TABLE 12: PHYSICAL QUALITY FACTORS OF WHITE MAIZE ACCORDING TO GRADE (2009/2010)

Number of samples	Region	Hectolitre mass (kg/hl)			100 kernel mass (g)			Kernel size (%)									Breakage susceptibility (%)						Stress cracks (%)			Milling index		
								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.	max.
GRADE: WM 1																												
1	Region 11	77.8	77.8	77.8	32.0	32.0	32.0	1.2	1.2	1.2	62.7	62.7	62.7	36.1	36.1	36.1	2.9	2.9	2.9	2.0	2.0	2.0	7	7	7	98.8	98.8	98.8
8	Region 12	78.5	74.5	80.2	35.5	30.7	38.9	18.9	7.7	27.0	67.3	58.0	78.3	13.8	8.8	22.7	1.2	0.5	2.0	1.1	0.2	1.7	4	0	7	89.5	80.4	99.2
6	Region 13	79.2	76.6	80.4	34.8	33.1	37.0	26.2	14.5	38.7	64.9	55.4	72.0	8.9	5.9	16.1	1.2	0.7	1.7	0.9	0.4	1.3	3	1	6	92.8	87.4	97.4
11	Region 14	79.6	77.6	81.7	36.6	33.2	39.7	24.3	4.0	33.4	65.5	60.6	70.2	10.2	4.3	28.6	1.0	0.2	1.7	0.9	0.2	1.5	4	1	8	96.6	91.8	108.2
13	Region 15	79.2	77.0	84.4	36.0	34.2	38.0	32.4	24.6	40.1	59.9	51.6	69.3	7.7	5.5	10.1	1.1	0.4	1.8	0.8	0.3	1.3	2	0	5	97.4	92.5	101.9
18	Region 16	79.2	78.0	80.5	36.5	34.1	39.1	30.8	24.8	42.2	61.3	54.9	69.0	8.0	2.9	15.1	1.1	0.6	2.1	0.9	0.3	1.7	3	1	8	93.9	87.0	103.0
10	Region 17	77.8	76.8	79.6	35.2	32.5	39.0	21.5	13.1	31.7	67.3	60.3	72.0	11.2	6.6	19.8	1.6	0.6	2.7	1.2	0.6	1.9	3	1	7	90.7	87.5	94.3
8	Region 18	78.0	76.8	78.8	35.9	33.1	38.2	23.3	11.8	33.8	65.9	58.8	74.5	10.8	7.4	13.7	1.3	0.5	2.2	1.0	0.5	1.6	3	2	6	91.4	81.5	98.7
5	Region 19	78.1	77.9	78.5	35.8	33.8	37.8	20.6	13.0	28.8	66.9	61.7	74.4	12.5	9.5	14.5	1.1	0.6	1.6	0.8	0.3	1.2	5	1	10	91.1	84.7	96.9
5	Region 20	75.1	60.2	78.9	35.5	33.6	38.9	26.2	17.0	31.9	60.2	53.8	67.7	13.6	9.1	19.3	1.4	0.6	2.1	1.1	0.6	1.4	2	0	3	88.6	85.0	94.2
25	Region 21	77.8	74.7	79.0	36.0	32.1	59.1	25.5	12.5	90.7	63.3	9.2	73.8	11.3	0.1	20.0	1.4	0.3	2.6	1.1	0.3	2.4	3	0	11	91.3	78.7	99.4
6	Region 22	78.8	74.9	80.3	35.9	31.5	40.3	30.8	20.9	37.9	59.5	54.6	69.1	9.8	6.7	14.0	1.4	0.9	2.8	1.1	0.4	2.3	2	0	4	94.2	82.0	101.2
21	Region 23	79.0	76.6	80.9	36.1	30.9	41.9	28.5	6.3	40.5	63.9	53.7	82.0	7.6	3.3	13.4	1.1	0.4	2.5	0.9	0.2	2.0	3	0	16	96.3	85.2	103.8
20	Region 24	78.8	77.4	80.6	35.9	32.7	39.4	27.7	12.6	41.4	63.1	52.4	75.8	9.2	4.7	16.5	1.7	0.4	3.7	1.3	0.4	2.8	4	0	14	95.9	77.2	107.1
14	Region 25	76.9	72.6	79.9	36.1	29.6	42.8	28.2	7.8	41.7	60.6	38.7	72.0	11.3	5.1	53.5	1.6	0.6	3.0	1.1	0.4	2.3	6	0	14	85.8	72.7	96.1
12	Region 26	77.4	73.9	80.2	33.4	30.1	35.7	17.6	4.5	30.3	66.9	60.9	75.8	15.4	7.9	31.3	1.8	0.8	3.3	1.4	0.5	2.7	4	0	10	90.6	73.7	112.8
2	Region 27	77.8	77.0	78.6	35.1	34.1	36.0	21.3	18.8	23.7	69.8	68.1	71.5	9.0	8.2	9.7	3.0	1.5	4.5	2.0	1.1	2.9	11	7	15	89.3	80.3	98.2
25	Region 28	77.3	73.2	79.9	36.6	29.6	41.5	28.4	1.3	47.7	61.3	44.6	75.9	10.3	1.6	35.1	2.1	0.3	20.4	1.5	0.3	12.3	4	0	9	87.5	79.8	100.2
26	Region 29	77.8	73.8	80.5	34.9	24.1	40.1	23.5	7.5	38.9	64.5	54.7	79.3	12.0	4.5	27.6	1.3	0.2	4.9	1.0	0.1	3.8	4	0	16	90.6	72.5	107.6
14	Region 30	76.9	71.1	78.9	37.3	29.2	41.5	26.8	7.9	47.1	63.0	49.0	74.7	10.2	3.1	23.3	1.5	0.4	3.2	1.2	0.4	3.1	6	0	21	95.9	79.9	107.2
5	Region 31	78.7	78.2	79.1	36.3	33.7	37.9	17.1	7.2	25.8	71.7	62.5	79.3	11.3	3.9	14.9	1.1	0.9	1.3	0.9	0.6	1.1	3	2	6	94.7	83.8	98.7
17	Region 32	78.6	76.9	80.3	38.3	33.3	43.3	32.8	9.7	47.6	58.3	48.6	72.1	8.9	3.8	18.4	1.3	0.5	2.4	1.0	0.4	2.2	2	0	7	89.5	82.8	96.9
3	Region 33	77.1	75.6	78.2	40.1	36.8	42.0	32.7	23.2	48.7	58.8	47.4	69.0	8.5	3.9	13.8	1.0	0.2	2.0	0.9	0.1	1.9	2	1	2	89.4	85.8	96.0
10	Region 34	78.6	77.6	80.7	37.0	33.9	40.0	28.5	16.5	45.3	61.5	48.4	67.7	9.9	6.3	17.6	0.9	0.3	1.6	0.7	0.1	1.3	2	0	3	90.8	83.2	97.6
7	Region 35	78.1	74.7	80.6	33.3	26.0	40.5	25.6	3.8	54.9	59.5	40.7	65.2	14.9	4.4	38.3	1.6	0.8	2.9	1.2	0.5	2.3	3	1	4	94.5	84.4	105.0
15	Region 36	77.3	74.7	80.0	35.8	29.4	39.1	15.0	1.9	29.6	68.5	53.0	74.5	16.5	8.8	35.3	1.4	0.5	4.3	1.1	0.5	3.0	7	0	28	98.8	90.3	111.0
307	**Ave WM 1**	**78.1**			**36.0**			**25.8**			**63.3**			**10.8**			**1.4**			**1.1**			**4**			**92.4**		
	Min WM 1		**60.2**			**24.1**			**1.2**			**9.2**			**0.1**			**0.2**			**0.1**			**0**			**72.5**	
	Max WM 1			**84.4**			**59.1**			**90.7**			**82.0**			**53.5**			**20.4**			**12.3**			**28**			**112.8**

TABLE 12: PHYSICAL QUALITY FACTORS OF WHITE MAIZE ACCORDING TO GRADE (2009/2010)
(continue)

Number of samples	Region	Hectolitre mass (kg/hl)			100 kernel mass (g)			Kernel size (%)									Breakage susceptibility (%)						Stress cracks (%)			Milling index		
								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.	max.
GRADE: WM 2																												
1	Region 11	80.4	80.4	80.4	41.0	41.0	41.0	26.0	26.0	26.0	69.0	69.0	69.0	5.0	5.0	5.0	1.7	1.7	1.7	1.4	1.4	1.4	5	5	5	119.1	119.1	119.1
1	Region 12	79.2	79.2	79.2	37.3	37.3	37.3	21.8	21.8	21.8	63.4	63.4	63.4	14.8	14.8	14.8	1.2	1.2	1.2	1.1	1.1	1.1	1	1	1	84.5	84.5	84.5
2	Region 13	78.6	78.5	78.7	35.2	35.0	35.4	37.4	30.8	44.0	55.7	50.9	60.5	6.9	5.1	8.7	1.4	1.0	1.7	1.2	0.9	1.5	2	2	2	90.7	90.0	91.3
7	Region 14	78.5	76.9	80.2	35.7	33.5	38.1	26.5	10.5	36.1	62.4	56.1	70.0	11.0	5.4	19.7	1.5	0.7	2.6	1.2	0.6	1.9	2	1	5	90.8	82.5	98.7
6	Region 15	79.6	78.9	80.1	37.2	35.5	39.7	36.7	31.4	40.3	54.6	50.0	60.6	8.7	6.8	10.9	0.8	0.6	1.0	0.7	0.4	0.9	2	0	4	99.1	97.2	101.5
4	Region 16	78.7	78.1	79.8	37.1	36.3	38.5	34.1	27.8	44.3	58.8	51.4	64.9	7.1	4.3	8.5	1.3	0.9	2.4	1.2	0.7	2.2	2	0	4	95.0	89.6	99.9
3	Region 17	77.9	77.6	78.2	34.9	34.4	35.9	21.8	16.9	30.0	67.1	62.9	70.1	11.1	7.1	13.3	1.0	0.9	1.1	0.9	0.8	1.0	3	2	5	89.1	87.5	90.1
4	Region 18	78.1	77.1	78.8	37.2	36.3	39.3	26.2	19.7	34.2	60.5	57.7	65.4	13.3	8.1	18.9	1.9	0.9	2.5	1.4	0.8	2.0	3	1	5	88.1	84.3	93.5
4	Region 19	77.9	77.3	78.8	34.6	33.5	35.6	17.9	13.0	24.5	65.3	62.0	67.7	16.8	10.7	21.5	1.3	0.9	1.7	1.1	0.8	1.4	1	0	2	90.4	87.2	95.4
3	Region 20	77.0	76.7	77.3	37.3	35.2	41.1	27.4	23.5	30.0	64.2	62.7	67.0	8.5	7.2	9.5	1.7	1.1	2.6	1.3	0.8	1.9	3	1	4	88.5	82.7	91.8
3	Region 21	77.4	75.9	80.0	31.9	29.9	35.5	18.9	12.8	22.7	68.3	63.8	73.6	12.8	11.3	13.6	2.3	1.7	3.1	1.4	1.1	1.8	6	1	8	90.0	85.2	97.7
4	Region 22	77.8	76.3	78.7	35.2	34.3	36.1	34.0	20.4	45.9	57.8	49.7	69.2	8.3	4.4	10.4	1.9	0.8	4.2	1.1	0.3	1.9	4	0	12	90.6	80.8	96.9
9	Region 23	78.0	73.4	80.3	35.4	30.2	39.8	29.9	6.4	53.6	60.2	44.0	71.0	9.9	2.4	31.4	1.9	0.7	4.1	1.4	0.7	3.2	4	0	10	90.1	65.4	103.0
11	Region 24	78.5	73.4	80.9	35.3	31.0	38.4	25.6	1.7	42.0	60.1	53.8	71.9	14.3	4.2	42.7	1.5	0.8	3.7	1.2	0.7	3.1	3	1	5	91.2	70.1	100.0
8	Region 25	76.3	75.0	77.8	36.1	30.0	43.9	26.7	12.0	55.8	62.0	39.8	70.9	11.4	4.4	17.6	2.0	0.7	3.6	1.5	0.5	2.9	4	0	6	86.6	76.5	95.9
5	Region 26	75.5	74.1	78.6	33.4	29.6	37.4	21.3	3.4	41.9	63.3	53.3	71.1	15.4	4.8	31.1	6.7	2.0	24.3	5.7	0.8	23.1	4	2	8	85.7	82.5	93.4
4	Region 27	77.2	75.9	77.8	35.9	32.1	42.5	19.8	9.2	40.0	66.3	54.2	75.1	13.9	5.8	19.5	2.2	1.0	4.9	1.6	0.8	3.5	13	2	36	87.7	77.6	98.2
11	Region 28	77.0	74.4	78.8	36.0	32.9	41.0	23.7	9.4	36.3	62.7	56.8	72.9	13.6	6.9	28.1	1.9	1.0	3.4	1.3	0.6	2.8	3	1	7	85.0	70.8	98.9
6	Region 29	77.0	73.9	78.6	38.0	34.2	42.5	33.6	26.1	49.2	59.0	48.6	64.7	7.4	2.2	10.5	1.2	0.8	1.8	1.0	0.6	1.4	4	2	8	90.0	86.2	93.7
4	Region 30	77.0	73.6	79.9	35.0	31.6	36.6	17.6	5.6	32.4	67.8	59.9	73.5	14.6	7.7	20.9	1.7	0.8	2.5	1.3	0.7	1.7	7	1	14	90.1	86.6	98.5
9	Region 31	78.4	77.1	80.8	35.9	33.6	39.9	17.1	7.2	25.9	70.6	61.5	77.9	12.3	9.1	18.2	0.8	0.4	1.3	0.8	0.2	1.2	3	0	8	92.6	77.6	103.4
8	Region 32	78.0	76.3	79.4	37.9	32.3	42.2	29.3	11.6	53.9	59.4	42.0	69.7	11.3	4.1	22.7	1.6	1.0	2.6	1.1	0.8	1.6	4	0	8	90.6	84.0	97.8
1	Region 33	77.7	77.7	77.7	36.9	36.9	36.9	33.4	33.4	33.4	57.3	57.3	57.3	9.3	9.3	9.3	1.3	1.3	1.3	0.8	08	0.8	5	5	5	84.3	84.3	84.3
6	Region 34	78.5	77.6	79.5	39.6	36.6	41.3	29.3	7.1	42.7	60.5	48.5	72.9	10.2	5.7	23.1	1.3	0.6	2.0	1.2	0.6	1.7	3	1	5	86.5	81.9	90.9
1	Region 35	79.2	79.2	79.2	26.1	26.1	26.1	8.5	8.5	8.5	56.7	56.7	56.7	34.8	34.8	34.8	1.8	1.8	1.8	1.0	1.0	1.0	7	7	7	104.6	104.6	104.6
1	Region 36	76.3	76.3	76.3	37.3	37.3	37.3	18.9	18.9	18.9	66.9	66.9	66.9	14.2	14.2	14.2	1.3	1.3	1.3	0.9	0.9	0.9	2	2	2	91.5	91.5	91.5
126	**Ave WM 2**	**77.8**			**36.1**			**26.1**			**62.1**			**11.8**			**1.8**			**1.4**			**4**			**90.1**		
	Min WM 2		**73.4**			**26.1**			**1.7**			**39.8**			**2.2**			**0.4**			**0.2**			**0**			**65.4**	
	Max WM 2			**80.9**			**43.9**			**55.8**			**77.9**			**42.7**			**24.3**			**23.1**			**36**			**119.1**

TABLE 12: PHYSICAL QUALITY FACTORS OF WHITE MAIZE ACCORDING TO GRADE (2009/2010)
(continue)

Number of samples	Region	Hectolitre mass (kg/hl)			100 kernel mass (g)			Kernel size (%)									Breakage susceptibility (%)						Stress cracks (%)			Milling index		
								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.	max.
GRADE: WM 3																												
2	Region 12	77.7	76.5	78.9	37.6	36.8	38.3	38.4	35.3	41.4	56.0	51.2	60.7	5.7	4.0	7.4	1.6	1.1	2.1	1.0	0.3	1.8	2	1	2	83.7	83.6	83.8
1	Region 13	73.4	73.4	73.4	33.9	33.9	33.9	38.2	38.2	38.2	55.5	55.5	55.5	6.3	6.3	6.3	2.0	2.0	2.0	1.3	1.3	1.3	1	1	1	83.6	83.6	83.6
1	Region 17	75.4	75.4	75.4	38.3	38.3	38.3	23.8	23.8	23.8	66.5	66.5	66.5	9.7	9.7	9.7	1.2	1.2	1.2	0.9	0.9	0.9	3	3	3	84.3	84.3	84.3
2	Region 18	77.0	76.5	77.5	30.9	30.5	31.3	10.7	1.9	19.5	62.4	60.5	64.3	26.9	16.2	37.6	1.8	1.6	2.1	1.5	1.3	1.7	2	1	2	78.7	75.5	81.8
1	Region 19	77.5	77.5	77.5	35.0	35.0	35.0	25.6	25.6	25.6	66.8	66.8	66.8	7.6	7.6	7.6	1.7	1.7	1.7	1.4	1.4	1.4	1	1	1	92.1	92.1	92.1
2	Region 20	77.4	76.3	78.4	37.5	37.3	37.6	26.6	26.1	27.0	63.0	59.1	66.8	10.5	7.1	13.9	2.0	1.6	2.3	1.5	1.2	1.7	2	1	2	82.0	79.3	84.6
1	Region 21	77.1	77.1	77.1	33.1	33.1	33.1	15.4	15.4	15.4	62.3	62.3	62.3	22.3	22.3	22.3	1.3	1.3	1.3	1.2	1.2	1.2	8	8	8	90.1	90.1	90.1
4	Region 23	76.6	75.1	78.5	33.6	29.5	38.9	29.2	9.5	36.7	56.7	51.5	59.8	14.2	3.7	39.0	2.4	1.4	3.0	1.9	1.2	2.7	3	1	7	82.6	74.6	90.4
1	Region 24	78.2	78.2	78.2	33.7	33.7	33.7	46.8	46.8	46.8	50.4	50.4	50.4	2.8	2.8	2.8	2.6	2.6	2.6	1.9	1.9	1.9	0	0	0	92.3	92.3	92.3
1	Region 25	74.7	74.7	74.7	40.0	40.0	40.0	42.9	42.9	42.9	50.8	50.8	50.8	6.3	6.3	6.3	3.7	3.7	3.7	2.1	2.1	2.1	2	2	2	90.4	90.4	90.4
2	Region 26	75.3	74.6	76.0	32.3	31.7	32.8	6.9	3.6	10.2	63.8	63.7	63.9	29.3	25.9	32.7	1.8	1.4	2.1	1.6	1.3	1.9	3	3	3	80.8	74.7	86.8
4	Region 28	78.1	76.3	79.6	38.1	35.0	42.5	41.9	28.3	59.2	50.7	36.1	58.4	7.4	4.7	13.3	1.9	1.3	2.4	1.1	0.8	1.5	4	0	9	89.2	84.0	99.0
1	Region 29	78.9	78.9	78.9	39.5	39.5	39.5	46.3	46.3	46.3	50.6	50.6	50.6	3.1	3.1	3.1	2.3	2.3	2.3	1.3	1.3	1.3	10	10	10	99.4	99.4	99.4
1	Region 32	77.2	77.2	77.2	41.3	41.3	41.3	65.9	65.9	65.9	29.9	29.9	29.9	4.2	4.2	4.2	2.6	2.6	2.6	1.7	1.7	1.7	6	6	6	89.5	89.5	89.5
24	**Ave WM 3**	**76.9**			**35.7**			**31.4**			**56.4**			**12.2**			**2.0**			**1.5**			**3**			**85.8**		
	Min WM 3		**73.4**			**29.5**			**1.9**			**29.9**			**2.8**			**1.1**			**0.3**			**0**			**74.6**	
	Max WM 3			**79.6**			**42.5**			**65.9**			**66.8**			**39.0**			**3.7**			**2.7**			**10**			**99.4**
GRADE: COM																												
1	Region 33	76.0	76.0	76.0	40.9	40.9	40.9	47.0	47.0	47.0	49.5	49.5	49.5	3.5	3.5	3.5	2.7	2.7	2.7	2.0	2.0	2.0	4	4	4	90.0	90.0	90.0
1	**Ave COM**	**76.0**			**40.9**			**47.0**			**49.5**			**3.5**			**2.7**			**2.0**			**4**			**90.0**		
	Min COM		**76.0**			**40.9**			**47.0**			**49.5**			**3.5**			**2.7**			**2.0**			**4**			**90.0**	
	Max COM			**76.0**			**40.9**			**47.0**			**49.5**			**3.5**			**2.7**			**2.0**			**4**			**90.0**
458	**Ave white maize**	**77.9**			**36.0**			**26.3**			**62.6**			**11.2**			**1.5**			**1.2**			**4**			**91.4**		
	Min white maize		**60.2**			**24.1**			**1.2**			**9.2**			**0.1**			**0.2**			**0.1**			**0**			**65.4**	
	Max white maize			**84.4**			**59.1**			**90.7**			**82.0**			**53.5**			**24.3**			**23.1**			**36**			**119.1**
800	**Ave maize**	**77.4**			**34.7**			**21.1**			**65.1**			**13.7**			**1.8**			**1.4**			**4**			**90.3**		
	Min maize		**60.2**			**23.3**			**0.0**			**9.2**			**0.1**			**0.2**			**0.1**			**0**			**52.7**	
	Max maize			**84.4**			**59.1**			**90.7**			**82.0**			**53.3**			**24.3**			**23.1**			**36**			**119.1**