

TABLE 2: SOUTH AFRICAN MAIZE CROP QUALITY 2020/21 (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, %	2.2	4.4	6.4	4.3	1.9	2.5	6.0	2.5	2.6
Defective kernels below 6.35 mm sieve, %	1.6	2.9	3.6	3.2	1.8	4.0	3.3	3.2	2.1
Total defective kernels, %	3.8	7.3	10.0	7.5	3.6	6.4	9.3	5.8	4.7
Other colour maize kernels, %	0.2	0.6	0.8	0.6	0.1	0.3	0.2	0.8	0.3
Foreign matter, %	0.1	0.2	0.4	0.9	0.0	0.2	0.4	0.7	0.2
Combined deviation, %	4.1	8.1	11.3	9.0	3.7	6.8	10.0	7.3	5.1
Pinked maize kernels, %	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1
Physical Factors									
Test weight, kg/ha	76.1	76.0	74.8	75.0	76.9	75.2	75.6	75.3	76.2
100 Kernel mass, g	33.2	34.2	32.6	33.1	31.6	29.4	29.7	30.2	32.4
Stress cracks, %	11	14	15	14	11	13	15	14	12
Milling Index	73	74	71	73	77	73	75	76	75
Grit Yield	63	63	63	63	64	63	64	64	63
Kernel Size									
% on top 10 mm	21.0	23.1	23.4	22.6	7.8	5.2	4.6	7.3	15.4
% on top 8 mm	65.6	64.3	64.3	63.5	66.6	61.1	62.9	65.9	65.5
% through 8 mm	13.4	12.6	12.3	13.9	25.6	33.8	32.5	26.8	19.1
Breakage susceptibility									
% Below 6.35 mm sieve	0.7	1.0	1.1	1.0	0.7	0.9	1.3	1.1	0.8
% Below 4.75 mm sieve	0.5	0.7	0.8	0.7	0.5	0.7	0.8	0.8	0.6
Nutritional Values									
Fat, % (db)	4.0	4.0	3.9	4.0	4.0	3.9	3.9	4.0	4.0
Protein, %	8.3	8.3	8.1	8.2	8.7	8.5	8.9	8.8	8.5
Starch, % (db)	75.6	75.5	75.6	75.5	74.7	74.9	74.4	74.5	75.2
Crude fibre, % (db)	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Number of samples	388	90	36	46	343	43	8	46	1 000
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]	29 [561]	407 [5 373]	0 [0]	78 [706]	118 [2 648]	76 [735]	114 [687]	8 [100]	109 [5 373]
Deoxynivalenol, µg/kg (ppb) [max. value]	269 [1 606]	680 [3 256]	162 [594]	245 [862]	210 [1 248]	148 [573]	240 [474]	343 [2 169]	279 [3 256]
15-ADON, µg/kg (ppb) [max. value]	29 [403]	104 [571]	9 [105]	22 [127]	20 [309]	18 [244]	17 [101]	41 [237]	71 [571]
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]	1 [27]	4 [101]	0 [<20]	1 [20]	0 [52]	3 [56]	0 [<20]	0 [0]	1 [101]
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	124	33	12	17	119	20	6	19	350
GMO									
Cry1Ab, % Samples positive (>LOD of 0.4%)	92	70	100	50	94	86	100	100	90
Cry2Ab, % Samples positive (>LOD of 0.5%)	100	80	100	100	94	100	100	100	96
CP4 EPSPS, % Samples positive (>LOD of 0.25%)	100	80	100	100	100	100	100	100	98
Number of samples	38	10	3	2	36	7	1	3	100

Note: Not detected mycotoxin results are reported as 0, see LOQ in Table 24 page 89.