

TABLE 25: MYCOTOXIN RESULTS - SUMMARY OF SEASONS 2011/12 TO 2020/21

Season	Total Number of samples received	Number of samples tested for mycotoxins	Aflatoxin µg/kg			Fumonisin µg/kg			Deoxynivalenol µg/kg			Zearalenone µg/kg			Ochratoxin A µg/kg			T-2 Toxin µg/kg		
			ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.
**2011/12	1 000	350	0	0	0	383	0	11 297	146	0	911	33	0	297	0	0	0	0	0	0
**2012/13	1 000	350	0	0	0	530	0	11 243	186	0	1 175	30	0	426	0	0	2	0	232	0
**2013/14	930	350	0	0	0	451	0	5 357	243	0	6 134	38	0	445	0	0	0	0	0	0
**2014/15	1 000	350	2	0	48	357	0	3 382	397	0	9 736	36	0	337	0	0	0	0	0	0
**2015/16	920	350	0	0	0	444	0	11 347	175	0	1 585	16	0	127	0	0	0	0	0	0
**2016/17	1 000	350	0	0	0	471	0	6 059	513	0	7 698	36	0	399	0	0	0	0	0	0
**2017/18	900	350	0	0	0	991	0	8 356	656	0	3 510	51	0	361	0	0	0	0	0	0
**2018/19	808	350	10	0	143	666	0	34 740	550	0	11 181	64	0	957	0	0	0	0	0	0
**2019/20	890	350	1	0	10	361	0	5 928	898	0	7 700	43	0	539	0	0	0	0	0	0
**2020/21	1 000	350	0	0	0	724	0	5 373	321	0	3 256	12	0	101	0	0	0	0	0	0
Total	9 448	3 500																		
	Min.		0				0			0			0			0			0	
	Max.				143			34 740			11 181			957			0			232

** Sum of Aflatoxin (B₁; B₂; G₁; G₂) and sum of Fumonisin (B₁; B₂; B₃) RSA averages calculated from averages per province.

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
Zearalenone	20	10
Ochratoxin A	5	2.5
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)