

TABLE 2: SOUTH AFRICAN MAIZE CROP QUALITY 2018/19 (Weighted Averages)

Class and grade of maize	WM1	WM2	WM3	WCOM	YM1	YM2	YM3	YCOM	Weighted Ave.
RSA Grading									
Defective kernels above 6.35 mm sieve, %	2.7	6.3	12.6	27.4	2.7	6.8	7.5	7.1	5.3
Defective kernels below 6.35 mm sieve, %	1.2	2.3	3.1	3.6	1.4	2.9	2.2	2.8	1.8
Total defective kernels, %	3.9	8.6	15.6	31.0	4.1	9.7	9.7	10.0	7.0
Other colour maize kernels, %	0.4	0.8	0.6	0.6	0.1	0.4	0.1	0.4	0.4
Foreign matter, %	0.0	0.1	0.2	0.9	0.0	0.1	0.5	0.7	0.1
Combined deviation, %	4.3	9.5	16.4	32.5	4.2	10.3	10.3	11.1	7.5
Pinked maize kernels, %	0.2	0.4	0.5	0.4	0.0	0.0	0.0	0.0	0.2
Physical Factors									
Test weight, kg/ha	76.9	75.8	74.7	71.8	77.3	75.8	75.7	75.8	76.4
100 Kernel mass, g	33.6	33.9	32.6	31.3	30.9	29.2	31.4	29.8	32.0
Stress cracks, %	14	18	23	26	12	16	17	16	15
Milling Index	80.9	78.9	74.7	68.4	79.4	80.8	78.5	78.5	79.1
Kernel Size									
% on top 10 mm	22.2	28.0	27.7	27.3	8.4	7.5	8.5	8.1	16.4
% on top 8 mm	64.9	61.2	61.8	61.5	66.8	64.7	69.4	64.1	64.9
% through 8 mm	12.9	10.8	10.6	11.1	24.8	27.8	22.1	27.7	18.7
Breakage susceptibility									
% Below 6.35 mm sieve	1.0	1.8	2.6	3.4	0.8	1.6	1.4	1.3	1.3
% Below 4.75 mm sieve	0.8	1.3	2.0	2.3	0.6	1.1	1.0	0.9	0.9
Nutritional Values									
Fat, % (db)	4.0	4.0	3.9	3.8	3.9	4.0	3.8	4.0	4.0
Protein, %	8.9	8.9	9.1	9.1	9.2	9.4	9.1	9.1	9.1
Starch, % (db)	73.8	73.7	73.5	72.9	72.8	72.6	73.1	72.6	73.2
Crude fibre, % (db)	1.9	1.9	2.0	2.1	1.9	2.0	2.0	2.0	1.9
Number of samples	233	92	42	37	309	47	13	35	808
Mycotoxins									
Total Aflatoxin, µg/kg (ppb) [max. value]	0 [0]	<5 [143]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [143]
Total Fumonisin, µg/kg (ppb) [max. value]	89 [1 901]	162 [1 503]	445 [7 341]	64 [479]	219 [4 393]	1 430 [34 740]	993 [3 471]	142 [520]	298 [34 740]
Deoxynivalenol, µg/kg (ppb) [max. value]	344 [4 058]	858 [6 510]	1 109 [11 181]	441 [2 410]	238 [1 735]	394 [1 723]	273 [914]	736 [3 256]	424 [11 181]
15-ADON, µg/kg (ppb) [max. value]	<100 [694]	<100 [593]	<100 [737]	<100 [467]	<100 [195]	<100 [227]	<100 [271]	124 [593]	<100 [37]
Ochratoxin A, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]
Zearalenone, µg/kg (ppb) [max. value]	<20 [60]	25 [271]	<20 [176]	0 [<20]	<20 [148]	43 [957]	20 [180]	<20 [70]	<20 [957]
HT-2 Toxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]
T - 2 Toxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]
Number of samples	106	38	19	12	124	29	9	13	350
GMO									
Cry1Ab, % Samples positive (>LOQ of 0.4%)	91	89	100	100	94	80	100	100	91
Cry2Ab, % Samples positive (>LOQ of 0.5%)	74	89	100	0	89	80	100	100	83
CP4 EPSPS, % Samples positive (>LOQ of 0.25%)	96	100	100	100	94	90	100	100	96
Number of samples	23	9	2	1	18	10	4	3	70

Note: Not detected mycotoxin results are reported as 0, see LOQ in Table 24 page 84.