

TABLE 2: SOUTH AFRICAN MAIZE CROP QUALITY 2017/2018 (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	6.1	9.5	16.0	2.7	5.5	11.5	2.3	3.4
Defective kernels below 6.35 mm sieve, %	1.4	2.6	4.9	2.5	1.5	3.8	4.4	1.0	1.8
Total defective kernels, %	4.1	8.7	14.4	18.4	4.2	9.4	15.9	3.3	5.2
Other colour maize kernels, %	0.3	0.5	1.0	0.5	0.1	0.5	0.2	1.4	0.2
Foreign matter, %	0.0	0.1	0.1	1.4	0.0	0.1	0.3	0.8	0.1
Combined deviation, %	4.4	9.2	15.5	20.3	4.4	9.9	16.4	5.5	5.5
Pinhead maize kernels, %	0.4	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0.2
Physical Factors									
Test weight, kg/hl	77.5	75.9	74.1	75.1	77.5	75.4	73.3	76.3	77.1
100 Kernel mass, g	34.6	33.8	32.0	32.7	31.7	29.3	27.5	33.9	32.9
Stress cracks, %	10	14	14	11	9	13	14	9	10
Milling Index	79.3	76.3	70.4	74.6	79.9	75.3	75.2	78.7	78.9
Kernel Size									
% on top 10 mm	26.1	27.7	24.4	21.3	11.2	9.8	7.4	17.5	18.7
% on top 8 mm	62.8	62.3	63.3	67.7	67.0	64.5	63.3	65.2	64.7
% through 8 mm	11.2	9.9	12.3	10.9	21.8	25.7	29.4	17.2	16.6
Breakage susceptibility									
% Below 6.35 mm sieve	0.9	1.5	1.4	1.2	0.9	1.4	1.8	0.9	1.0
% Below 4.75 mm sieve	0.7	1.1	1.0	0.8	0.6	1.0	1.2	0.7	0.7
Nutritional Values									
Protein, % (db)	8.7	8.6	8.8	8.7	9.0	9.0	9.3	9.1	8.8
Fat, % (db)	4.1	4.0	3.9	4.2	4.0	4.0	3.8	4.0	4.0
Starch, % (db)	73.2	73.3	72.9	72.6	72.0	71.8	71.6	71.9	72.6
Number of samples	352	71	23	5	400	34	10	5	900
Mycotoxins									
Total Aflatoxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]
Total Fumonisin, µg/kg (ppb) [max. value]	226 [8 356]	393 [7 328]	100 [499]	538 [1 075]	230 [6 082]	304 [2 109]	233 [708]	0 [0]	244 [8 356]
Deoxynivalenol, µg/kg (ppb) [max. value]	441 [3 510]	788 [2 812]	558 [2 246]	153 [306]	263 [2 348]	373 [1 956]	404 [949]	54 [214]	393 [3 510]
15-ADON, µg/kg (ppb) [max. value]	28 [394]	65 [310]	91 [391]	0 [0]	20 [263]	23 [244]	61 [192]	0 [0]	30 [394]
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]	6 [361]	8 [91]	3 [32]	0 [0]	3 [86]	6 [121]	12 [58]	0 [0]	5 [361]
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	131	32	10	2	141	25	5	4	350
GMO									
Cry1Ab, % Samples positive (>LOQ of 0.4%)	97	90	60	100	87	100	100	-	91
Cry2Ab, % Samples positive (>LOQ of 0.5%)	88	80	60	100	82	88	67	-	83
CP4 EPSPS, % Samples positive (>LOQ of 0.25%)	100	100	100	100	100	100	100	-	100
Number of samples	34	10	5	1	39	8	3	-	100

Note: Not detected mycotoxin results are reported as 0; see LOQ in Table 24 page 78.