

# SOUTH AFRICAN COMMERCIAL WHEAT QUALITY FOR THE 2014/2015 SEASON

## Acknowledgements

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## Summary

The commercial wheat crop of the 2014/2015 season was set at 1.750 million tons which is 120 000 tons lower than the previous season's crop. A total area of 476 570 hectares was utilized for wheat production and the average yield was 3.67 tons per hectare (Figures obtained from the Crop Estimates Committee).

The whole wheat protein average was 11.8% compared to the 11.6% of the previous season and the ten year average of 11.7%. The percentage of samples having protein contents higher than 12.0% increased from 39.5% to 45.5%. The average hectolitre mass was 80.2 kg/hl, higher than the 79.5 kg/hl of the 2013/2014 season. The hectoliter mass of only 7.7% of the samples was below the minimum Grade 1 requirement of 77 kg/hl.

The average falling number this season was 368 seconds. Four of the samples analysed gave falling number values below 250 seconds and of these only one was below 220 seconds. One of these samples was from the Free State, two from Mpumalanga and the remaining sample from Limpopo province. Sprouted kernel levels in these samples varied between 0 and 1.72% and no frost damage was observed, which may indicate the presence of late maturity alpha amylase in at least one of the samples.

The average mixogram peak time of 3.0 minutes was equal to the previous season and compared well with the ten year average of 2.9 minutes.

The overall flour and dough quality were good and compared well with the previous three seasons. The water absorption according to the Farinograph was lower and the distensibility of the dough as measured with the Alveograph increased on average compared to previous seasons.

## Introduction

This report provides the results of the seventeenth annual wheat crop quality survey performed by the Southern African Grain Laboratory NPC (SAGL). SAGL was established in 1997 on request of the Grain Industry. SAGL is an ISO 17025 accredited testing laboratory and participates in one national and sixteen international proficiency testing schemes as part of our ongoing quality assurance procedures to demonstrate technical competency and international comparability.

During the harvesting season (October to December for the southern production regions and November to January for the Northern production regions), 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 SAGL for the annual wheat crop quality survey. SAGL analysed 337 samples to provide as best possible a proportional representation of the production of wheat in all of 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 graded and the thousand kernel mass determined. Sub-samples were milled on the Quadromat mill for a mixograph analysis.