

SOUTH AFRICAN MAIZE CROP QUALITY 2009/2010 (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, %	3.4	7.2	13.2	40.1	3.3	8.6	17.1	3.5	5.1
Defective kernels below 6.35 mm sieve, %	1.3	1.9	2.4	1.2	1.5	2.6	3.8	0.8	1.7
Total defective kernels, %	4.7	9.1	15.5	41.3	4.9	11.2	21.0	4.4	6.7
Other colour maize kernels, %	0.1	0.4	0.7	0.0	0.1	0.3	0.6	0.4	0.2
Foreign matter, %	0.1	0.2	0.2	0.2	0.1	0.2	0.2	4.1	0.1
Combined deviation, %	4.9	9.7	16.4	41.4	5.0	11.7	21.8	8.9	7.1
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	78.1	77.8	76.9	76.0	76.9	76.0	75.6	72.9	77.4
100 Kernel mass, g	36.0	36.1	35.7	40.9	33.4	32.2	31.6	34.2	34.7
Stress cracks, %	4	4	3	4	5	5	2	18	4
Milling Index	92.4	90.1	85.8	90.0	90.0	86.1	82.0	101.2	90.3
Kernel Size									
% on top 10 mm	25.8	26.1	31.4	47.0	14.5	14.0	9.3	11.0	21.1
% on top 8 mm	63.3	62.1	56.4	49.5	68.9	67.4	70.8	79.9	65.1
% through 8 mm	10.8	11.8	12.2	3.5	16.7	18.5	19.9	9.1	13.7
Breakage susceptibility, g									
Below 6.35 mm sieve	1.4	1.8	2.0	2.7	2.0	2.4	2.7	3.0	1.8
Below 4.75 mm sieve	1.1	1.4	1.5	2.0	1.5	1.8	1.9	1.8	1.4
Nutritional Values									
Protein, %	8.4	8.3	8.3	9.7	8.2	7.9	8.5	8.5	8.3
Fat, % (db)	4.3	4.2	4.0	3.5	3.8	3.8	3.6	3.8	4.0
Starch, % (db)	72.5	72.8	73.0	72.9	73.3	73.6	73.9	72.0	72.9
Number of samples	307	126	24	1	238	97	6	1	800
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]	187 [1 629]	396 [4 035]	711 [2 405]	-	92 [690]	384 [1 563]	0 [0]	-	251 [4 035]
Deoxynivalenol, µg/kg (ppb) [max. value]	230 [624]	324 [1 845]	241 [444]	-	100 [440]	109 [199]	42 [42]	-	206 [1 845]
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]	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]
Number of samples	37	18	5	0	21	8	1	0	90
GMO									
MON810, % Samples positive (> LOD of 0.15 %)	92	100	100	-	95	75	100	-	96
NK603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	59	56	80	-	67	50	100	-	61
Number of samples	37	18	5	0	21	8	1	-	90

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