

## SOUTH AFRICAN MAIZE CROP QUALITY 2010/2011 (Averages)

Class and grade of maize	WM1	WM2	WM3	WCOM	YM1	YM2	YM3	YCOM	Weighted Ave.
<b>RSA Grading</b>									
Defective kernels above 6.35 mm sieve, %	3.5	6.8	12.7	34.0	3.4	7.9	18.8	23.7	5.0
Defective kernels below 6.35 mm sieve, %	1.5	2.2	2.9	7.8	1.7	3.1	2.7	3.7	1.9
Total defective kernels, %	4.9	9.0	15.6	41.8	5.2	11.0	21.5	27.4	6.9
Other colour maize kernels, %	0.2	0.5	0.6	8.9	0.1	0.4	1.4	3.3	0.8
Foreign matter, %	0.1	0.2	0.2	0.5	0.2	0.2	0.3	0.3	0.2
Combined deviation, %	5.3	9.7	16.4	51.2	5.4	11.5	23.2	31.0	7.4
Pinked maize kernels, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Physical Factors</b>									
Hectolitre mass, kg/hl	77.9	77.6	76.5	74.0	76.5	75.4	74.7	74.6	77.1
100 Kernel mass, g	34.8	34.1	33.7	33.4	32.1	31.3	31.7	35.7	33.5
Stress cracks, %	5	5	5	10	5	7	5	5	5
Milling Index	89.3	88.0	87.0	68.2	86.0	85.5	79.4	74.5	87.5
<b>Kernel Size</b>									
% on top 10 mm	24.7	25.1	25.6	24.3	14.1	15.1	18.3	20.9	20.7
% on top 8 mm	63.6	63.3	63.2	62.8	68.7	68.3	68.1	68.9	65.6
% through 8 mm	11.7	11.6	11.2	12.9	17.1	16.6	13.6	10.2	13.8
<b>Breakage susceptibility</b>									
% Below 6.35 mm sieve	1.3	1.8	2.7	4.9	2.0	2.5	3.3	2.9	1.8
% Below 4.75 mm sieve	1.0	1.3	2.1	3.3	1.5	1.9	2.5	2.5	1.3
<b>Nutritional Values</b>									
Protein, %	7.9	7.8	8.1	6.9	7.8	7.9	8.1	8.0	7.9
Fat, % (db)	4.1	4.1	4.0	3.3	3.6	3.6	3.8	3.9	3.9
Starch, % (db)	73.5	73.6	73.5	74.9	74.2	74.3	73.7	73.6	73.8
<b>Number of samples</b>	<b>264</b>	<b>125</b>	<b>21</b>	<b>3</b>	<b>212</b>	<b>63</b>	<b>3</b>	<b>2</b>	<b>693</b>
<b>Mycotoxins</b>									
Total Aflatoxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [0]	0 [0]
Total Fumonisin, µg/kg (ppb) [max. value]	113 [1 126]	126 [1 341]	19 [57]	0 [0]	265 [1 401]	0 [0]	-	0 [0]	139 [1 401]
Deoxynivalenol, µg/kg (ppb) [max. value]	36 [54-1]	138 [883]	0 [<100]	<100 [<100]	26 [213]	47 [222]	-	<100 [<100]	49 [883]
Ochratoxin A, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [0]	0 [0]
Zearalenone, µg/kg (ppb) [max. value]	9 [187]	7 [55]	0 [0]	<20 [<20]	0 [<20]	0 [<20]	-	0 [0]	5 [187]
T - 2 Toxin, µg/kg (ppb) [max. value]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	-	0 [0]	0 [0]
<b>Number of samples</b>	<b>27</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>20</b>	<b>7</b>	<b>-</b>	<b>1</b>	<b>77</b>
<b>GMO</b>									
Cry1Ab (MON810), % Samples positive (> LOQ of 0.4%)	96	100	100	100	95	100	-	100	97
CP4 EPSPS (Roundup Ready), % Samples positive (> LOQ of 0.25 %)	81	94	67	100	95	86	-	100	88
<b>Number of samples</b>	<b>27</b>	<b>18</b>	<b>3</b>	<b>1</b>	<b>20</b>	<b>7</b>	<b>-</b>	<b>1</b>	<b>77</b>

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