

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2006/2007)**

| 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        | 12.4        | 12.4       | 12.4        | 9.8        | 9.8        | 9.8         | 27.1        | 27.1        | 27.1        | 30.3        | 30.3        | 30.3        | 20.3            | 20.3        | 20.3        | 79.7                       | 79.7        | 79.7        | 23.9                     | 23.9        | 23.9        | 15.4                         | 15.4       | 15.4        |  |
| 1                  | Region 10       | 13.0        | 13.0       | 13.0        | 9.6        | 9.6        | 9.6         | 27.1        | 27.1        | 27.1        | 29.1        | 29.1        | 29.1        | 21.2            | 21.2        | 21.2        | 78.8                       | 78.8        | 78.8        | 24.9                     | 24.9        | 24.9        | 13.9                         | 13.9       | 13.9        |  |
| 9                  | Region 11       | 11.6        | 10.5       | 12.5        | 9.6        | 9.0        | 10.6        | 25.8        | 22.6        | 28.6        | 31.6        | 30.4        | 33.3        | 21.5            | 19.4        | 24.5        | 78.5                       | 75.5        | 80.6        | 26.6                     | 16.7        | 35.0        | 18.2                         | 10.1       | 28.5        |  |
| 6                  | Region 12       | 12.2        | 9.8        | 16.2        | 9.7        | 9.1        | 10.5        | 25.9        | 23.3        | 27.8        | 30.5        | 25.4        | 33.0        | 21.6            | 20.3        | 24.6        | 78.4                       | 75.4        | 79.7        | 29.7                     | 26.6        | 34.5        | 20.4                         | 16.0       | 26.4        |  |
| 4                  | Region 13       | 11.5        | 10.3       | 12.5        | 9.1        | 8.8        | 9.5         | 26.7        | 26.1        | 27.2        | 31.6        | 29.1        | 33.5        | 21.0            | 20.2        | 22.9        | 79.0                       | 77.1        | 79.8        | 31.2                     | 29.5        | 32.8        | 21.2                         | 17.9       | 23.2        |  |
| 28                 | Region 14       | 12.4        | 9.6        | 13.9        | 9.8        | 8.8        | 11.4        | 27.7        | 25.1        | 30.4        | 29.4        | 26.0        | 33.4        | 20.7            | 19.0        | 23.0        | 79.3                       | 77.0        | 81.0        | 29.0                     | 25.7        | 35.0        | 20.6                         | 12.1       | 24.5        |  |
| 27                 | Region 15       | 12.1        | 10.6       | 14.6        | 9.9        | 9.3        | 11.4        | 27.6        | 24.1        | 31.0        | 30.3        | 25.3        | 34.2        | 20.1            | 18.1        | 24.0        | 79.9                       | 76.0        | 81.9        | 26.4                     | 13.9        | 32.6        | 18.7                         | 15.0       | 22.1        |  |
| 11                 | Region 16       | 12.6        | 10.8       | 14.0        | 9.7        | 8.8        | 10.3        | 27.6        | 25.4        | 30.5        | 29.4        | 24.9        | 33.8        | 20.7            | 18.5        | 24.1        | 79.3                       | 75.9        | 81.5        | 28.7                     | 24.2        | 38.1        | 20.4                         | 16.7       | 29.0        |  |
| 7                  | Region 17       | 11.0        | 9.6        | 11.8        | 9.4        | 8.4        | 11.1        | 26.6        | 23.7        | 28.7        | 31.4        | 27.8        | 33.4        | 21.6            | 19.1        | 24.5        | 78.4                       | 75.5        | 80.9        | 32.2                     | 28.5        | 36.8        | 24.7                         | 21.2       | 28.3        |  |
| 17                 | Region 18       | 11.7        | 10.8       | 13.1        | 9.5        | 8.6        | 11.7        | 26.3        | 21.8        | 29.7        | 30.5        | 26.7        | 34.6        | 22.0            | 19.1        | 25.0        | 78.0                       | 75.0        | 80.9        | 30.7                     | 27.2        | 33.3        | 22.0                         | 18.2       | 26.5        |  |
| 7                  | Region 19       | 11.9        | 11.1       | 12.7        | 9.5        | 8.6        | 10.6        | 25.9        | 23.7        | 28.0        | 30.5        | 28.3        | 31.9        | 22.3            | 20.8        | 24.3        | 77.7                       | 75.7        | 79.2        | 30.7                     | 28.3        | 32.6        | 21.4                         | 19.2       | 23.5        |  |
| 6                  | Region 20       | 13.4        | 12.3       | 16.4        | 9.8        | 9.2        | 11.1        | 24.6        | 22.7        | 27.4        | 29.7        | 28.5        | 31.1        | 22.5            | 20.3        | 23.6        | 77.5                       | 76.4        | 79.7        | 32.2                     | 30.1        | 34.9        | 22.4                         | 19.4       | 24.7        |  |
| 14                 | Region 21       | 11.9        | 9.9        | 13.5        | 9.3        | 9.1        | 9.9         | 26.8        | 24.7        | 30.3        | 30.2        | 26.5        | 32.7        | 21.8            | 20.3        | 24.6        | 78.2                       | 75.4        | 79.7        | 30.4                     | 26.0        | 36.7        | 21.1                         | 17.2       | 25.3        |  |
| 31                 | Region 22       | 12.6        | 10.7       | 13.8        | 9.9        | 9.2        | 11.1        | 26.9        | 24.2        | 29.2        | 29.5        | 25.7        | 32.2        | 21.1            | 18.2        | 23.0        | 78.9                       | 77.0        | 81.8        | 29.3                     | 26.1        | 35.5        | 20.6                         | 17.2       | 24.2        |  |
| 89                 | Region 23       | 12.3        | 5.9        | 14.4        | 10.1       | 8.7        | 49.6        | 26.5        | 14.6        | 29.9        | 30.1        | 17.0        | 34.8        | 20.9            | 12.9        | 24.2        | 79.1                       | 75.8        | 87.1        | 30.1                     | 22.5        | 36.5        | 21.3                         | 13.4       | 26.9        |  |
| 31                 | Region 24       | 11.7        | 9.5        | 13.8        | 9.7        | 8.7        | 11.2        | 26.9        | 24.0        | 29.7        | 29.6        | 25.3        | 32.6        | 22.2            | 20.4        | 25.1        | 77.8                       | 74.9        | 79.6        | 31.8                     | 26.3        | 36.4        | 22.7                         | 19.7       | 27.6        |  |
| 18                 | Region 25       | 12.9        | 7.3        | 14.6        | 9.7        | 8.1        | 11.1        | 27.0        | 23.7        | 30.0        | 28.8        | 24.8        | 37.6        | 21.6            | 19.9        | 23.9        | 78.4                       | 76.1        | 80.1        | 29.6                     | 22.0        | 34.0        | 20.6                         | 13.9       | 24.7        |  |
| 7                  | Region 26       | 14.3        | 8.8        | 27.8        | 9.3        | 8.3        | 10.1        | 24.9        | 20.7        | 28.3        | 30.1        | 21.0        | 35.3        | 21.5            | 18.7        | 23.2        | 78.5                       | 76.8        | 81.3        | 30.7                     | 26.5        | 37.3        | 21.0                         | 17.1       | 29.5        |  |
| 7                  | Region 27       | 10.6        | 9.7        | 13.5        | 8.7        | 8.5        | 9.6         | 26.8        | 24.7        | 28.6        | 31.5        | 28.8        | 33.6        | 22.4            | 19.6        | 23.5        | 77.6                       | 76.5        | 80.4        | 29.6                     | 27.1        | 35.1        | 20.0                         | 17.2       | 21.2        |  |
| 16                 | Region 28       | 13.2        | 11.5       | 14.8        | 9.8        | 9.3        | 10.6        | 28.3        | 25.2        | 31.6        | 28.9        | 26.0        | 31.2        | 19.8            | 17.8        | 21.7        | 80.2                       | 78.3        | 82.2        | 27.6                     | 25.0        | 31.0        | 19.9                         | 15.6       | 25.1        |  |
| 15                 | Region 29       | 14.0        | 12.3       | 16.3        | 9.8        | 9.2        | 10.3        | 28.1        | 25.0        | 30.2        | 27.8        | 24.8        | 30.0        | 20.4            | 18.2        | 23.8        | 79.6                       | 76.2        | 81.8        | 27.3                     | 24.1        | 34.5        | 17.3                         | 12.9       | 21.1        |  |
| 20                 | Region 30       | 13.1        | 11.4       | 15.0        | 9.7        | 9.1        | 10.6        | 26.1        | 22.5        | 28.3        | 27.9        | 24.8        | 32.2        | 23.2            | 20.9        | 27.3        | 76.8                       | 72.7        | 79.1        | 30.0                     | 24.1        | 33.6        | 20.8                         | 15.2       | 26.8        |  |
| 6                  | Region 31       | 13.5        | 12.3       | 14.8        | 10.0       | 9.6        | 10.4        | 27.6        | 26.8        | 29.1        | 28.9        | 26.3        | 30.4        | 20.0            | 18.8        | 21.4        | 80.0                       | 78.6        | 81.2        | 25.8                     | 21.8        | 31.9        | 16.3                         | 11.8       | 22.9        |  |
| 20                 | Region 32       | 13.5        | 12.3       | 14.7        | 9.7        | 9.1        | 10.4        | 26.8        | 24.6        | 30.3        | 28.5        | 26.6        | 31.4        | 21.6            | 18.6        | 24.2        | 78.4                       | 75.8        | 81.4        | 28.7                     | 21.4        | 34.3        | 18.6                         | 12.4       | 25.6        |  |
| 18                 | Region 33       | 13.5        | 9.8        | 15.4        | 10.3       | 9.5        | 11.3        | 26.4        | 24.1        | 28.7        | 27.0        | 23.6        | 29.2        | 22.7            | 18.2        | 25.1        | 77.3                       | 74.9        | 81.8        | 31.5                     | 26.7        | 37.9        | 21.8                         | 18.3       | 29.6        |  |
| 22                 | Region 34       | 13.6        | 11.7       | 15.9        | 10.0       | 9.3        | 11.1        | 27.2        | 24.5        | 29.5        | 28.1        | 24.2        | 30.5        | 21.2            | 18.2        | 23.1        | 78.8                       | 76.9        | 81.8        | 32.6                     | 22.6        | 39.6        | 21.7                         | 9.7        | 28.3        |  |
| 10                 | Region 35       | 11.8        | 8.4        | 13.0        | 9.4        | 8.5        | 10.0        | 26.6        | 25.1        | 29.7        | 29.4        | 26.9        | 34.6        | 22.8            | 19.4        | 25.9        | 77.2                       | 74.1        | 80.6        | 27.7                     | 19.2        | 33.2        | 20.1                         | 12.7       | 25.0        |  |
| 7                  | Region 36       | 12.5        | 11.8       | 13.1        | 9.6        | 9.5        | 9.9         | 24.7        | 23.3        | 26.4        | 30.9        | 29.3        | 32.9        | 22.3            | 20.4        | 24.4        | 77.7                       | 75.6        | 79.6        | 30.2                     | 27.9        | 33.5        | 18.7                         | 15.9       | 23.6        |  |
| <b>455</b>         | <b>Ave WM 1</b> | <b>12.5</b> | <b>5.9</b> | <b>27.8</b> | <b>9.8</b> | <b>8.1</b> | <b>49.6</b> | <b>26.8</b> | <b>14.6</b> | <b>31.6</b> | <b>29.5</b> | <b>17.0</b> | <b>37.6</b> | <b>21.4</b>     | <b>12.9</b> | <b>27.3</b> | <b>78.6</b>                | <b>72.7</b> | <b>87.1</b> | <b>29.6</b>              | <b>13.9</b> | <b>39.6</b> | <b>20.6</b>                  | <b>9.7</b> | <b>29.6</b> |  |
|                    | <b>Min WM 1</b> |             |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |  |
|                    | <b>Max WM 1</b> |             |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |  |

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2006/2007)**  
(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> |                 |              |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |
| 6                  | Region 12       | 11.1         | 10.3       | 12.6        | 9.5        | 9.2        | 10.0        | 26.3        | 25.1        | 27.7        | 31.4        | 30.0        | 32.4        | 21.6            | 20.4        | 22.6        | 78.4                       | 77.4        | 79.6        | 29.2                     | 27.1        | 33.6        | 18.9                         | 17.4       | 20.4        |
| 6                  | Region 13       | 11.6         | 8.4        | 15.3        | 9.3        | 8.8        | 10.2        | 26.0        | 23.1        | 29.6        | 30.8        | 26.2        | 36.2        | 22.3            | 20.5        | 24.5        | 77.7                       | 75.5        | 79.5        | 28.1                     | 23.8        | 32.6        | 19.6                         | 15.9       | 23.2        |
| 7                  | Region 14       | 10.7         | 9.5        | 11.3        | 9.2        | 8.8        | 9.7         | 26.4        | 25.4        | 27.9        | 32.3        | 30.2        | 33.4        | 21.4            | 20.2        | 23.3        | 78.6                       | 76.7        | 79.8        | 27.8                     | 25.0        | 30.1        | 20.2                         | 16.8       | 22.3        |
| 2                  | Region 15       | 12.7         | 11.6       | 13.9        | 9.9        | 9.4        | 10.4        | 27.1        | 25.2        | 29.0        | 27.6        | 26.4        | 28.8        | 22.7            | 21.3        | 24.0        | 77.3                       | 76.0        | 78.7        | 27.6                     | 27.3        | 27.9        | 18.9                         | 17.2       | 20.7        |
| 1                  | Region 16       | 14.5         | 14.5       | 14.5        | 9.8        | 9.8        | 9.8         | 24.2        | 24.2        | 24.2        | 23.8        | 23.8        | 23.8        | 27.6            | 27.6        | 27.6        | 72.4                       | 72.4        | 72.4        | 35.8                     | 35.8        | 35.8        | 24.3                         | 24.3       | 24.3        |
| 8                  | Region 17       | 9.9          | 8.6        | 11.2        | 9.0        | 8.5        | 9.5         | 26.9        | 24.6        | 30.1        | 32.7        | 29.0        | 35.6        | 21.6            | 20.0        | 23.8        | 78.4                       | 76.2        | 80.0        | 28.3                     | 26.2        | 31.9        | 20.1                         | 16.9       | 22.6        |
| 8                  | Region 19       | 10.8         | 9.9        | 12.9        | 9.3        | 8.9        | 10.2        | 25.9        | 24.2        | 30.7        | 32.0        | 29.0        | 34.1        | 22.2            | 19.8        | 23.2        | 77.8                       | 76.8        | 80.2        | 30.6                     | 28.0        | 33.0        | 22.9                         | 20.6       | 25.0        |
| 1                  | Region 20       | 11.6         | 11.6       | 11.6        | 9.7        | 9.7        | 9.7         | 26.2        | 26.2        | 26.2        | 31.0        | 31.0        | 31.0        | 21.4            | 21.4        | 21.4        | 78.6                       | 78.6        | 78.6        | 25.9                     | 25.9        | 25.9        | 18.7                         | 18.7       | 18.7        |
| 9                  | Region 21       | 11.9         | 8.9        | 15.4        | 9.8        | 9.1        | 10.5        | 25.5        | 23.3        | 27.5        | 29.6        | 25.7        | 32.4        | 23.2            | 21.6        | 26.3        | 76.8                       | 73.7        | 78.4        | 31.4                     | 28.0        | 35.2        | 21.5                         | 18.2       | 24.7        |
| 1                  | Region 22       | 11.9         | 11.9       | 11.9        | 9.8        | 9.8        | 9.8         | 27.0        | 27.0        | 27.0        | 30.5        | 30.5        | 30.5        | 20.7            | 20.7        | 20.7        | 79.3                       | 79.3        | 79.3        | 29.7                     | 29.7        | 29.7        | 25.3                         | 25.3       | 25.3        |
| 8                  | Region 23       | 11.6         | 10.7       | 12.4        | 9.4        | 8.5        | 10.5        | 26.5        | 24.8        | 27.6        | 31.8        | 28.8        | 35.6        | 20.7            | 19.1        | 23.2        | 79.3                       | 76.8        | 80.9        | 28.1                     | 20.6        | 36.5        | 20.4                         | 11.9       | 29.0        |
| 3                  | Region 24       | 11.8         | 9.9        | 14.1        | 9.3        | 9.0        | 9.6         | 26.6        | 24.5        | 28.5        | 29.6        | 26.3        | 32.3        | 22.7            | 20.5        | 25.5        | 77.3                       | 74.5        | 79.5        | 29.7                     | 25.5        | 34.2        | 22.5                         | 20.4       | 24.8        |
| 1                  | Region 28       | 12.8         | 12.8       | 12.8        | 9.7        | 9.7        | 9.7         | 26.8        | 26.8        | 26.8        | 29.9        | 29.9        | 29.9        | 20.9            | 20.9        | 20.9        | 79.1                       | 79.1        | 79.1        | 27.0                     | 27.0        | 27.0        | 16.7                         | 16.7       | 16.7        |
| 1                  | Region 30       | 15.3         | 15.3       | 15.3        | 10.0       | 10.0       | 10.0        | 24.1        | 24.1        | 24.1        | 25.9        | 25.9        | 25.9        | 24.7            | 24.7        | 24.7        | 75.3                       | 75.3        | 75.3        | 25.5                     | 25.5        | 25.5        | 18.7                         | 18.7       | 18.7        |
| 1                  | Region 31       | 11.8         | 11.8       | 11.8        | 9.1        | 9.1        | 9.1         | 25.8        | 25.8        | 25.8        | 28.2        | 28.2        | 28.2        | 25.1            | 25.1        | 25.1        | 74.9                       | 74.9        | 74.9        | 21.0                     | 21.0        | 21.0        | 6.7                          | 6.7        | 6.7         |
| 1                  | Region 33       | 13.1         | 13.1       | 13.1        | 10.0       | 10.0       | 10.0        | 25.6        | 25.6        | 25.6        | 25.5        | 25.5        | 25.5        | 25.7            | 25.7        | 25.7        | 74.3                       | 74.3        | 74.3        | 25.4                     | 25.4        | 25.4        | 16.4                         | 16.4       | 16.4        |
| 2                  | Region 34       | 13.5         | 13.4       | 13.6        | 10.1       | 10.1       | 10.2        | 26.5        | 26.4        | 26.5        | 27.8        | 26.4        | 29.2        | 22.1            | 20.9        | 23.3        | 77.9                       | 76.7        | 79.1        | 26.5                     | 24.0        | 29.1        | 16.2                         | 12.0       | 20.4        |
| <b>66</b>          | <b>Ave WM 2</b> | <b>11.4</b>  | <b>8.4</b> | <b>15.4</b> | <b>9.4</b> | <b>8.5</b> | <b>10.5</b> | <b>26.2</b> | <b>23.1</b> | <b>30.7</b> | <b>30.8</b> | <b>23.8</b> | <b>36.2</b> | <b>22.1</b>     | <b>19.1</b> | <b>27.6</b> | <b>77.9</b>                | <b>72.4</b> | <b>80.9</b> | <b>28.8</b>              | <b>20.6</b> | <b>36.5</b> | <b>20.3</b>                  | <b>6.7</b> | <b>29.0</b> |
|                    | <b>Min WM 2</b> |              |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |
|                    | <b>Max WM 2</b> |              |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE ACCORDING TO GRADE (2006/2007)**  
(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. | ave.                     | min. | max. | ave.                         | min. | max. |
| <b>GRADE: WM 3</b>         |                        |             |             |             |            |      |             |             |      |             |             |            |             |             |      |             |                 |      |             |              |      |             |                            |      |      |                          |      |      |                              |      |      |
| 4                          | Region 12              | 11.2        | 10.2        | 11.7        | 9.3        | 8.8  | 9.8         | 26.2        | 24.9 | 28.2        | 31.8        | 29.9       | 34.3        | 21.5        | 19.8 | 23.7        | 78.5            | 76.3 | 80.2        | 28.4         | 25.9 | 34.3        | 17.2                       | 13.2 | 23.2 |                          |      |      |                              |      |      |
| 3                          | Region 13              | 10.1        | 9.4         | 11.0        | 8.9        | 8.6  | 9.4         | 27.3        | 26.0 | 29.2        | 33.0        | 31.6       | 34.5        | 20.6        | 19.7 | 21.2        | 79.4            | 78.8 | 80.3        | 25.8         | 23.5 | 29.5        | 15.5                       | 14.1 | 18.0 |                          |      |      |                              |      |      |
| 4                          | Region 14              | 11.4        | 10.0        | 14.6        | 9.7        | 9.0  | 10.2        | 25.5        | 22.3 | 27.7        | 30.1        | 26.4       | 32.4        | 23.3        | 21.0 | 26.5        | 76.7            | 73.5 | 79.0        | 29.0         | 27.5 | 31.8        | 19.7                       | 18.2 | 21.5 |                          |      |      |                              |      |      |
| 4                          | Region 15              | 12.3        | 9.7         | 15.1        | 9.7        | 9.2  | 10.8        | 25.4        | 21.8 | 28.6        | 29.9        | 25.4       | 34.3        | 22.6        | 19.6 | 25.3        | 77.4            | 74.7 | 80.4        | 27.1         | 24.5 | 30.4        | 16.6                       | 13.2 | 23.2 |                          |      |      |                              |      |      |
| 3                          | Region 16              | 14.9        | 14.8        | 15.1        | 9.8        | 9.7  | 10.0        | 22.4        | 21.1 | 23.3        | 25.2        | 24.5       | 25.9        | 27.7        | 27.5 | 28.0        | 72.3            | 72.0 | 72.5        | 32.9         | 31.2 | 35.7        | 22.1                       | 18.8 | 25.1 |                          |      |      |                              |      |      |
| 6                          | Region 17              | 10.8        | 8.9         | 12.1        | 9.1        | 8.6  | 9.3         | 25.7        | 23.4 | 27.6        | 32.1        | 30.7       | 34.5        | 22.3        | 20.6 | 24.7        | 77.7            | 75.3 | 79.4        | 26.6         | 22.8 | 27.9        | 20.1                       | 18.0 | 22.1 |                          |      |      |                              |      |      |
| 3                          | Region 19              | 12.0        | 10.4        | 14.7        | 9.5        | 9.1  | 10.4        | 25.0        | 24.4 | 25.5        | 29.3        | 27.3       | 30.9        | 24.2        | 23.2 | 25.3        | 75.8            | 74.7 | 76.8        | 29.4         | 27.5 | 31.0        | 20.3                       | 18.6 | 22.5 |                          |      |      |                              |      |      |
| 2                          | Region 20              | 12.1        | 11.8        | 12.3        | 9.5        | 9.5  | 9.6         | 24.3        | 22.4 | 26.1        | 29.6        | 29.2       | 30.0        | 24.5        | 22.5 | 26.5        | 75.5            | 73.5 | 77.5        | 29.0         | 28.1 | 30.0        | 20.2                       | 20.0 | 20.5 |                          |      |      |                              |      |      |
| 1                          | Region 21              | 13.8        | 13.8        | 13.8        | 9.8        | 9.8  | 9.8         | 26.0        | 26.0 | 26.0        | 27.8        | 27.8       | 27.8        | 22.6        | 22.6 | 22.6        | 77.4            | 77.4 | 77.4        | 32.3         | 32.3 | 32.3        | 21.1                       | 21.1 | 21.1 |                          |      |      |                              |      |      |
| 1                          | Region 22              | 10.9        | 10.9        | 10.9        | 9.3        | 9.3  | 9.3         | 24.2        | 24.2 | 24.2        | 33.9        | 33.9       | 33.9        | 21.7        | 21.7 | 21.7        | 78.3            | 78.3 | 78.3        | 29.9         | 29.9 | 29.9        | 23.8                       | 23.8 | 23.8 |                          |      |      |                              |      |      |
| 2                          | Region 23              | 11.0        | 10.6        | 11.5        | 9.9        | 9.7  | 10.1        | 26.8        | 25.5 | 28.0        | 32.3        | 31.7       | 32.9        | 20.0        | 18.4 | 21.6        | 80.0            | 78.4 | 81.6        | 28.8         | 26.4 | 31.2        | 20.4                       | 19.7 | 21.0 |                          |      |      |                              |      |      |
| 2                          | Region 24              | 11.4        | 11.0        | 11.8        | 9.4        | 9.4  | 9.5         | 27.0        | 26.8 | 27.2        | 31.0        | 30.9       | 31.0        | 21.2        | 21.0 | 21.4        | 78.8            | 78.6 | 79.0        | 30.3         | 27.1 | 33.5        | 20.4                       | 20.0 | 20.8 |                          |      |      |                              |      |      |
| 1                          | Region 32              | 12.4        | 12.4        | 12.4        | 9.4        | 9.4  | 9.4         | 23.3        | 23.3 | 23.3        | 30.0        | 30.0       | 30.0        | 24.9        | 24.9 | 24.9        | 75.1            | 75.1 | 75.1        | 19.2         | 19.2 | 19.2        | 5.4                        | 5.4  | 5.4  |                          |      |      |                              |      |      |
| 1                          | Region 33              | 15.1        | 15.1        | 15.1        | 10.1       | 10.1 | 10.1        | 26.2        | 26.2 | 26.2        | 23.7        | 23.7       | 23.7        | 25.0        | 25.0 | 25.0        | 75.0            | 75.0 | 75.0        | 35.5         | 35.5 | 35.5        | 20.3                       | 20.3 | 20.3 |                          |      |      |                              |      |      |
| 1                          | Region 34              | 12.3        | 12.3        | 12.3        | 9.7        | 9.7  | 9.7         | 25.6        | 25.6 | 25.6        | 31.6        | 31.6       | 31.6        | 20.8        | 20.8 | 20.8        | 79.2            | 79.2 | 79.2        | 33.6         | 33.6 | 33.6        | 26.5                       | 26.5 | 26.5 |                          |      |      |                              |      |      |
| <b>38</b>                  | <b>Ave WM 3</b>        | <b>11.8</b> |             |             | <b>9.5</b> |      |             | <b>25.5</b> |      |             | <b>30.4</b> |            |             | <b>22.8</b> |      |             | <b>77.2</b>     |      |             | <b>28.7</b>  |      |             | <b>19.2</b>                |      |      |                          |      |      |                              |      |      |
|                            | <b>Min WM 3</b>        |             | <b>8.9</b>  |             | <b>8.6</b> |      |             | <b>21.1</b> |      |             | <b>23.7</b> |            |             | <b>18.4</b> |      |             | <b>72.0</b>     |      |             | <b>19.2</b>  |      |             | <b>5.4</b>                 |      |      | <b>26.5</b>              |      |      |                              |      |      |
|                            | <b>Max WM 3</b>        |             |             | <b>15.1</b> |            |      | <b>10.8</b> |             |      | <b>29.2</b> |             |            | <b>34.5</b> |             |      | <b>28.0</b> |                 |      | <b>81.6</b> |              |      | <b>35.7</b> |                            |      |      |                          |      |      |                              |      |      |
| <b>GRADE: COM</b>          |                        |             |             |             |            |      |             |             |      |             |             |            |             |             |      |             |                 |      |             |              |      |             |                            |      |      |                          |      |      |                              |      |      |
| 1                          | Region 15              | 10.4        | 10.4        | 10.4        | 9.5        | 9.5  | 9.5         | 25.8        | 25.8 | 25.8        | 33.4        | 33.4       | 33.4        | 20.9        | 20.9 | 20.9        | 79.1            | 79.1 | 79.1        | 29.5         | 29.5 | 29.5        | 22.0                       | 22.0 | 22.0 |                          |      |      |                              |      |      |
| 1                          | Region 21              | 13.7        | 13.7        | 13.7        | 10.6       | 10.6 | 10.6        | 25.5        | 25.5 | 25.5        | 28.2        | 28.2       | 28.2        | 22.1        | 22.1 | 22.1        | 77.9            | 77.9 | 77.9        | 27.4         | 27.4 | 27.4        | 8.9                        | 8.9  | 8.9  |                          |      |      |                              |      |      |
| 1                          | Region 26              | 17.5        | 17.5        | 17.5        | 9.8        | 9.8  | 9.8         | 21.5        | 21.5 | 21.5        | 23.7        | 23.7       | 23.7        | 27.4        | 27.4 | 27.4        | 72.6            | 72.6 | 72.6        | 29.8         | 29.8 | 29.8        | 20.3                       | 20.3 | 20.3 |                          |      |      |                              |      |      |
| 1                          | Region 33              | 14.7        | 14.7        | 14.7        | 9.7        | 9.7  | 9.7         | 23.9        | 23.9 | 23.9        | 26.7        | 26.7       | 26.7        | 25.0        | 25.0 | 25.0        | 75.0            | 75.0 | 75.0        | 12.4         | 12.4 | 12.4        | 23.3                       | 23.3 | 23.3 |                          |      |      |                              |      |      |
| <b>4</b>                   | <b>Ave COM</b>         | <b>14.1</b> |             |             | <b>9.9</b> |      |             | <b>24.2</b> |      |             | <b>28.0</b> |            |             | <b>23.8</b> |      |             | <b>76.2</b>     |      |             | <b>24.8</b>  |      |             | <b>18.6</b>                |      |      |                          |      |      |                              |      |      |
|                            | <b>Min COM</b>         |             | <b>10.4</b> |             | <b>9.5</b> |      |             | <b>21.5</b> |      |             | <b>23.7</b> |            |             | <b>20.9</b> |      |             | <b>72.6</b>     |      |             | <b>12.4</b>  |      |             | <b>8.9</b>                 |      |      | <b>23.3</b>              |      |      |                              |      |      |
|                            | <b>Max COM</b>         |             |             | <b>17.5</b> |            |      | <b>10.6</b> |             |      | <b>25.8</b> |             |            | <b>33.4</b> |             |      | <b>27.4</b> |                 |      | <b>79.1</b> |              |      | <b>29.8</b> |                            |      |      |                          |      |      |                              |      |      |
| <b>563 Ave white maize</b> |                        |             |             |             |            |      |             |             |      |             |             |            |             |             |      |             |                 |      |             |              |      |             |                            |      |      |                          |      |      |                              |      |      |
|                            | <b>Min white maize</b> | <b>12.4</b> |             |             | <b>9.7</b> |      |             | <b>26.6</b> |      |             | <b>29.7</b> |            |             | <b>21.6</b> |      |             | <b>78.4</b>     |      |             | <b>29.5</b>  |      |             | <b>20.5</b>                |      |      | <b>29.6</b>              |      |      |                              |      |      |
|                            | <b>Max white maize</b> |             | <b>5.9</b>  |             | <b>8.1</b> |      |             | <b>14.6</b> |      |             | <b>17.0</b> |            |             | <b>12.9</b> |      |             | <b>72.0</b>     |      |             | <b>12.4</b>  |      |             | <b>5.4</b>                 |      |      | <b>29.6</b>              |      |      |                              |      |      |
|                            |                        |             |             | <b>27.8</b> |            |      | <b>49.6</b> |             |      | <b>31.6</b> |             |            | <b>37.6</b> |             |      | <b>28.0</b> |                 |      | <b>87.1</b> |              |      | <b>39.6</b> |                            |      |      |                          |      |      |                              |      |      |

**TABLE 19: ROFF MILLING AND WHITENESS INDEX OF WHITE MAIZE (2006/2007)**

| 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         | 12.4        | 12.4       | 12.4        | 9.8        | 9.8        | 9.8         | 27.1        | 27.1        | 27.1        | 30.3        | 30.3        | 30.3        | 20.3            | 20.3        | 20.3        | 79.7                       | 79.7        | 79.7        | 23.9                     | 23.9        | 23.9        | 15.4                         | 15.4       | 15.4        |  |
| 1                   | Region 10        | 13.0        | 13.0       | 13.0        | 9.6        | 9.6        | 9.6         | 27.1        | 27.1        | 27.1        | 29.1        | 29.1        | 29.1        | 21.2            | 21.2        | 21.2        | 78.8                       | 78.8        | 78.8        | 24.9                     | 24.9        | 24.9        | 13.9                         | 13.9       | 13.9        |  |
| 9                   | Region 11        | 11.6        | 10.5       | 12.5        | 9.6        | 9.0        | 10.6        | 25.8        | 22.6        | 28.6        | 31.6        | 30.4        | 33.3        | 21.5            | 19.4        | 24.5        | 78.5                       | 75.5        | 80.6        | 26.6                     | 16.7        | 35.0        | 18.2                         | 10.1       | 28.5        |  |
| 16                  | Region 12        | 11.5        | 9.8        | 16.2        | 9.5        | 8.8        | 10.5        | 26.2        | 23.3        | 28.2        | 31.2        | 25.4        | 34.3        | 21.6            | 19.8        | 24.6        | 78.4                       | 75.4        | 80.2        | 29.2                     | 25.9        | 34.5        | 19.1                         | 13.2       | 26.4        |  |
| 13                  | Region 13        | 11.2        | 8.4        | 15.3        | 9.2        | 8.6        | 10.2        | 26.5        | 23.1        | 29.6        | 31.6        | 26.2        | 36.2        | 21.5            | 19.7        | 24.5        | 78.5                       | 75.5        | 80.3        | 28.5                     | 23.5        | 32.8        | 19.2                         | 14.1       | 23.2        |  |
| 39                  | Region 14        | 12.0        | 9.5        | 14.6        | 9.7        | 8.8        | 11.4        | 27.2        | 22.3        | 30.4        | 30.0        | 26.0        | 33.4        | 21.1            | 19.0        | 26.5        | 78.9                       | 73.5        | 81.0        | 28.8                     | 25.0        | 35.0        | 20.4                         | 12.1       | 24.5        |  |
| 34                  | Region 15        | 12.1        | 9.7        | 15.1        | 9.9        | 9.2        | 11.4        | 27.2        | 21.8        | 31.0        | 30.2        | 25.3        | 34.3        | 20.6            | 18.1        | 25.3        | 79.4                       | 74.7        | 81.9        | 26.6                     | 13.9        | 32.6        | 18.5                         | 13.2       | 23.2        |  |
| 15                  | Region 16        | 13.2        | 10.8       | 15.1        | 9.7        | 8.8        | 10.3        | 26.3        | 21.1        | 30.5        | 28.2        | 23.8        | 33.8        | 22.6            | 18.5        | 28.0        | 77.4                       | 72.0        | 81.5        | 30.0                     | 24.2        | 38.1        | 21.0                         | 16.7       | 29.0        |  |
| 21                  | Region 17        | 10.5        | 8.6        | 12.1        | 9.2        | 8.4        | 11.1        | 26.5        | 23.4        | 30.1        | 32.1        | 27.8        | 35.6        | 21.8            | 19.1        | 24.7        | 78.2                       | 75.3        | 80.9        | 29.1                     | 22.8        | 36.8        | 21.6                         | 16.9       | 28.3        |  |
| 17                  | Region 18        | 11.7        | 10.8       | 13.1        | 9.5        | 8.6        | 11.7        | 26.3        | 21.8        | 29.7        | 30.5        | 26.7        | 34.6        | 22.0            | 19.1        | 25.0        | 78.0                       | 75.0        | 80.9        | 30.7                     | 27.2        | 33.3        | 22.0                         | 18.2       | 26.5        |  |
| 18                  | Region 19        | 11.4        | 9.9        | 14.7        | 9.4        | 8.6        | 10.6        | 25.7        | 23.7        | 30.7        | 30.9        | 27.3        | 34.1        | 22.6            | 19.8        | 25.3        | 77.4                       | 74.7        | 80.2        | 30.4                     | 27.5        | 33.0        | 21.9                         | 18.6       | 25.0        |  |
| 9                   | Region 20        | 12.9        | 11.6       | 16.4        | 9.7        | 9.2        | 11.1        | 24.7        | 22.4        | 27.4        | 29.8        | 28.5        | 31.1        | 22.8            | 20.3        | 26.5        | 77.2                       | 73.5        | 79.7        | 30.8                     | 25.9        | 34.9        | 21.5                         | 18.7       | 24.7        |  |
| 25                  | Region 21        | 12.0        | 8.9        | 15.4        | 9.6        | 9.1        | 10.6        | 26.3        | 23.3        | 30.3        | 29.8        | 25.7        | 32.7        | 22.3            | 20.3        | 26.3        | 77.7                       | 73.7        | 79.7        | 30.7                     | 26.0        | 36.7        | 20.8                         | 8.9        | 25.3        |  |
| 33                  | Region 22        | 12.5        | 10.7       | 13.8        | 9.8        | 9.2        | 11.1        | 26.8        | 24.2        | 29.2        | 29.7        | 25.7        | 33.9        | 21.1            | 18.2        | 23.0        | 78.9                       | 77.0        | 81.8        | 29.4                     | 26.1        | 35.5        | 20.9                         | 17.2       | 25.3        |  |
| 99                  | Region 23        | 12.2        | 5.9        | 14.4        | 10.1       | 8.5        | 49.6        | 26.5        | 14.6        | 29.9        | 30.3        | 17.0        | 35.6        | 20.9            | 12.9        | 24.2        | 79.1                       | 75.8        | 87.1        | 29.9                     | 20.6        | 36.5        | 21.2                         | 11.9       | 29.0        |  |
| 36                  | Region 24        | 11.7        | 9.5        | 14.1        | 9.6        | 8.7        | 11.2        | 26.8        | 24.0        | 29.7        | 29.6        | 25.3        | 32.6        | 22.2            | 20.4        | 25.5        | 77.8                       | 74.5        | 79.6        | 31.5                     | 25.5        | 36.4        | 22.6                         | 19.7       | 27.6        |  |
| 18                  | Region 25        | 12.9        | 7.3        | 14.6        | 9.7        | 8.1        | 11.1        | 27.0        | 23.7        | 30.0        | 28.8        | 24.8        | 37.6        | 21.6            | 19.9        | 23.9        | 78.4                       | 76.1        | 80.1        | 29.6                     | 22.0        | 34.0        | 20.6                         | 13.9       | 24.7        |  |
| 8                   | Region 26        | 14.7        | 8.8        | 27.8        | 9.3        | 8.3        | 10.1        | 24.5        | 20.7        | 28.3        | 29.3        | 21.0        | 35.3        | 22.2            | 18.7        | 27.4        | 77.8                       | 72.6        | 81.3        | 30.6                     | 26.5        | 37.3        | 20.9                         | 17.1       | 29.5        |  |
| 7                   | Region 27        | 10.6        | 9.7        | 13.5        | 8.7        | 8.5        | 9.6         | 26.8        | 24.7        | 28.6        | 31.5        | 28.8        | 33.6        | 22.4            | 19.6        | 23.5        | 77.6                       | 76.5        | 80.4        | 29.6                     | 27.1        | 35.1        | 20.0                         | 17.2       | 21.2        |  |
| 17                  | Region 28        | 13.2        | 11.5       | 14.8        | 9.8        | 9.3        | 10.6        | 28.2        | 25.2        | 31.6        | 28.9        | 26.0        | 31.2        | 19.9            | 17.8        | 21.7        | 80.1                       | 78.3        | 82.2        | 27.6                     | 25.0        | 31.0        | 19.7                         | 15.6       | 25.1        |  |
| 15                  | Region 29        | 14.0        | 12.3       | 16.3        | 9.8        | 9.2        | 10.3        | 28.1        | 25.0        | 30.2        | 27.8        | 24.8        | 30.0        | 20.4            | 18.2        | 23.8        | 79.6                       | 76.2        | 81.8        | 27.3                     | 24.1        | 34.5        | 17.3                         | 12.9       | 21.1        |  |
| 21                  | Region 30        | 13.2        | 11.4       | 15.3        | 9.7        | 9.1        | 10.6        | 26.0        | 22.5        | 28.3        | 27.8        | 24.8        | 32.2        | 23.3            | 20.9        | 27.3        | 76.7                       | 72.7        | 79.1        | 29.8                     | 24.1        | 33.6        | 20.7                         | 15.2       | 26.8        |  |
| 7                   | Region 31        | 13.3        | 11.8       | 14.8        | 9.9        | 9.1        | 10.4        | 27.3        | 25.8        | 29.1        | 28.8        | 26.3        | 30.4        | 20.8            | 18.8        | 25.1        | 79.2                       | 74.9        | 81.2        | 25.1                     | 21.0        | 31.9        | 14.9                         | 6.7        | 22.9        |  |
| 21                  | Region 32        | 13.4        | 12.3       | 14.7        | 9.7        | 9.1        | 10.4        | 26.7        | 23.3        | 30.3        | 28.6        | 26.6        | 31.4        | 21.7            | 18.6        | 24.9        | 78.3                       | 75.1        | 81.4        | 28.2                     | 19.2        | 34.3        | 17.9                         | 5.4        | 25.6        |  |
| 21                  | Region 33        | 13.6        | 9.8        | 15.4        | 10.3       | 9.5        | 11.3        | 26.3        | 23.9        | 28.7        | 26.8        | 23.6        | 29.2        | 23.1            | 18.2        | 25.7        | 76.9                       | 74.3        | 81.8        | 30.5                     | 12.4        | 37.9        | 21.6                         | 16.4       | 29.6        |  |
| 25                  | Region 34        | 13.5        | 11.7       | 15.9        | 10.0       | 9.3        | 11.1        | 27.1        | 24.5        | 29.5        | 28.2        | 24.2        | 31.6        | 21.2            | 18.2        | 23.3        | 78.8                       | 76.7        | 81.8        | 32.2                     | 22.6        | 39.6        | 21.5                         | 9.7        | 28.3        |  |
| 10                  | Region 35        | 11.8        | 8.4        | 13.0        | 9.4        | 8.5        | 10.0        | 26.6        | 25.1        | 29.7        | 29.4        | 26.9        | 34.6        | 22.8            | 19.4        | 25.9        | 77.2                       | 74.1        | 80.6        | 27.7                     | 19.2        | 33.2        | 20.1                         | 12.7       | 25.0        |  |
| 7                   | Region 36        | 12.5        | 11.8       | 13.1        | 9.6        | 9.5        | 9.9         | 24.7        | 23.3        | 26.4        | 30.9        | 29.3        | 32.9        | 22.3            | 20.4        | 24.4        | 77.7                       | 75.6        | 79.6        | 30.2                     | 27.9        | 33.5        | 18.7                         | 15.9       | 23.6        |  |
| <b>563</b>          | <b>Ave white</b> | <b>12.4</b> | <b>5.9</b> | <b>27.8</b> | <b>9.7</b> | <b>8.1</b> | <b>49.6</b> | <b>26.6</b> | <b>14.6</b> | <b>31.6</b> | <b>29.7</b> | <b>17.0</b> | <b>37.6</b> | <b>21.6</b>     | <b>12.9</b> | <b>28.0</b> | <b>78.4</b>                | <b>72.0</b> | <b>87.1</b> | <b>29.5</b>              | <b>12.4</b> | <b>39.6</b> | <b>20.5</b>                  | <b>5.4</b> | <b>29.6</b> |  |
|                     | <b>Min white</b> |             |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |  |
|                     | <b>Max white</b> |             |            |             |            |            |             |             |             |             |             |             |             |                 |             |             |                            |             |             |                          |             |             |                              |            |             |  |