

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE (2005/2006)**

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: WHITE</b>																											
1	Region 8	11.6	11.6	11.6	9.4	9.4	9.4	23.3	23.3	23.3	33.6	33.6	33.6	22.1	22.1	22.1	77.9	77.9	77.9	26.6	26.6	26.6	18.8	18.8	18.8		
11	Region 10	12.7	10.1	14.2	10.0	9.2	13.2	26.3	23.5	28.3	30.5	28.0	33.7	20.4	19.1	22.5	79.6	77.5	80.9	24.2	19.1	31.0	14.3	6.3	21.5		
8	Region 11	13.3	11.9	14.0	9.6	9.3	9.9	24.5	22.6	25.8	29.8	27.7	30.6	22.9	21.8	24.7	77.1	75.3	78.2	31.4	29.3	33.4	19.6	18.1	21.8		
14	Region 12	13.6	11.8	15.6	9.5	8.7	10.1	23.3	21.0	24.7	30.8	28.3	33.9	22.8	20.8	24.4	77.2	75.6	79.2	31.2	22.2	36.9	19.7	9.4	24.3		
34	Region 13	14.5	12.8	16.4	9.9	9.3	10.9	22.8	20.8	25.5	29.0	26.1	32.1	23.8	20.5	25.6	76.2	74.4	79.5	30.8	24.7	37.3	20.4	15.3	26.4		
46	Region 14	13.7	10.5	17.0	9.8	8.4	11.4	23.2	19.8	27.2	29.1	24.4	34.3	24.2	19.1	27.2	75.8	72.8	80.9	29.8	22.6	36.4	19.2	10.1	23.2		
13	Region 15	13.3	12.3	14.6	9.8	9.5	10.2	25.2	23.2	26.7	30.4	27.2	33.7	21.3	17.7	25.5	78.7	74.5	82.3	27.6	24.9	35.5	18.0	15.0	22.4		
13	Region 16	15.1	13.3	16.2	10.0	9.5	10.5	23.8	21.6	26.2	28.3	24.7	30.8	22.8	20.0	27.1	77.2	72.9	80.0	28.5	23.9	34.8	19.2	14.3	22.7		
31	Region 17	14.6	10.9	17.5	9.8	8.9	11.1	22.6	20.3	24.8	28.7	22.6	34.3	24.3	20.7	28.3	75.7	71.7	79.3	31.2	22.5	38.8	20.2	12.2	25.7		
30	Region 18	14.6	12.2	16.8	10.0	8.6	14.9	23.0	20.1	27.7	28.1	24.5	31.2	24.2	20.2	29.6	75.8	70.4	79.8	32.3	25.3	38.2	21.7	17.7	26.2		
14	Region 19	14.1	11.5	16.4	10.1	9.0	13.0	23.6	20.1	26.5	28.8	23.0	32.5	23.5	18.6	30.6	76.5	69.4	81.4	31.9	26.6	36.3	21.0	18.2	25.6		
21	Region 20	15.3	13.3	19.5	10.0	9.0	10.9	22.3	20.7	24.8	27.7	25.3	29.7	24.6	19.5	26.9	75.4	73.1	80.5	32.7	26.1	37.9	21.7	14.5	27.5		
8	Region 21	13.8	12.3	15.9	9.9	9.0	10.4	22.2	20.6	25.5	29.1	26.0	32.9	25.0	21.2	29.0	75.0	71.0	78.8	32.5	26.8	34.6	20.4	14.2	24.1		
16	Region 22	13.6	11.4	14.8	9.9	9.2	10.9	24.7	22.7	27.1	29.9	27.4	33.5	21.9	20.0	26.1	78.1	73.9	80.0	26.6	21.0	31.6	17.3	11.3	23.0		
46	Region 23	13.1	10.2	17.8	9.8	8.8	11.8	24.0	20.5	27.0	30.8	23.8	34.4	22.2	17.2	26.1	77.8	73.9	82.8	28.2	22.2	37.7	17.8	11.7	24.4		
31	Region 24	13.1	10.3	20.6	9.8	9.0	11.1	23.9	15.2	27.7	30.2	14.8	33.3	23.0	18.6	39.1	77.0	60.9	81.4	28.0	21.1	44.2	18.1	10.7	33.3		
19	Region 25	16.2	13.6	19.4	10.5	9.7	12.6	22.6	19.5	26.4	26.1	21.8	31.5	24.6	20.6	29.0	75.4	71.0	79.4	31.1	27.7	36.6	19.1	14.1	23.3		
29	Region 26	15.9	13.1	18.8	10.6	9.6	13.9	21.9	18.4	30.2	26.9	22.3	31.4	24.7	21.2	29.7	75.3	70.3	78.8	32.3	24.8	43.8	21.0	14.6	29.0		
4	Region 27	13.4	10.8	14.9	9.7	9.0	10.7	22.0	21.0	24.1	29.0	26.2	33.2	25.8	22.9	29.1	74.2	70.9	77.1	29.6	26.6	31.9	20.4	17.4	24.4		
32	Region 28	16.2	12.1	22.2	10.6	9.3	12.0	22.4	19.8	24.7	27.0	19.2	31.3	23.9	19.7	28.1	76.1	71.9	80.3	30.1	23.7	43.8	18.7	9.5	31.7		
10	Region 29	14.7	12.0	16.4	10.1	9.2	10.7	23.7	21.5	27.0	27.9	25.2	32.2	23.6	21.0	26.9	76.4	73.1	79.0	28.9	23.1	34.1	20.3	13.5	24.2		
32	Region 30	14.8	12.9	17.2	9.9	8.8	10.9	23.4	19.8	25.7	27.9	24.4	32.1	24.0	21.1	28.8	76.0	71.2	78.9	30.6	25.3	35.4	20.4	12.7	24.8		
3	Region 32	14.4	13.8	15.2	10.0	9.8	10.2	22.7	22.0	23.8	29.3	26.5	31.1	23.6	22.6	24.4	76.4	75.6	77.4	29.6	29.3	29.7	17.4	17.0	17.8		
28	Region 33	14.8	11.6	16.2	9.9	9.1	10.7	23.0	20.2	27.3	28.5	23.5	33.1	23.9	20.2	28.4	76.1	71.6	79.8	28.2	-2.0	36.2	17.2	-15.2	23.2		
42	Region 34	14.1	9.9	16.1	10.0	8.9	15.4	23.0	20.1	25.5	29.3	25.8	32.5	23.6	19.4	27.5	76.4	72.5	80.6	30.9	25.3	45.2	19.9	15.0	25.5		
8	Region 35	13.2	10.7	17.0	9.5	8.7	10.5	23.2	21.6	24.5	31.0	26.3	33.0	23.1	21.2	25.0	76.9	75.0	78.8	27.1	23.3	29.7	18.0	15.6	21.8		
7	Region 36	14.5	11.4	17.9	9.8	9.2	10.3	22.7	20.7	25.0	28.6	24.3	33.7	24.4	20.0	27.6	75.6	72.4	80.0	32.3	26.2	37.9	21.2	16.4	24.9		
<b>551</b>	<b>Ave white</b>	<b>14.3</b>			<b>10.0</b>			<b>23.2</b>			<b>28.9</b>			<b>23.6</b>			<b>76.4</b>			<b>30.0</b>			<b>19.4</b>				
	<b>Min white</b>		<b>9.9</b>			<b>8.4</b>			<b>15.2</b>			<b>14.8</b>			<b>17.2</b>			<b>60.9</b>			<b>-2.0</b>			<b>-15.2</b>			
	<b>Max white</b>			<b>22.2</b>			<b>15.4</b>			<b>30.2</b>			<b>34.4</b>			<b>39.1</b>			<b>82.8</b>			<b>45.2</b>			<b>33.3</b>		

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2005/2006)**

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: WM 1</b>																									
1	Region 8	11.6	11.6	11.6	9.4	9.4	9.4	23.3	23.3	23.3	33.6	33.6	33.6	22.1	22.1	22.1	77.9	77.9	77.9	26.6	26.6	26.6	18.8	18.8	18.8
8	Region 10	12.9	10.1	14.2	10.1	9.2	13.2	26.1	23.5	28.3	30.2	28.0	33.7	20.7	19.4	22.5	79.3	77.5	80.6	25.1	20.0	31.0	15.7	9.9	21.5
8	Region 11	13.3	11.9	14.0	9.6	9.3	9.9	24.5	22.6	25.8	29.8	27.7	30.6	22.9	21.8	24.7	77.1	75.3	78.2	31.4	29.3	33.4	19.6	18.1	21.8
8	Region 12	13.7	12.9	14.9	9.5	8.9	10.1	23.4	22.6	24.4	30.8	29.0	33.9	22.6	20.8	24.4	77.4	75.6	79.2	31.6	27.6	36.9	20.4	17.5	24.3
11	Region 13	14.4	13.5	15.7	9.9	9.5	10.5	23.1	21.3	25.5	29.8	27.1	32.1	22.9	20.5	25.4	77.1	74.6	79.5	32.2	27.5	37.3	22.2	18.6	26.4
16	Region 14	13.9	10.6	17.0	10.0	9.1	11.4	24.4	21.9	27.0	28.6	26.2	31.8	23.1	19.1	25.7	76.9	74.3	80.9	31.0	23.0	36.4	19.9	17.1	23.2
8	Region 15	13.5	12.9	14.6	9.8	9.5	10.1	25.4	23.2	26.7	30.0	27.2	32.1	21.4	20.3	25.5	78.6	74.5	79.7	27.7	25.5	35.5	18.4	16.0	22.4
9	Region 16	14.8	13.3	16.1	10.0	9.5	10.5	24.3	22.9	26.2	29.2	27.6	30.8	21.7	20.0	23.1	78.3	76.9	80.0	27.0	23.9	30.8	18.1	14.3	22.7
9	Region 17	14.1	11.6	16.0	9.9	9.1	11.1	22.8	21.0	24.8	30.2	28.1	32.9	23.0	20.7	24.5	77.0	75.5	79.3	30.5	28.1	33.3	20.6	17.4	24.0
12	Region 18	14.5	13.2	15.4	9.9	8.8	10.7	24.0	22.0	27.7	28.5	27.0	30.3	23.1	20.2	26.3	76.9	73.7	79.8	32.7	27.8	37.9	22.1	18.2	24.7
6	Region 19	14.2	12.8	14.9	9.8	9.5	10.4	23.3	20.4	25.3	30.4	28.7	32.5	22.4	18.6	24.5	77.6	75.5	81.4	32.3	27.4	35.1	21.6	18.2	25.6
7	Region 20	15.7	13.6	17.8	10.0	9.4	10.6	22.4	20.8	23.8	27.3	26.2	29.0	24.7	23.6	25.9	75.3	74.1	76.4	34.0	30.7	36.2	22.7	20.3	24.8
2	Region 21	14.3	13.6	15.0	10.1	10.0	10.2	22.1	20.9	23.3	29.1	28.9	29.3	24.4	23.7	25.1	75.6	74.9	76.3	33.0	31.6	34.4	20.1	18.1	22.2
7	Region 22	13.2	11.4	14.6	9.8	9.2	10.1	25.3	23.9	26.2	30.6	28.4	33.5	21.1	20.0	21.8	78.9	78.2	80.0	26.9	25.2	31.1	17.9	14.9	21.2
18	Region 23	12.4	10.2	14.7	9.4	8.8	10.3	24.0	21.8	26.5	32.3	28.2	34.4	21.9	19.3	24.0	78.1	76.0	80.7	27.8	24.8	31.0	18.2	14.8	21.0
19	Region 24	12.9	11.5	14.5	9.9	9.4	11.1	24.5	22.2	27.7	30.7	27.3	32.5	21.9	18.6	24.5	78.1	75.5	81.4	27.4	21.2	34.6	17.9	12.8	21.4
10	Region 25	16.0	13.6	18.4	10.5	9.7	12.6	22.3	19.5	26.4	26.5	22.9	31.5	24.7	20.6	29.0	75.3	71.0	79.4	31.0	28.3	34.4	19.0	14.1	22.4
7	Region 26	15.6	13.1	16.6	10.7	9.7	13.9	22.7	20.6	30.2	26.8	22.3	31.4	24.2	21.7	25.9	75.8	74.1	78.3	32.8	29.0	40.4	20.7	18.0	23.4
3	Region 27	13.0	10.8	14.7	9.4	9.0	10.0	22.4	21.0	24.1	29.3	26.2	33.2	25.9	22.9	29.1	74.1	70.9	77.1	30.6	28.8	31.9	20.2	17.4	24.4
15	Region 28	15.6	12.1	17.1	10.6	9.3	12.0	23.0	20.3	24.7	27.7	25.3	31.3	23.1	19.7	25.8	76.9	74.2	80.3	29.8	23.7	43.8	18.4	12.1	31.7
8	Region 29	14.6	12.0	16.4	10.1	9.2	10.7	24.0	22.0	27.0	28.2	25.2	32.2	23.0	21.0	25.6	77.0	74.4	79.0	29.4	26.4	34.1	21.3	19.0	24.2
16	Region 30	14.9	12.9	16.1	9.8	8.8	10.7	23.2	20.8	25.7	27.7	25.6	30.2	24.4	21.1	28.8	75.6	71.2	78.9	30.9	25.9	35.4	20.5	12.7	24.3
2	Region 32	14.1	13.8	14.3	10.0	9.8	10.1	22.2	22.0	22.4	30.7	30.3	31.1	23.1	22.6	23.6	76.9	76.4	77.4	29.5	29.3	29.7	17.2	17.0	17.4
19	Region 33	14.8	11.6	16.2	9.8	9.1	10.5	22.6	20.2	24.6	28.4	23.5	33.1	24.4	22.3	28.4	75.6	71.6	77.7	27.4	-2.0	36.2	16.7	-15.2	23.1
30	Region 34	14.0	9.9	16.0	10.1	8.9	15.4	23.1	20.8	25.4	29.4	26.6	32.5	23.5	20.8	27.5	76.5	72.5	79.2	30.8	25.3	45.2	20.0	15.4	25.5
8	Region 35	13.2	10.7	17.0	9.5	8.7	10.5	23.2	21.6	24.5	31.0	26.3	33.0	23.1	21.2	25.0	76.9	75.0	78.8	27.1	23.3	29.7	18.0	15.6	21.8
7	Region 36	14.5	11.4	17.9	9.8	9.2	10.3	22.7	20.7	25.0	28.6	24.3	33.7	24.4	20.0	27.6	75.6	72.4	80.0	32.3	26.2	37.9	21.2	16.4	24.9
<b>274</b>	<b>Ave WM 1</b>	<b>14.1</b>			<b>9.9</b>			<b>23.6</b>			<b>29.3</b>			<b>23.1</b>			<b>76.9</b>			<b>29.8</b>			<b>19.4</b>		
	<b>Min WM 1</b>		<b>9.9</b>			<b>8.7</b>			<b>19.5</b>			<b>22.3</b>			<b>18.6</b>			<b>70.9</b>			<b>-2.0</b>			<b>-15.2</b>	
	<b>Max WM 1</b>			<b>18.4</b>			<b>15.4</b>			<b>30.2</b>			<b>34.4</b>			<b>29.1</b>			<b>81.4</b>			<b>45.2</b>			<b>31.7</b>

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2005/2006)**  
(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: WM 2</b>																									
3	Region 10	12.3	11.8	13.1	9.7	9.5	9.8	27.0	26.4	27.4	31.1	30.3	32.0	19.8	19.1	20.3	80.2	79.7	80.9	21.9	19.1	27.2	10.5	6.3	18.4
4	Region 12	13.6	12.6	15.6	9.5	8.7	10.0	22.5	21.0	23.6	30.9	28.3	32.2	23.5	21.9	24.4	76.5	75.6	78.1	31.9	29.3	35.6	20.5	18.5	22.2
16	Region 13	14.5	12.8	16.4	10.0	9.3	10.9	22.5	20.8	24.8	29.0	26.3	32.0	24.1	22.1	25.6	75.9	74.4	77.9	30.2	25.9	32.0	19.7	16.0	23.2
23	Region 14	13.7	10.5	16.4	9.7	8.4	10.9	22.7	19.8	27.2	28.9	24.4	34.3	25.0	19.7	27.2	75.0	72.8	80.3	30.0	23.0	34.4	19.5	10.1	22.8
4	Region 15	13.2	12.4	14.0	9.9	9.7	10.2	25.1	23.9	26.1	30.9	28.4	33.7	20.9	17.7	22.7	79.1	77.3	82.3	26.8	24.9	28.7	17.4	15.0	20.2
2	Region 16	15.9	15.8	16.1	10.2	10.1	10.2	23.7	23.4	23.9	25.8	24.7	26.9	24.4	23.3	25.6	75.6	74.4	76.7	31.8	31.7	31.9	21.4	21.3	21.6
16	Region 17	14.9	13.6	17.5	9.8	8.9	10.7	22.4	20.3	24.7	27.6	22.6	30.4	25.3	21.0	28.3	74.7	71.7	79.0	32.1	28.1	35.6	20.7	13.9	23.3
13	Region 18	14.6	12.2	16.4	10.3	8.6	14.9	22.3	20.7	24.6	27.8	24.5	31.2	25.1	22.0	29.6	74.9	70.4	78.0	32.4	25.3	38.2	21.6	17.7	26.2
5	Region 19	13.7	11.5	15.0	9.8	9.0	10.6	24.5	23.1	26.5	28.2	25.8	32.0	23.9	21.8	25.5	76.1	74.5	78.2	31.3	29.2	34.0	20.2	18.2	24.7
6	Region 20	14.9	13.3	15.7	10.0	9.5	10.5	22.5	21.5	24.6	28.2	25.8	29.7	24.4	20.9	26.9	75.6	73.1	79.1	30.2	27.5	32.0	19.2	17.7	21.6
5	Region 21	13.2	12.3	14.1	9.8	9.0	10.4	22.5	20.6	25.5	29.7	26.0	32.9	24.9	21.2	29.0	75.1	71.0	78.8	31.8	26.8	34.4	19.7	14.2	23.1
6	Region 22	13.8	12.5	14.4	10.0	9.7	10.9	24.5	22.9	27.1	29.2	27.4	30.7	22.5	20.2	26.1	77.5	73.9	79.8	27.0	23.8	31.6	18.8	15.8	23.0
18	Region 23	13.3	10.6	16.6	10.1	9.0	11.8	24.5	22.0	27.0	30.0	23.8	33.5	22.1	17.2	24.7	77.9	75.3	82.8	28.5	24.8	34.3	17.8	13.8	22.1
9	Region 24	12.4	10.3	14.2	9.5	9.0	10.0	23.8	21.8	25.3	31.4	28.6	33.3	22.8	20.6	25.5	77.2	74.5	79.4	26.6	21.1	30.7	16.3	10.7	19.7
7	Region 25	15.5	13.9	18.2	10.5	9.7	11.1	23.1	22.3	24.5	26.8	22.3	30.4	24.2	21.7	27.3	75.8	72.7	78.3	31.8	27.7	36.6	19.9	16.9	23.3
17	Region 26	16.0	13.2	18.8	10.5	9.6	11.1	21.7	18.4	25.7	27.1	23.5	30.3	24.7	21.2	29.7	75.3	70.3	78.8	31.6	24.8	34.8	20.2	14.6	23.1
1	Region 27	14.9	14.9	14.9	10.7	10.7	10.7	21.0	21.0	21.0	28.2	28.2	28.2	25.2	25.2	25.2	74.8	74.8	74.8	26.6	26.6	26.6	20.9	20.9	20.9
15	Region 28	16.4	13.8	20.0	10.7	10.2	11.6	21.9	19.8	23.8	26.7	21.6	30.3	24.3	21.5	27.4	75.7	72.6	78.5	30.2	24.0	35.3	19.2	9.5	23.8
2	Region 29	15.1	14.4	15.9	10.1	9.7	10.4	22.4	21.5	23.2	26.6	25.8	27.5	25.8	24.8	26.9	74.2	73.1	75.2	27.1	23.1	31.1	16.3	13.5	19.0
14	Region 30	14.7	13.1	17.2	10.0	8.9	10.9	23.6	19.8	25.0	28.1	24.4	32.1	23.7	22.0	26.0	76.3	74.0	78.0	30.0	25.3	34.1	20.1	14.0	24.0
8	Region 33	14.9	14.2	15.4	10.2	9.7	10.7	23.9	22.2	27.3	28.5	27.3	30.2	22.5	20.2	24.3	77.5	75.7	79.8	30.9	28.7	33.5	19.0	14.8	23.2
12	Region 34	14.3	11.8	16.1	10.0	9.2	11.2	22.9	20.1	25.5	29.0	25.8	32.0	23.8	19.4	27.1	76.2	72.9	80.6	31.4	27.3	36.0	19.7	15.0	24.3
<b>206</b>	<b>Ave WM 2</b>	<b>14.5</b>			<b>10.0</b>			<b>23.0</b>			<b>28.5</b>			<b>23.9</b>			<b>76.1</b>			<b>30.2</b>			<b>19.4</b>		
	<b>Min WM 2</b>		<b>10.3</b>			<b>8.4</b>			<b>18.4</b>			<b>21.6</b>			<b>17.2</b>			<b>70.3</b>			<b>19.1</b>			<b>6.3</b>	
	<b>Max WM 2</b>			<b>20.0</b>			<b>14.9</b>			<b>27.4</b>			<b>34.3</b>			<b>29.7</b>			<b>82.8</b>			<b>38.2</b>			<b>26.2</b>

