

## SOUTH AFRICAN MAIZE CROP QUALITY 2006/2007 (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, %	1.5	6.1	12.4	21.5	1.7	3.8	9.6	24.7	2.9
Defective kernels below 6.35 mm sieve, %	1.8	2.5	2.5	4.1	1.9	4.7	8.0	2.9	2.2
Total defective kernels, %	3.3	8.7	15.0	25.6	3.6	8.4	17.5	27.5	5.1
Other colour maize kernels, %	0.1	0.4	0.5	4.0	0.1	0.4	1.1	0.4	0.2
Foreign matter, %	0.1	0.2	0.3	0.3	0.1	0.2	0.3	0.8	0.1
Combined deviation, %	3.6	9.2	15.7	29.8	3.8	9.1	18.9	28.8	5.4
Pinked maize kernels, %	0.0	0.1	0.2	0.0	0.1	0.0	0.1	0.2	0.0
Noxious seeds	0	0	0	0	0	0	0	0	0
<b>Physical Factors</b>									
Hectolitre mass, kg/hl	78.5	77.2	75.8	73.0	77.0	74.4	74.2	73.3	77.5
100 Kernel mass, g	30.1	28.8	28.5	26.6	28.3	24.0	21.3	28.1	28.9
Stress cracks, %	3	3	4	4	4	4	1	8	3
Milling Index	100.0	101.0	98.4	87.4	96.5	91.6	95.9	97.4	98.3
<b>Kernel Size</b>									
% on top 10 mm	17.6	15.2	15.4	10.9	9.2	5.5	4.7	10.1	13.9
% on top 8 mm	63.3	62.7	64.4	62.9	63.3	55.9	47.8	65.6	62.7
% through 8 mm	19.1	22.1	20.3	26.2	27.5	38.6	47.4	24.3	23.4
<b>Breakage susceptibility, g</b>									
Below 6.35 mm sieve	1.2	2.1	3.1	4.4	1.8	2.9	3.6	3.3	1.7
Below 4.8 mm sieve	0.8	1.4	2.2	3.0	1.2	1.7	1.8	2.3	1.1
<b>Nutritional Values</b>									
Protein, %	9.2	9.8	10.1	8.9	9.4	9.9	10.7	9.9	9.4
Fat, % (db)	3.8	4.0	4.0	4.0	3.5	3.5	3.6	3.8	3.7
Starch, % (db)	73.0	72.6	72.3	73.1	73.3	73.4	72.8	72.4	73.0
<b>Number of samples</b>	<b>455</b>	<b>66</b>	<b>38</b>	<b>4</b>	<b>262</b>	<b>60</b>	<b>7</b>	<b>8</b>	<b>900</b>
<b>Mycotoxins</b>									
Total Aflatoxin, ppb (ug/kg) [max. value] (LOD 1 ppb)	0.38 [9.00]	0.25 [2.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	0.00 [0.00]	0.17
Fumonisin, ppm (mg/kg) [max. value] (LOD 0.25 ppm)	0.53 [3.50]	1.39 [3.40]	0.99 [2.30]	0.51 [4.40]	0.51 [4.40]	0.26 [0.84]	0.51 [4.40]	2.25 [4.50]	0.64
Deoxynivalenol, ppm (mg/kg) [max. value] (LOD 0.5 ppm)	0.33 [1.40]	0.81 [3.10]	0.56 [1.70]	0.46 [1.40]	0.46 [1.40]	0.94 [2.10]	0.46 [1.40]	1.01 [1.10]	0.50
Ochratoxin A, ppb (ug/kg) [max. value] (LOD 2 ppb)	0.68 [5.20]	0.85 [2.80]	0.56 [2.80]	0.37 [6.50]	0.37 [6.50]	<2 [<2]	<2 [<2]	<2 [<2]	0.50
Zearalenone, ppm (mg/kg) [max. value] (LOD 0.1 ppm)	0.00 [<0.1]	0.00 [<0.1]	0.00 [0.00]	0.00 [<0.1]	0.00 [<0.1]	0.00 [<0.1]	0.00 [<0.1]	<0.1 [<0.1]	0.00
<b>Number of samples</b>	<b>34</b>	<b>8</b>	<b>5</b>	<b>34</b>	<b>34</b>	<b>7</b>	<b>7</b>	<b>2</b>	<b>90</b>
<b>GMO</b>									
MON 810, % Samples positive (> LOD of 0.15 %)	97	100	80	97	97	100	100	100	97
NK 603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	56	50	40	62	62	71	100	100	59
<b>Number of samples</b>	<b>34</b>	<b>8</b>	<b>5</b>	<b>34</b>	<b>34</b>	<b>7</b>	<b>2</b>	<b>2</b>	<b>90</b>