

TABLE 25: MYCOTOXIN RESULTS - SUMMARY OF SEASONS 2012/13 TO 2021/22

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	
			ave.	max.	ave.	max.	ave.	max.	ave.	max.	ave.	max.	ave.	max.	ave.	max.
2012/13	1 000	350	0	0	530	11 243	186	1 175	-	-	0	0	30	426	2	232
2013/14	930	350	0	0	451	5 357	243	6 134	142	861	0	0	38	445	0	0
2014/15	1 000	350	2	48	357	3 382	397	9 736	144	1 768	0	0	36	337	0	0
2015/16	920	350	0	0	444	11 347	175	1 585	34	310	0	0	16	127	0	0
2016/17	1 000	350	0	0	471	6 059	513	7 698	131	964	0	0	36	399	0	0
2017/18	900	350	0	0	991	8 356	656	3 510	127	394	0	0	51	361	0	0
2018/19	808	350	10	143	666	34 740	550	11 181	179	737	0	0	64	957	0	0
2019/20	890	350	1	10	361	5 928	898	7 700	195	1 173	0	0	43	539	0	0
2020/21	1 000	350	0	0	724	5 373	321	3 256	128	571	0	0	12	101	0	0
2021/22	1 000	350	0	0	434	18 301	715	6 879	160	1 115	0	0	39	428	0	30
Total	9 448	3 500			543	34 740	465	11 181	1 768	1	0	0	37	957	0	232
Weighted ave.			1		543		465		1 768	1	0	0	37	957	0	232
Max.			143		34 740		11 181		1 768	1 768	0	0	957	957	0	232

* 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

Notes:

- Limit of detection (LOD) means the lowest level that can be detected accurately by the technique.
- Limit of quantitation (LOQ) means the lowest level that can be quantified accurately by the technique.
- A result above zero but lower than the limit of detection/quantitation, is reported as <LOD/<LOQ.
- µg/kg = ppb (parts per billion)