

SOUTH AFRICAN MAIZE CROP QUALITY 2008/2009 (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	5.8	14.0	3.8	2.0	4.9	1.3	6.1	2.5
Defective kernels below 6.35 mm sieve, %	1.5	2.2	1.7	2.0	1.8	3.7	6.2	2.3	1.8
Total defective kernels, %	3.7	7.9	15.7	5.8	3.9	8.6	7.5	8.5	4.2
Other colour maize kernels, %	0.2	0.7	1.1	0.4	0.1	0.5	0.0	7.2	0.2
Foreign matter, %	0.1	0.2	0.2	2.0	0.1	0.2	0.4	1.2	0.2
Combined deviation, %	4.0	8.8	17.0	8.3	4.1	9.4	8.0	16.8	4.6
Pinked maize kernels, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Noxious seeds	0	0	0	0	0	0	0	0	0
Physical Factors									
Hectolitre mass, kg/hl	77.7	76.9	76.0	73.4	76.7	75.4	76.3	76.0	77.2
100 Kernel mass, g	35.1	34.7	36.8	35.7	33.1	30.7	31.2	30.8	34.2
Stress cracks, %	5	7	9	8	6	6	4	7	5
Milling Index	94.1	91.6	94.2	98.9	93.7	87.8	94.9	89.4	93.6
Kernel Size									
% on top 10 mm	26.0	27.8	25.4	30.1	16.0	12.2	19.2	10.7	21.9
% on top 8 mm	63.4	61.6	64.1	63.0	66.5	67.3	64.8	66.7	64.6
% through 8 mm	10.5	10.6	10.6	6.8	17.5	20.6	16.1	22.6	13.4
Breakage susceptibility, g									
Below 6.35 mm sieve	1.4	2.3	4.6	1.5	1.8	2.2	1.3	2.2	1.6
Below 4.8 mm sieve	1.1	1.6	3.4	1.0	1.2	1.6	0.9	1.7	1.2
Nutritional Values									
Protein, %	8.3	8.4	8.8	8.8	8.2	8.0	8.7	8.2	8.3
Fat, % (db)	4.0	3.9	3.9	4.0	3.6	3.6	3.9	3.5	3.8
Starch, % (db)	72.4	72.5	72.0	71.8	73.1	73.4	72.7	73.3	72.7
Number of samples	440	36	4	3	297	25	2	3	810
Mycotoxins									
Total Aflatoxin, ppb (ug/kg) [max. value] (LOD 2 ppb)	0 [0]	0 [0]	-	0 [0]	0 [0]	0 [0]	-	0 [0]	0 [0]
Fumonisin, ppm (mg/kg) [max. value] (LOD 0.1 ppm)	0.55 [3.30]	0.64 [1.90]	-	3.20 [3.20]	0.25 [1.90]	1.23 [3.00]	-	0.15 [0.15]	0.49 [3.30]
Deoxynivalenol, ppm (mg/kg) [max. value] (LOD 0.25 ppm)	0.33 [1.50]	0.92 [2.90]	-	2.70 [2.70]	0.36 [2.40]	0.45 [1.00]	-	0 [0]	0.43 [2.90]
Ochratoxin A, ppb (ug/kg) [max. value] (LOD 1 ppb)	0.21 [1.00]	0 [0]	-	0 [0]	0.09 [1.00]	0 [0]	-	0 [0]	0.01 [0.16]
Zearalenone, ppm (mg/kg) [max. value] (LOD 0.025 ppm)	0.01 [0.12]	0.01 [0.05]	-	0 [0]	0.01 [0.16]	0 [0]	-	0 [0]	0.12 [1.00]
Number of samples	43	9	-	1	33	3	-	1	90
GMO									
MON810, % Samples positive (> LOD of 0.15 %)	90	89	-	100	91	100	-	100	91
NK603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	91	78	-	100	91	100	-	100	90
Number of samples	43	9	-	1	33	3	-	1	90

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