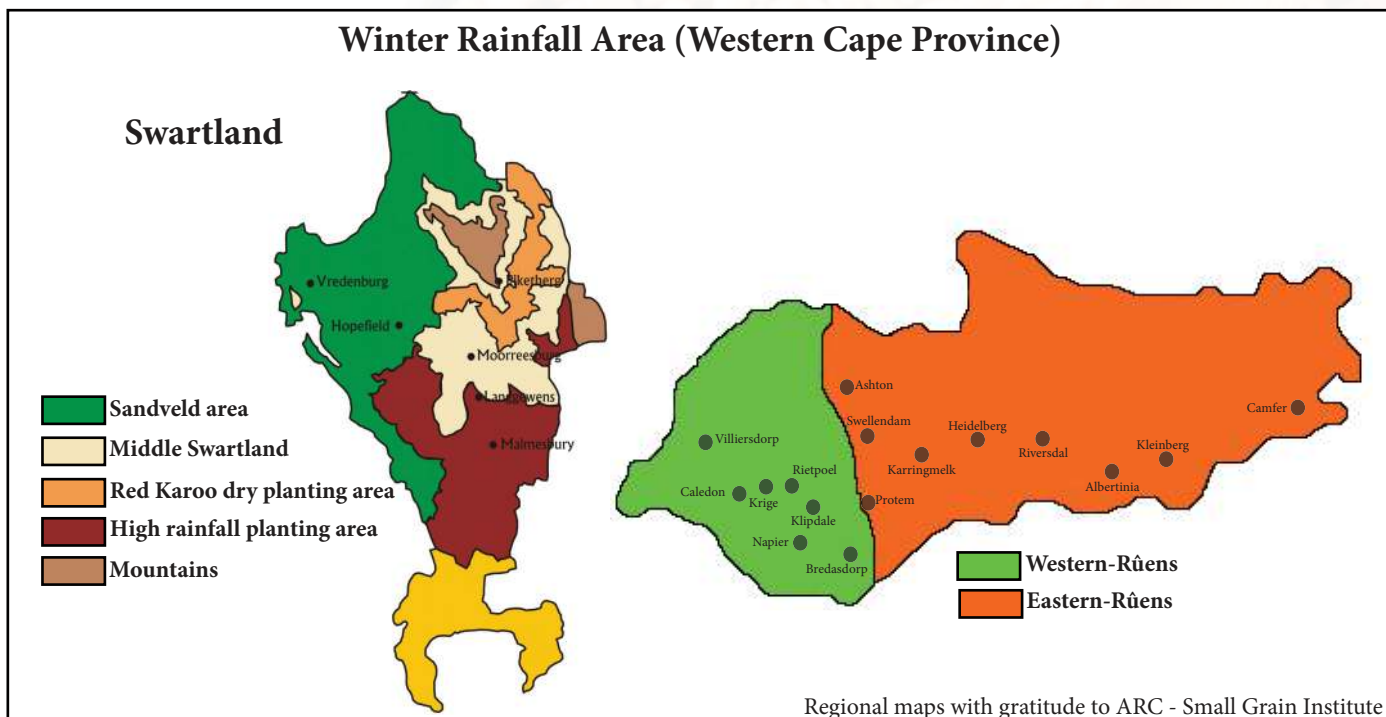


REGIONAL QUALITY

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 to 4 are the Swartland area and regions 5 and 6 the Rûens area. Wheat is planted from the second half of April until the middle of June and harvested during October to December.

The hectolitre mass averaged 81.7 kg/hl. The thousand kernel mass averaged 42.0 gram, which is almost 4.0 g higher than the previous season. The average falling number was 361 seconds. The average whole wheat protein content of 10.8% (12% mb) was the lowest of the different production areas, confirming a trend observed over previous seasons.



The screenings of 1.44% was lower than the previous season's 1.65%. The Bühler extraction averaged 72.2% (average of wheat grades B1 to B4 and UT). The average dry colour of the flour was -2.9 KJ units and the dry colour L* value (indicating lightness) 94.03. This colour indicates a very white flour that is preferred by millers and bakers.

The lowest average whole wheat and flour protein of the four areas also resulted, as can be expected, in the lowest average wet and dry gluten values namely 27.2% and 9.4% (14% mb). The gluten index was 82.

The mixogram peak time (Quadromat mill) averaged 2.7 minutes. The average farinogram absorption was 61.0%. The average alveogram strength was 32.8 cm², slightly lower, but still comparing well with the previous season. The alveogram P/L value was 1.01 compared to the 0.98 of 2011/2012. The average strength on the extensogram was 71 cm².

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, still made the second highest contribution to the total production figure, although production decreased this season (CEC). Planting of wheat takes place during July and August and harvesting from November to January.

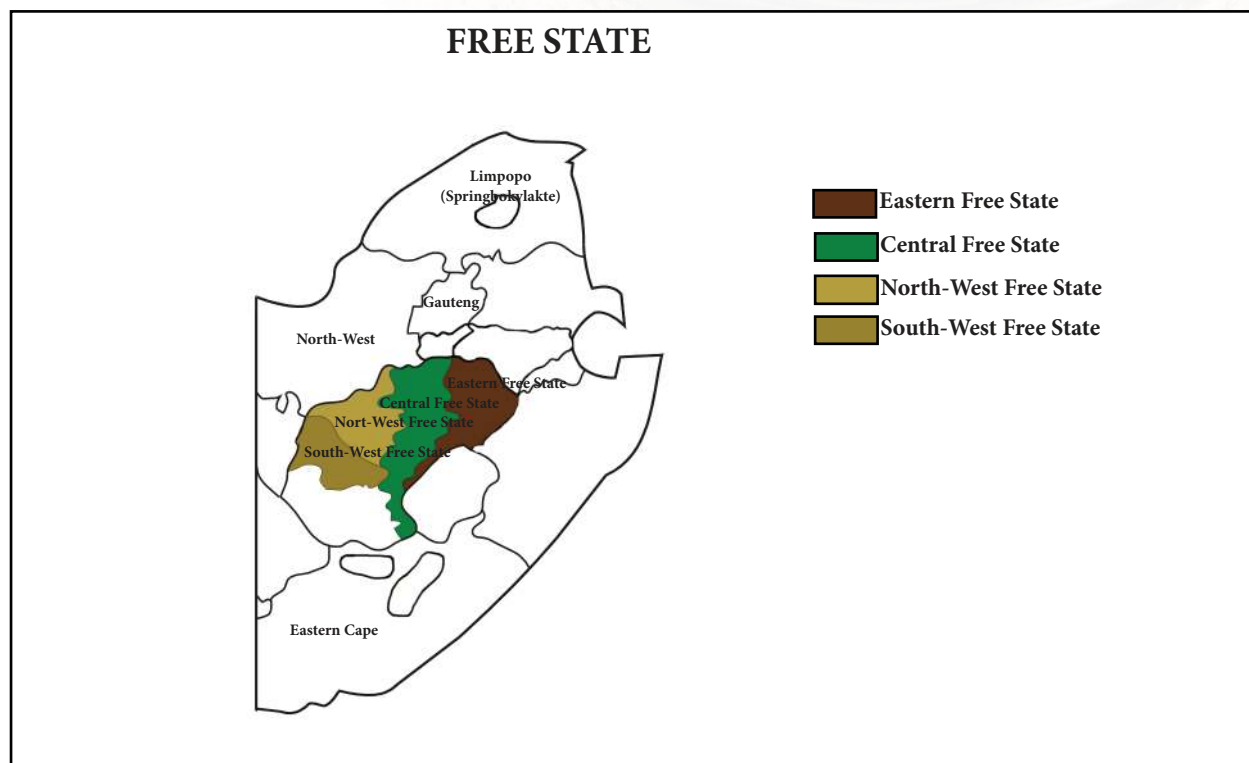
The average hectolitre mass was 79.9 kg/hl. The physical characteristic thousand kernel mass (36.2 g) was higher than the previous season's 35.1 g. The average screenings was 1.28%. The average protein content decreased from 12.0% the previous season to 11.7% (12% mb) this season. Despite the fact that some of the samples which gave the lowest falling number values overall in this survey originated in the Free State production regions, the average falling number of 333 seconds was still within the ideal range.

The wet gluten content (14% mb) was 28.8% and the dry gluten 10.0%. The gluten index was 85. The mixogram (Quadromat) peak time of 3.4 minutes, gave the Free State the longest average mixogram peak time of the different production areas.

The average Bühler extraction percentage in the Free State was 72.4% (73.3% previous season). The Kent Jones flour colour was -2.7 KJ units (-2.5 KJ units in the previous season) and the L* value 93.61.

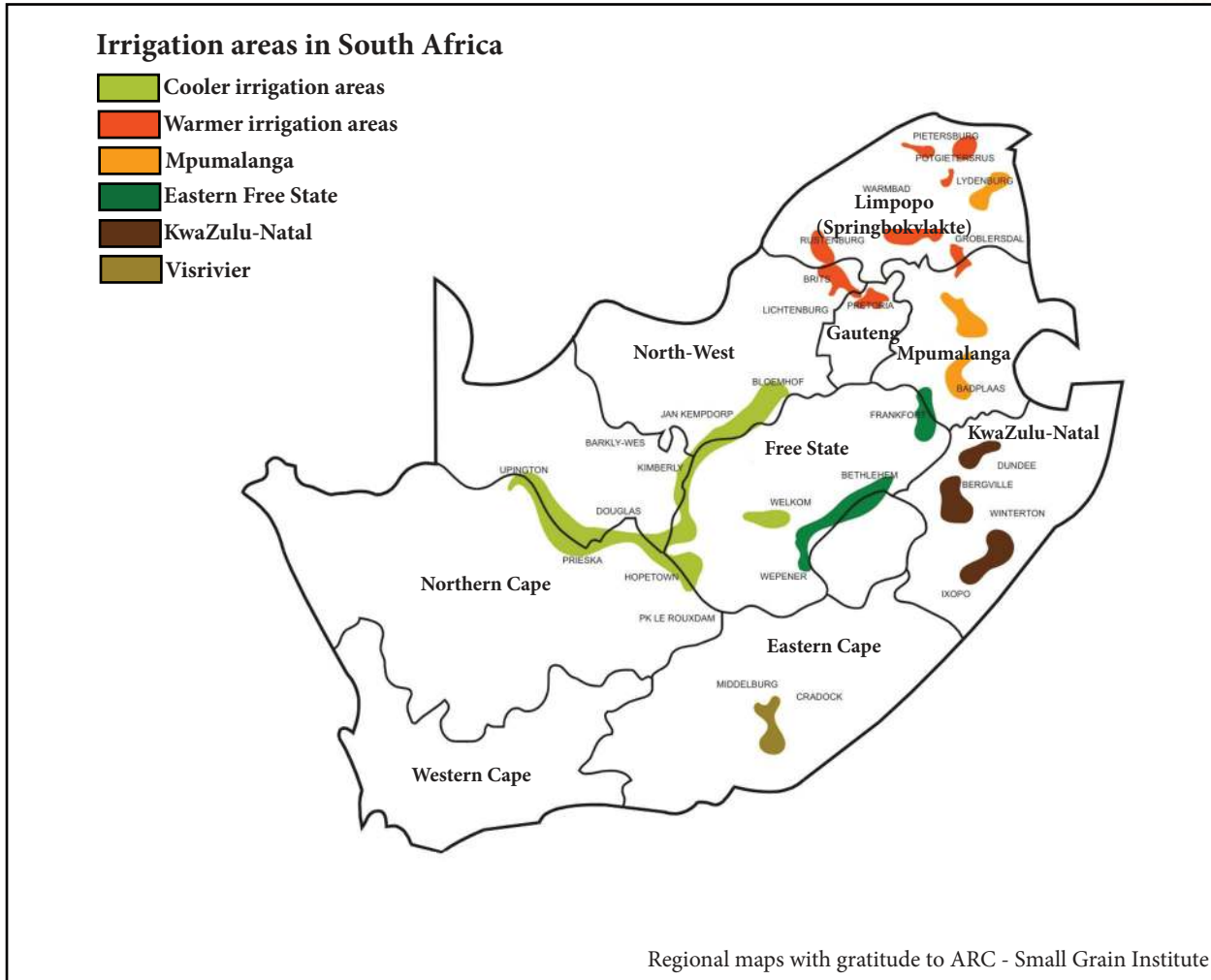
The average farinogram water absorption was 61.6%, similar to 2011/2012. The development time averaged 5.6 minutes. The average alveogram strength was 40.4 cm² and extensogram strength 89 cm².

The 100-gram baking test showed that the relationship between protein content and bread volume was excellent between the different grades.



Regional maps with gratitude to ARC - Small Grain Institute

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



Production regions 7, 10 - 12, 14 - 20 and 36 falls within the Irrigation areas.

The highest weighted average hectolitre mass of 82.1 kg/hl was reported here. The thousand kernel mass was 40.2 g (40.7 g the previous season). The average falling number was 384 seconds and the screenings averaged 1.35%.

The average mixogram (Quadromat) peak time was 2.8 minutes which was equal to the previous two seasons.

The average Bühler extraction percentage was 74.6 (75.0% during the previous season). The Irrigation areas gave on average 2% higher extraction than the winter and summer rainfall areas.

The Irrigation areas also had the highest average protein content of 12.1% (12% mb), half of a percent increase from the previous season. The wet and dry gluten contents, 30.6% and 10.6% respectively, were the highest of the four areas as well. The gluten index however was the lowest, although very slightly, at 80.

The dry colour L* value was 94.00 and the Kent Jones wet colour value -3.1 KJ units. The average farinogram water absorption was 60.4% (61.7% during previous season), with an average farinogram development time of one minute longer than the 4.4 minutes of 2011/2012.

The average alveogram strength was 36.8 cm² and the average P/L 0.67 (33.6 cm² and 0.84 respectively the previous season). The average extensogram strength was 86 cm². The relationship between protein content and 100 g bread volume was shown to be excellent.

OTHER SUMMER RAINFALL AND IRRIGATION AREAS (Mpumalanga, Limpopo and Gauteng)

Other summer rainfall regions, excluding the Free State, are mainly regions 29 - 33 (Mpumalanga), 34 (Gauteng) and 35 (Limpopo).

The average hectolitre mass was 80.8 kg/hl, and the thousand kernel mass averaged 40.3 g (39.5 g the previous season).

The average falling number was 381 seconds, with the average percentage screenings 1.62%. The average protein content was 12.1% (12% mb), equal to the previous season.

The average mixogram (Quadromat) peak time was 3.1 minutes, the same as in the 2011/2012 season.

The average Bühler extraction was 74.2%, with an average colour of -2.8 KJ units (75.2% and -2.7 KJ units the previous season). The L* value was 93.76. The farinogram average water absorption was 59.6% (60.9% the previous season) and had an average development time of 5.5 minutes.

The average alveogram strength was 36.9 cm² and the average extensogram strength 94 cm², respectively equal and significantly lower than in 2011/2012. The P/L values over the four production areas ranged from 0.60 locally to 1.36 in the Summer rainfall area. Lower P/L values are indicative of dough being more extensible (having higher L values) than dough with higher P/L values.

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

