

SOUTH AFRICAN MAIZE CROP QUALITY 2005/2006 (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, %	3.2	7.2	13.0	26.4	4.0	8.3	17.2	8.1	5.9
Defective kernels below 6.35 mm sieve, %	1.5	1.9	2.7	3.4	1.8	2.5	3.9	3.1	1.9
Total defective kernels, %	4.7	9.1	15.7	29.9	5.8	10.8	21.0	11.2	7.8
Other colour maize kernels, %	0.2	0.4	0.3	0.6	0.1	0.4	0.3	7.4	0.3
Foreign matter, %	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2
Combined deviation, %	5.1	9.6	16.3	30.8	6.0	11.5	21.5	18.8	8.2
Pinked maize kernels, %	0.3	0.6	0.8	1.4	0.1	0.2	0.1	0.6	0.4
Noxious seeds	0	0	0	0	0	0	0	0	0
Physical Factors									
Hectolitre mass, kg/hl	77.3	75.6	73.9	65.8	76.2	74.0	71.4	74.1	75.9
100 Kernel mass, g	34.4	33.4	31.7	27.6	32.2	30.0	26.2	30.7	32.9
Stress cracks, %	3.6	3.7	3.3	1.5	5.2	5.0	4.0	10.0	4.2
Milling Index	93.7	89.0	84.7	66.1	93.1	87.0	76.8	87.8	90.8
Kernel Size									
% on top 10 mm	30.5	30.2	28.4	25.9	19.2	18.7	13.1	20.0	26.3
% on top 8 mm	58.6	60.4	59.6	65.0	65.5	65.2	62.8	63.4	61.4
% through 8 mm	11.0	9.5	12.0	9.2	15.3	16.1	24.1	16.6	12.3
Breakage susceptibility, g									
Below 6.35 mm sieve	1.7	2.3	3.5	8.4	2.0	3.7	4.5	3.4	2.3
Below 4.8 mm sieve	1.2	1.7	2.4	6.0	1.4	2.5	2.8	2.1	1.6
Nutritional Factors									
Protein, %	8.5	8.4	8.5	8.7	8.3	8.4	8.2	8.4	8.4
Fat, % (db)	4.1	4.0	3.8	3.5	3.9	3.9	3.8	4.0	4.0
Starch, % (db)	71.0	71.1	71.2	71.2	71.5	71.4	71.9	71.4	71.2
Number of samples	293	221	77	2	209	86	5	7	900
Mycotoxins									
Total Aflatoxin, ppb (ug/kg) [max. value] (LOD 1 ppb)	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	-	0.00 [0.00]	0.00 [0.00]	-	0.00 [0.00]	0.00
Fumonisin, ppm (mg/kg) [max. value] (LOD 0.25 ppm)	0.85 [3.40]	0.65 [2.00]	0.14 [0.43]	-	1.95 [13.00]	0.52 [2.70]	-	0.65 [1.30]	0.97
Deoxynivalenol, ppm (mg/kg) [max. value] (LOD 0.5 ppm)	2.33 [4.90]	3.14 [6.20]	4.50 [5.40]	-	2.35 [5.90]	2.94 [4.90]	-	3.25 [3.80]	2.74
Ochratoxin, ppb (ug/kg) [max. value] (LOD 2 ppb)	0.10 [2.50]	0.12 [2.70]	0.00 [<2]	-	0.11 [2.40]	0.18 [2.90]	-	0.00 [0.00]	0.12
Zearalenone, ppm (mg/kg) [max. value] (LOD 0.1 ppm)	0.02 [0.22]	0.04 [0.25]	0.04 [0.12]	-	0.02 [0.39]	0.03 [0.26]	-	0.17 [0.22]	0.03
Number of samples	25	23	3	-	21	16	-	2	90
GMO									
MON810, % Samples positive (> LOD of 0.15 %)	88	87	67	-	95	100	-	100	91
NK603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	40	26	67	-	14	50	-	0	31
Number of samples	25	23	3	-	21	16	-	2	90