

**TABLE 15: PHYSICAL QUALITY FACTORS OF WHITE AND YELLOW MAIZE  
2000/01 - 2009/10**

Season	Number of samples	Hectolitre mass (kg/hl)			100 kernel mass (g)			Kernel size (%)									Breakage susceptibility (%)						Stress cracks (%)		
								Above 10mm sieve			Above 8mm sieve			Below 8mm sieve			< 6.35mm sieve			<4.75mm sieve					
		ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.	ave.	min.	max.
<b>White Maize</b>																									
2000/01	522	78.2	69.6	82.5	34.4	26.5	42.5	21.5	0.8	73.1	62.3	24.2	74.9	16.2	2.7	71.1	1.6	0.0	23.0	1.3	0.0	22.5	6	0	45
2001/02	471	77.3	68.1	81.1	31.8	17.5	44.4	21.1	1.7	59.5	62.7	32.9	77.1	16.2	0.0	45.6	1.8	0.2	11.0	1.3	0.1	6.7	6	0	60
2002/03	517	78.1	65.3	83.2	33.0	22.5	44.4	20.4	0.3	69.4	62.9	29.4	75.4	16.7	1.0	65.6	1.4	0.0	21.4	1.0	0.0	21.0	5	0	34
2003/04	599	78.1	63.8	83.2	36.2	23.7	58.8	29.9	0.4	65.5	59.2	31.0	78.0	11.0	1.0	64.9	1.4	0.0	15.0	1.0	0.0	9.5	6	0	58
2004/05	601	77.9	68.9	83.2	35.3	26.3	44.3	29.7	0.8	59.7	60.1	31.3	80.3	10.2	0.1	54.5	1.4	0.1	8.0	1.1	0.0	6.2	5	0	23
2005/06	593	76.2	58.3	81.6	33.7	18.0	44.7	30.1	0.0	73.9	59.4	24.2	75.0	10.5	1.2	75.8	2.1	0.2	12.6	1.6	0.1	10.4	4	0	36
2006/07	563	78.1	68.1	82.8	29.8	19.4	40.1	17.1	0.2	51.7	63.3	16.7	78.2	19.6	0.8	81.6	1.5	0.0	12.1	1.0	0.0	11.5	3	0	27
2007/08	483	78.2	65.3	81.6	34.5	17.0	45.6	24.5	0.4	69.7	63.8	23.3	84.2	11.7	1.0	76.2	1.2	0.1	9.7	0.9	0.0	7.3	4	0	44
2008/09	483	77.6	61.6	82.8	35.1	27.1	44.0	26.2	0.5	46.4	63.3	43.1	84.0	10.5	2.1	51.0	1.5	0.2	11.7	1.1	0.1	8.7	5	0	50
2009/10	458	77.9	60.2	84.4	36.0	24.1	59.1	26.3	1.2	90.7	62.6	9.2	82.0	11.2	0.1	53.5	1.5	0.2	24.3	1.2	0.1	23.1	4	0	36
<b>Weighted Average</b>		<b>77.7</b>			<b>34.0</b>			<b>24.9</b>			<b>61.8</b>			<b>13.3</b>			<b>1.5</b>			<b>1.2</b>			<b>5</b>		
<b>Minimum</b>		<b>58.3</b>			<b>17.0</b>			<b>0.0</b>			<b>9.2</b>			<b>0.0</b>			<b>0.0</b>			<b>0.0</b>			<b>0</b>		
<b>Maximum</b>		<b>84.4</b>			<b>59.1</b>			<b>90.7</b>			<b>84.2</b>			<b>81.6</b>			<b>24.3</b>			<b>23.1</b>			<b>60</b>		
<b>Yellow Maize</b>																									
2000/01	378	77.8	66.8	81.0	32.1	21.5	38.4	14.7	0.0	49.1	63.2	15.8	76.4	22.1	4.4	83.8	1.9	0.0	71.7	1.5	0.0	71.4	6	0	56
2001/02	429	76.7	63.3	80.6	29.7	21.7	37.8	13.9	0.0	40.6	63.8	7.8	77.6	22.3	6.2	92.1	2.2	0.2	12.6	1.5	0.1	8.3	7	0	57
2002/03	383	77.2	68.6	81.9	30.8	19.9	46.0	13.5	0.0	72.7	63.6	16.9	77.7	22.9	1.3	77.2	1.6	0.0	5.5	1.2	0.0	4.4	5	0	38
2003/04	301	77.0	68.0	80.1	34.0	25.5	62.9	20.2	0.9	59.8	65.4	35.8	79.4	14.4	0.8	53.9	1.7	0.2	22.0	1.2	0.1	21.5	8	0	60
2004/05	399	76.8	68.4	81.0	33.0	21.5	44.4	19.8	1.0	46.9	64.3	32.9	82.3	15.9	1.4	66.1	1.7	0.2	24.4	1.2	0.0	12.9	5	0	21
2005/06	307	75.4	53.4	81.9	31.5	22.0	40.1	19.0	1.1	53.1	65.4	43.3	80.1	15.7	3.2	50.8	2.5	0.1	17.6	1.7	0.0	11.7	5	0	24
2006/07	337	76.4	70.2	81.2	27.4	16.6	38.6	8.5	0.0	34.2	61.7	17.1	79.5	29.8	6.4	82.9	2.1	0.2	10.9	1.3	0.0	6.0	4	0	24
2007/08	417	76.7	69.3	79.9	32.4	24.4	42.9	15.2	0.3	50.9	66.0	39.6	78.6	18.8	2.8	60.1	1.9	0.3	15.2	1.3	0.1	8.3	5	0	58
2008/09	327	76.6	69.9	81.2	32.9	24.2	45.4	15.7	1.3	52.8	66.5	44.3	79.9	17.8	1.6	44.6	1.8	0.1	10.3	1.3	0.0	9.9	6	0	32
2009/10	342	76.6	69.0	81.6	33.0	23.3	42.5	14.3	0.0	41.7	68.5	50.9	79.9	17.2	4.0	47.7	2.1	0.4	10.3	1.6	0.3	8.4	5	0	27
<b>Weighted Average</b>		<b>76.7</b>			<b>31.6</b>			<b>15.4</b>			<b>64.8</b>			<b>19.8</b>			<b>1.9</b>			<b>1.4</b>			<b>6</b>		
<b>Minimum</b>		<b>53.4</b>			<b>16.6</b>			<b>0.0</b>			<b>7.8</b>			<b>0.8</b>			<b>0.0</b>			<b>0.0</b>			<b>0</b>		
<b>Maximum</b>		<b>81.9</b>			<b>62.9</b>			<b>72.7</b>			<b>82.3</b>			<b>92.1</b>			<b>71.7</b>			<b>71.4</b>			<b>60</b>		
<b>White and Yellow Maize</b>																									
2000/01	900	78.0	66.8	82.5	33.4	21.5	42.5	18.7	0.0	73.1	62.7	15.8	76.4	18.7	2.7	83.8	1.7	0.0	71.7	1.4	0.0	71.4	6	0	56
2001/02	900	77.0	63.3	81.1	30.8	17.5	44.4	17.7	0.0	59.5	63.2	7.8	77.6	19.1	0.0	92.1	2.0	0.2	12.6	1.4	0.1	8.3	7	0	60
2002/03	900	77.7	65.3	83.2	32.1	19.9	46.0	17.5	0.0	72.7	63.2	16.9	77.7	19.3	1.0	77.2	1.5	0.0	21.4	1.1	0.0	21.0	5	0	38
2003/04	900	77.8	63.8	83.2	35.5	23.7	62.9	26.6	0.4	65.5	61.3	31.0	79.4	12.1	0.8	64.9	1.5	0.0	22.0	1.1	0.0	21.5	7	0	60
2004/05	1000	77.5	68.4	83.2	34.4	21.5	44.4	25.7	0.8	59.7	61.8	31.8	82.3	12.5	0.1	66.1	1.5	0.1	24.4	1.1	0.0	12.9	5	0	23
2005/06	900	75.9	53.4	81.9	32.9	18.0	44.7	26.3	0.0	73.9	61.4	24.2	80.1	12.3	1.2	75.8	2.3	0.1	17.6	1.6	0.0	11.7	4	0	36
2006/07	900	77.5	68.1	82.8	28.9	16.6	40.1	13.9	0.0	51.7	62.7	16.7	79.5	23.4	0.8	82.9	1.7	0.0	12.1	1.1	0.0	11.5	3	0	27
2007/08	900	77.5	65.3	81.6	33.5	17.0	45.6	20.2	0.3	69.7	64.8	23.3	84.2	15.0	1.0	76.2	1.5	0.1	15.2	1.1	0.0	8.3	4	0	58
2008/09	810	77.2	61.6	82.8	34.2	24.2	45.4	21.9	0.5	52.8	64.6	43.1	84.0	13.4	1.6	51.0	1.6	0.1	11.7	1.2	0.0	9.9	5	0	50
2009/10	800	77.4	60.2	84.4	34.7	23.3	59.1	21.1	0.0	90.7	65.1	9.2	82.0	13.7	0.1	53.5	1.8	0.2	24.3	1.4	0.1	23.1	4	0	36
<b>Weighted Average</b>		<b>77.4</b>			<b>33.0</b>			<b>21.0</b>			<b>63.0</b>			<b>16.0</b>			<b>1.7</b>			<b>1.2</b>			<b>5</b>		
<b>Minimum</b>		<b>53.4</b>			<b>16.6</b>			<b>0.0</b>			<b>7.8</b>			<b>0.0</b>			<b>0.0</b>			<b>0.0</b>			<b>0</b>		
<b>Maximum</b>		<b>84.4</b>			<b>62.9</b>			<b>90.7</b>			<b>84.2</b>			<b>92.1</b>			<b>71.7</b>			<b>71.4</b>			<b>60</b>		

**Hectolitre mass, kg/hl of South African White and Yellow maize 2000/01 - 2009/10**

