

SOUTH AFRICAN MAIZE CROP QUALITY 2007/2008 (Averages)

Class and grade of maize	WM1	WM2	WM3	YM1	YM2	COM	Weighted Ave
RSA Grading							
Defective kernels above 6.35 mm sieve, %	1.6	5.0	10.2	1.6	2.5	1.0	1.8
Defective kernels below 6.35 mm sieve, %	1.5	2.9	3.5	1.8	4.2	1.7	1.8
Total defective kernels, %	3.1	8.0	13.7	3.4	6.7	2.7	3.6
Other colour maize kernels, %	0.1	0.4	0.9	0.1	0.4	0.0	0.1
Foreign matter, %	0.1	0.2	0.3	0.1	0.2	0.1	0.1
Combined deviation, %	3.4	8.6	14.9	3.7	7.3	2.8	3.9
Pinked maize kernels, %	0.0	0.0	0.0	0.1	0.0	17.9	0.1
Noxious seeds	0	0	0	0	0	0	0
Physical Factors							
Hectolitre mass, kg/hl	78.3	77.7	73.7	76.8	75.0	78.4	77.5
100 Kernel mass, g	34.6	34.7	30.5	32.4	31.6	39.1	33.5
Stress cracks, %	4	4	3	5	8	2	5
Milling Index	98.3	99.3	83.8	95.5	92.7	109.4	96.9
Kernel Size							
% on top 10 mm	24.3	27.7	22.3	15.1	15.8	32.1	20.2
% on top 8 mm	64.1	60.2	58.6	66.2	63.2	60.0	64.8
% through 8 mm	11.6	12.2	19.2	18.7	21.0	7.9	15.0
Breakage susceptibility, g							
Below 6.35 mm sieve	1.2	2.1	3.1	1.8	3.6	0.6	1.6
Below 4.8 mm sieve	0.9	1.5	1.7	1.2	2.5	0.5	1.1
Nutritional Values							
Protein, %	8.6	8.5	8.3	8.4	8.4	8.5	8.5
Fat, % (db)	4.0	3.9	3.6	3.6	3.7	4.0	3.8
Starch, % (db)	71.9	71.7	72.2	72.3	72.0	71.2	72.1
Number of samples	444	33	6	389	27	1	900
Mycotoxins							
Total Aflatoxin, ppb (ug/kg) [max. value] (LOD 2 ppb)	0.03 [2.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]		0.02
Fumonisin, ppm (mg/kg) [max. value] (LOD 0.1 ppm)	0.42 [5.50]	0.11 [0.40]	0.95 [1.90]	0.60 [4.70]	0.18 [0.36]		0.46
Deoxynivalenol, ppm (mg/kg) [max. value] (LOD 0.25 ppm)	0.18 [1.20]	0.69 [1.70]	0.74 [0.98]	0.24 [0.79]	<0.25 [<0.25]		0.24
Ochratoxin A, ppb (ug/kg) [max. value] (LOD 1 ppb)	0.29 [2.00]	0.17 [1.00]	0.00 [0.00]	0.22 [1.00]	0.50 [1.00]		0.26
Zearalenone, ppm (mg/kg) [max. value] (LOD 0.025 ppm)	0.00 [0.10]	0.01 [0.05]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]		0.00
Number of samples	58	6	2	32	2	1	100
GMO							
MON810, % Samples positive (> LOD of 0.15 %)	95	83	100	97	100		95
NK603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	64	100	0	75	100		69
Number of samples	58	6	2	32	2	1	100