

TABLE 24: MYCOTOXIN RESULTS - SUMMARY OF SEASONS 2013/14 TO 2022/23

Season	Total Number of samples represented in crop survey	Number of samples tested for mycotoxins	Aflatoxin* µg/kg		Fumonisin** µg/kg		Deoxynivalenol µg/kg		15-acetyl-deoxynivalenol µg/kg		Ochratoxin A µg/kg		Zearalenone µg/kg		T-2 Toxin µg/kg						
			N	ave.	max.	N	ave.	max.	N	ave.	max.	N	ave.	max.	N	ave.	max.				
2013/14	930	350	-	-	-	143	456	5 357	243	417	6 134	59	182	861	-	-	41	78	445	-	-
2014/15	1 000	350	3	31	48	197	397	3 382	143	447	9 736	37	251	1 768	-	-	37	60	337	-	-
2015/16	920	350	-	-	-	200	569	11 347	75	259	1 585	7	163	310	-	-	17	49	127	-	-
2016/17	1 000	350	-	-	-	155	431	6 059	129	919	7 698	56	254	964	-	-	27	89	399	-	-
2017/18	900	350	-	-	-	154	554	8 356	204	676	3 510	64	163	394	-	-	28	61	361	-	-
2018/19	808	350	1	143	143	151	689	34 740	237	627	11 181	62	218	737	-	-	36	98	957	-	-
2019/20	890	350	1	10	10	121	413	5 928	299	768	7 700	120	238	1 173	-	-	44	70	539	-	-
2020/21	1 000	350	-	-	-	76	459	5 373	225	434	3 256	63	176	571	-	-	9	38	101	-	-
2021/22	1 000	350	-	-	-	55	709	18 301	290	749	6 879	107	211	1 115	-	-	57	58	428	2	29
2022/23	1 000	350	-	-	-	48	297	3 127	127	320	2 205	15	176	379	-	-	12	78	328	-	-
Total	9 448	3 500	5			1 300	501		1 972	596		590	211			308	70		29		29
	Weighted ave.		49			501		596		11 181		1 768				957			30		30
	Max.		143			34 740		34 740		11 181		1 768				957			30		30

* Sum of Aflatoxin (B₁; B₂; G₁; G₂)

**Sum of Fumonisin (B₁; B₂; B₃)

Mycotoxin methodology

During 2010 SAGL implemented a multi-mycotoxin screening method using UPLC-MS/MS. The following limit of detection applies for each toxin:

Mycotoxin	LOQ for maize µg/kg	LOD for maize µg/kg
Aflatoxin B ₁	5	2.5
Aflatoxin B ₂	5	2.5
Aflatoxin G ₁	5	2.5
Aflatoxin G ₂	5	2.5
Fumonisin B ₁	20	10
Fumonisin B ₂	20	10
Fumonisin B ₃	20	10
Deoxynivalenol	100	50
15-ADON	100	50
Ochratoxin A	5	2.5
Zearalenone	20	10
T - 2 Toxin	20	10

Note:

Limit of quantitation (LOQ) means the lowest concentration level that can be quantified with acceptable precision and accuracy by the LC-MS/MS. Limit of detection (LOD) is the lowest concentration level that can be detected but not quantified and is 50% of the LOQ of each mycotoxin. µg/kg = ppb (parts per billion)