

Table 2: SOUTH AFRICAN MAIZE CROP QUALITY 2011/2012 (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, %	2.1	5.7	12.2	4.1	2.1	4.9	2.8	66.3	2.5
Defective kernels below 6.35 mm sieve, %	1.9	3.2	2.8	2.8	2.1	5.0	9.1	22.9	2.2
Total defective kernels, %	4.1	8.9	15.0	6.9	4.2	9.9	12.0	89.2	4.7
Other colour maize kernels, %	0.2	0.6	1.5	43.7	0.1	0.3	2.7	0.0	0.2
Foreign matter, %	0.1	0.2	0.4	0.6	0.1	0.2	0.3	1.2	0.1
Combined deviation, %	4.4	9.7	16.8	51.2	4.4	10.5	15.0	90.4	5.1
Pinked maize kernels, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Physical Factors									
Hectolitre mass, kg/hl	78.3	76.6	73.9	76.9	76.3	74.5	72.7	69.9	77.3
100 Kernel mass, g	31.2	31.2	28.1	36.2	29.8	25.7	24.5	25.6	30.4
Stress cracks, %	5	8	12	10	6	8	6	16	6
Milling Index	93.4	92.8	89.9	107.7	88.0	87.8	83.6	76.6	91.1
Kernel Size									
% on top 10 mm	18.8	19.1	14.8	24.5	11.7	6.9	7.8	7.2	15.6
% on top 8 mm	65.2	60.9	67.3	62.5	64.5	58.0	56.0	54.0	64.4
% through 8 mm	15.9	20.0	17.9	13.0	23.7	35.1	36.3	38.8	19.9
Breakage susceptibility									
% Below 6.35 mm sieve	0.8	1.6	2.3	1.8	1.2	2.5	3.5	9.3	1.1
% Below 4.75 mm sieve	0.5	1.1	1.7	1.4	0.9	1.5	2.4	4.3	0.7
Nutritional Values									
Protein, %	8.6	8.9	9.0	9.8	8.8	9.2	9.3	11.3	8.7
Fat, % (db)	4.1	4.1	4.2	4.3	3.8	3.7	3.7	4.0	4.0
Starch, % (db)	72.6	72.4	71.9	71.5	73.0	73.2	73.0	72.1	72.8
Number of samples	526	46	4	1	383	35	4	1	1000
Mycotoxins									
Total Aflatoxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	-	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [0]
Total Fumonisin, µg/kg (ppb) [max. value]	108 [2 235]	995 [4 419]	-	741 [741]	84 [720]	0 [0]	0 [<20]	-	182 [2 235]
Deoxyvalenol, µg/kg [max. value]	12 [303]	54 [485]	-	0 [0]	0 [<100]	0 [0]	0 [0]	-	11 [485]
15-ADON, µg/kg (ppb) [max. value]	2 [31]	9 [85]	-	0 [0]	1 [<20]	0 [0]	0 [0]	-	2 [85]
Ochratoxin A, µg/kg (ppb) [max. value]	0 [0]	0 [0]	-	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [0]
Zearalenone, µg/kg (ppb) [max. value]	4 [200]	33 [297]	-	0 [0]	0 [<20]	0 [0]	0 [0]	-	5 [297]
HT-2 Toxin, µg/kg (ppb) [max. value]	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 [<20]	-	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [<20]
Number of samples	48	9	-	1	39	2	1	-	100
GMO									
Cry1Ab, % Samples positive (>LOQ of 0.4%)	100	100	-	100	95	100	100	-	98
Cry2Ab, % Samples positive (>LOQ of 0.5%)	17	33	-	100	36	50	0	-	27
CP4 EPSPS, % Samples positive (>LOQ of 0.25%)	88	100	-	100	97	100	100	-	93
Number of samples	48	9	-	1	39	2	1	-	100

Note: Non detective mycotoxin results are reported as 0, see LOQ.