TABLE 13: PHYSICAL QUALITY FACTORS OF YELLOW MAIZE ACCORDING TO GRADE (2008/2009)

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			< 6.3 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: YM 1																												
15	Region 10	77.2	75.1	78.3	37.6	33.2	45.4	6.6	2.9	10.4	72.2	64.4	79.9	21.2	13.9	31.2	1.8	0.6	10.3	1.5	0.2	9.9	3	0	6	86.3	81.1	95.7
12	Region 11	77.0	76.0	77.9	33.7	31.6	36.3	7.0	1.3	22.1	67.0	60.5	72.0	26.0	9.9	34.9	2.1	1.3	3.0	1.5	1.0	1.9	3	0	7	86.3	77.3	94.3
5	Region 12	77.1	75.9	79.0	31.3	30.2	32.7	12.9	5.4	17.0	71.2	67.9	73.5	15.9	11.5	21.1	1.6	1.0	2.6	1.3	0.9	2.3	4	1	6	93.3	88.9	97.7
4	Region 13	77.3	75.6	78.0	32.9	28.9	35.0	19.3	13.7	29.5	67.3	62.0	70.4	13.5	8.5	17.7	1.5	1.0	2.1	1.2	0.6	1.7	6	1	9	95.5	91.1	99.1
12	Region 14	77.7	72.9	81.2	33.4	26.6	37.8	20.8	6.2	33.3	66.6	52.8	75.5	12.6	6.6	24.2	2.1	1.2	3.2	1.6	0.9	3.1	4	1	8	99.4	86.4	105.3
7	Region 15	77.3	76.7	77.8	33.1	29.3	35.4	8.4	5.3	17.3	72.2	66.5	75.7	19.4	13.8	26.1	1.5	1.1	2.2	1.0	0.7	1.6	5	3	12	91.1	82.7	101.4
8	Region 16	76.0	74.0	78.0	32.4	30.8	33.8	14.9	8.0	22.5	68.8	58.9	75.6	16.3	11.8	22.0	2.4	0.8	5.4	1.5	0.5	3.5	9	3	14	93.6	79.3	103.2
11	Region 17	75.9	71.9	77.4	30.6	25.8	33.6	14.1	3.8	21.3	68.6	64.8	73.6	17.3	9.9	31.0	2.4	1.3	5.4	1.8	1.1	4.3	7	1	14	94.6	82.2	103.3
4	Region 18	76.0	75.4	76.8	34.0	31.9	37.0	26.2	18.4	37.8	62.0	59.1	66.1	11.8	3.1	18.8	2.5	1.8	3.1	2.0	1.7	2.3	2	1	3	90.6	83.6	97.3
3	Region 19	77.5	76.0	79.6	33.9	32.9	35.6	13.0	11.1	14.2	69.8	69.2	70.9	17.1	15.3	19.7	1.5	1.2	1.7	1.2	0.9	1.4	8	3	16	97.9	95.4	101.1
5	Region 20	76.8	76.3	77.4	33.6	31.2	38.2	18.6	14.6	24.4	64.2	54.9	68.1	17.2	10.6	29.7	2.8	1.8	3.4	2.1	1.5	2.5	7	1	11	94.9	89.6	98.0
7	Region 21	76.1	73.5	77.3	31.8	27.6	36.2	13.1	7.5	21.9	70.2	63.1	76.3	16.7	8.7	26.7	2.0	0.6	3.3	1.6	0.5	2.5	4	1	8	93.2	78.8	101.5
4	Region 22	75.8	74.6	77.1	32.4	30.0	35.0	16.7	11.6	22.8	70.2	66.4	73.4	13.1	8.6	16.2	2.0	1.5	2.6	1.4	1.0	1.6	2	0	5	96.9	91.6	105.2
8	Region 23	77.0	75.9	77.9	33.2	31.0	35.5	17.0	12.8	20.2	69.3	66.4	72.8	13.7	8.1	19.4	2.5	1.5	4.5	2.0	0.9	4.1	5	2	11	101.1	90.6	108.0
4	Region 24	76.0	74.3	77.0	30.9	26.9	33.1	15.5	10.1	20.5	67.3	63.8	69.8	17.2	12.3	26.1	1.7	0.8	2.9	1.1	0.2	2.1	4	0	8	96.1	83.8	103.3
23	Region 25	76.3	74.6	77.7	31.3	27.4	35.0	12.7	3.6	25.1	66.6	60.1	73.0	20.8	8.5	33.7	1.6	0.3	2.9	1.1	0.2	2.0	6	1	18	84.6	74.5	95.4
14	Region 26	76.6	72.7	80.4	31.0	28.7	33.7	13.0	5.6	22.5	66.1	55.6	74.1	20.9	11.0	33.7	2.2	0.9	6.6	1.4	0.4	4.1	7	1	29	98.5	92.0	108.1
10	Region 27	77.0	75.9	79.2	33.8	31.2	41.1	16.5	11.0	24.1	68.1	61.1	77.2	15.5	8.0	20.9	1.9	0.3	2.9	1.3	0.0	2.2	12	4	31	97.1	92.8	103.2
46	Region 28	76.5	72.1	79.3	32.0	25.4	36.6	15.5	3.0	32.6	65.1	49.2	75.9	19.3	8.5	39.3	1.6	0.2	4.2	1.0	0.1	2.9	9	1	32	92.0	68.6	102.8
5	Region 29	77.3	75.4	78.7	32.7	29.5	35.3	19.0	12.8	25.1	64.9	62.9	67.7	16.1	8.6	24.3	1.1	0.6	1.5	0.8	0.5	1.0	5	2	8	96.9	89.5	100.6
23	Region 30	77.2	74.9	78.7	33.2	28.2	38.8	13.4	4.8	28.5	68.1	57.8	75.4	18.5	10.3	25.5	1.3	0.1	2.6	0.8	0.1	1.5	5	0	11	90.3	74.4	106.4
21	Region 31	78.2	76.3	80.1	35.5	27.6	44.4	17.5	5.6	39.5	65.6	52.8	73.0	16.9	7.1	36.7	1.4	0.6	2.8	1.0	0.3	1.8	8	3	18	100.2	90.0	106.9
15	Region 32	77.5	75.7	79.3	32.9	26.4	40.3	19.3	4.3	33.9	65.0	58.7	76.8	15.7	4.9	32.3	1.7	0.9	2.8	1.3	0.8	2.0	6	2	14	94.2	76.0	109.0
4	Region 33	76.5	73.0	78.2	33.6	32.9	34.4	21.9	14.1	33.5	63.9	55.8	68.6	14.3	10.7	18.1	1.5	0.6	2.0	1.1	0.5	1.5	3	2	4	89.0	84.6	92.6
8	Region 34	78.3	76.9	80.0	33.6	31.7	35.1	22.9	12.0	37.8	65.7	55.9	74.6	11.4	6.3	18.2	1.3	0.6	1.8	0.9	0.4	1.4	4	1	6	99.0	92.5	104.4
12	Region 35	72.0	69.9	77.8	36.4	25.5	42.8	39.4	5.0	52.8	52.3	44.3	72.2	8.3	1.6	44.6	1.1	0.2	5.0	0.8	0.2	3.5	8	2	17	105.0	77.9	112.7
7	Region 36	76.4	75.7	77.5	32.3	28.6	34.2	13.2	8.2	19.1	65.1	60.4	68.9	21.7	16.1	27.5	2.6	1.9	4.6	1.8	1.0	3.1	7	1	14	93.0	89.8	95.0
297	**Ave YM 1**	**76.7**			**33.1**			**16.0**			**66.5**			**17.5**			**1.8**			**1.2**			**6**			**93.7**		
	Min YM 1		**69.9**			**25.4**			**1.3**			**44.3**			**1.6**			**0.1**			**0.0**			**0**			**68.6**	
	Max YM 1			**81.2**			**45.4**			**52.8**			**79.9**			**44.6**			**10.3**			**9.9**			**32**			**112.7**

TABLE 13: PHYSICAL QUALITY FACTORS OF YELLOW MAIZE ACCORDING TO GRADE (2008/2009) (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			< 6.3 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: YM 2																												
1	Region 10	74.8	74.8	74.8	35.2	35.2	35.2	8.9	8.9	8.9	70.3	70.3	70.3	20.8	20.8	20.8	0.6	0.6	0.6	0.6	0.6	0.6	2	2	2	72.7	72.7	72.7
1	Region 12	74.7	74.7	74.7	32.8	32.8	32.8	12.4	12.4	12.4	74.0	74.0	74.0	13.6	13.6	13.6	1.9	1.9	1.9	1.6	1.6	1.6	5	5	5	87.1	87.1	87.1
2	Region 13	75.5	75.3	75.7	31.2	29.8	32.5	9.0	7.9	10.1	72.3	69.3	75.3	18.7	14.6	22.8	2.1	2.0	2.1	1.8	1.7	1.8	8	7	8	77.8	76.7	78.8
1	Region 17	73.6	73.6	73.6	31.3	31.3	31.3	15.3	15.3	15.3	72.1	72.1	72.1	12.6	12.6	12.6	2.9	2.9	2.9	2.0	2.0	2.0	2	2	2	83.5	83.5	83.5
1	Region 18	75.3	75.3	75.3	33.6	33.6	33.6	18.2	18.2	18.2	69.5	69.5	69.5	12.3	12.3	12.3	6.4	6.4	6.4	4.6	4.6	4.6	22	22	22	103.1	103.1	103.1
2	Region 19	76.0	75.2	76.7	28.8	27.3	30.2	9.7	6.0	13.4	64.4	61.3	67.4	26.0	19.2	32.7	2.0	1.6	2.4	1.4	1.0	1.7	2	1	2	94.6	90.8	98.3
1	Region 20	76.6	76.6	76.6	31.6	31.6	31.6	12.0	12.0	12.0	72.5	72.5	72.5	15.5	15.5	15.5	2.1	2.1	2.1	1.9	1.9	1.9	2	2	2	93.1	93.1	93.1
1	Region 25	74.0	74.0	74.0	28.0	28.0	28.0	2.1	2.1	2.1	58.8	58.8	58.8	39.1	39.1	39.1	2.4	2.4	2.4	1.8	1.8	1.8	2	2	2	74.8	74.8	74.8
1	Region 26	76.7	76.7	76.7	32.7	32.7	32.7	20.8	20.8	20.8	63.9	63.9	63.9	15.3	15.3	15.3	1.4	1.4	1.4	1.0	1.0	1.0	1	1	1	101.1	101.1	101.1
1	Region 28	75.2	75.2	75.2	29.0	29.0	29.0	3.7	3.7	3.7	64.0	64.0	64.0	32.3	32.3	32.3	1.5	1.5	1.5	1.1	1.1	1.1	4	4	4	83.2	83.2	83.2
3	Region 30	75.3	73.1	76.9	30.4	28.8	32.6	14.4	11.7	16.3	66.3	63.8	68.7	19.4	16.2	22.0	1.9	1.6	2.1	1.1	1.0	1.3	7	2	12	86.3	79.9	93.4
4	Region 31	75.8	75.3	77.0	30.4	28.8	32.3	19.4	8.1	28.3	64.9	59.5	67.7	15.8	11.8	24.2	2.0	1.4	2.7	1.4	1.0	2.1	8	4	14	95.3	86.0	100.0
1	Region 33	75.9	75.9	75.9	28.4	28.4	28.4	4.0	4.0	4.0	76.9	76.9	76.9	19.1	19.1	19.1	2.1	2.1	2.1	1.2	1.2	1.2	2	2	2	75.7	75.7	75.7
1	Region 34	76.3	76.3	76.3	30.9	30.9	30.9	11.4	11.4	11.4	72.5	72.5	72.5	16.1	16.1	16.1	1.9	1.9	1.9	1.6	1.6	1.6	5	5	5	88.3	88.3	88.3
1	Region 35	74.0	74.0	74.0	24.2	24.2	24.2	2.8	2.8	2.8	55.3	55.3	55.3	41.9	41.9	41.9	1.5	1.5	1.5	0.5	0.5	0.5	1	1	1	84.1	84.1	84.1
3	Region 36	75.7	71.8	78.2	32.5	29.0	36.1	11.8	6.4	17.6	66.6	65.5	68.0	21.6	14.4	28.1	2.8	1.4	4.0	2.1	1.1	3.0	7	3	11	88.2	72.2	100.8
25	**Ave YM 2**	**75.4**			**30.7**			**12.2**			**67.3**			**20.6**			**2.2**			**1.6**			**6**			**87.8**		
	Min YM 2		**71.8**			**24.2**			**2.1**			**55.3**			**11.8**			**0.6**			**0.5**			**1**			**72.2**	
	Max YM 2			**78.2**			**36.1**			**28.3**			**76.9**			**41.9**			**6.4**			**4.6**			**22**			**103.1**

TABLE 13: PHYSICAL QUALITY FACTORS OF YELLOW MAIZE ACCORDING TO GRADE (2008/2009)
(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			< 6.3 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: YM3																												
1	Region 17	75.2	75.2	75.2	29.8	29.8	29.8	16.7	16.7	16.7	67.3	67.3	67.3	16.0	16.0	16.0	1.8	1.8	1.8	1.5	1.5	1.5	5	5	5	100.8	100.8	100.8
1	Region 30	77.4	77.4	77.4	32.5	32.5	32.5	21.7	21.7	21.7	62.2	62.2	62.2	16.1	16.1	16.1	0.8	0.8	0.8	0.4	0.4	0.4	2	2	2	89.0	89.0	89.0
2	**Ave YM 3**	**76.3**			**31.2**			**19.2**			**64.8**			**16.1**			**1.3**			**0.9**			**4**			**94.9**		
	Min YM 3		**75.2**			**29.8**			**16.7**			**62.2**			**16.0**			**0.8**			**0.4**			**2**			**89.0**	
	Max YM 3			**77.4**			**32.5**			**21.7**			**67.3**			**16.1**			**1.8**			**1.5**			**5**			**100.8**
GRADE: COM																												
1	Region 16	76.9	76.9	76.9	31.1	31.1	31.1	13.9	13.9	13.9	67.4	67.4	67.4	18.7	18.7	18.7	2.2	2.2	2.2	1.6	1.6	1.6	3	3	3	93.8	93.8	93.8
1	Region 19	74.9	74.9	74.9	30.6	30.6	30.6	7.1	7.1	7.1	71.5	71.5	71.5	21.4	21.4	21.4	2.2	2.2	2.2	1.8	1.8	1.8	8	8	8	93.0	93.0	93.0
1	Region 32	76.3	76.3	76.3	30.6	30.6	30.6	11.0	11.0	11.0	61.2	61.2	61.2	27.8	27.8	27.8	2.1	2.1	2.1	1.6	1.6	1.6	11	11	11	81.3	81.3	81.3
3	**Ave COM**	**76.0**			**30.8**			**10.7**			**66.7**			**22.6**			**2.2**			**1.7**			**7**			**89.4**		
	Min COM		**74.9**			**30.6**			**7.1**			**61.2**			**18.7**			**2.1**			**1.6**			**3**			**81.3**	
	Max COM			**76.9**			**31.1**			**13.9**			**71.5**			**27.8**			**2.2**			**1.8**			**11**			**93.8**
327	**Ave yellow maize**	**76.6**			**32.9**			**15.7**			**66.5**			**17.8**			**1.8**			**1.3**			**6**			**93.2**		
	Min yellow maize		**69.9**			**24.2**			**1.3**			**44.3**			**1.6**			**0.1**			**0.0**			**0**			**68.6**	
	Max yellow maize			**81.2**			**45.4**			**52.8**			**79.9**			**44.6**			**10.3**			**9.9**			**32**			**112.7**
810	**Ave maize**	**77.2**			**34.2**			**21.9**			**64.6**			**13.4**			**1.6**			**1.2**			**5**			**93.6**		
	Min maize		**61.6**			**24.2**			**0.5**			**43.1**			**1.6**			**0.1**			**0.0**			**0**			**68.6**	
	Max maize			**82.8**			**45.4**			**52.8**			**84.0**			**51.0**			**11.7**			**9.9**			**50**			**115.4**