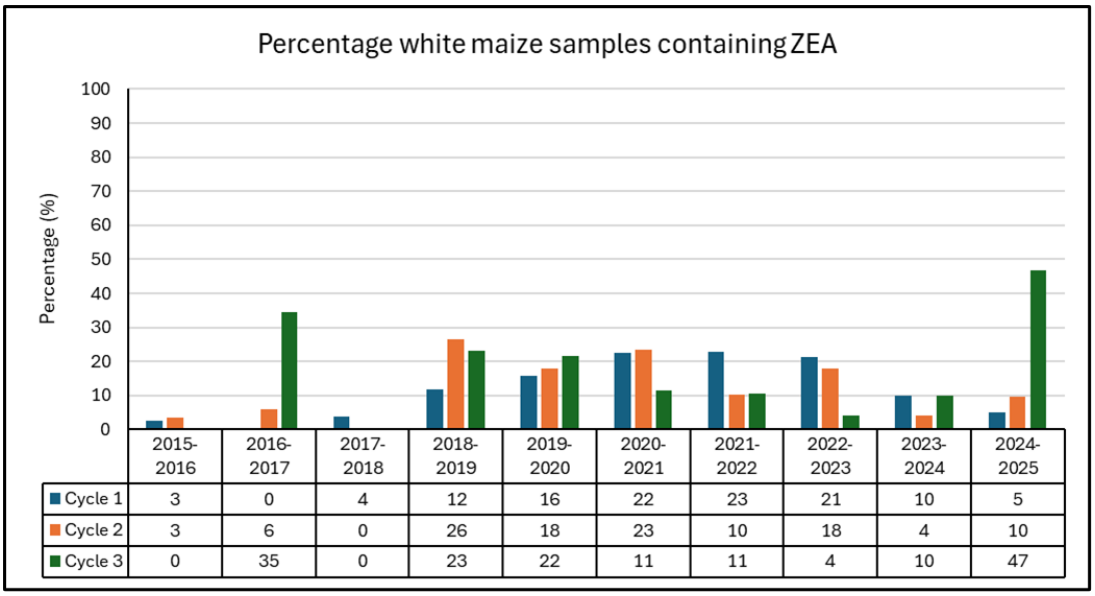
	2015-2016 Cycle 1	2015-2016 Cycle 2	2015-2016 Cycle 3	2016-2017 Cycle 1	2016-2017 Cycle 2	2016-2017 Cycle 3	2017-2018 Cycle 1	2017-2018 Cycle 2	2017-2018 Cycle 3	2018-2019 Cycle 1	2018-2019 Cycle 2	2018-2019 Cycle 3	2019-2020 Cycle 1	2019-2020 Cycle 2	2019-2020 Cycle 3	2020-2021 Cycle 1	2020-2021 Cycle 2	2020-2021 Cycle 3	2021-2022 Cycle 1	2021-2022 Cycle 2	2021-2022 Cycle 3	2022-2023 Cycle 1	2022-2023 Cycle 2	2022-2023 Cycle 3	2023-2024 Cycle 1	2023-2024 Cycle 2	2023-2024 Cycle 3	2024-2025 Cycle 1	2024-2025 Cycle 2	2024-2025 Cycle 3
>4000	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>3000 - 4000	0	0	0	0	0	0	0	0	0	1	4	4	0	0	7	2	2	0	0	0	0	2	4	0	0	0	0	0	0	3
>2000 - 3000	0	0	0	0	0	0	0	0	0	1	9	7	2	2	2	4	2	0	6	0	0	7	13	0	0	0	0	0	0	3
>1000 - 2000	0	0	0	0	0	0	0	0	0	24	19	16	14	5	13	18	13	8	10	4	0	14	18	0	0	0	0	0	4	18
20 -1000	27	17	33	40	47	46	41	84	83	66	62	46	67	77	60	67	78	57	54	49	51	77	59	53	38	38	23	20	18	65
ND	73	83	67	60	53	54	59	16	17	6	6	27	18	15	18	8	5	34	29	47	49	0	7	47	62	62	78	80	78	11

Figure 7. The relative frequency distribution of deoxynivalenol (DON) concentrations (µg/kg) in white maize for the 3 cycles over ten seasons from 2015 to 2025

Zearalenone (ZEA) in white maize

While South African regulations do not currently specify an MRL for ZEA, EC Regulation 2023/915 sets a limit of 350 µg/kg for unprocessed maize grains [2].

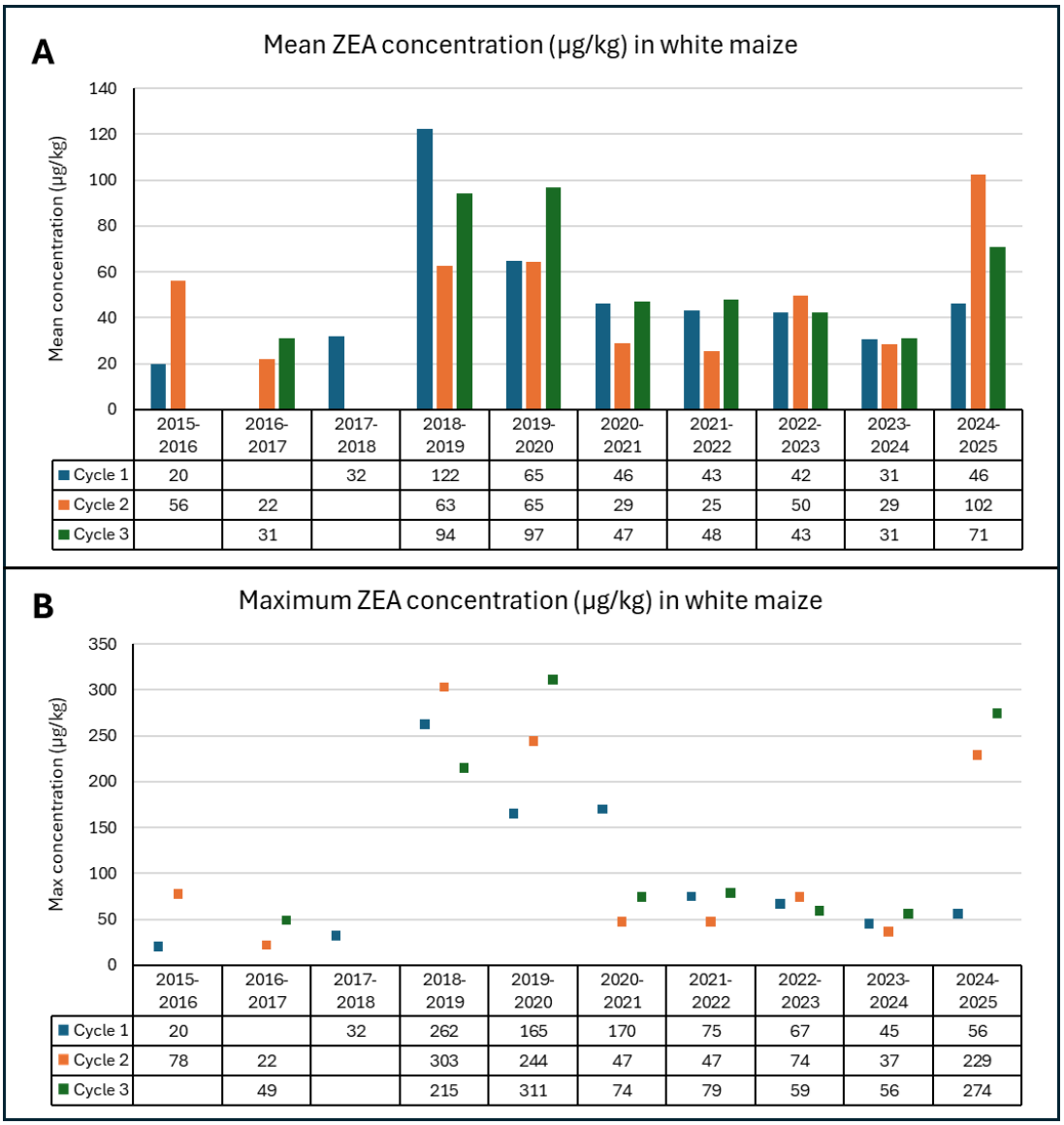
- **Detection frequency:** As shown in Figure 8, the percentage white maize containing ZEA, were 5 %, 10 %, and 47 % for cycle 1, 2, and 3.
    - Cycles 1 and 2 showed similar contamination as the previous season.
    - The percentage white maize containing ZEA in cycle 3 were the highest reported over the last 10 years.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	3	0	4	12	16	22	23	21	10	5
Cycle 2	3	6	0	26	18	23	10	18	4	10
Cycle 3	0	35	0	23	22	11	11	4	10	47

Figure 8. ZEA occurrence in white maize over 30 sampling cycles in 10 years

- **Average concentrations:** The average ZEA concentrations where 46, 102, and 71 µg/kg for cycle 1, 2, and 3 (Figure 9A).
    - The concentration measured during cycle 1 were higher than the previous season.
    - The concentration for cycle 2 and 3 were the highest since the 2019-2020 season.
- **Maximum levels:** As shown in Figure 9B, the maximum ZEA concentrations for the 3 cycles, were 56, 229, and 274 µg/kg.
    - None of the samples had ZEA concentrations exceeding the MRL for unprocessed maize grains listed in the EU regulations.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	20		32	122	65	46	43	42	31	46
Cycle 2	56	22		63	65	29	25	50	29	102
Cycle 3		31		94	97	47	48	43	31	71

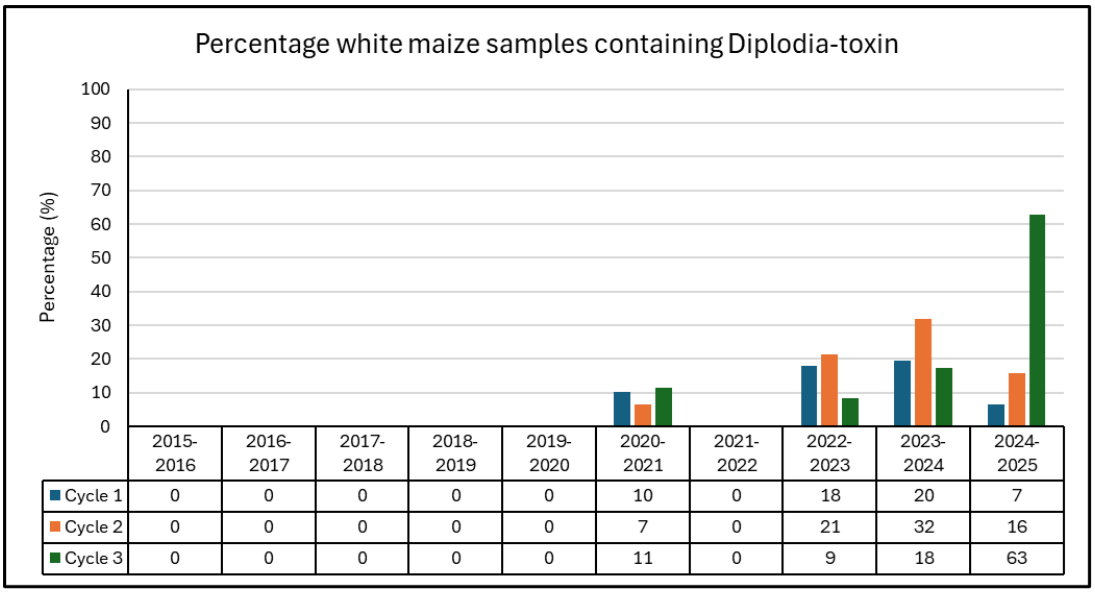
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	20		32	262	165	170	75	67	45	56
Cycle 2	78	22		303	244	47	47	74	37	229
Cycle 3		49		215	311	74	79	59	56	274

Figure 9.A, The mean zearalenone (ZEA) concentrations (µg/kg), calculated as the average of the positive samples. **9B**, The maximum ZEA concentrations (µg/kg) in white maize for the 3 cycles over ten seasons from 2015 to 2025

Diplodia-toxin in white maize

Diplodia-toxin was included during the 2020-2021 season and analysed in 4 seasons. In the absence of certified reference materials, analysis relies on purified standards, which were unavailable during 2021–2022. No South African MRL currently exists for this diplodia-toxin.

- **Detection frequency:** The percentage white maize containing diplodia-toxin, were 7 %, 16 %, and 63 % for cycle 1, 2, and 3 (Figure 10).
    - The contamination reported for cycles 1 and 2 showed were lower than the previous season.
    - The percentage white maize containing diplodia-toxin in cycle 3 were the highest reported over the 4 years.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	0	0	0	0	0	10	0	18	20	7
Cycle 2	0	0	0	0	0	7	0	21	32	16
Cycle 3	0	0	0	0	0	11	0	9	18	63

Figure 10. Diplodia-toxin occurrence in white maize over 12 sampling cycles over 4 years

- **Average concentrations:** As shown in Figure 11A, the average concentrations where 147, 79, and 136 µg/kg for cycle 1, 2, and 3.
    - The concentration measured during cycle 1 and 3 were higher than the previous season.
    - The average concentration cycle 2 showed a decreasing trend compare to previous cycle 2 samples, since the 2022-2023 season.
- **Maximum levels:** The maximum diplodia-toxin concentrations for the 3 cycles, were 338, 113, and 588 µg/kg (Figure 11B).
    - The maximum concentration reported for cycle 3 was the highest for all seasons.

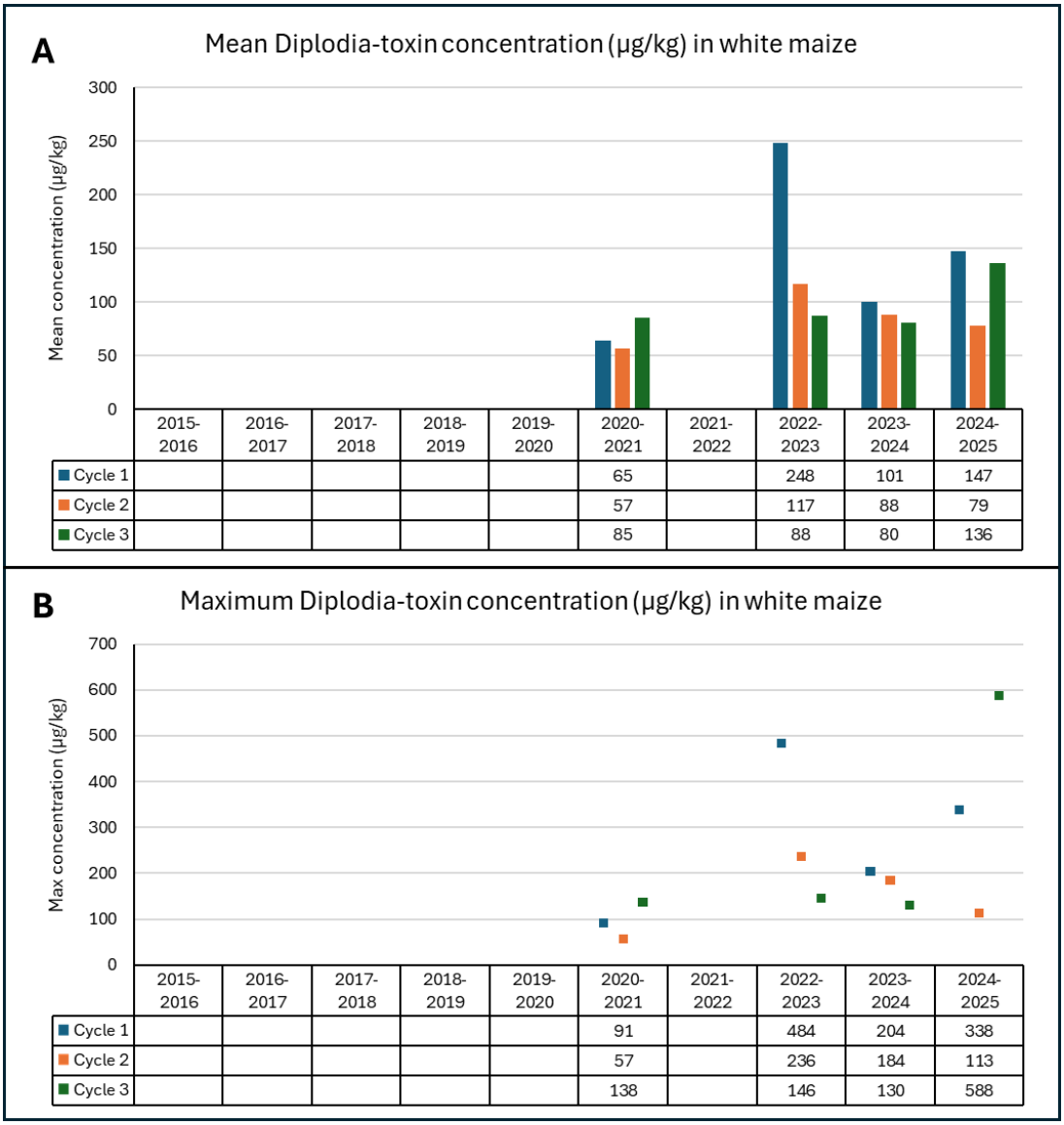


Figure 11.A, The mean diplodia-toxin concentrations (µg/kg), calculated as the average of the positive samples. **11B**, The maximum diplodia-toxin concentrations (µg/kg) in white maize for the 3 cycles over four seasons from 2021 to 2025

Mycotoxins in yellow maize

For the 2024–2025 season, 188 yellow maize samples were submitted (Table 3). Feed processing mills submitted 172 yellow maize samples, 12 samples came from processing mills for both food and feed, and 3 samples were from food processing mills, 1 maize sample was received with no information for the intended use. 177 samples were provided from locally produced yellow maize and 11 from imported maize.

The number of samples per cycle are shown in Table 3 along with a summary of the number and percentage positive samples, and the average, and maximum concentration levels of key mycotoxins. The mean concentration of each mycotoxin was calculated as the average of the positive samples, excluding results below the limit of quantitation (LOQ). The maximum concentrations are reported as the highest concentration measured for a sample in each of the 3 cycles.

Table 3. Mycotoxin contamination of yellow maize received in 2024 – 2025 for processing.

Cycle 1 (November 2024 – January 2025)						
Number of samples analysed	**66**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	0	14	21	2	1	24
Percentage positive samples (%)	0	21	32	3	2	36
Average concentration of positive (µg/kg)	-	516	191	106	21	122
Maximum concentration (µg/kg)	-	3664	460	110	21	398

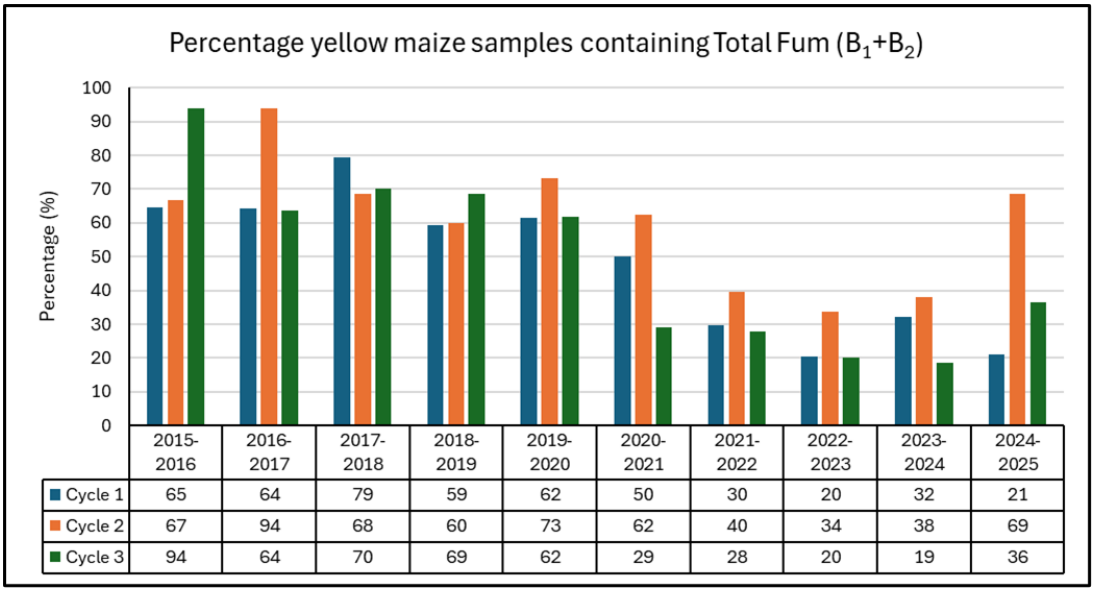
Cycle 2 (March 2025 – April 2025)						
Number of samples analysed	**67**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	0	46	33	9	16	23
Percentage positive samples (%)	0	69	49	13	24	34
Average concentration of positive (µg/kg)	-	609	634	177	121	332
Maximum concentration (µg/kg)	-	7038	2778	326	505	1410

Cycle 3 (June 2025 – July 2025)						
Number of samples analysed	**55**					
Mycotoxins	**AFB_1**	**Total FUM (B_1+B_2)**	**DON**	**15-ADON**	**ZEA**	**Diplodia -toxin**
Number of positive samples	0	20	51	42	36	38
Percentage positive samples (%)	0	36	93	76	65	69
Average concentration of positive (µg/kg)	-	696	828	191	66	355
Maximum concentration (µg/kg)	-	3628	1849	424	249	1342

Total fumonisins (Total FUM (B_1+B_2)) in yellow maize

South African regulations specify maximum residue limits (MRL) for Total FUM (B_1+B_2) ranging from 5000 to 50000 µg/kg for complete and supplement feed for horses, pets, pigs, adult ruminants (>4 months), poultry, calves (<4 months), lambs, kids, and fish [3].

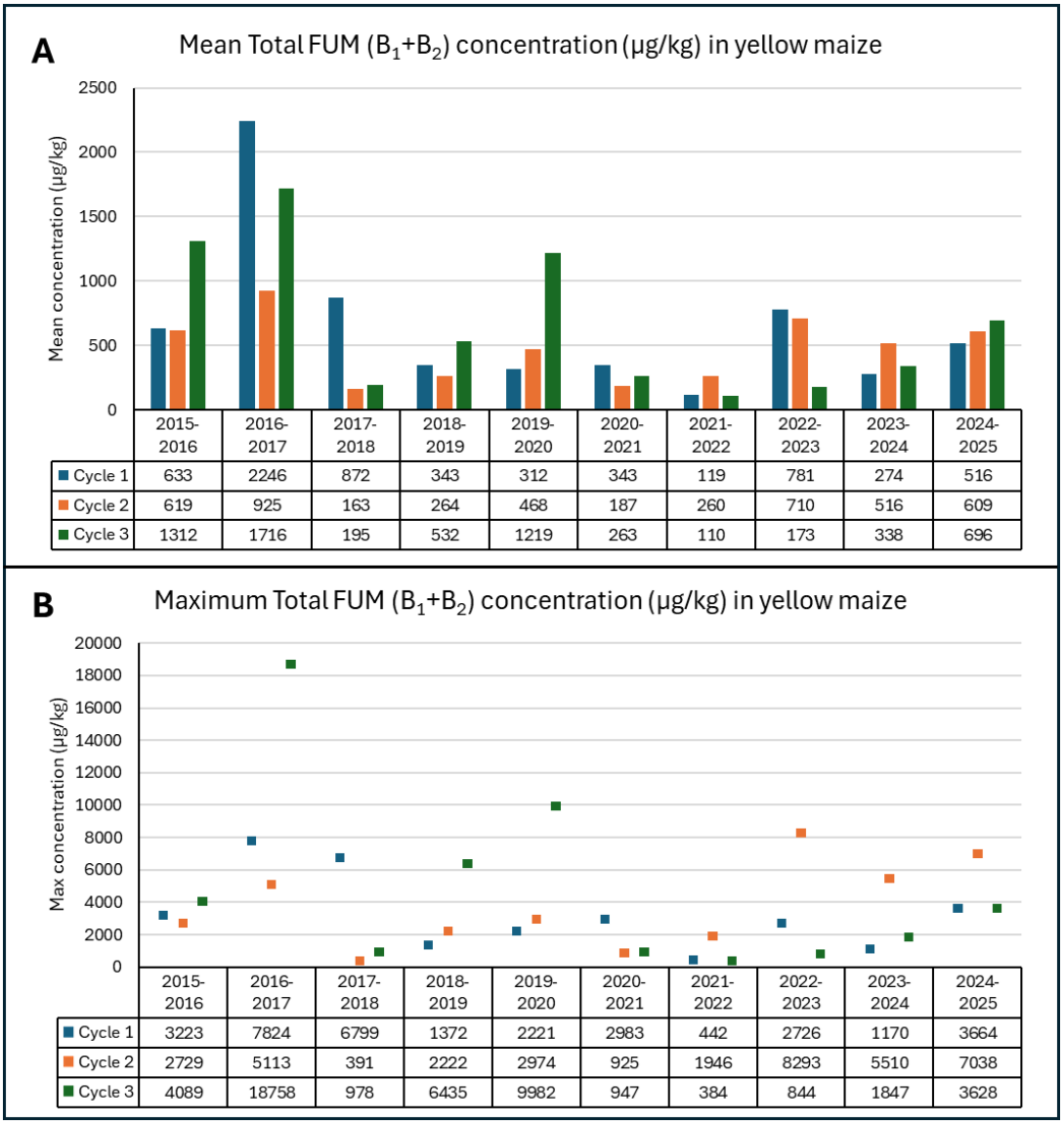
- **Detection frequency:** The percentage yellow maize samples containing Total FUM (B_1+B_2) were 21 % for cycle 1, 69 % for cycle 2, and 36 % for cycle 3 (Figure 12).
    - The contamination reported for cycle 1 was similar to cycle 3 of the previous season.
    - The percentage contamination for cycle 2 was the highest since the 2019-2020 season for samples analysed in the respective cycles.
    - Cycle 2 consistently reported a higher contamination frequency than 3 cycles, from the 2019-2020 season.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	65	64	79	59	62	50	30	20	32	21
Cycle 2	67	94	68	60	73	62	40	34	38	69
Cycle 3	94	64	70	69	62	29	28	20	19	36

Figure 12. Total FUM (B_1+B_2) occurrence in yellow maize over 30 sampling cycles in 10 years

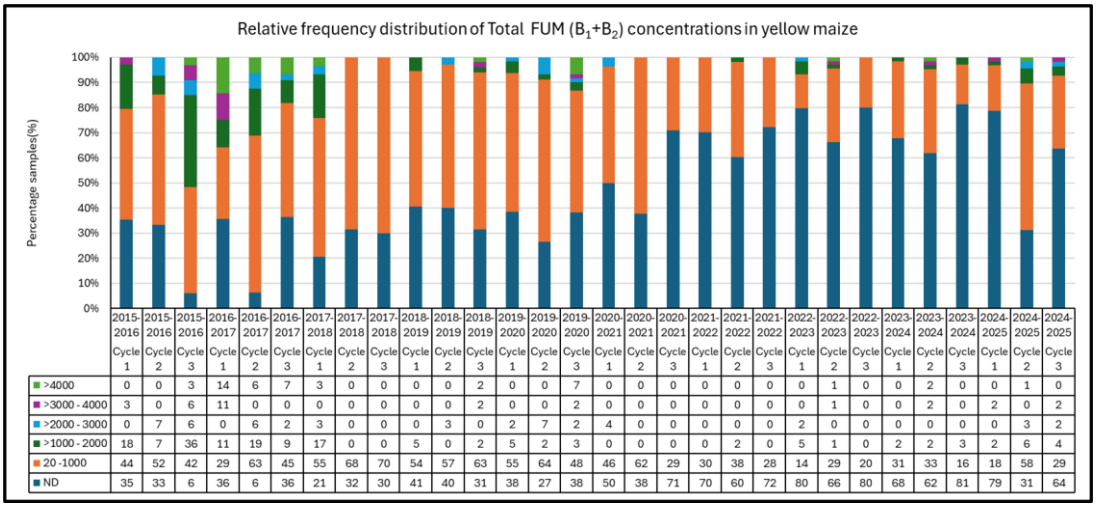
- **Average concentrations:** As shown in Figure 13A, the average Total FUM (B_1+B_2) concentrations where 516, 609, and 696 µg/kg for cycle 1, 2, and 3 respectively.
    - The concentrations measured during cycle 2 was higher than the previous season.
    - The mean concentration in cycle 3 were the highest since the 2019-2020 season for samples analysed in cycle 3.
- **Maximum levels:** The maximum Total FUM (B_1+B_2) concentrations for the 3 cycles, illustrated in Figure 13B, were 3664, 7038, and 3628 µg/kg.
    - Only 1 sample (7038 µg/kg) exceeded 5000 µg/kg, which is the MRL for complete and supplement feed for horses.
- **Frequency distribution (%):** Figure 14 shows that the relative frequency distribution for Total FUM (B_1+B_2) vary over the ten seasons with an increase in concentrations exceeding 1000 µg/kg increased during cycle 2.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	633	2246	872	343	312	343	119	781	274	516
Cycle 2	619	925	163	264	468	187	260	710	516	609
Cycle 3	1312	1716	195	532	1219	263	110	173	338	696

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	3223	7824	6799	1372	2221	2983	442	2726	1170	3664
Cycle 2	2729	5113	391	2222	2974	925	1946	8293	5510	7038
Cycle 3	4089	18758	978	6435	9982	947	384	844	1847	3628

Figure 13.A, The mean Total FUM (B_1+B_2) concentrations (µg/kg), calculated as the average of the positive samples. **13B**, The maximum Total FUM (B_1+B_2) concentrations (µg/kg) in yellow maize for the 3 cycles over ten seasons from 2015 to 2025



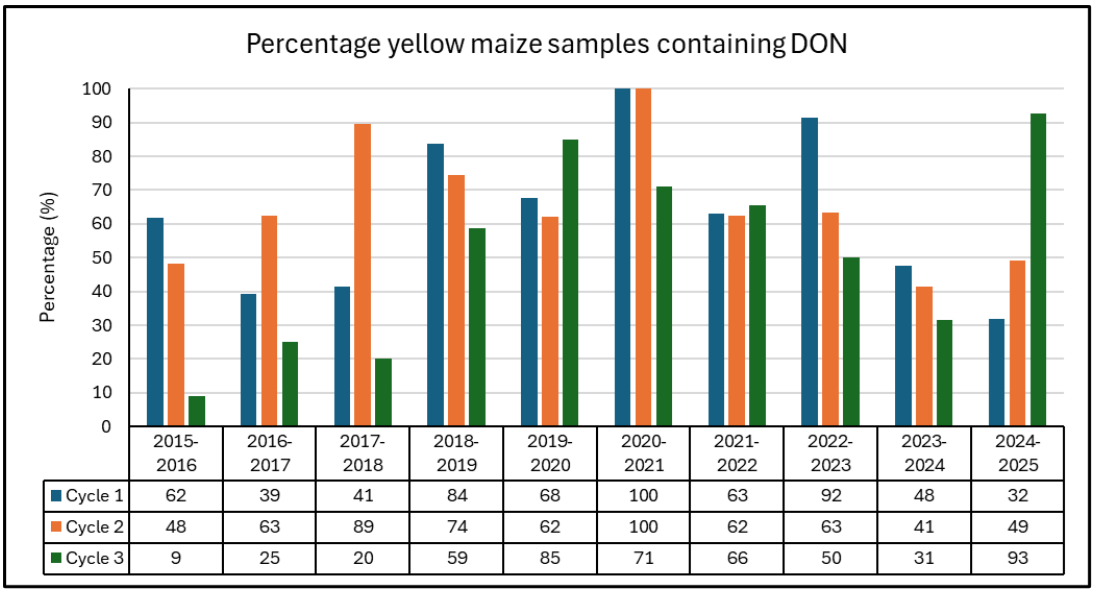
	2015-2016 Cycle 1	2015-2016 Cycle 2	2015-2016 Cycle 3	2016-2017 Cycle 1	2016-2017 Cycle 2	2016-2017 Cycle 3	2017-2018 Cycle 1	2017-2018 Cycle 2	2017-2018 Cycle 3	2018-2019 Cycle 1	2018-2019 Cycle 2	2018-2019 Cycle 3	2019-2020 Cycle 1	2019-2020 Cycle 2	2019-2020 Cycle 3	2020-2021 Cycle 1	2020-2021 Cycle 2	2020-2021 Cycle 3	2021-2022 Cycle 1	2021-2022 Cycle 2	2021-2022 Cycle 3	2022-2023 Cycle 1	2022-2023 Cycle 2	2022-2023 Cycle 3	2023-2024 Cycle 1	2023-2024 Cycle 2	2023-2024 Cycle 3	2024-2025 Cycle 1	2024-2025 Cycle 2	2024-2025 Cycle 3
>4000	0	0	3	14	6	7	3	0	0	0	0	2	0	0	7	0	0	0	0	0	0	1	0	0	2	0	0	1	0
>3000 - 4000	3	0	6	11	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	2	0	2	0	2
>2000 - 3000	0	7	6	0	6	2	3	0	0	0	3	0	2	7	2	4	0	0	0	0	0	2	0	0	0	0	0	3	2
>1000 - 2000	18	7	36	11	19	9	17	0	0	5	0	2	5	2	3	0	0	0	0	2	0	5	1	0	2	2	3	2	6	4
20 -1000	44	52	42	29	63	45	55	68	70	54	57	63	55	64	48	46	62	29	30	38	28	14	29	20	31	33	16	18	58	29
ND	35	33	6	36	6	36	21	32	30	41	40	31	38	27	38	50	38	71	70	60	72	80	66	80	68	62	81	79	31	64

Figure 14. The relative frequency distribution of Total FUM (B_1+B_2) concentrations (µg/kg) in yellow maize for the 3 cycles over ten seasons from 2015 to 2025

Deoxynivalenol (DON) in yellow maize

Current South African regulations specify maximum residue limits (MRL) for DON ranging from 1000 to 5000 µg/kg for complete and supplement feed for pigs, cattle, calves up to 4 months, lambs, kids, dairy cattle, poultry, and pets [3].

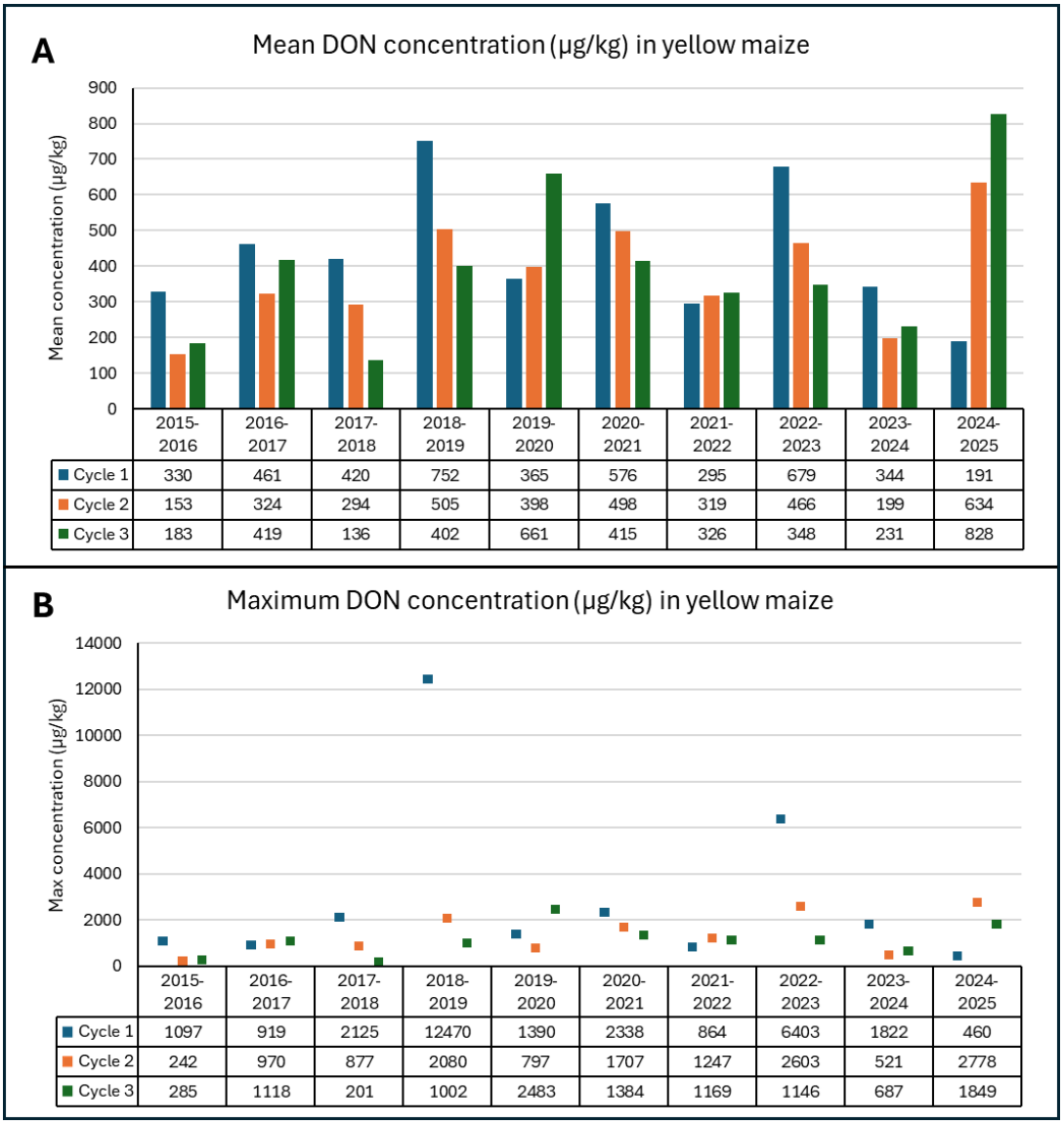
- **Detection frequency:** The percentage yellow maize containing DON were 32 %, 49 %, and 93 % for cycle 1, 2, and 3 (Figure 15).
    - The percentage contamination showed a clear increasing trend in contamination over the 3 cycles.
    - Cycle 3 reported the highest contamination for samples analysed during cycle 3.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	62	39	41	84	68	100	63	92	48	32
Cycle 2	48	63	89	74	62	100	62	63	41	49
Cycle 3	9	25	20	59	85	71	66	50	31	93

Figure 15. DON occurrence in yellow maize over 30 sampling cycles in 10 years

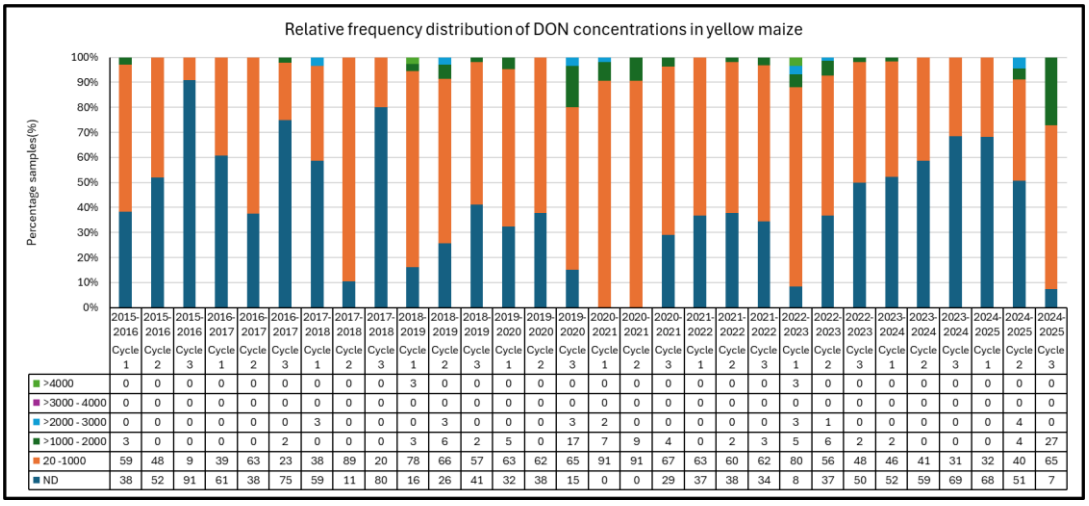
- **Average concentrations:** As shown in Figure 16A, the average DON concentrations where 191, 634, and 828 µg/kg for cycle 1, 2, and 3 respectively.
    - The concentration measured during cycle 1 was the lowest since cycle 3 in the 2017-2018 season.
    - The concentrations measured during cycle 2 was higher than all previous season for samples collected in cycle 2
    - The mean concentration for cycle 3 was the highest reported for all sampling cycles in all seasons.
- **Maximum levels:** The maximum DON concentrations for the 3 cycles were 460, 2778, and 1849 µg/kg (Figure 16B).
    - 21 samples analysed in cycle 2 and 3 exceeded the MRL (1000 µg/kg) for DON in complete and supplement feed for pigs and pets ranging from 1025 to 2778 µg/kg.
    - 3 samples analysed in cycle 2 exceeded the MRL (2000 µg/kg) for DON in complete and supplement feed for calves up to 4 months, lambs, and kids.
    - None of the samples analysed had DON concentrations exceeding the MRL for complete and supplement feed for cattle, dairy cattle, and poultry.
- **Frequency distribution (%):** Figure 17 shows an increase in the percentage of samples exceeding 1000 µg/kg in Cycle 3.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	330	461	420	752	365	576	295	679	344	191
Cycle 2	153	324	294	505	398	498	319	466	199	634
Cycle 3	183	419	136	402	661	415	326	348	231	828

	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	1097	919	2125	12470	1390	2338	864	6403	1822	460
Cycle 2	242	970	877	2080	797	1707	1247	2603	521	2778
Cycle 3	285	1118	201	1002	2483	1384	1169	1146	687	1849

Figure 16.A, The mean deoxynivalenol (DON) concentrations (µg/kg), calculated as the average of the positive samples. **16B**, The maximum DON concentrations (µg/kg) in yellow maize for the 3 cycles over ten seasons from 2015 to 2025



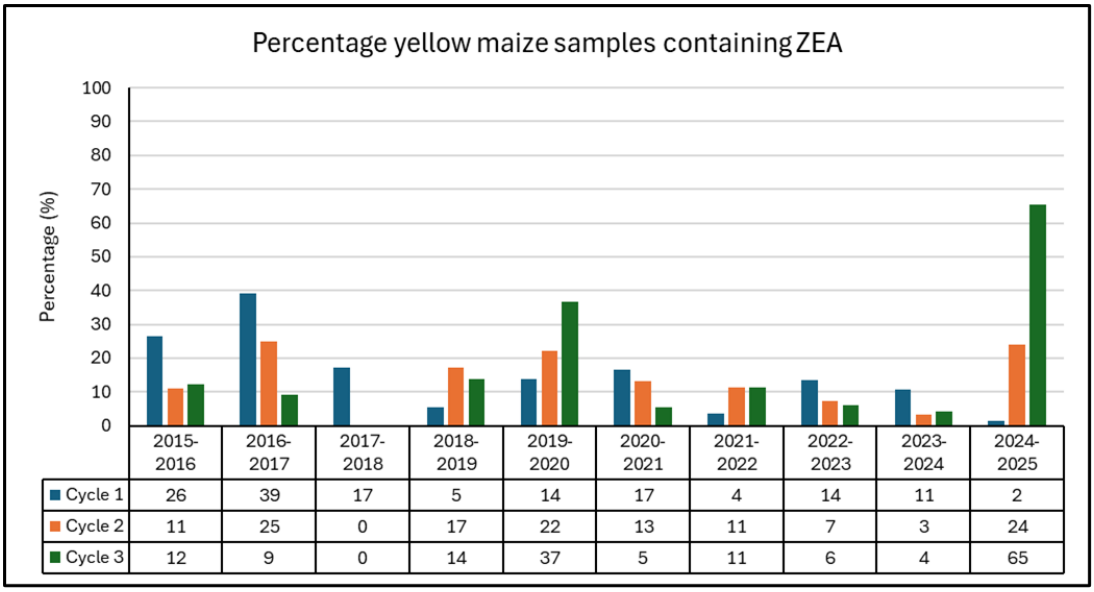
	2015-2016 Cycle 1	2015-2016 Cycle 2	2015-2016 Cycle 3	2016-2017 Cycle 1	2016-2017 Cycle 2	2016-2017 Cycle 3	2017-2018 Cycle 1	2017-2018 Cycle 2	2017-2018 Cycle 3	2018-2019 Cycle 1	2018-2019 Cycle 2	2018-2019 Cycle 3	2019-2020 Cycle 1	2019-2020 Cycle 2	2019-2020 Cycle 3	2020-2021 Cycle 1	2020-2021 Cycle 2	2020-2021 Cycle 3	2021-2022 Cycle 1	2021-2022 Cycle 2	2021-2022 Cycle 3	2022-2023 Cycle 1	2022-2023 Cycle 2	2022-2023 Cycle 3	2023-2024 Cycle 1	2023-2024 Cycle 2	2023-2024 Cycle 3	2024-2025 Cycle 1	2024-2025 Cycle 2	2024-2025 Cycle 3
>4000	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
>3000 - 4000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>2000 - 3000	0	0	0	0	0	0	3	0	0	0	3	0	0	0	3	2	0	0	0	0	0	3	1	0	0	0	0	0	4	0
>1000 - 2000	3	0	0	0	0	2	0	0	0	3	6	2	5	0	17	7	9	4	0	2	3	5	6	2	2	0	0	0	4	27
20 -1000	59	48	9	39	63	23	38	89	20	78	66	57	63	62	65	91	91	67	63	60	62	80	56	48	46	41	31	32	40	65
ND	38	52	91	61	38	75	59	11	80	16	26	41	32	38	15	0	0	29	37	38	34	8	37	50	52	59	69	68	51	7

Figure 17. The relative frequency distribution of deoxynivalenol (DON) concentrations (µg/kg) in yellow maize for the 3 cycles over ten seasons from 2015 to 2025

Zearalenone (ZEA) in yellow maize

Current South African regulations specify maximum residue limits (MRL) for DON ranging from 200 to 5000 µg/kg for complete and supplement feed for sows, pigs, piglets, calves, dairy cattle, sheep, lambs, goats, kids, and adult dogs and cats (other than for reproduction) [3].

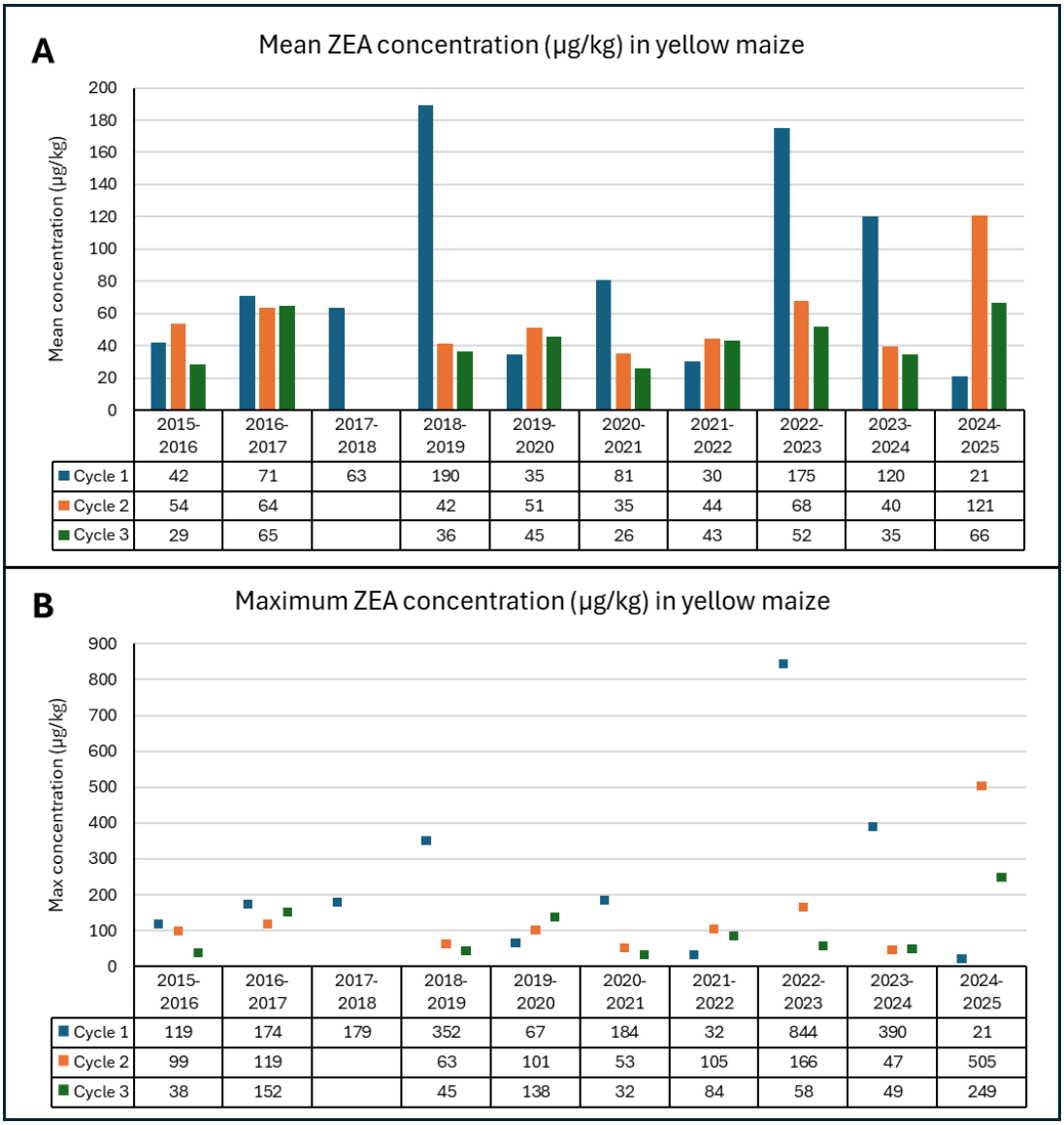
- **Detection frequency:** ZEA was detected in 2 %, 24 %, and 65 % for cycle 1, 2, and 3 (Figure 18).
    - The contamination reported for cycles 1 was the lowest ever reported for cycle 1.
    - The percentage yellow maize containing ZEA in cycle 3 were the highest reported over the last 10 years for any cycle.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	26	39	17	5	14	17	4	14	11	2
Cycle 2	11	25	0	17	22	13	11	7	3	24
Cycle 3	12	9	0	14	37	5	11	6	4	65

Figure 18. ZEA occurrence in yellow maize over 30 sampling cycles in 10 years

- **Average concentrations:** The average ZEA concentrations, presented in Figure 19A, where 21, 121, and 66 µg/kg for cycle 1, 2, and 3.
    - The mean concentration measured during cycle 1 was the lowest since the 2017-2018 season.
    - The concentrations measured during cycle 2 was similar to the levels in last season cycle 1.
- **Maximum levels:** The maximum ZEA concentrations for the 3 cycles, were 21, 505, and 249 µg/kg (Figure 19B).
    - 5 samples analysed in cycle 2 and 3 exceeded the MRL (200 µg/kg) for ZEA in complete and supplement feed for adult dogs and cats (other than for reproduction) ranging from 210 to 505 µg/kg.
    - 1 sample analysed in cycle 2 exceeded the MRL (500 µg/kg) for ZEA in complete and supplement feed for calves, dairy cattle, sheep, lambs, goats, kids.
    - None of the samples analysed had ZEA concentrations exceeding the MRL for complete and supplement feed for sows, pigs, and piglets.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	42	71	63	190	35	81	30	175	120	21
Cycle 2	54	64		42	51	35	44	68	40	121
Cycle 3	29	65		36	45	26	43	52	35	66

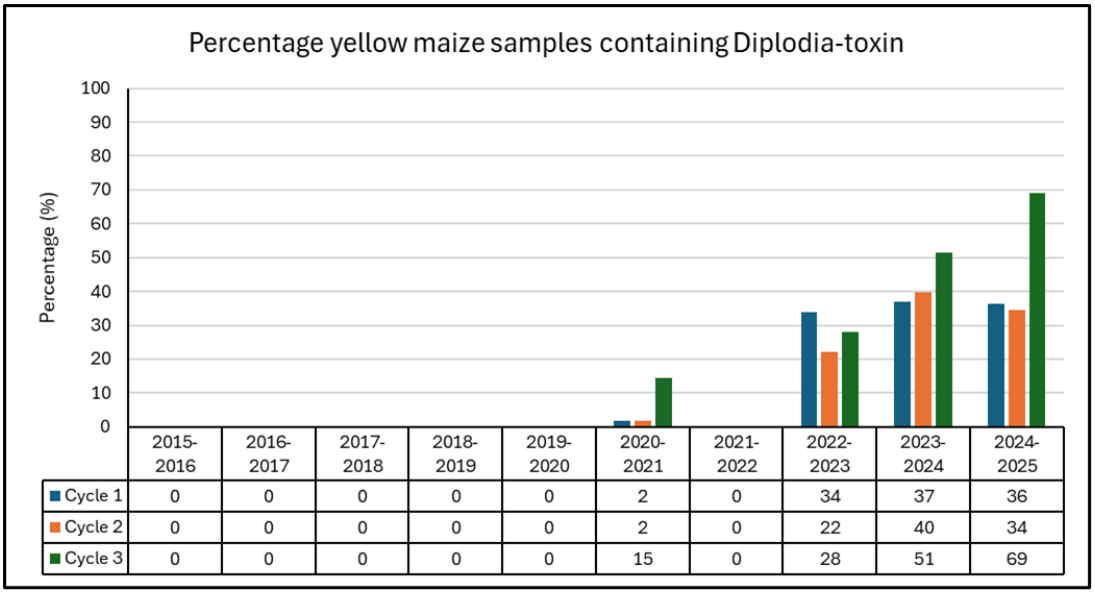
	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	119	174	179	352	67	184	32	844	390	21
Cycle 2	99	119		63	101	53	105	166	47	505
Cycle 3	38	152		45	138	32	84	58	49	249

Figure 19.A, The mean zearalenone (ZEA) concentrations (µg/kg), calculated as the average of the positive samples. **19B**, The maximum ZEA concentrations (µg/kg) in yellow maize for the 3 cycles over ten seasons from 2015 to 2025

Diplodia-toxin in yellow maize

Diplodia-toxin was only included in the multi-mycotoxin analyses during the 2020-2021 season and analysed in 4 seasons. As there is currently no certified reference material for diplodia-toxin, the analysis is dependent on the availability of a purified standard. During the 2021-2022 season this standard was not available. There is current South African no regulations that specify a maximum residue limit (MRL) for diplodia-toxin.

- **Detection frequency:** The percentage yellow maize containing diplodia-toxin, were 36 %, 34 %, and 69 % for cycle 1, 2, and 3 (Figure 20).
    - The contamination reported for cycles 1 and 2 were slightly lower than the previous season.
    - The percentage yellow maize containing diplodia-toxin in cycle 3 were the highest reported over the last 4 years for all cycles.



	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
Cycle 1	0	0	0	0	0	2	0	34	37	36
Cycle 2	0	0	0	0	0	2	0	22	40	34
Cycle 3	0	0	0	0	0	15	0	28	51	69

Figure 20. Diplodia-toxin occurrence in yellow maize over 12 sampling cycles over 4 years

- **Average concentrations:** As shown in Figure 21A, the average diplodia-toxin concentrations where 122, 332, and 355 µg/kg for cycle 1, 2, and 3.
    - The concentrations measured during cycle 1 were lower than the previous 2 seasons
    - The concentrations measured during cycles 2 and 3 were the highest since the 2020-2021 season.
    - The average diplodia-toxin concentration for cycle 2 showed an increasing trend for samples analysed during cycle 2 over all seasons.
- **Maximum levels:** The maximum diplodia-toxin concentrations for the 3 cycles, were 398, 1410, and 1342 µg/kg (see Figure 21B).
    - The maximum concentrations showed a clear increasing trend in contamination over the 4 seasons.

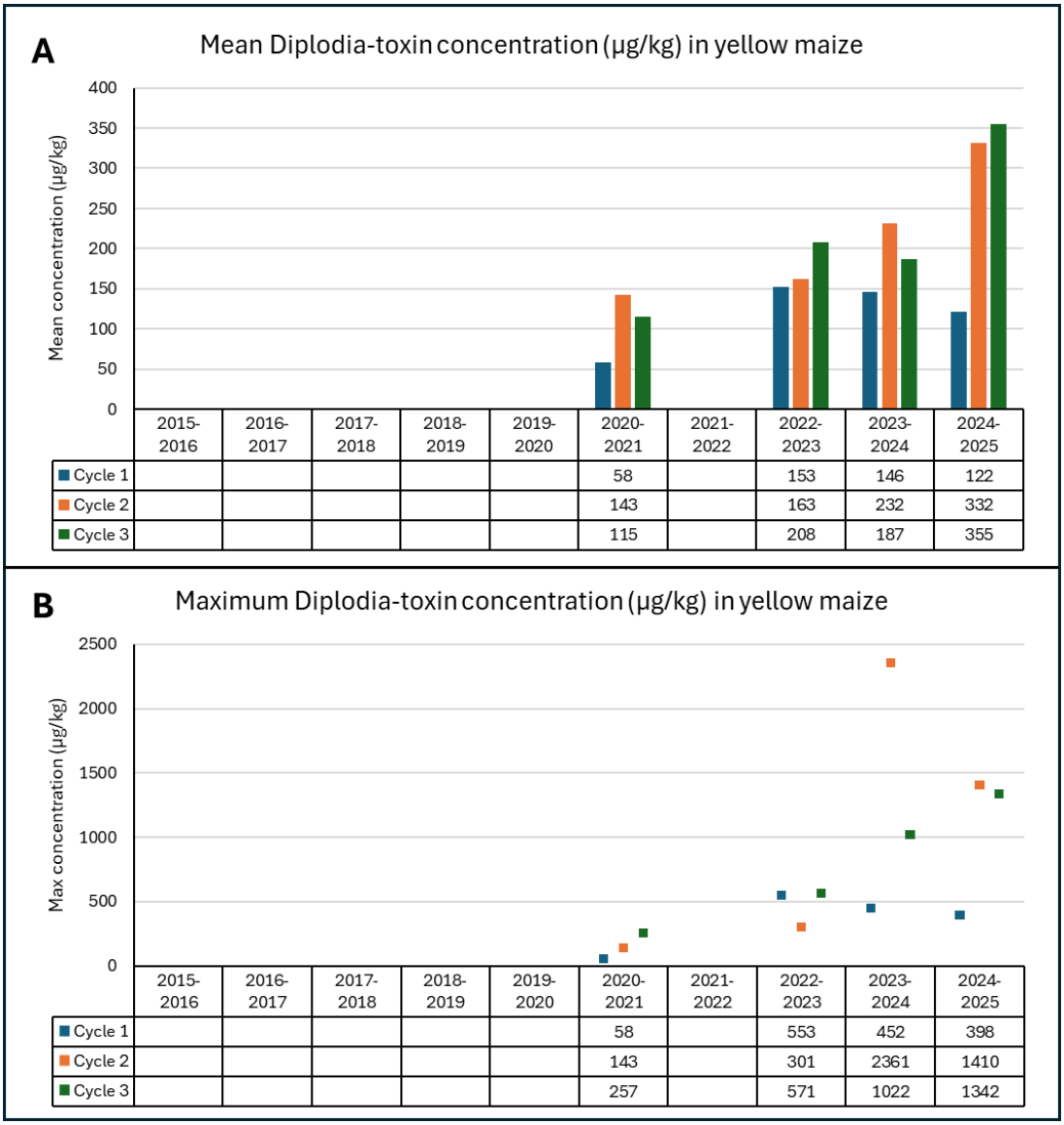


Figure 21.A, The mean diplodia-toxin concentrations (µg/kg), calculated as the average of the positive samples. **21B**, The maximum diplodia-toxin concentrations (µg/kg) in yellow maize for the 3 cycles over four seasons from 2021 to 2025

Materials and methods

Sample collection

Food and feed processing mills voluntarily collected maize samples for mycotoxin analysis across three collection periods, sourced from various South African production and storage regions. Participating mills included 31 feed mills (Animal Feed Manufacturers Association members) primarily collecting yellow maize, and 8 food processing mills (including National Chamber of Milling members) collecting white maize. 4 of the food mills provided both white and yellow maize. Composite samples ranging from 1 to 10 kg were submitted to the SAGL. 4 food and 2 feed processing mills submitted more than one sample taken on the same day from the same producer/region and composite samples were made.

A total of 362 (174 white maize and 188 yellow maize) maize samples were collected, 348 were locally produced and 14 from imported maize. The local maize samples came from the Free State (163), Mpumalanga (73), North West (31), KwaZulu Natal (23), Gauteng (18), Limpopo (15), Northern Cape (14), Eastern Cape (5) and 1 from the Western Cape. The production regions were not recorded for 5 samples.

Table 4. Summary of the pre-processing maize samples submitted for mycotoxin analysis

Sample collection period		**Summary of samples collected by the processing mills**					
		Food processing mills		**Suppliers to both food and feed processing mills**		**Feed processing mills**	
Cycle number	Collection period	Number of mills	Number of samples submitted	Number of suppliers	Number of samples submitted	Number of mills	Number of samples submitted
1	November 2023-January 2024	3	54	4	16	26	57
2	March - April 2024	4	52	-	-	27	66
3	June - July 2024	4	60	2	7	26	50
Cycle 1, 2 and 3	**November 2023 – July 2024**		**166**		**23**		**173**

Analytical method and quality assurance

Each sample was milled with a Mazzer mill set to the equivalent of a 1 mm sieve and mixed on a mixer for at least 90 minutes to ensure homogeneity of the sample.

All the samples were analysed with the SAGL multi-mycotoxin UPLC-MS/MS method; a SANAS accredited method for the simultaneous analysis of aflatoxin B_1, G_1, B_2, G_2, fumonisin B_1, B_2, B_3 (FUM), deoxynivalenol (DON) including 15-acetyl deoxynivalenol (15-ADON), T-2 toxin, HT-2 toxin, zearalenone (ZON), ochratoxin A (OTA), and diplodia-toxin.

Duplicate subsamples were extracted with the extraction solution, diluted, and analysed with the UPLC-MS/MS. The mycotoxins were separated on a reversed-phase UPLC column and analysed with positive electrospray (EI) ionisation in the multiple reaction monitoring (MRM) mode. For each compound, one precursor and two product ions were monitored, one product ion for quantification and one for confirmation.

The reference materials purchased from Biopure and Cape Town University of Technology (CPUT) were used for the preparation of separate stock solutions of each mycotoxin. The diplodiatoxin was obtained from the University of Pretoria. Matrix-matched working standards containing a mixture of the 14 mycotoxins (Table 5) were prepared for each batch of samples to construct a calibration curve for each mycotoxin with at least five calibration levels. A blank maize sample was analysed with every batch of samples to confirm that no contamination was present in the laboratory.

The method is an accredited method under the requirements of ISO 17025:2017 and the limit of quantitation (LOQ) and limit of detection (LOD) are given in Table 4.

General laboratory performance is verified by successful participation in the bimonthly Bipea and FAPAS international proficiency testing programs. These assessment programs provide several test samples for each mycotoxin group and commodity type.

Table 5. Limit of quantitation and limit of detection (µg/kg)

Mycotoxin	Limit of detection, (LOD), µg/kg	Limit of quantitation, (LOQ), µg/kg	Concentration range, µg/kg
Aflatoxin B_1	2.5	5	1.25 – 80
Aflatoxin B_2	2.5	5	1.25 - 80
Aflatoxin G_1	2.5	5	1.25 - 80
Aflatoxin G_2	2.5	5	1.25 - 80
Deoxynivalenol	50	100	50 - 4000
15 Acetyl deoxynivalenol	50	100	50 - 4000
Fumonisin B_1	10	20	10 - 4000
Fumonisin B_2	10	20	10 - 4000
Fumonisin B_3	10	20	10 - 4000
Ochratoxin A	2.5	5	1.25 - 80
T-2 Toxin	10	20	10 - 4000
H-T2 toxin	10	20	10 - 4000
Zearalenone	10	20	10 – 4000
Diplodiatoxin *	25	50	25 – 4000

*Diplodiatoxin not included in the accredited multi-mycotoxin method

References

[1] Department of Health (South Africa). 2024. Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act no 54 of 1972): Regulations Relating to Maximum Levels of Mycotoxins in Foodstuffs. (Notice 5505). Government Gazette, 51499: 101, 1 November.

[2] European Commission (EC) Commission Regulation (EC) N0 2023/915 of 25 April 2023 on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006. Official Journal of the European Union 2023, L 119/103-L 119/157

[3] Department of Agriculture, Land Reform and Rural Development (South Africa). 2026. Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act no 36 of 1947): Amended Regulations Relating to Farm Feeds. (Notice 6998). Government Gazette, 53956: 13, 16 January. **(Please note this notice is still under invitation for public comments)**

Annexure 1

MYCOTOXIN RESULTS OF WHITE MAIZE SAMPLES (POST STORAGE PRE-PROCESSING 2024- 2025)

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia -toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	24	405/11/24	25-Nov-24	Free State	2024/11/25	ND	ND	ND	ND	ND	101	46	ND	147	ND	ND	ND	ND	ND	ND	ND
1	24	20/01/25/99	June 2024-July 2024	Free State	2024/01/20	ND	ND	ND	ND	ND	96	28	ND	124	ND	ND	ND	ND	ND	ND	ND
1	24	22/01/25-/39	June 2024-July 2024	Free State	2025/01/22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	24	148/01/25	Jan-25	Free State	2025/01/25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	24	105/01/25	21-Jan-25	Free State	2025/01/21	ND	ND	ND	ND	ND	51	20	ND	71	ND	ND	ND	ND	ND	ND	ND
1	24	0374/2378/2348	June 2024-July 2024	Free State	2024/11/22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	24	375/2611211/5128	June 2024-July 2024	Free State	2024/11/22	ND	ND	ND	ND	ND	<LOQ	22	ND	22	ND	ND	ND	ND	ND	ND	ND
1	24	397/11/23	Nov-24	Free State	2024/11/23	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	24	120/04/25	16-Apr-25	KwaZulu-Natal	2025/04/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	249	ND	ND	26	ND	ND	<LOQ
2	24	72/03/25	24-Mar-25	KwaZulu-Natal	2025/03/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	294	ND	ND	27	ND	ND	<LOQ
2	24	118-525758	June 2024-July 2024	KwaZulu-Natal	2025/04/15	ND	ND	ND	ND	ND	61	29	ND	90	244	ND	ND	ND	ND	ND	113
2	24	79/25/3/25	25-Mar-25	Free State	2025/03/25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	24	#1401/537098/(7/0015)	March-April 2025	KwaZulu-Natal	2025/04/25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND
1	25	S1	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	22	ND	ND	22	ND	ND	ND	ND	ND	ND	ND
1	25	S8,23	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	22	ND	ND	22	ND	ND	ND	ND	ND	ND	ND
1	25	S21	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	25	S6	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	256	76	22	354	ND	ND	ND	ND	ND	ND	ND
1	25	S13	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	24	ND	ND	24	ND	ND	ND	ND	ND	ND	ND
1	25	S9	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	142	59	ND	201	108	ND	ND	ND	ND	ND	ND
1	25	S10	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	41	<LOQ	ND	41	ND	ND	ND	ND	ND	ND	ND
1	25	S14,28	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	25	S20	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	123	41	<LOQ	164	<LOQ	ND	ND	ND	ND	ND	ND
1	25	S24	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	74	23	ND	97	ND	ND	ND	ND	ND	ND	ND
1	25	S29	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	35	ND	ND	35	ND	ND	ND	ND	ND	ND	ND
1	25	S48	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	84	24	<LOQ	108	ND	ND	ND	ND	ND	ND	ND
1	25	S5,19	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	25	S17,40	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	37	ND	ND	37	ND	ND	ND	ND	ND	ND	ND
1	25	S2,18,34	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	58	21	ND	79	ND	ND	ND	ND	ND	ND	ND
1	25	S25,30,44	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	236	84	21	341	<LOQ	ND	ND	ND	ND	ND	ND
1	25	S32,37	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	25	S4,33,35,43	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	<LOQ	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	25	S12,39	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	54	<LOQ	ND	54	ND	ND	ND	ND	ND	ND	ND
1	25	S11,16,26,38 ,46,49	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	43	<LOQ	ND	43	ND	ND	ND	ND	ND	ND	ND
1	25	S7.22	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	36	<LOQ	ND	36	ND	ND	ND	ND	ND	ND	ND
1	25	S31,36,42,45	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	88	30	ND	118	ND	ND	ND	ND	ND	ND	ND
1	25	S3,15,27,41, 47,50	Nov-24	Free State	2024/11/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	25	S1	March-April 2025	Free State	2025/03/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S2	March-April 2025	Free State	2025/03/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S3,31	March-April 2025	Free State	2025/03/24	ND	ND	ND	ND	ND	22	ND	ND	22	ND	ND	ND	ND	ND	ND	ND
2	25	S4,33,40	March-April 2025	Free State	2025/03/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S6,24,44	March-April 2025	Free State	2025/03/27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S7,25	March-April 2025	Free State	2025/03/17	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	160	ND	ND	ND	ND	ND	94
2	25	S8,22	March-April 2025	Free State	2025/03/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND
2	25	S9	March-April 2025	Free State	2025/03/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S10	March-April 2025	Free State	2025/03/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54
2	25	S11,30,38,47	March-April 2025	Free State	2025/03/31	ND	ND	ND	ND	ND	53	ND	ND	53	ND	ND	ND	ND	ND	ND	ND
2	25	S12	March-April 2025	Free State	2025/03/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S13	March-April 2025	Free State	2025/03/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S15,34	March-April 2025	Free State	2025/03/24	ND	ND	ND	ND	ND	33	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
2	25	S16,28,37	March-April 2025	Free State	2025/03/26	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND
2	25	S17	March-April 2025	Free State	2025/03/11	ND	ND	ND	ND	ND	41	ND	ND	41	ND	ND	ND	ND	ND	ND	ND
2	25	S18,26	March-April 2025	Free State	2025/03/,17	ND	ND	ND	ND	ND	34	ND	ND	34	ND	ND	ND	ND	ND	ND	ND
2	25	S19	March-April 2025	Free State	2025/03/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S20	March-April 2025	Free State	2024/03/14	ND	ND	ND	ND	ND	34	ND	ND	34	ND	ND	ND	ND	ND	ND	ND
2	25	S21	March-April 2025	Free State	2025/03/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S5,23,14,27, 29,35,39,42	March-April 2025	Free State	2025/03/28	ND	ND	ND	ND	ND	122	41	ND	163	ND	ND	ND	ND	ND	ND	ND

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	25	S32,43	March-April 2025	Free State	2025/03/28	ND	ND	ND	ND	ND	49	ND	ND	49	ND	ND	ND	ND	ND	ND	ND
2	25	S36	March-April 2025	Free State	2025/03/24	ND	ND	ND	ND	ND	43	<LOQ	ND	43	103	ND	ND	ND	ND	ND	ND
2	25	S41	March-April 2025	Free State	2025/03/27	ND	ND	ND	ND	ND	41	<LOQ	ND	41	ND	ND	ND	ND	ND	ND	ND
2	25	S44,50	March-April 2025	Free State	2025/03/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	25	S45,49	March-April 2025	Free State	2025/03/31	ND	ND	ND	ND	ND	41	<LOQ	ND	41	ND	ND	ND	ND	ND	ND	<LOQ
2	25	S46,48	March-April 2025	Free State	2025/03/31	ND	ND	ND	ND	ND	38	<LOQ	ND	38	ND	ND	ND	ND	ND	ND	ND
3	25	S35	Jun-25	Free State	2025/06/25	ND	ND	ND	ND	ND	487	172	45	704	253	ND	ND	ND	ND	ND	58
3	25	S41	Jun-25	Free State	2025/06/26	ND	ND	ND	ND	ND	103	37	ND	140	<LOQ	ND	ND	ND	ND	ND	<LOQ
3	25	S1	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	101	35	ND	136	185	ND	ND	20	ND	ND	105
3	25	S2	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	314	102	23	439	305	ND	ND	35	ND	ND	123
3	25	S3	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	284	123	23	430	ND	ND	ND	ND	ND	ND	142
3	25	S4,30	Jun-25	Free State	2025/06/24	ND	ND	ND	ND	ND	518	219	57	794	107	ND	ND	ND	ND	ND	59
3	25	S5	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	596	222	50	868	<LOQ	ND	ND	22	ND	ND	ND
3	25	S6	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	266	117	22	405	ND	ND	ND	ND	ND	ND	<LOQ
3	25	S7	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	921	380	88	1389	ND	ND	ND	ND	ND	ND	65
3	25	S8,44	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	112	41	ND	153	659	<LOQ	ND	52	ND	ND	125
3	25	S9	Jun-25	Free State	2025/06/09	ND	ND	ND	ND	ND	114	34	ND	148	1654	261	ND	92	ND	ND	119
3	25	S10,31	Jun-25	Free State	2025/06/24	ND	ND	ND	ND	ND	477	176	51	704	131	ND	ND	ND	ND	ND	266
3	25	S11	Jun-25	Free State	2025/06/10	ND	ND	ND	ND	ND	1082	413	103	1598	269	ND	ND	ND	ND	ND	84
3	25	S12	Jun-25	Free State	2025/06/10	ND	ND	ND	ND	ND	1428	505	134	2067	225	ND	ND	<LOQ	ND	ND	74

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	25	S13	Jun-25	Free State	2025/06/10	ND	ND	ND	ND	ND	519	221	46	786	183	ND	ND	ND	ND	ND	161
3	25	S14	Jun-25	Free State	2025/06/10	ND	ND	ND	ND	ND	999	334	89	1422	<LOQ	ND	ND	34	ND	ND	96
3	25	S15,17	Jun-25	Free State	2025/06/12	ND	ND	ND	ND	ND	143	40	<LOQ	183	131	ND	ND	ND	ND	ND	ND
3	25	S16	Jun-25	Free State	2025/06/11	ND	ND	ND	ND	ND	162	61	<LOQ	223	248	ND	ND	ND	ND	ND	ND
3	25	S18	Jun-25	Free State	2025/06/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	211	<LOQ	ND	ND	ND	ND	ND
3	25	S19	Jun-25	Free State	2025/06/12	ND	ND	ND	ND	ND	260	76	ND	336	<LOQ	ND	ND	ND	ND	ND	ND
3	25	S20,24,40	Jun-25	Free State	2025/06/26	ND	ND	ND	ND	ND	379	127	33	539	313	ND	ND	ND	ND	ND	ND
3	25	S21	Jun-25	Free State	2025/06/19	ND	ND	ND	ND	ND	366	124	29	519	350	<LOQ	ND	ND	ND	ND	166
3	25	S22,50	Jun-25	Free State	2025/06/30	ND	ND	ND	ND	ND	1036	513	95	1644	233	ND	ND	59	ND	ND	152
3	25	S23	Jun-25	Free State	2025/06/19	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	3304	332	ND	176	ND	ND	80
3	25	S25	Jun-25	Free State	2025/06/19	ND	ND	ND	ND	ND	1966	933	156	3055	883	124	ND	32	ND	ND	239
3	25	S26	Jun-25	Free State	2025/06/23	ND	ND	ND	ND	ND	783	288	63	1134	192	ND	ND	ND	ND	ND	ND
3	25	S27	Jun-25	Free State	2025/06/24	ND	ND	ND	ND	ND	2700	1134	269	4103	472	<LOQ	ND	ND	ND	ND	64
3	25	S28,47	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	399	151	29	579	541	<LOQ	ND	ND	ND	ND	99
3	25	S29	Jun-25	Free State	2025/06/24	ND	ND	ND	ND	ND	494	219	46	759	488	<LOQ	ND	ND	ND	ND	184
3	25	S32	Jun-25	Free State	2025/06/25	ND	ND	ND	ND	ND	1318	521	118	1957	738	116	ND	ND	ND	ND	ND
3	25	S33,49	Jun-25	Free State	2025/06/25	ND	ND	ND	ND	ND	576	275	58	909	1024	189	ND	ND	ND	ND	ND
3	25	S34,43	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	585	213	54	852	551	128	ND	<LOQ	ND	ND	ND
3	25	S36	Jun-25	Free State	2025/06/25	ND	ND	ND	ND	ND	806	369	65	1240	521	<LOQ	ND	ND	ND	ND	54
3	25	S37	Jun-25	Free State	2025/06/25	ND	ND	ND	ND	ND	47	ND	ND	47	109	ND	ND	ND	ND	ND	115

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	25	S38	Jun-25	Free State	2025/06/26	ND	ND	ND	ND	ND	718	257	120	1095	522	<LOQ	ND	40	ND	ND	93
3	25	S39,46	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	445	182	32	659	243	ND	ND	<LOQ	ND	ND	305
3	25	S42	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	583	228	49	860	1057	158	ND	41	ND	ND	135
3	25	S45	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	37	<LOQ	ND	37	428	105	ND	<LOQ	ND	ND	<LOQ
3	25	S48	Jun-25	Free State	2025/06/27	ND	ND	ND	ND	ND	338	136	31	505	2650	342	ND	83	ND	ND	142
1	31	R1	Nov 2024-Jan 2025	North-West	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	31	R2	Nov 2024-Jan 2026	Gauteng	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND
1	31	R3	Nov 2024-Jan 2027	Mpumalanga	2025/01/31	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
1	31	R4	Nov 2024-Jan 2028	Mpumalanga	2025/01/31	ND	ND	ND	ND	ND	47	<LOQ	ND	47	ND	ND	ND	ND	ND	ND	ND
1	31	R5	Nov 2024-Jan 2029	Gauteng	2025/01/31	ND	ND	ND	ND	ND	33	ND	ND	33	ND	ND	ND	ND	ND	ND	ND
1	31	R6	Nov 2024-Jan 2030	North-West	2025/01/31	ND	ND	ND	ND	ND	121	51	<LOQ	172	133	ND	ND	ND	ND	ND	64
1	31	R7	Nov 2024-Jan 2031	North-West	2025/01/31	ND	ND	ND	ND	ND	58	<LOQ	ND	58	ND	ND	ND	ND	ND	ND	ND
1	31	R8	Nov 2024-Jan 2032	North-West	2025/01/31	ND	ND	ND	ND	ND	78	35	ND	113	171	ND	ND	ND	ND	ND	<LOQ
1	31	R9	Nov 2024-Jan 2033	North-West	2025/01/31	ND	ND	ND	ND	ND	22	ND	ND	22	ND	ND	ND	ND	ND	ND	ND
1	31	R10	Nov 2024-Jan 2034	Gauteng	2025/01/31	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	176	ND	ND	ND	ND	ND	ND
2	31	R MZ1	08/05/2025	USA	2025/05/08	<LOQ	ND	ND	ND	ND	839	234	79	1152	<LOQ	ND	ND	ND	ND	ND	ND
2	31	R MZ2	08/05/2025	USA	2025/05/08	ND	ND	ND	ND	ND	401	127	35	563	ND	ND	ND	ND	ND	ND	ND
2	31	R MZ3	06-May-25	North-West	2025/05/08	ND	ND	ND	ND	ND	197	64	<LOQ	261	ND	ND	ND	ND	ND	ND	ND
3	31	R A1	Aug-25	North-West	2025/08/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	1981	307	ND	104	ND	ND	ND
3	31	R A2	Aug-25	Northern Cape	2025/08/13	ND	ND	ND	ND	ND	590	234	63	887	183	ND	ND	ND	ND	ND	101

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	31	R A3	Aug-25	North-West	2025/08/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	163	ND	ND	ND	ND	ND	ND
3	31	R A4	Aug-25	Northern Cape	2025/08/13	ND	ND	ND	ND	ND	672	245	68	985	178	ND	ND	ND	ND	ND	76
1	33	N/A	Jan-25	Free State	2025/01/31	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	171	ND	ND	ND	ND	ND	ND
1	33	N/A	Jan-25	Free State	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	ND	ND	ND
1	33	N/A	Jan-25	Mpumalanga	2025/01/31	ND	ND	ND	ND	ND	41	<LOQ	ND	41	ND	ND	ND	ND	ND	ND	ND
1	33	N/A	Jan-25	North-West	2025/01/31	ND	ND	ND	ND	ND	173	69	ND	242	ND	ND	ND	ND	ND	ND	ND
1	33	N/A	Dec-24	Free State	2025/01/31	ND	ND	ND	ND	ND	36	ND	ND	36	ND	ND	ND	ND	ND	ND	ND
1	33	N/A	Jan-25	North-West	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	33	N/A	Jan-25	Free State	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
1	33	N/A	Dec-24	Gauteng	2025/01/31	ND	ND	ND	ND	ND	88	36	<LOQ	124	157	ND	ND	ND	ND	ND	ND
1	33	N/A	Jan-25	USA	2025/01/31	ND	ND	ND	ND	ND	480	147	45	672	ND	ND	ND	ND	ND	ND	ND
1	33	N/A	Dec-24	Gauteng	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	33	N/A	25-Mar-18	Mpumalanga	2025/05/13	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	33	N/A	25-26-Mar-25	Mpumalanga	2025/05/13	ND	ND	ND		ND	722	242	55	1019	100	ND	ND	ND	ND	ND	86
2	33	N/A	13-Mar-18	Mpumalanga	2025/05/13	ND	ND	ND		ND	28	ND	ND	28	ND	ND	ND	ND	ND	ND	ND
2	33	N/A	25-28-Mar-25	Mpumalanga	2025/05/13	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	33	N/A	04-12-Mar-25	Free State	2025/05/13	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	33	N/A	13-16-Mar-25	Free State	2025/05/13	ND	ND	ND		ND	158	73	<LOQ	231	496	<LOQ	ND	<LOQ	ND	ND	ND
2	33	N/A	05-09_Mar-25	N/A	2025/05/13	ND	ND	ND	ND	ND	478	162	44	684	ND	ND	ND	ND	ND	ND	ND
3	33	N/A	Jul-25	North-West	2025/07/09	ND	ND	ND	ND	ND	504	221	56	781	1590	202	ND	45	ND	ND	ND

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	33	N/A	Jul-25	Gauteng	2025/07/12	ND	ND	ND	ND	ND	35	ND	ND	35	3011	282	ND	274	ND	ND	ND
3	33	N/A	Jul-25	North-West	2025/07/10	ND	ND	ND	ND	ND	168	90	<LOQ	258	765	140	ND	24	ND	ND	<LOQ
3	33	N/A	Jul-25	Gauteng	2025/07/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	1813	184	ND	73	ND	ND	<LOQ
3	33	N/A	Jul-25	Mpumalanga	2025/07/04	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	2083	173	ND	113	ND	ND	56
3	33	N/A	Jul-25	North-West	2025/07/03	ND	ND	ND	ND	ND	ND	ND	ND	ND	536	<LOQ	ND	21	ND	ND	128
3	33	N/A	Jul-25	North-West	2025/07/10	ND	ND	ND	ND	ND	126	38	ND	164	1463	366	ND	43	ND	ND	71
3	33	N/A	Jul-25	Free State	2025/07/02	ND	ND	ND	ND	ND	182	62	ND	244	1700	245	ND	51	ND	ND	87
3	33	N/A	Jul-25	North-West	2025/07/03	ND	ND	ND	ND	ND	143	24	ND	167	765	140	ND	ND	ND	ND	91
3	33	N/A	Jul-25	Free State	2025/07/10	ND	ND	ND	ND	ND	69	25	ND	94	360	ND	ND	ND	ND	ND	51
3	33	N/A	Jul-25	Free State	2025/07/10	ND	ND	ND	ND	ND	52	<LOQ	ND	52	720	229	ND	<LOQ	ND	ND	ND
1	34	Bin 1 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	248	ND	ND	ND	ND	ND	ND
1	34	Bin 3 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	136	ND	ND	ND	ND	ND	338
1	34	Bin 9 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	232	ND	ND	<LOQ	ND	ND	113
1	34	Bin 10 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	382	<LOQ	ND	35	ND	ND	<LOQ
2	34	M - Bin 13	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	81	23	ND	104	1430	118	ND	204	ND	ND	67
2	34	M - Bin 4	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	135	54	ND	189	1284	<LOQ	ND	229	ND	ND	85
1	35	B1-1-25	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	138	ND	ND	47	ND	ND	ND
1	35	B9-1-26	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	602	<LOQ	ND	56	ND	ND	74
1	35	B10-1-27	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	35	Bin 2	01-Apr-25	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	114	39	ND	153	696	<LOQ	ND	25	ND	ND	60

White Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	35	Bin 4	01-Apr-25	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	51	<LOQ	ND	51	234	ND	ND	ND	ND	ND	ND
3	35	Bin 2	Jun-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	72	<LOQ	ND	72	1669	138	ND	106	ND	ND	<LOQ
3	35	Bin 4	Jun-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	1674	180	ND	63	ND	ND	ND
3	35	Bin 14	Jun-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	446	<LOQ	ND	116	ND	ND	588
3	36	SAK A1,A2	Jun-25	Mpumalanga	2025/06/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	126	ND	32	ND	ND	381
3	36	N/A		Mpumalanga	2025/07/23	ND	ND	ND	ND	ND	ND	ND	ND	ND	1130	164	ND	75	ND	ND	136
1	37	LYD-Jan-2025	Nov 2024-Jan 2025	Mpumalanga	2025/01/21	ND	ND	ND	ND	ND	401	170	32	603	ND	ND	ND	ND	ND	ND	ND
1	37	LTT-Jan-2025	Nov 2024-Jan 2025	Limpopo	2025/01/27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	37	MOK-Jan-2025	Nov 2024-Jan 2025	Limpopo	2025/01/27	<LOQ	ND	ND	ND	ND	455	123	53	631	ND	ND	ND	ND	ND	ND	ND
2	37	MOK-MARCH-2025	16-Mar-25	Limpopo	2025/04/04	ND	ND	ND	ND	ND	1299	394	171	1864	ND	ND	ND	ND	ND	ND	ND
2	37	MOK-MARCH-2025	19-Mar-25	Limpopo	2025/04/04	ND	ND	ND	ND	ND	123	60	ND	183	<LOQ	ND	ND	ND	ND	ND	69
2	37	MOK-MARCH-2025	19-Mar-25	Limpopo	2025/04/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	37	LYD-MARCH-2025	06-Mar-25	Mpumalanga	2025/04/04	ND	ND	ND	ND	ND	30	<LOQ	ND	30	<LOQ	ND	ND	ND	ND	ND	<LOQ
2	37	MOK-MARCH-2025	18-Mar-25	Limpopo	2025/04/04	ND	ND	ND	ND	ND	513	149	86	748	ND	ND	ND	ND	ND	ND	ND
2	37	LTT-MARCH-2025	11-Mar-25	Limpopo	2025/04/04	24.6	ND	ND	ND	24.6	1249	368	108	1725	ND	ND	ND	ND	ND	ND	ND
3	37	LTT-JULY-2025	Jun-25	Limpopo	2025/07/31	ND	ND	ND	ND	ND	325	111	<LOQ	436	371	<LOQ	ND	21	ND	ND	ND
3	37	LYD-JULY-2025	Jul-25	Mpumalanga	2025/07/31	ND	ND	ND	ND	ND	42	ND	ND	42	804	107	ND	51	ND	ND	174
3	37	MOK-JULU-2025	Jun-25	Limpopo	2025/07/31	ND	ND	ND	ND	ND	599	235	37	871	722	109	ND	150	ND	ND	72

N/A = Not available.
ND = Not detected.
<LOQ = Less than limit of quantitation. See Table 4.

MYCOTOXIN RESULTS OF YELLOW MAIZE SAMPLES (POST STORAGE PRE-PROCESSING 2023 – 2024)

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	1	124127	Dec-24	Free State	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
1	1	119908	19-Nov-24	Free State	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	1	130372	Jan-25	Free State	2025/01/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	1	144583	Mar-25	Free State	2025/05/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	1	144829	Apr-25	Free State	2025/05/06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
3	1	155644	Jun- Jul -25	Free State	2025/08/04	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	1075	191	ND	37	ND	ND	121
3	1	160259	Jul-25	Free State	2025/08/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	696	126	ND	29	ND	ND	169
1	2	E0140017	N/A	Mpumalanga	2024/12/05	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	65
1	2	E0140019	N/A	Mpumalanga	2024/12/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	69
2	2	E0148953	2025.03.12	Mpumalanga	2025/03/12	ND	ND	ND	ND	ND	63	21		84	167	ND	ND	ND	ND	ND	ND
2	2	E0148954	v	Mpumalanga	2025/03/12	ND	ND	ND	ND	ND	50	20		70	241	ND	ND	ND	ND	ND	<LOQ
3	2	E0157894	2025.06.20	Mpumalanga	2025/06/20	ND	ND	ND	ND	ND	ND	ND	ND	ND	747	122	ND	<LOQ	ND	ND	554
3	2	E0157895	2025.06.20	Mpumalanga	2025/06/20	ND	ND	ND	ND	ND	27	<LOQ	ND	27	291	ND	ND	45	ND	ND	75
1	3	I0190903	29-Jan-25	Gauteng	2025/01/30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	3	I0181159	27-Nov-24	Mpumalanga	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	126	ND	ND	ND	ND	ND	ND
1	3	I0184747	19-Dec-24	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	52
2	3	I0202233	01-Apr-25	KwaZulu-Natal	2025/05/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	3	I0196979	04-Mar-25	Gauteng	2025/05/07	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	3	I020811	05-May-25	North-West	2025/05/07	ND	ND	ND	ND	ND	750	241	39	1030	485	ND	ND	39	ND	ND	ND
3	3	I0278720	Jun-25	Mpumalanga	2025/08/08	ND	ND	ND	ND	ND	ND	ND	ND	ND	416	<LOQ	ND	210	ND	ND	1223
3	3	I0224138	Jul-25	Mpumalanga	2025/08/07	ND	ND	ND	ND	ND	44	ND	ND	44	901	119	ND	<LOQ	ND	ND	305
3	3	I0214893	Jun-25	Gauteng	2025/08/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	564	110	ND	25	ND	ND	<LOQ
1	4	W5441018	Jan-25	Northern Cape	2025/01/24	ND	ND	ND	ND	ND	32	ND	ND	32	149	ND	ND	ND	ND	ND	ND
1	4	W5440938	Jan-25	Northern Cape	2025/01/24	ND	ND	ND	ND	ND	49	ND	ND	49	147	<LOQ	ND	ND	ND	ND	ND
2	4	W5448101	April 2025	Northern Cape	2025/04/23	ND	ND	ND	ND	ND	76	<LOQ	ND	76	<LOQ	ND	ND	ND	ND	ND	ND
2	4	W5448171	April 2025	Northern Cape	2025/04/23	ND	ND	ND	ND	ND	88	<LOQ	ND	88	199	ND	ND	ND	ND	ND	ND
3	4	W5455225	Jul-25	Northern Cape	2025/07/15	ND	ND	ND	ND	ND	236	44	<LOQ	280	220	<LOQ	ND	ND	ND	ND	ND
3	4	W5455510	Jul-25	Northern Cape	2025/07/15	ND	ND	ND	ND	ND	571	152	46	769	444	122	ND	<LOQ	ND	ND	ND
1	5	N/A	Nov 2024-Jan 2025	Free State	2025/02/06	ND	ND	ND	ND	ND	35	ND	ND	35	ND	ND	ND	ND	ND	ND	ND
1	5	N/A	Nov 2024-Jan 2025	Free State	2025/02/06	ND	ND	ND	ND	ND	148	34	<LOQ	182	ND	ND	ND	ND	ND	ND	ND
2	5	0002206	10-Mar-25	Eastern Cape	2025/04/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	595	170	ND	ND	ND	ND	ND
2	5	0066564	07-Apr-25	North-West	2025/04/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	628	189	ND	<LOQ	ND	ND	ND
3	5	N/A	Jun- Jul -25	Eastern Cape	2025/07/05	ND	ND	ND	ND	ND	225	65	ND	290	753	111	ND	<LOQ	ND	ND	<LOQ
3	5	P0033268	Jun- Jul -25	Free State	2025/08/05	ND	ND	ND	ND	ND	276	77	<LOQ	353	875	135	ND	41	ND	ND	ND
1	6	N1720143	Jan-25	KwaZulu-Natal	2025/02/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	223	<LOQ	ND	ND	ND	ND	<LOQ
1	6	N1720144	Jan-25	KwaZulu-Natal	2025/02/17	ND	ND	ND	ND	ND	ND	ND	ND	ND	460	102	ND	ND	ND	ND	57
2	6	N173090	April 2025	KwaZulu-Natal	2025/04/29	ND	ND	ND	ND	ND	28	ND	ND	28	<LOQ	ND	ND	ND	ND	ND	ND
2	6	N173098	April 2025	KwaZulu-Natal	2025/04/29	ND	ND	ND	ND	ND	41	ND	ND	41	ND	ND	ND	80	ND	ND	ND

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	6	N1739245	Jun-25	KwaZulu-Natal	2025/06/25	ND	ND	ND	ND	ND	ND	ND	ND	ND	1195	389	ND	64	ND	ND	93
3	6	N1739246	Jun-25	KwaZulu-Natal	2025/06/25	ND	ND	ND	ND	ND	ND	ND	ND	ND	1130	355	ND	57	ND	ND	145
1	7	RM3839	27-Dec-23	Mpumalanga	2025/01/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	157	ND	ND	ND	ND	ND	68
1	7	RM4044	27-Dec-23	Mpumalanga	2025/01/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	118	ND	ND	ND	ND	ND	<LOQ
2	8	68250312016	12-Mar-25	Limpopo	2025/03/12	ND	ND	ND	ND	ND	262	90	22	374	156	ND	ND	ND	ND	ND	ND
2	8	68250319038	12-Mar-25	Limpopo	2025/03/12	ND	ND	ND	ND	ND	679	178	60	917	ND	ND	ND	ND	ND	ND	ND
3	8	2 753 660	Jul-25	Mpumalanga	2025/07/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	1056	171	ND	71	ND	ND	296
3	8	2719503	Jul-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	806	107	ND	81	ND	ND	75
1	9	662412301010	N/A	Free State	2025/01/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	120
1	9	66241115041	N/A	North-West	2025/01/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	ND	ND	ND	ND	ND	<LOQ
1	9	66250121001	N/A	Gauteng	2025/01/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	171	ND	ND	ND	ND	ND	<LOQ
2	9	AA1	21/05/2025	KwaZulu-Natal	2025/05/23	ND	ND	ND	ND	ND	89	30	ND	119	2778	326	ND	460	ND	ND	220
2	9	AA2	22/05/2025	KwaZulu-Natal	2025/05/23	ND	ND	ND	ND	ND	37	ND	ND	37	200	ND	ND	55	ND	ND	476
3	10	1 499 563	Jun-25	KwaZulu-Natal	2025/06/20	ND	ND	ND	ND	ND	594	240	44	878	1025	172	ND	181	ND	ND	214
3	10	1499863	Jun-25	KwaZulu-Natal	2025/06/20	ND	ND	ND	ND	ND	2679	949	279	3907	1246	184	ND	249	ND	ND	ND
1	11	1455562	Nov-24	Brazil	2025/01/08	ND	ND	ND	ND	ND	514	156	49	719	ND	ND	ND	ND	ND	ND	ND
1	11	1455561	Nov-24	Northern Cape	2025/01/08	ND	ND	ND	ND	ND	67	<LOQ	ND	67	169	<LOQ	ND	ND	ND	ND	ND
2	11	1486409	March	Free State	2025/05/08	ND	ND	ND	ND	ND	476	105	35	616	292	ND	ND	24	ND	ND	ND
2	11	1486408	March	Argentina	2025/05/08	ND	ND	ND	ND	ND	648	161	63	872	161	ND	ND	ND	ND	ND	73
3	11	1509752	Jul-25	Northern Cape	2025/07/28	ND	ND	ND	ND	ND	196	31	ND	227	1277	224	ND	24	ND	ND	ND

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
3	11	1509751	Jul-25	Northern Cape	2025/07/08	ND	ND	ND	ND	ND	1441	336	116	1893	992	424	ND	31	ND	ND	ND
1	12	AF-YM Sample 1	Nov-24	Free State	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	12	AF-YM Sample 2	Nov-24	Free State	2024/11/15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	12	23/03/2025	23/03/2025-28/04/2025	USA	2025/05/14	ND	ND	ND	ND	ND	165	53	ND	218	ND	ND	ND	ND	ND		ND
2	12	28/04/2025	23/03/2025-28/04/2025	USA	2025/05/14	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	13	L001	Nov 2024-Jan 2025	Northern Cape	2025/01/16	ND	ND	ND	ND	ND	244	74	<LOQ	318	ND	ND	ND	ND	ND	ND	ND
1	14	159765	07-Jan-25	Mpumalanga	2025/01/07	ND	ND	ND	ND	ND	31	ND	ND	31	ND	ND	ND	ND	ND	ND	ND
1	14	159788	08-Jan-25	Mpumalanga	2025/01/08	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	136
2	14	168756	02-Apr-25	Mpumalanga	2025/04/02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	14	168339	14-Mar-25	Mpumalanga	2025/03/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	14	171 332	Jun-25	Mpumalanga	2025/06/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	538	121	ND	<LOQ	ND	ND	289
3	14	170837	Jun-25	Mpumalanga	2025/06/19	ND	ND	ND	ND	ND	ND	ND	ND	ND	510	132	ND	22	ND	ND	1123
1	15	131679	14-Nov-24	Eastern Cape	2024/11/14	ND	ND	ND	ND	ND	39	<LOQ	ND	39	ND	ND	ND	ND	ND	ND	ND
1	15	131693	14-Nov-24	China	2024/11/14	ND	ND	ND	ND	ND	2840	824	289	3953	231	ND	ND	ND	ND	ND	89
2	15	136488	01-Mar-25	South America	2025/03/13	ND	ND	ND	ND	ND	873	268	96	1237	123	ND	ND	<LOQ	ND	ND	85
2	15	136445	01-Mar-25	South America	2025/03/13	ND	ND	ND	ND	ND	1363	436	150	1949	107	ND	ND	<LOQ	ND	ND	<LOQ
3	15	140283	12/06/2025	Eastern Cape	2025/06/12	ND	ND	ND	ND	ND	1564	471	103	2138	1849	316	ND	82	ND	ND	ND
3	15	Yermaak	16/06/2025	Eastern Cape	2025/06/16	ND	ND	ND	ND	ND	713	204	47	964	293	ND	ND	<LOQ	ND	ND	ND
1	16	359701	Nov-24	Argentina	2025/01/28	ND	ND	ND	ND	ND	853	299	94	1246	ND	ND	ND	ND	ND	ND	ND
1	16	365170	Jan-25	Argentina	2025/01/28	ND	ND	ND	ND	ND	443	155	47	645	ND	ND	ND	ND	ND	ND	ND

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	16	377687	March-April 2025	Argentina	2025/04/29	ND	ND	ND	ND	ND	903	223	79	1205	ND	ND	ND	ND	ND	ND	ND
2	16	373747	March-April 2025	Argentina	2025/04/29	ND	ND	ND	ND	ND	1044	281	69	1394	143	ND	ND	ND	ND	ND	<LOQ
3	16	390275	Jul-25	Northern Cape	2025/07/18	ND	ND	ND	ND	ND	410	129	45	584	1281	249	ND	77	ND	ND	ND
3	16	385214	Jul-25	Northern Cape	2025/07/18	ND	ND	ND	ND	ND	192	64	<LOQ	256	136	ND	ND	20	ND	ND	ND
1	17	Silo 61	23-Jan-25	N/A	2025/01/23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	80
1	17	Silo 88	23-Jan-25	N/A	2025/01/23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	73
2	17	SILO 151	17-Apr-25	KwaZulu-Natal	2025/04/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	320	ND	ND	ND	ND	ND	60
2	17	SILO 151	17-Apr-25	KwaZulu-Natal	2025/04/24	ND	ND	ND	ND	ND	41	<LOQ	ND	41	296	<LOQ	ND	<LOQ	ND	ND	98
3	17	Silo 66	Jul-25	KwaZulu-Natal	2025/07/16	ND	ND	ND	ND	ND	215	47	ND	262	896	211	ND	56	ND	ND	154
3	17	Silo 66	Aug-25	KwaZulu-Natal	2025/08/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	419	<LOQ	ND	220	ND	ND	167
1	18	N/A	Dec	Gauteng	2025/02/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	90
1	18	N/A	Nov	Gauteng	2025/02/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	18	N/A	Jan	Gauteng	2025/02/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
2	18	299416	26/02/2025	Free State	2025/02/26	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	74
2	18	300066	05/03/2025	Free State	2025/03/05	ND	ND	ND	ND	ND	136	31	ND	167	ND	ND	ND	ND	ND	ND	ND
2	18	304240	15/04/2025	Free State	2025/04/15	ND	ND	ND	ND	ND	134	26	ND	160	ND	ND	ND	ND	ND	ND	ND
3	18	302877	Jul-25	Gauteng	2025/07/08	ND	ND	ND	ND	ND	34	ND	ND	34	ND	ND	ND	ND	ND	ND	ND
3	18	314893	Jul-25	Gauteng	2025/07/08	ND	ND	ND	ND	ND	ND	ND	ND	ND	1416	285	ND	42	ND	ND	224
3	18	309415	Jul-25	Gauteng	2025/07/08	ND	ND	ND	ND	ND	51	ND	ND	51	ND	ND	ND	ND	ND	ND	ND
1	19	379043	17-Dec-24	Mpumalanga	2025/01/15	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	62

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	19	381358	15-Jan-25	Mpumalanga	2025/01/15	ND	ND	ND	ND	ND	ND	ND	ND	ND	330	110	ND	<LOQ	ND	ND	230
2	19	396222	13-May-25	Mpumalanga	2025/05/14	ND	ND	ND		ND	510	170	35	715	2611	113	ND	505	ND	ND	955
2	19	396159	12-May-25	Mpumalanga	2025/05/14	ND	ND	ND		ND	77	29	ND	106	212	ND	ND	59	ND	ND	193
3	19	150478		Mpumalanga	2025/08/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	1511	295	ND	109	ND	ND	252
3	19	412673		Mpumalanga	2025/08/07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150
1	20	007831	03-Jan-25	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	20	007832	03-Jan-25	Free State	2025/01/21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	20	026652	April 2025	Free State	2025/04/10	ND	ND	ND	ND	ND	28	ND	ND	28	ND	ND	ND	ND	ND	ND	ND
2	20	026651	April 2025	Free State	2025/04/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	20	29811	Jul-25	Free State	2025/07/31	ND	ND	ND	ND	ND	117	28	ND	145	ND	ND	ND	ND	ND	ND	158
3	20	29812	Jul-25	Free State	2025/07/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	1521	318	ND	<LOQ	ND	ND	51
1	21	007834	14-Nov-24	North-West	2025/01/16	ND	ND	ND	ND	ND	54	<LOQ	ND	54	346	<LOQ	ND	ND	ND	ND	ND
1	21	007833	14-Nov-24	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	21	026653	11-Mar-25	Free State	2025/04/10	ND	ND	ND	ND	ND	223	75	21	319	ND	ND	ND	ND	ND	ND	56
2	21	026654	12-Mar-25	North-West	2025/04/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	21	29813	Jul-25	North-West	2025/07/31	ND	ND	ND	ND	ND	189	71	ND	260	1846	296	ND	38	ND	ND	ND
3	21	29814	Jun-25	North-West	2025/07/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	617	110	ND	37	ND	ND	462
1	22	007835	03-Jan-25	Limpopo	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
1	22	007836	03-Jan-25	Mpumalanga	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	22	026656	02-Apr-25	Mpumalanga	2025/04/10	ND	ND	ND	ND	ND	2000	570	170	2740	ND	ND	ND	ND	ND	ND	ND

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	22	026655	05-Apr-25	Limpopo	2025/04/10	ND	ND	ND	ND	ND	69	24	ND	93	ND	ND	ND	ND	ND	ND	
3	22	29815	Jul-25	Limpopo	2025/08/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	443	124	ND	49	ND	ND	887
3	22	29816	Jul-25	Limpopo	2025/08/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	265	<LOQ	ND	ND	ND	ND	73
1	23	007837	25-Nov-24	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
1	23	007838	08-Jan-25	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	23	026658	25-Mar-25	Free State	2025/04/10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	23	026657	25-Mar-25	Free State	2025/04/10	ND	ND	ND	ND	ND	77	22	ND	99	429	ND	ND	ND	ND	ND	189
3	23	29818	Jul-25	Free State	2025/07/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	496	169	ND	28	ND	ND	643
3	23	29817	Jul-25	Free State	2025/07/31	ND	ND	ND	ND	ND	ND	ND	ND	ND	636	167	ND	27	ND	ND	505
2	24	121/04/25	16-Apr-25	Free State	2025/04/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	26	Nov Sample 1	Nov-24	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	66
1	26	Dec Sample 2	Dec-24	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	121	ND	ND	ND	ND	ND	67
1	26	Jan Sample 3	Jan-25	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97
2	26	March Sample1	March & April	Free State	2025/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	26	March Sample2	March & April	Free State	2025/05/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	26	April Sample3	March & April	Free State	2025/05/12	ND	ND	ND	ND	ND	198	36	ND	234	1245	<LOQ	ND	84	ND	ND	275
3	26	JUNE SAMPLE 1	Jun-25	Free State	2025/08/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	584	<LOQ	ND	ND	ND	<LOQ	62
3	26	JULY SAMPLE 2	Jul-25	Free State	2025/08/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	616	130	ND	31	ND	ND	249
3	26	JULY SAMPLE 3	Jul-25	Free State	2025/08/11	ND	ND	ND	ND	ND	ND	ND	ND	ND	515	203	ND	ND	ND	ND	213

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	27	VR433570-November 2024	Nov 2024-Jan 2025	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	27	VR434606-December 2024	Nov 2024-Jan 2025	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
1	27	VR435520-January 2025	Nov 2024-Jan 2025	Free State	2025/01/28	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	ND	ND	ND	ND	<LOQ
2	27	VR438120-24/03/2025 (March 2025)	March-April 2025	Free State	2025/05/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
2	27	VR439140-14/04/2025 (April 2025)	March-April 2025	Free State	2025/05/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	27	VR440291 30/04/2025 (April 2025	March-April 2025	Free State	2025/05/16	ND	ND	ND	ND	ND	45	ND	ND	45	143	ND	ND	ND	ND	ND	67
3	27	VR443375	Jun-25 Jul-25 Jul-25	Free State	2025/07/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1081	192	ND	44	ND	ND	265
3	27	VR444162	Jul-25	Free State	2025/08/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	934	178	ND	21	ND	ND	182
3	27	VR444163	Jul-25	Free State	2025/08/01	ND	ND	ND	ND	ND	ND	ND	ND	ND	900	168	ND	<LOQ	ND	ND	184
2	28	MNR 0349 (MNR 334117)	12-May-25	N/A	2025/05/14	ND	ND	ND	ND	ND	160	33	ND	193	327	121	ND	ND	ND	ND	ND
3	28	MRN 34592	Jun-25	Western Cape	2025/06/23	ND	ND	ND	ND	ND	981	266	62	1309	852	158	ND	30	ND	ND	ND
1	29	LRN:217653	09-Jan-25	North-West	2025/01/13	ND	ND	ND	ND	ND	242	95	<LOQ	337	170	ND	ND	ND	ND	ND	<LOQ
1	29	LRN:217652	09-Jan-25	Free State	2025/01/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	29	LRN:221532	18-Mar-25	KwaZulu-Natal	2025/03/18	ND	ND	ND	ND	ND	37	<LOQ	ND	37	<LOQ	ND	ND	ND	ND	ND	146
2	29	LRN:221814	18-Mar-25	Mpumalanga	2025/03/18	ND	ND	ND	ND	ND	124	49	<LOQ	173	494	<LOQ	ND	53	ND	ND	207
3	29	229768	Jul-25	Gauteng	2025/07/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	500	109	ND	ND	ND	ND	413
3	29	228014	Jul-25	Mpumalanga	2025/07/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	805	181	ND	93	ND	ND	751

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
1	30	1441969	14-Nov-24	North-West	2024/11/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	73
1	30	1441859	14-Nov-24	North-West	2024/11/14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ
2	30	LIMS NO:1472787	13-Mar-25	North-West	2025/03/12	ND	ND	ND	ND	ND	102	28	<LOQ	130	ND	ND	ND	ND	ND	ND	ND
2	30	LIMS NO:1472826	13-Mar-25	North-West	2025/03/12	ND	ND	ND	ND	ND	5457	1581	498	7536	1635	190	ND	87	ND	ND	ND
2	30	LIMS NO:1472813	13-Mar-25	North-West	2025/03/12	ND	ND	ND	ND	ND	540	227	38	805	ND	ND	ND	ND	ND	ND	ND
2	30	LIMS No:1472131	14-Nov-24	North-West	2025/03/13	ND	ND	ND	ND	ND	244	78	23	345	ND	ND	ND	ND	ND	ND	ND
2	30	LIMS No:1472932	14-Nov-24	North-West	2025/03/13	ND	ND	ND	ND	ND	640	252	53	945	ND	ND	ND	ND	ND	ND	ND
2	30	1499392	21/05/2025	KwaZulu-Natal	2025/05/23	ND	ND	ND	ND	ND	311	161	21	493	2055	222	ND	135	ND	ND	664
2	30	1501144	22/05/2025	KwaZulu-Natal	2025/05/23	ND	ND	ND	ND	ND	41	ND	ND	41	1746	154	ND	120	ND	ND	185
1	32	T749448	14-Jan-25	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	32	T749343	13-Jan-25	Free State	2025/01/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	32	T762096	15-Apr-25	Free State	2025/04/23	ND	ND	ND	ND	ND	23	ND	ND	23	230	ND	ND	ND	ND	ND	106
2	32	T762973	22-Apr-25	North-West	2025/04/23	ND	ND	ND	ND	ND	2041	711	207	2959	494	<LOQ	ND	<LOQ	ND	ND	496
3	32	T776447	Jul-25	Free State	2025/07/15	ND	ND	ND	ND	ND	ND	ND	ND	ND	582	139	ND	<LOQ	ND	ND	168
3	32	T776451	Jul-25	Free State	2025/07/15	ND	ND	ND	ND	ND	ND	ND	ND	ND	1731	364	ND	82	ND	ND	142
1	34	Bin 2 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	119	ND	ND	ND	ND	ND	234
1	34	Bin 4 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	325
1	34	Bin12 Cycle 1	05-Nov-24	Mpumalanga	2024/11/05	ND	ND	ND	ND	ND	ND	ND	ND	ND	224	ND	ND	21	ND	ND	80
2	34	M - Bin 2	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	399	ND	ND	133	ND	ND	1213
2	34	M - Bin 9	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	140	32	ND	172	<LOQ	ND	ND	39	ND	ND	285

Yellow Maize Sample Description						Multi-Mycotoxin Results, µg/kg (ppb)														
						Aflatoxins					Fumonisins				DON	15-ADON	OTA	ZEA	T2	HT2	Diplodia-toxin
						AFB_1	AFB_2	AFG_1	AFG_2	Total	FUM B_1	FUM B_2	FUM B_3	Total (B_1+B_2)							
Cycle	Sender Report Code	Sender code	Sampling date / period	Production Region	Submission date	LOQ 5	LOQ 5	LOQ 5	LOQ 5		LOQ 20	LOQ 20	LOQ 20		LOQ 100	LOQ 100	LOQ 5	LOQ 20	LOQ 20	LOQ 20	LOQ 50
2	34	M - Bin 12	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	44	ND	ND	44	410	ND	ND	25	ND	ND	ND
2	34	M - Bin 6	March-April 2025	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	200	66	ND	266	243	ND	ND	ND	ND	ND	92
1	35	B2-1-25	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	229	ND	ND	ND	ND		178
1	35	B4-1-25	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	66
1	35	B13-1-28	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	ND	ND	ND	ND	122	ND	ND	ND	ND	ND	398
1	35	B14-1-29	Nov-24	Mpumalanga	2024/12/04	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	131	ND	ND	ND	ND	ND	142
2	35	Bin 10	01-Apr-25	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	324	103	22	449	456	ND	ND	39	ND	ND	<LOQ
2	35	Bin 8	01-Apr-25	Mpumalanga	2025/05/16	ND	ND	ND	ND	ND	ND	ND	ND	ND	902	106	ND	ND	ND	ND	1410
3	35	Bin 10	Jun-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	770	114	ND	29	ND	ND	<LOQ
3	35	Bin 11	Jun-25	Mpumalanga	2025/06/11	ND	ND	ND	ND	ND	<LOQ	ND	ND	<LOQ	873	110	ND	67	ND	ND	931
3	36	Bunker 4	Jun-25	Mpumalanga	2025/06/05	ND	ND	ND	ND	ND	ND	<LOQ	ND	<LOQ	781	107	ND	44	ND	ND	171
3	36	N/A		Mpumalanga	2025/07/23	ND	ND	ND	ND	ND	ND	ND	ND	ND	303	<LOQ	ND	<LOQ	ND	ND	1342
1	38	Cycle 1 Sample 1	Nov 2024-Jan 2025	N/A	2025/01/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ
1	38	Cycle 1 Sample2	Nov 2024-Jan 2025	KwaZulu-Natal	2025/01/24	ND	ND	ND	ND	ND	ND	ND	ND	ND	<LOQ	ND	ND	ND	ND	ND	<LOQ

N/A = Not available.

ND = Not detected.

<LOQ = Less than limit of quantitation. See Table 4

Annexure 2

Summary of the SA mycotoxin regulations in food for human consumption and in feed for animal consumption

Mycotoxin	Human consumption [1]		Animal consumption [3]	
	Maximum allowable level	Commodity	Maximum allowable level	Commodity
Aflatoxin B_1	5 µg/kg	All foodstuff not specified (ready-to-eat)	20 µg/kg	Groundnut, copra, palm kernel, cotton seed, maize and products derived from processing thereof.
Total Aflatoxin (B_1+B_2+G_1+G_2)	10 µg/kg	All foodstuff not specified (ready-to-eat)		
	15 µg/kg	Maize grain		
Deoxynivalenol	2000 µg/kg	Cereal grains (wheat, maize, and barley) intended for further processing	1000 – 5000 µg/kg	Complete and supplement feed for: pigs, cattle, calves up to 4 months, lambs, kids, dairy cattle, poultry, and pets.
	1000 µg/kg	Flour, meal, semolina, and flakes derived from wheat, maize, or barley, ready for human consumption		
Fumonisin B_1+B_2	4000 µg/kg	Raw maize grain, the whole commodity, intended for further processing	5000 - 50000 µg/kg	Complete and supplement feed for: horses, pets, pigs, adult ruminants (>4 months), poultry, calves (<4 months), lambs, kids, and fish.
	2000 µg/kg	Maize flour and maize meal, ready for human consumption		
Ochratoxin A	-	-	10 - 200 µg/kg	Complete and supplement feed for: pigs, poultry, cats, and dogs.
Zearalenone	-	-	200 - 5000 µg/kg	Complete and supplement feed for: Sows, pigs, piglets, calves, dairy cattle, sheep, lambs, goats, kids, and adult dogs and cats (other than for reproduction).