

SOUTH AFRICAN

COMMERCIAL WHEAT QUALITY FOR THE 2013/2014 SEASON

Acknowledgements

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Summary

The commercial wheat crop for the 2013/2014 season was set at 1.870 million tons which is equal to the previous season's crop. A total area of 505,500 hectares was utilized for wheat production and the average yield was 3.70 tons per hectare (Figures obtained from the Crop Estimates Committee).

The whole wheat protein average was 11.6% compared to the 11.4% of the previous season and the ten year average of 11.9%. The percentage of samples having protein contents higher than 12.0% increased from 30.5% to 39.5%. The average hectolitre mass was 79.5 kg/hl, lower than the 81.3 kg/hl of the 2012/2013 season. The average mixogram peak time of 3.0 minutes compared well with the previous two seasons.

The average falling number this season was 337 seconds. Twenty of the samples analysed gave falling number values below 220 seconds and of these seventeen were below 200 seconds. Three of the twenty samples were from the Rûens production regions, another three from the North West, ten from the Free State and four from Mpumalanga. Sprouted kernels were not visually present in all of these samples which may indicate the presence of late maturity alpha amylase.

The overall flour and dough quality were good and compared well with the previous three seasons. The water absorption according to the Farinograph was slightly lower and the distensibility of the dough as measured with the Alveograph increased on average compared to the 2012/2013 season.

Introduction

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 The Southern African Grain Laboratory (SAGL) for the annual wheat crop quality survey. SAGL analysed 340 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 the thousand kernel mass determined. Sub-samples were milled on the Quadromat mill for a mixograph 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 and a RVA analysis conducted. 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. Hard copy of the report are distributed to all interested parties and the report is also available in a PDF format on the website.

Summaries comparing the quality of the local wheat for the last three seasons are provided.

Data on imported wheat is also included in the report.