

**TABLE 16: PHYSICAL QUALITY CHARACTERISTICS OF WHITE AND YELLOW MAIZE
2010/11 - 2019/20**

Season	Number of samples	Test weight (kg/hl)			100 kernel mass (g)			Kernel size (%)									Breakage susceptibility (%)						Stress cracks (%)				
								Above 10 mm sieve			Above 8 mm sieve			Below 8 mm sieve			< 6.35 mm sieve			< 4.75 mm 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.	ave.	min.
White Maize																											
2010/11	413	77.7	71.3	81.8	34.5	25.0	44.0	24.9	1.4	55.8	63.5	33.5	83.9	11.6	1.7	65.1	1.6	0.0	8.4	1.2	0.0	5.9	5	0	31		
2011/12	577	78.2	71.8	82.0	31.2	17.4	44.4	18.8	0.8	63.3	64.9	26.2	79.7	16.3	2.8	72.4	0.8	0.0	8.6	0.6	0.0	4.9	5	0	25		
2012/13	508	78.2	69.7	82.9	29.6	17.7	46.0	15.1	0.0	59.9	65.0	16.2	80.5	20.0	3.1	83.5	1.0	0.0	6.6	0.7	0.0	4.6	4	0	37		
2013/14	451	77.6	68.7	81.9	34.0	26.0	46.5	24.7	0.7	71.3	64.7	23.4	82.7	10.6	1.1	37.7	1.3	0.0	7.2	1.0	0.0	4.2	7	0	37		
2014/15	485	78.3	70.2	83.1	31.1	20.3	48.3	15.4	0.3	86.7	66.1	13.1	81.8	18.4	0.0	51.5	1.1	0.0	12.1	0.8	0.0	5.6	6	0	61		
2015/16	415	78.1	68.5	83.9	32.4	20.8	40.8	15.2	0.3	99.4	66.7	0.1	89.5	18.2	0.0	63.8	0.9	0.0	7.2	0.4	0.0	4.3	5	0	30		
2016/17	549	77.7	70.0	81.8	35.0	22.8	43.8	22.1	1.8	64.2	64.1	13.6	82.4	13.7	0.7	62.6	1.2	0.0	9.9	0.8	0.0	9.0	8	0	42		
2017/18	451	77.0	63.4	81.7	34.3	18.3	45.8	26.2	1.5	58.7	62.8	39.8	83.7	11.0	1.5	32.1	1.0	0.0	3.8	0.7	0.0	2.7	11	1	30		
2018/19	404	75.9	61.0	83.6	33.4	18.7	51.1	24.6	0.0	93.8	63.4	5.8	79.9	12.0	0.4	46.8	1.6	0.0	7.9	1.2	0.0	5.6	17	1	58		
2019/20	516	75.6	63.4	82.0	34.9	19.3	44.7	27.8	1.0	63.7	62.0	34.8	83.8	10.2	1.2	49.4	1.1	0.0	6.3	0.8	0.0	4.1	16	2	58		
Weighted Average		77.5			33.0			21.4			64.3			14.3			1.1			0.8			8				
Minimum		61.0			17.4			0.0			0.1			0.0			0.0			0.0			0				
Maximum		83.9			51.1			99.4			89.5			83.5			12.1			9.0			61				
Yellow Maize																											
2010/11	280	76.2	69.0	81.5	31.9	22.0	40.4	14.4	1.1	43.7	68.6	39.5	79.6	16.9	1.9	58.7	2.1	0.5	8.1	1.6	0.0	5.0	5	0	24		
2011/12	423	76.1	68.1	81.0	29.4	14.5	40.9	11.3	0.0	38.3	63.9	13.7	79.4	24.8	6.5	86.3	1.3	0.2	15.6	1.0	0.0	8.3	6	0	27		
2012/13	492	76.6	67.8	81.6	28.4	15.2	41.3	9.8	0.0	42.6	61.7	10.1	80.9	28.5	3.4	89.9	1.7	0.1	8.2	1.1	0.0	5.4	5	0	31		
2013/14	479	76.0	56.6	80.9	31.8	18.6	43.1	14.9	0.3	52.7	67.1	21.4	79.7	18.0	2.6	64.8	1.9	0.1	14.5	1.4	0.0	9.9	7	0	53		
2014/15	515	76.3	67.3	83.1	28.6	17.8	38.2	8.8	0.0	30.2	63.4	9.2	78.9	27.8	4.2	90.4	1.3	0.1	6.8	0.9	0.0	4.8	5	0	56		
2015/16	505	76.7	59.8	81.7	31.8	17.1	43.1	11.8	0.3	34.1	66.6	15.6	93.6	21.6	0.2	77.9	1.0	0.0	4.5	0.5	0.0	4.1	5	0	31		
2016/17	451	76.9	67.6	82.4	33.5	18.4	43.3	11.4	0.0	71.9	65.6	13.0	90.9	23.0	1.6	69.7	1.1	0.1	8.6	0.8	0.0	5.3	8	0	50		
2017/18	449	77.2	59.6	82.5	31.5	15.6	40.7	11.1	0.0	72.4	66.7	24.2	82.2	22.2	2.5	62.0	0.9	0.0	4.7	0.7	0.0	3.3	9	1	38		
2018/19	404	76.9	69.0	83.3	30.6	19.5	41.4	8.3	0.0	33.2	66.4	24.2	85.2	25.3	4.7	74.5	1.0	0.0	6.5	0.7	0.0	3.9	13	2	39		
2019/20	374	76.3	63.9	82.4	30.4	15.0	39.3	8.4	0.0	30.1	65.1	30.2	82.1	26.5	6.1	68.5	1.0	0.0	6.0	0.7	0.0	3.7	13	2	48		
Weighted Average		76.5			30.7			11.0			65.4			23.7			1.3			0.9			8				
Minimum		56.6			14.5			0.0			9.2			0.2			0.0			0.0			0				
Maximum		83.3			43.3			72.4			93.6			90.4			15.6			9.9			56				
White & Yellow Maize																											
2010/11	693	77.1	69.0	81.8	33.5	22.0	44.0	20.7	1.1	55.8	65.6	33.5	83.9	13.8	1.7	65.1	1.8	0.0	8.4	1.3	0.0	5.9	5	0	31		
2011/12	1000	77.3	68.1	82.0	30.4	14.5	44.4	15.6	0.0	63.3	64.5	13.7	79.7	19.9	2.8	86.3	1.0	0.0	15.6	0.7	0.0	8.3	6	0	27		
2012/13	1000	77.4	67.8	82.9	29.0	15.2	46.0	12.5	0.0	59.9	63.4	10.1	80.9	24.2	3.1	89.9	1.4	0.0	8.2	0.9	0.0	5.4	5	0	37		
2013/14	930	76.8	56.6	81.9	32.9	18.6	46.5	19.6	0.3	71.3	65.9	23.4	82.7	14.4	1.1	64.8	1.6	0.0	14.5	1.2	0.0	9.9	7	0	53		
2014/15	1000	77.3	67.3	83.1	29.8	17.8	48.3	12.0	0.0	86.7	64.7	9.2	81.8	23.2	0.0	90.4	1.2	0.0	12.1	0.8	0.0	5.6	6	0	61		
2015/16	920	77.3	59.8	83.9	32.1	17.1	43.1	13.3	0.3	99.4	66.7	0.1	93.6	20.0	0.0	77.9	1.0	0.0	7.2	0.5	0.0	4.3	5	0	31		
2016/17	1000	77.3	67.6	82.4	34.3	18.4	43.8	17.3	0.0	71.9	64.8	13.0	90.9	17.9	0.7	69.7	1.2	0.0	9.9	0.8	0.0	9.0	11	0	40		
2017/18	900	77.1	59.6	82.5	32.9	15.6	45.8	18.7	0.0	72.4	64.7	24.2	83.7	16.6	1.5	62.0	1.0	0.0	4.7	0.7	0.0	3.3	10	1	38		
2018/19	808	76.4	61.0	83.6	32.0	18.7	51.1	16.4	0.0	93.8	64.9	5.8	85.2	18.7	0.4	74.5	1.3	0.0	7.9	0.9	0.0	5.6	15	1	58		
2019/20	890	75.9	63.4	82.4	33.0	15.0	44.7	19.7	0.0	63.7	63.3	30.2	83.8	17.1	1.2	68.5	1.1	0.0	6.3	0.8	0.0	4.1	15	2	58		
Weighted Average		77.0			31.9			16.4			64.8			18.8			1.2			0.8			8				
Minimum		56.6			14.5			0.0			0.1			0.0			0.0			0.0			0				
Maximum		83.9			51.1			99.4			93.6			90.4			15.6			9.9			61				

Graph 37: Test weight of white and yellow maize over 10 seasons

