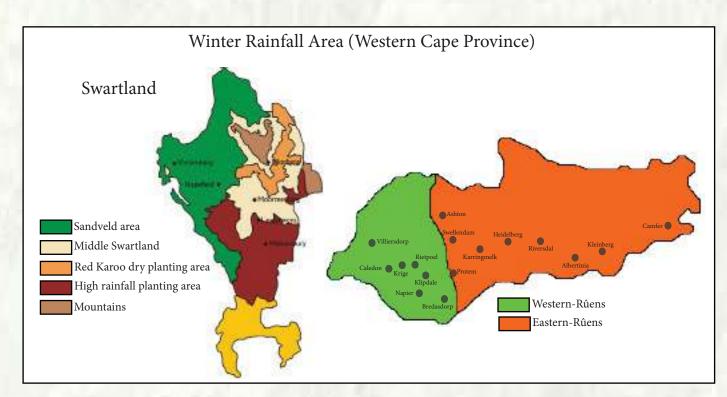
### **REGIONAL QUALITY**

#### WINTER RAINFALL AREA (Western Cape)

Production regions 1 to 6 fall within the winter rainfall area (Western Cape Province). Region 1 is Namaqualand, regions 2 - 4 are the Swartland area and regions 5 and 6 the Rûens area. The Western Cape had the highest production of all the provinces this season, namely 675 000 tons (35%) (CEC).

The hectolitre mass averaged 79.3 kg/hl. The thousand kernel mass averaged 39.9 gram, which is lower than the previous season's 42.1 gram. The average falling number was 353 seconds. The average protein content of 11.11 % (12 % mb) was the lowest of the different production areas.

Conditions for crop production were generally favourable in the winter rainfall area. Parts of the Swartland however experienced heavy rainfall during havesting which resulted in pre-harvest sprouting and therefore low falling numbers.



The screenings of 2.02 % was higher than the previous season's 1.72 %. The Bühler extraction averaged 74.2 % (average of wheat grades B1 to B4, UT and COW) and the average colour of the flour was -2.2 KJ units. This colour indicates a very white flour that is preferred by millers and bakers.

The mixogram peak time (Quadromat mill) averaged 2.5 minutes. The average farinogram absorption was 60.5 %. The average alveogram strength was 30.4 cm<sup>2</sup> and the average strength on the extensogram was 64 cm<sup>2</sup>. The alveogram strength in the Free State was 35.9 cm<sup>2</sup> and in the irrigation areas 40.0 cm<sup>2</sup>.

The 100-gram baking test showed an excellent relationship between protein content and bread volume.

# SUMMER RAINFALL AREA

(Free State)

Production regions 21 to 28, which fall within the Free State Province, had the second highest production, namely 622 750 tons (32 %) (CEC).

The 2.7 tons/ha average yield in the Free State was higher than the 2.0 tons/ha of the previous season.

Planting conditions were good due to good rainfall, in the late summer. Climatic conditions were favourable during harvesting.

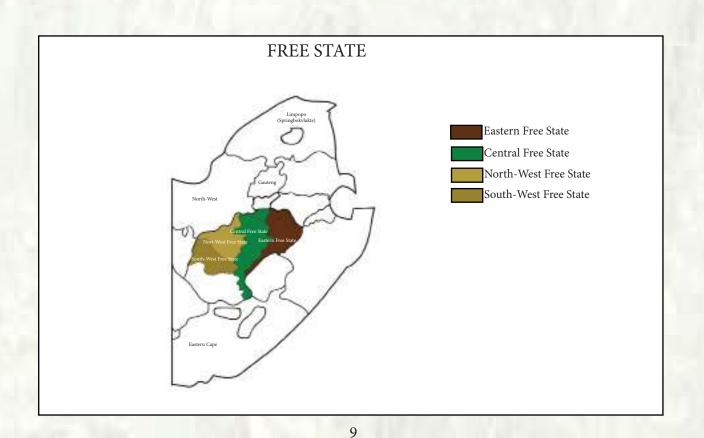
The average hectolitre mass was 80.0 kg/hl. The physical characteristic thousand kernel mass (38.4 g) was higher than the previous season's 34.5 g. The average screenings was 1.25 %. The average protein content decreased from 13.40 % the previous season to 11.93 % (12 % mb) this season. Although the average falling number was 354 seconds, seven samples gave falling numbers lower than 250 seconds and three samples were below 220 seconds.

The mixogram (Quadromat) peak time of 3.3 minutes was the same as the previous season, giving the Free State the longest average mixogram peak time of the different production areas.

The average Bühler extraction percentage in the Free State was 75.6 % (75.0 % previous season). The Kent Jones flour colour was -2.3 KJ units (-1.1 KJ units in previous season).

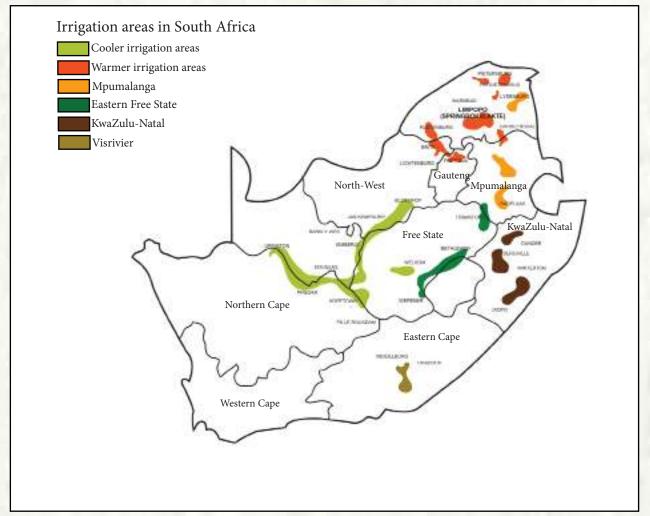
The average farinogram water absorption was 61.1 %, a little lower than the previous season but more or less the same as the other regions. An average alveogram strength of  $35.9 \text{ cm}^2$  and an extensogram strength of  $88 \text{ cm}^2$  were reported.

The 100-gram baking test showed that the relationship between protein content and bread volume ranged from excellent to very good between the different grades.



### **IRRIGATION AREAS**

(Northern Cape, North West (plus other irrigation areas))



Production regions 7, 10 - 12, 14 - 20 and 36 falls within the irrigation areas. These areas produced 469 000 tons of wheat this season (24 % of total production) with an average yield of 5.3 tons/hectare.

The average hectolitre mass was 80.6 kg/hl and the thousand kernel mass was 38.6 g (37.0 g the previous season). The average falling number was 404 seconds. The average screenings was 1.75 % and the protein averaged 12.18 % (12 % mb).

The average mixogram (Quadromat) peak time was 2.6 minutes which was more or less the same as the previous season.

The average Bühler extraction percentage was 73.9 (76.5 % during the previous season), with an average flour colour of -2.2 KJ units.

The average farinogram water absorption was 61.6 % (60.0 % during previous season), with an average farinogram development time of 3.3 minutes.

The average alveogram strength was  $40.0 \text{ cm}^2$  and the average P/L 1.68 (36.8 cm<sup>2</sup> and 0.57 respectively the previous season).

The average extensogram strength was 92 cm<sup>2</sup>. The relationship between protein content and bread volume (with the 100-gram baking test) was shown to be very good.

## OTHER SUMMER RAINFALL AND IRRIGATION AREAS

(Mpumalanga, Limpopo and Gauteng)

Other summer rainfall regions, excluding the Free State, are mainly regions 30, 32, 33 (Mpumalanga), 34 (Gauteng) and 35 (Limpopo). They produced in total 153 050 tons during this season (8 % of the total production).

The average hectolitre mass was 79.8 kg/hl and the average thousand kernel mass was 40.6 g (39.5 g the previous season).

The average falling number was 370 seconds, with the average percentage screenings 1.00 %. The average protein content was 11.83 % (12 % mb), which is similar to the previous year.

The average mixogram (Quadromat) peak time was 3.1 minutes (3.0 minutes the previous season).

The average Bühler extraction was 76.2 %, with an average colour of -2.1 KJ units (76.2 % and -1.5 KJ units the previous season). The farinogram average water absorption was 60.1 % (60.8 % the previous season) and had an average development time of 3.8 minutes.

The average alveogram strength was 35.8  $\text{cm}^2$ , with an average P/L value of 0.77, and the average extensogram strength was 93  $\text{cm}^2$ .

The 100-gram baking test showed an excellent relationship between protein content and bread volume.

