

**TABLE 15: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2012/2013)**

Number of samples	Region	Roﬀ Milling												Whiteness index											
		Break 1, %			Break 2, %			Break 3, %			Grits, %			Bran/Germ, %			Extraction, % (Total meal)			Whiteness index unsifted			Whiteness index sifted 87:13		
		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>GRADE: WM1</b>																									
3	Region 11	13.6	13.3	14.0	13.7	13.2	14.2	28.9	28.4	29.2	24.6	23.6	25.1	19.2	18.9	19.5	80.8	80.5	81.1	25.2	22.3	28.0	14.4	11.4	15.9
5	Region 12	11.5	10.1	12.1	12.1	10.8	13.0	29.5	28.6	30.3	27.7	26.4	29.2	19.2	18.2	20.4	80.8	79.6	81.8	24.0	18.7	28.1	16.5	14.0	19.7
5	Region 13	11.9	11.2	12.6	12.0	10.2	12.8	30.4	29.9	31.0	26.1	25.0	26.7	19.7	18.6	21.5	80.3	78.5	81.4	27.0	23.9	29.9	17.9	15.5	22.3
14	Region 14	11.9	8.6	13.3	12.3	11.5	12.9	29.0	26.7	31.2	26.5	24.5	30.0	20.3	17.4	23.5	79.7	76.5	82.6	24.7	16.7	30.4	17.1	7.0	22.6
8	Region 15	12.6	11.5	13.2	12.4	11.7	14.3	29.6	28.8	31.5	26.7	26.2	27.7	18.7	17.1	19.5	81.3	80.5	82.9	22.4	19.8	25.0	14.3	10.6	16.0
16	Region 16	11.2	9.8	12.9	11.6	11.0	12.4	29.4	28.5	30.2	27.4	25.3	29.2	20.5	19.0	21.2	79.5	78.8	81.0	21.7	18.1	26.6	14.1	11.5	16.9
7	Region 17	12.4	10.6	13.3	12.8	12.1	14.7	28.5	27.3	30.3	25.7	23.8	27.3	20.6	19.5	21.6	79.4	78.4	80.5	29.9	25.2	40.0	19.4	15.6	27.2
11	Region 18	12.6	9.2	14.8	12.9	11.7	15.4	28.1	26.6	29.2	25.5	21.9	30.0	21.0	19.2	22.1	79.0	77.9	80.8	25.8	17.0	30.7	16.9	10.1	20.8
10	Region 19	11.9	10.1	13.1	11.9	10.5	12.8	29.2	28.4	30.4	26.0	24.2	28.4	21.0	18.3	23.0	79.0	77.0	81.7	22.4	16.1	27.2	14.6	5.8	19.8
7	Region 20	13.5	12.1	16.9	12.8	12.5	13.1	27.8	25.9	29.4	24.6	21.3	26.8	21.3	19.7	22.9	78.7	77.1	80.3	26.3	23.2	30.4	17.8	14.5	23.0
34	Region 21	13.0	9.8	15.2	13.0	11.6	14.7	28.4	26.1	29.5	25.3	23.0	29.5	20.3	18.7	25.4	79.7	74.6	81.3	26.3	20.4	32.9	16.4	13.0	21.4
29	Region 22	13.3	12.0	14.3	12.7	11.7	13.7	28.5	27.3	30.3	25.5	24.1	27.7	20.0	18.5	21.9	80.0	78.1	81.5	25.9	20.9	29.9	16.0	10.9	21.4
49	Region 23	12.7	9.5	14.4	13.2	10.9	15.8	29.1	27.3	31.8	25.8	23.5	28.4	19.3	16.9	22.1	80.7	77.9	83.1	24.4	17.2	30.7	16.1	10.7	21.5
24	Region 24	12.7	11.7	13.4	12.7	11.8	14.6	28.0	26.5	29.5	26.0	24.5	27.8	20.6	18.2	22.8	79.4	77.2	81.8	27.8	20.5	32.1	19.1	13.9	22.4
5	Region 25	14.5	12.7	15.8	13.5	12.6	14.7	27.1	26.1	28.7	22.8	21.5	24.6	22.1	20.4	23.9	77.9	76.1	79.6	28.9	26.2	32.5	18.7	17.6	21.9
14	Region 26	12.4	9.1	15.3	12.8	11.7	15.0	27.9	26.9	29.0	26.1	23.2	28.4	20.9	19.1	22.0	79.1	78.0	80.9	26.9	22.3	39.4	18.4	13.9	37.2
4	Region 27	13.2	12.0	14.3	13.3	12.9	13.8	28.2	27.1	29.2	23.9	22.9	25.5	21.5	19.9	23.0	78.5	77.0	80.1	22.7	15.8	26.8	12.2	7.0	15.4
14	Region 28	14.4	12.1	17.0	13.7	12.0	14.7	27.9	25.7	29.4	23.4	20.5	25.9	20.6	17.8	23.9	79.4	76.1	82.2	25.7	15.0	33.7	15.5	9.9	20.0
15	Region 29	12.8	10.6	14.4	15.1	12.8	23.5	27.6	24.1	29.6	25.4	22.5	28.5	19.2	16.8	21.6	80.8	78.4	83.2	22.8	18.5	26.8	14.0	9.7	17.6
19	Region 30	13.5	11.4	14.9	12.9	11.9	14.9	27.3	26.0	29.0	24.4	21.9	27.0	21.8	19.1	23.6	78.2	76.4	80.9	24.1	20.8	27.4	15.1	12.6	18.8
26	Region 31	13.4	11.0	16.0	13.9	11.6	24.8	27.1	23.2	29.5	23.6	20.9	26.6	22.0	17.6	28.2	78.0	71.8	82.4	25.2	16.4	30.9	15.8	2.9	22.9
30	Region 32	13.7	11.8	15.8	12.9	11.6	15.7	27.1	24.5	29.4	24.5	21.2	26.7	21.9	17.2	25.4	78.1	74.6	82.8	25.2	19.6	28.8	16.5	11.1	25.7
28	Region 33	14.5	12.9	16.2	12.7	11.9	15.3	26.4	24.6	28.2	23.6	22.1	25.6	22.7	20.0	26.3	77.3	73.8	80.0	27.3	22.9	33.0	17.1	11.1	22.3
34	Region 34	14.4	9.9	17.6	14.2	12.2	15.9	27.2	25.0	29.3	23.5	20.3	27.5	20.7	17.4	23.4	79.3	76.6	82.6	25.5	19.1	31.4	15.5	11.1	25.7
6	Region 35	13.5	11.6	14.9	13.5	12.9	14.1	27.4	24.6	30.0	24.3	22.9	26.2	21.3	17.5	23.8	78.7	76.2	82.5	27.9	23.7	33.1	18.9	16.9	21.8
14	Region 36	13.1	10.8	16.2	12.8	12.4	13.3	26.8	24.6	28.9	24.9	20.5	27.7	22.5	17.5	25.8	77.5	74.2	82.5	25.7	20.3	30.2	15.0	12.2	18.8
431	Ave. WM1	13.1			13.1	10.2	24.8	28.0	23.2	31.8	25.0	20.3	30.0	20.8	16.8	28.2	79.2	71.8	83.2	25.4	15.0	40.0	16.3	2.9	37.2
	Min. WM1	8.6																							
	Max. WM1	17.6																							

**TABLE 15: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2012/2013)**  
(continue)

Number of samples	Region	Roff Milling												Whiteness index											
		Break 1, %			Break 2, %			Break 3, %			Grits, %			Bran/Germ, %			Extraction, % (Total meal)			Whiteness index unsifted			Whiteness index sifted 87:13		
		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>GRADE: WM2</b>																									
1	Region 11	14.1	-	-	13.2	-	-	28.8	-	-	24.9	-	-	18.9	-	-	81.1	-	-	16.2	-	-	3.9	-	-
3	Region 12	11.1	9.9	13.3	12.3	10.8	13.5	29.5	28.0	30.6	28.2	26.6	29.2	18.9	16.7	20.8	81.1	79.2	83.3	18.5	11.7	23.4	12.0	5.9	16.8
5	Region 13	11.7	10.2	13.1	11.3	9.4	12.2	29.3	28.6	30.8	26.8	25.0	28.1	20.9	19.8	21.4	79.1	78.6	80.2	27.9	21.8	38.5	21.0	14.5	38.9
2	Region 14	11.9	11.8	11.9	11.9	11.8	12.1	29.2	29.0	29.4	26.7	26.5	27.0	20.3	19.8	20.7	79.7	79.3	80.2	22.2	20.4	24.1	15.5	12.5	18.6
2	Region 15	12.2	11.9	12.6	11.9	11.6	12.2	29.7	29.4	29.9	26.0	25.8	26.2	20.2	19.5	21.0	79.8	79.0	80.5	21.6	20.9	22.3	14.0	13.3	14.7
2	Region 17	12.7	11.6	13.8	12.0	10.5	13.6	28.1	27.4	28.8	25.0	23.9	26.1	22.2	21.3	23.0	77.8	77.0	78.7	23.8	23.4	24.3	15.9	15.5	16.4
2	Region 18	11.9	11.5	12.3	17.5	13.3	21.8	26.4	23.7	29.0	24.4	23.2	25.6	19.8	19.0	20.7	80.2	79.3	81.0	19.4	16.7	22.1	13.0	13.0	13.0
1	Region 19	12.7	-	-	12.9	-	-	28.5	-	-	26.2	-	-	19.6	-	-	80.4	-	-	19.7	-	-	10.6	-	-
3	Region 20	13.2	11.7	14.4	13.1	12.7	13.6	27.4	26.0	28.9	25.1	23.6	26.4	21.3	20.1	22.6	78.7	77.4	79.9	22.9	20.2	25.2	14.0	11.4	16.5
1	Region 21	13.3	-	-	13.3	-	-	28.3	-	-	25.6	-	-	19.4	-	-	80.6	-	-	22.5	-	-	15.1	-	-
3	Region 22	12.2	11.2	12.7	12.5	12.0	12.9	28.1	27.8	28.5	27.2	26.3	28.6	20.0	19.5	20.4	80.0	79.6	80.5	23.2	22.3	24.3	14.4	13.8	15.4
4	Region 23	13.1	12.7	13.8	13.2	12.6	13.7	29.4	29.1	30.3	25.0	23.8	26.2	19.3	18.5	20.3	80.7	79.7	81.5	24.0	22.0	25.9	15.9	13.6	19.0
3	Region 25	14.6	12.7	16.4	12.5	12.0	13.6	27.1	25.6	28.8	23.2	21.0	25.7	22.6	20.9	25.0	77.4	75.0	79.1	25.7	22.7	29.4	15.9	12.4	19.5
4	Region 26	12.3	10.8	13.1	12.3	11.4	13.0	27.8	26.6	29.2	25.5	23.2	27.6	22.1	20.9	23.4	77.9	76.6	79.1	25.2	22.4	28.0	12.1	8.0	17.9
1	Region 27	12.6	-	-	14.0	-	-	26.3	-	-	23.9	-	-	23.2	-	-	76.8	-	-	34.2	-	-	23.0	-	-
1	Region 29	12.0	-	-	11.9	-	-	27.6	-	-	26.3	-	-	22.2	-	-	77.8	-	-	9.6	-	-	-1.7	-	-
2	Region 31	14.9	14.5	15.2	15.2	14.1	16.2	26.0	25.6	26.3	21.9	21.9	22.0	22.1	20.4	23.8	77.9	76.2	79.6	19.1	19.0	19.1	9.8	8.9	10.7
3	Region 32	13.9	12.7	14.6	13.4	12.6	13.9	26.6	25.9	27.1	22.9	22.2	24.0	23.3	22.8	23.9	76.7	76.1	77.2	26.0	25.1	26.9	15.6	13.2	18.1
6	Region 33	13.9	10.1	16.6	12.5	12.1	12.9	27.2	25.4	29.4	24.2	21.6	27.4	22.2	20.4	23.7	77.8	76.3	79.6	23.8	19.6	28.1	14.1	9.3	17.7
5	Region 34	15.8	15.3	16.5	15.2	14.2	15.9	27.1	25.2	29.1	22.5	21.0	24.3	19.4	15.7	21.6	80.6	78.4	84.3	21.7	16.8	24.8	12.2	8.4	15.2
1	Region 35	11.4	-	-	22.6	-	-	25.2	-	-	23.6	-	-	17.2	-	-	82.8	-	-	20.2	-	-	12.3	-	-
5	Region 36	13.1	11.9	13.9	12.9	12.4	13.2	27.2	26.0	28.8	24.6	23.3	26.9	22.2	19.3	24.6	77.8	75.4	80.7	25.9	19.9	34.8	16.3	10.1	23.0
<b>60</b>	<b>Ave. WM2</b>	<b>13.1</b>			<b>13.2</b>			<b>27.8</b>			<b>24.9</b>			<b>21.0</b>			<b>79.0</b>			<b>23.3</b>			<b>14.3</b>		
	<b>Min. WM2</b>	<b>9.9</b>			<b>9.4</b>			<b>23.7</b>			<b>21.0</b>			<b>15.7</b>			<b>75.0</b>			<b>9.6</b>			<b>-1.7</b>		
	<b>Max. WM2</b>	<b>16.6</b>			<b>22.6</b>			<b>30.8</b>			<b>29.2</b>			<b>25.0</b>			<b>84.3</b>			<b>38.5</b>			<b>38.9</b>		

**TABLE 15: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2012/2013)**  
(continue)

Number of samples	Region	Roff Milling												Whiteness index											
		Break 1, %			Break 2, %			Break 3, %			Grits, %			Bran/Germ, %			Extraction, % (Total meal)			Whiteness index unsifted			Whiteness index sifted 87:13		
		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>GRADE: WM3</b>																									
2	Region 13	10.4	9.8	10.9	12.1	11.8	12.4	30.4	29.7	31.1	29.2	28.6	29.8	17.9	16.4	19.5	82.1	80.5	83.6	27.2	26.5	27.9	17.4	17.3	17.5
1	Region 16	12.0	-	-	12.4	-	-	30.2	-	-	26.6	-	-	18.8	-	-	81.2	-	-	21.0	-	-	15.3	-	-
2	Region 17	11.9	11.9	12.0	11.5	10.7	12.2	29.9	29.9	29.9	26.4	25.7	27.0	20.3	18.8	21.8	79.7	78.2	81.2	23.4	20.0	26.7	12.0	7.8	16.3
1	Region 19	10.8	-	-	10.1	-	-	28.9	-	-	28.0	-	-	22.2	-	-	77.8	-	-	18.7	-	-	13.5	-	-
1	Region 22	14.4	-	-	13.1	-	-	27.9	-	-	23.9	-	-	20.7	-	-	79.3	-	-	26.0	-	-	18.6	-	-
1	Region 24	12.4	-	-	12.6	-	-	28.9	-	-	26.1	-	-	20.0	-	-	80.0	-	-	22.5	-	-	18.3	-	-
1	Region 25	14.6	-	-	15.1	-	-	28.2	-	-	25.7	-	-	16.5	-	-	83.5	-	-	5.9	-	-	-9.7	-	-
1	Region 29	13.0	-	-	15.0	-	-	28.4	-	-	26.5	-	-	17.1	-	-	82.9	-	-	18.4	-	-	8.8	-	-
1	Region 31	16.4	-	-	11.6	-	-	27.0	-	-	23.4	-	-	21.6	-	-	78.4	-	-	30.6	-	-	21.5	-	-
2	Region 34	16.8	15.9	17.7	15.3	14.6	16.0	26.3	24.0	28.6	20.9	19.0	22.8	20.8	16.8	24.7	79.2	75.3	83.2	22.5	22.1	22.9	12.1	9.0	15.3
13	Ave. WM3	13.2			12.9			28.7			25.6			19.6			80.4			22.2			13.0		
	Min. WM3	9.8			10.1			24.0			19.0			16.4			75.3			5.9			-9.7		
	Max. WM3	17.7			16.0			31.1			29.8			24.7			83.6			30.6			21.5		
<b>CLASS: COM</b>																									
2	Region 23	11.0	10.4	11.6	12.9	12.6	13.1	29.6	29.1	30.1	28.2	27.6	28.7	18.4	18.2	18.6	81.6	81.4	81.8	19.5	17.4	21.6	10.2	9.4	11.0
1	Region 25	15.7	-	-	13.5	-	-	26.4	-	-	23.1	-	-	21.4	-	-	78.6	-	-	27.4	-	-	18.4	-	-
1	Region 32	13.8	-	-	12.4	-	-	26.5	-	-	25.2	-	-	22.1	-	-	77.9	-	-	27.6	-	-	16.1	-	-
4	Ave. COM	12.9			12.9			28.0			26.1			20.1			79.9			23.5			13.7		
	Min. COM	10.4			12.4			26.4			23.1			18.2			77.9			17.4			9.4		
	Max. COM	15.7			13.5			30.1			28.7			22.1			81.8			27.6			18.4		
508	Ave. white maize	13.1			13.1			28.0			25.0			20.8			79.2			25.1			15.9		
	Min. white maize	8.6			9.4			23.2			19.0			15.7			71.8			5.9			-9.7		
	Max. white maize	17.7			24.8			31.8			30.0			28.2			84.3			40.0			38.9		