SOUTH AFRICAN

COMMERCIAL WHEAT QUALITY FOR THE 2009/2010 SEASON

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Introduction

The final wheat production of 1 958 000 tons for the 2009/2010 season, was 8 % lower than the previous season's 2 130 000 tons. This is 3 % lower than the 10 year average of 2 017 835 tons (2000/2001 to 2009/2010 seasons). A total area of 642 500 hectares was utilized for wheat production. (Figures obtained from the Crop Estimates Committee).

The whole wheat protein average was 11.7 % compared to the 12.0 % of the previous season, which is also the same as the ten year average. The average hectolitre mass was 79.9 kg/hl. This value includes the addition of 2 kg/hl to all individually obtained values as per the Hectolitre mass Dispensation (please see Methods page 53). The percentage of samples in this survey graded as B1 increased from 27 % the previous season to 33 % this season.

High levels of rainfall during harvesting in several parts of the Swartland in the Western Cape resulted in sprouting and low falling numbers. No major problems were experienced with the climatic conditions and rainfall patterns in the rest of the production regions.

Differences in the flour and dough qualities between the winter rainfall, summer rainfall and irrigation areas were observed as in previous seasons. The overall flour and dough quality was average to good.

The mixograph peak time of flour milled on the Quadromat mill averaged 2.9 minutes, varying from 2.5 minutes in the Western Cape to 3.3 minutes in the Free State. The straight-dough optimized 100-gram baking test showed little variation in volume according to the protein content. The average relationship between protein and bread volume was excellent.

During the harvesting season, a representative sample of each delivery of wheat is taken according to the prescribed wheat regulation. A sub-sample of each of these grading samples is collected in a bin according to grade and class per silo bin at each silo. This composite bin sample is then divided and a 5 kg sample is sent to the Southern African Grain Laboratory (SAGL) for the annual wheat crop quality survey. SAGL selected 480 samples representing the production of wheat in all the different production regions.

The samples, are fully graded and thousand kernel mass is done. Small samples are milled on the quadromat mill, followed by a mixogram analysis.

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, namely a mixogram, farinogram, alveogram, extensogram and 100-gram baking test, are 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 report is available from June each year (with the option to download the report from the website).

Summaries comparing the quality of the local wheat for the 2007/2008 and 2009/2010 as well as the 2008/2009 and 2009/2010 seasons are provided.