

SOUTH AFRICAN COMMERCIAL WHEAT QUALITY FOR THE 2006/2007 SEASON

Acknowledgements

With gratitude to:

- *The Winter Cereal Trust for its financial support in conducting this survey.*
- *The Grain Silo Industry and its members for their cooperation in providing the samples to make this survey possible.*
- *The National Chamber of Milling and its members for providing samples of wheat that were delivered directly to the mills.*

Introduction

The final calculated wheat production for the 2006/2007 season (2 105 000 tons) was 10 % better than the previous season (1 905 000 tons) and is also 10 % better than the 5-year average of 1 914 005 tons (2002/2003 to 2006/2007 seasons).

Although the hectolitre mass (78.4 kg/hl) and thousand kernel mass (37.2 g) were very good, this crop was of lower quality compared to the previous seasons.

About 10 % less samples made the grade B1 this season compared to other seasons. This was mainly because of the low protein levels.

The whole wheat protein averaged a ten year low with 11.45 % (12 % mb).

The quality of the flour was average to below average. The dough was of poorer quality than previous seasons with low alveogram and extensogram strengths. The farinogram development time of 3.4 minutes, was the shortest average ever experienced.

The straight-dough optimized 100-gram baking test, showed more variation in volume according to the protein content than in previous years.

Usually there are significant quality differences between the three major production regions, which was not evident with this season.

The Southern African Grain Laboratory (SAGL), receives samples from all the production areas, and determines the quality of the annual wheat crop. The results are then published in this report

and are also made available on the website www.sagl.co.za as raw data and an option to print the data in book format.

The SAGL has ISO 17025 accreditation and is also used as the reference laboratory for grain quality analyses in Southern Africa.

Samples, representing the production of each region, are fully graded and thousand kernel mass is done. Small samples are milled on the quadromat mill, after which a mixogram analysis is done.

Cultivar identification is done on these samples and sale figures of seed sold by the commercial grain silo owners are obtained.

Composite samples are made up per class and grade for each production region and milled on the Bühler mill. Rheological tests, such as a mixogram, farinogram, alveogram, extensogram and 100-gram baking test, are then performed.

Imported wheat (1 October 2005 - 30 September 2006)

The SAGL is also monitoring the quality of all wheat imported into South Africa. The same analyses which are done on the local crop are also done on the imported wheat. The last sixteen pages of this report contain summaries of imported wheat from specific countries during the 2005/2006 season compared to a summary of the local crop quality for the same season. Summaries of the quality of the local wheat for the 2004/2005 and 2006/2007 season are also provided.