## **SOUTH AFRICAN**

## COMMERCIAL WHEAT QUALITY FOR THE 2011/2012 SEASON

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## Introduction

The final wheat production of 2 005 000 tons for the 2011/2012 season, was 40% higher than the previous season's 1 430 000 tons. This is 5.5% higher than the 10 year average of 1 899 803 tons (2002/2003 to 2011/2012 seasons). A total area of 604 700 hectares was utilized for wheat production. The average yield increased from 2.56 t/ha in the previous season to 3.32 t/ha this season. (Figures obtained from the Crop Estimates Committee).

The whole wheat protein average was 11.8% compared to the 12.1% of the previous season and the ten year average of 12.0%. The average hectolitre mass was 80.7 kg/hl and slightly higher than the 80.3 kg/hl of the 2010/2011 season. The average mixogram peak time of 3.0 minutes was similar to the previous two seasons.

The percentage of samples in this survey graded as B1, decreased from 44% the previous season to 41% this season, the main contributing factor being the lower protein contents compared to the previous season observed in most of the production regions. The average falling number this season was 387 seconds. Only eleven of the samples analysed gave falling number values below 250 seconds, all of these samples were from the Free State production regions.

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

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 433 samples to proportionally represent the production of wheat in all the different production regions.

The samples were fully graded and thousand kernel mass was done. Small samples were milled on the Quadromat mill, followed by a mixograph analysis.

Cultivar identification was done on these samples and sales figures of seed sold by the commercial grain silo owners were obtained.

Composite samples were made up per class and grade for each production region and milled on the Bühler mill. 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 2009/2010 and 2011/2012 as well as the 2010/2011 and 2011/2012 seasons are provided.

Data on imported wheat are also included in the report.