# SOUTH AFRICAN COMMERCIAL WHEAT QUALITY 2003/2004 CROP

## **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.

#### Introduction

As a result of the low production during the 2003/2004 season, the 5-year average South Africa's wheat production is now 2,085 million tons per year.

The Western Cape province produced 487 500 tons and the Free State province followed with 455 000 tons. (Final estimation of the Crop Estimates Committee CEC). These two provinces accounted for 66 % of the total wheat production.

The low production (38 % lower than the previous season) can be contributed to the drought in the Free State and the water restrictions in the irrigation areas in Mpumalanga, which led to less planting. The drought in the Swartland area in the Western Cape nearly halved the production in that province.

Irrigation wheat contributed more to the total crop this year because of the drought experienced in the Free State and especially in the Swartland area. The estimated area of wheat under irrigation is approximately 112 500 ha (15,0 %) with an estimated yield of 5,20 t/ha, and for dry land 635 500 ha (85,0 %) with an estimated yield of 1,50 t/ha.

The production is not enough for inland requirements, and South Africa has to import wheat to meet domestic consumption of approximately 2,684 million tons this year.

South Africa has three major and two smaller wheat breeding programmes with stringent quality evaluation procedures to continuously better commercial cultivars. Grading standards are also set high to ensure adequate quality control.

The crop quality is determined annually by the Southern African Grain Laboratory (SAGL), which is an association incorporated under section 21 (not for gain) and are also the official grain quality reference laboratory in Southern Africa.

### **Crop quality**

The final production figures was 1,540 million tons (including 33 000 tons retained on farms) with an average yield of 2,06 tons per hectare. 748 000 ha of wheat were planted (Crop Estimates Committee - CEC and Crop Estimates Liaison Committee - CELC).

The quality of this crop gave low hectolitre masses and high protein because of the dry weather conditions during 2003.

Every year representative wheat crop quality samples are taken by commercial grain silo owners and sent to the SAGL for the annual crop quality survey.

Changes to the Grading Regulation this season resulted in having five bread wheat grades mainly as a result of the protein content and hectolitre mass.

The samples are graded fully and the thousand kernel mass is done. Small samples are milled on the quadromat mill, after which a mixograph analysis is done.

Cultivar identification is done on these samples and figures of seed sold by the commercial grain silo owners are also gathered

Composite samples are made up per grade per region and milled on the Bühler mill. A farinograph, extensograph, alveograph, mixograph and baking test are then performed.