## **SOUTH AFRICAN** COMMERCIAL WHEAT QUALITY FOR THE 2012/2013 SEASON

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- The Grain Silo Industry and its members for their cooperation in providing the samples to make this survey possible.
- Milling companies for providing samples of wheat delivered directly to the mills.

## Summary

The final calculated wheat production figure of 1 870 000 tons for the 2012/2013 season, was 7% lower than the previous season's 2 005 000 tons. The 10 year production average is 1 854 728 tons (2003/2004 to 2012/2013 seasons). A total area of 511 200 hectares was utilized for wheat production. The average yield increased from 3.32 t/ha in the previous season to 3.66 t/ha this season. (Figures obtained from the Crop Estimates Committee).

The whole wheat protein average was 11.4% compared to the 11.8% of the previous season and the ten year average of 12.0%. The average hectolitre mass was 81.3 kg/hl and slightly higher than the 80.7 kg/hl of the 2011/2012 season. The average mixogram peak time of 2.9 minutes compared well with the 3.0 minutes of the previous two seasons.

The percentage of samples in this survey graded as B1, decreased significantly from 41% the previous season to 22% this season, the main contributing factor being the lower protein contents compared to the previous season observed in most of the production regions. The percentage of samples having protein contents higher than 12.0% decreased from 46.2% to 30.5%. The average falling number this season was 360 seconds. Only sixteen of the samples analysed gave falling number values below 250 seconds. Seven of these samples were from the Free State production regions and nine from the Rûens production regions.

The overall flour and dough quality were good and compared well with the previous three seasons. Consistency in quality is one of the most important quality factors.

## Introduction

During the harvesting season, a representative sample of each delivery of wheat was taken according to the prescribed wheat regulation.

A sub-sample of each of these grading samples was collected in a bin according to grade and class per silo bin at each silo. This composite bin sample was then divided and a 3 kg sample was sent to the Southern African Grain Laboratory (SAGL) for the annual wheat crop quality survey. SAGL analysed 337 samples to proportionally represent the production of wheat in all the different production regions.

Cultivar identification was done on these samples and sales figures of seed sold by the commercial grain silo owners were obtained. The samples were fully graded and thousand kernel mass was done. Small samples were milled on the Quadromat mill, followed by a mixograph and RVA analysis.

Composite samples were made up per class and grade for each production region and milled on the Bühler mill. Moisture, protein and colour were determined. Rheological tests, namely gluten, mixogram, farinogram, alveogram, extensogram and 100-gram baking tests, were then performed.

The results (as averages per region) are made available weekly on the SAGL website (www.sagl. co.za) as soon as the first samples are received. The hard copy reports are distributed to all interested parties and can also be downloaded from the website.

Summaries comparing the quality of the local wheat for the 2010/2011 and 2012/2013 as well as the 2011/2012 and 2012/2013 seasons are provided.

Data on imported wheat are also included in the report.