

**IMPORTED MAIZE QUALITY**  
**Imported maize quality versus RSA crop quality**  
**2006/2007**

<b>Country of origin</b>	<b>Argentina Average</b>		<b>RSA Crop Average</b>	
<b>Class and grade yellow maize</b>	<b>YM2</b>	<b>COM</b>	<b>YM2</b>	<b>COM</b>
<b>RSA Grading</b>				
Defective kernels above 6.35 mm sieve, %	2.7	2.4	3.8	24.7
Defective kernels below 6.35 mm sieve, %	6.2	5.0	4.7	2.9
Total defective kernels, %	8.9	7.4	8.4	27.5
Other colour maize kernels, %	0.0	0.0	0.4	0.4
Foreign matter, %	0.1	0.2	0.2	0.8
Combined deviation, %	9.0	7.8	9.1	28.8
Pinked maize kernels, %	10.1	20.0	0.0	0.2
Noxious seeds	0	0	0	0
<b>Physical Factors</b>				
Hectolitre mass, kg/hl	77.1	76.1	74.4	73.3
100 Kernel mass, g	30.8	30.0	24.0	28.1
Stress cracks, %	16	9	4	8
Milling Index	107.7	97.8	91.6	97.4
<b>Kernel Size</b>				
% on top 10 mm	3.9	4.0	5.5	10.1
% on top 8 mm	51.4	57.3	55.9	65.6
% through 8 mm	44.7	38.6	38.6	24.3
<b>Breakage susceptibility, g</b>				
Below 6.35 mm sieve	1.0	0.9	2.9	3.3
Below 4.8 mm sieve	0.6	0.8	1.7	2.3
<b>Nutritional Factors</b>				
Protein, %	9.1	8.7	9.9	9.9
Fat, % (db)	5.2	4.7	3.5	3.8
Starch, % (db)	70.0	70.8	73.4	72.4
<b>Number of samples</b>	<b>3</b>	<b>80</b>	<b>60</b>	<b>8</b>
<b>Mycotoxins</b>				
Total Aflatoxin, ppb (ug/kg) [max. value]	0.43 [9.00]		0.00 [0.00]	
Fumonisin, ppm (mg/kg) [max. value]	1.66 [5.30]		1.05 [4.50]	
Deoxynivalenol, ppm (mg/kg) [max. value]	0.84 [2.80]		0.96 [2.10]	
Ochratoxin A, ppb (ug/kg) [max. value]	0.41 [3.50]		0.00 [<2]	
Zearalenone, ppm (mg/kg) [max. value]	0.01 [0.14]		0.00 [<0.1]	
<b>Number of samples</b>	<b>28</b>		<b>9</b>	
<b>GMO</b>				
MON 810, % Samples positive (> LOD of 0.15 %)	100		100	
NK 603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	89		78	
<b>Number of samples</b>	<b>28</b>		<b>9</b>	

<b>IMPORTED MAIZE QUALITY</b>				
<b>Imported maize quality versus RSA crop quality</b>				
<b>2006/2007 (continue)</b>				
<b>Country of origin</b>	<b>Switzerland Average</b>		<b>RSA Crop Average</b>	
<b>Class and grade yellow maize</b>	<b>YM2</b>	<b>COM</b>	<b>YM2</b>	<b>COM</b>
<b>RSA Grading</b>				
Defective kernels above 6.35 mm sieve, %	2.5	2.1	3.8	24.7
Defective kernels below 6.35 mm sieve, %	7.1	6.8	4.7	2.9
Total defective kernels, %	9.6	8.9	8.4	27.5
Other colour maize kernels, %	0.0	0.0	0.4	0.4
Foreign matter, %	0.2	0.2	0.2	0.8
Combined deviation, %	9.8	9.1	9.1	28.8
Pinked maize kernels, %	10.2	22.2	0.0	0.2
Noxious seeds	0	0	0	0
<b>Physical Factors</b>				
Hectolitre mass, kg/hl	76.2	76.3	74.4	73.3
100 Kernel mass, g	26.8	28.4	24.0	28.1
Stress cracks, %	10	9	4	8
Milling Index	96.4	101.2	91.6	97.4
<b>Kernel Size</b>				
% on top 10 mm	6.5	2.3	5.5	10.1
% on top 8 mm	57.1	49.9	55.9	65.6
% through 8 mm	36.4	47.7	38.6	24.3
<b>Breakage susceptibility, g</b>				
Below 6.35 mm sieve	1.0	1.0	2.9	3.3
Below 4.8 mm sieve	0.6	0.5	1.7	2.3
<b>Nutritional Factors</b>				
Protein, %	9.1	8.5	9.9	9.9
Fat, % (db)	5.3	4.4	3.5	3.8
Starch, % (db)	68.2	71.2	73.4	72.4
<b>Number of samples</b>	<b>1</b>	<b>3</b>	<b>60</b>	<b>8</b>
<b>Mycotoxins</b>				
Total Aflatoxin, ppb (ug/kg) [max. value]	0.00 [0.00]		0.00 [0.00]	
Fumonisin, ppm (mg/kg) [max. value]	3.00 [3.00]		1.05 [4.50]	
Deoxynivalenol, ppm (mg/kg) [max. value]	0.51 [0.51]		0.96 [2.10]	
Ochratoxin A, ppb (ug/kg) [max. value]	<2 [<2]		0.00 [<2]	
Zearalenone, ppm (mg/kg) [max. value]	<0.1 [<0.1]		0.00 [<0.1]	
<b>Number of samples</b>	<b>1</b>		<b>9</b>	
<b>GMO</b>				
MON 810, % Samples positive (> LOD of 0.15 %)	>2 [>2]		100	
NK 603 (Roundup Ready), % Samples positive (> LOD of 0.25 %)	1.50 [1.50]		78	
<b>Number of samples</b>	<b>1</b>		<b>9</b>	