

IMPORTED MAIZE QUALITY
Quality of maize imported from 1 May 2011 to 30 April 2012
versus RSA crop quality 2010/2011

Country of origin	ROMANIA					RSA Crop Average				
Class and grade yellow maize	YM1	YM2	YM3	COM	Ave.	YM1	YM2	YM3	COM	Ave.
RSA Grading										
Defective kernels above 6.35 mm sieve, %	1.1	1.4	1.8	2.1	1.5	3.4	7.9	18.8	23.7	4.7
Defective kernels below 6.35 mm sieve, %	2.7	7.2	11.7	11.4	7.7	1.7	3.1	2.7	3.7	2.1
Total defective kernels, %	3.7	8.6	13.5	13.5	9.2	5.2	11.0	21.5	27.4	6.8
Other colour maize kernels, %	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	3.3	0.2
Foreign matter, %	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.3	0.3	0.2
Combined deviation, %	3.7	8.7	13.5	13.5	9.3	5.4	11.5	23.2	31.0	7.2
Pinked maize kernels, %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Physical Factors										
Hectolitre mass, kg/hl	75.7	73.9	74.3	74.0	74.1	76.5	75.4	74.7	74.6	76.2
100 Kernel mass, g	36.0	32.1	32.4	32.5	32.6	32.1	31.3	31.7	35.7	31.9
Stress cracks, %	26	41	24	26	35	5	7	5	5	5
Milling Index	82.3	76.1	73.5	74.6	76.3	86.0	85.5	79.4	74.5	85.8
Kernel Size										
% on top 10 mm	5.3	4.3	6.1	4.2	4.6	14.1	15.1	18.3	20.9	14.4
% on top 8 mm	70.6	66.9	62.9	60.9	66.1	68.7	68.3	68.1	68.9	68.6
% through 8 mm	24.2	28.9	31.1	35.0	29.3	17.1	16.6	13.6	10.2	16.9
Breakage susceptibility										
% Below 6.35 mm sieve	3.3	10.7	7.2	7.4	8.9	2.0	2.5	3.3	2.9	2.1
% Below 4.75 mm sieve	2.3	8.1	4.7	6.0	6.7	1.5	1.9	2.5	2.5	1.6
Nutritional Factors										
Protein, %	8.7	8.2	7.7	8.4	8.3	7.8	7.9	8.1	8.0	7.8
Fat, % (db)	3.8	3.8	3.8	3.8	3.8	3.6	3.6	3.8	3.9	3.6
Starch, % (db)	70.6	73.8	73.4	71.6	73.1	74.2	74.3	73.7	73.6	74.2
Number of samples	2	10	2	2	16	212	63	3	2	280
Mycotoxins										
Afla G ₁ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla B ₁ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla G ₂ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla B ₂ (µg/kg) [max. value]	0 [0]					0 [0]				
Fum B ₁ (µg/kg) [max. value]	104 [417]					135 [999]				
Deoxynivalenol (µg/kg) [max. value]	52 [208]					44 [222]				
Ochratoxin A (µg/kg) [max. value]	0 [0]					0 [0]				
Zearalenone (µg/kg) [max. value]	0 [0]					1 [19]				
T-2 Toxin (µg/kg) [max. value]	0 [0]					0 [0]				
Number of samples	4					28				
GMO										
Cry1Ab, %	<0.4					4.64				
CP4 EPSPS, %	<0.25					4.43				
Number of samples	4					28				

IMPORTED MAIZE QUALITY
Quality of maize imported from 1 May 2011 to 30 April 2012
versus RSA crop quality 2010/2011

Country of origin	UKRAINE					RSA Crop Average				
Class and grade yellow maize	YM1	YM2	YM3	COM	Ave.	YM1	YM2	YM3	COM	Ave.
RSA Grading										
Defective kernels above 6.35 mm sieve, %	-	4.2	6.0	-	4.8	3.4	7.9	18.8	23.7	4.7
Defective kernels below 6.35 mm sieve, %	-	8.4	13.7	-	10.4	1.7	3.1	2.7	3.7	2.1
Total defective kernels, %	-	12.6	19.7	-	15.2	5.2	11.0	21.5	27.4	6.8
Other colour maize kernels, %	-	0.0	0.0	-	0.0	0.1	0.4	1.4	3.3	0.2
Foreign matter, %	-	0.1	0.2	-	0.1	0.2	0.2	0.3	0.3	0.2
Combined deviation, %	-	12.5	19.8	-	15.2	5.4	11.5	23.2	31.0	7.2
Pinked maize kernels, %	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0
Physical Factors										
Hectolitre mass, kg/hl	-	72.7	72.7	-	72.7	76.5	75.4	74.7	74.6	76.2
100 Kernel mass, g	-	29.8	30.1	-	29.9	32.1	31.3	31.7	35.7	31.9
Stress cracks, %	-	61	75	-	66	5	7	5	5	5
Milling Index	-	74.1	77.0	-	75.1	86.0	85.5	79.4	74.5	85.8
Kernel Size										
% on top 10 mm	-	6.2	7.4	-	6.6	14.1	15.1	18.3	20.9	14.4
% on top 8 mm	-	64.8	64.4	-	64.7	68.7	68.3	68.1	68.9	68.6
% through 8 mm	-	29.0	28.2	-	28.7	17.1	16.6	13.6	10.2	16.9
Breakage susceptibility										
% Below 6.35 mm sieve	-	16.9	22.9	-	19.1	2.0	2.5	3.3	2.9	2.1
% Below 4.75 mm sieve	-	12.4	17.0	-	14.0	1.5	1.9	2.5	2.5	1.6
Nutritional Factors										
Protein, %	-	8.4	8.4	-	8.4	7.8	7.9	8.1	8.0	7.8
Fat, % (db)	-	4.2	4.2	-	4.2	3.6	3.6	3.8	3.9	3.6
Starch, % (db)	-	72.6	72.4	-	72.5	74.2	74.3	73.7	73.6	74.2
Number of samples	-	14	8	-	22	212	63	3	2	280
Mycotoxins										
Afla G ₁ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla B ₁ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla G ₂ (µg/kg) [max. value]	0 [0]					0 [0]				
Afla B ₂ (µg/kg) [max. value]	0 [0]					0 [0]				
Fum B ₁ (µg/kg) [max. value]	21 [148]					135 [999]				
Deoxynivalenol (µg/kg) [max. value]	44 [307]					44 [222]				
Ochratoxin A (µg/kg) [max. value]	0 [0]					0 [0]				
Zearalenone (µg/kg) [max. value]	0 [0]					1 [19]				
T-2 Toxin (µg/kg) [max. value]	5 [35]					0 [0]				
Number of samples	7					28				
GMO										
Cry1Ab, %	<0.4					4.64				
CP4 EPSPS, %	<0.25					4.43				
Number of samples	7					28				