

South African

Commercial Wheat Quality of the 2024/2025 Season

Acknowledgements

With gratitude to:

- The South African Winter Cereal Industry Trust (SAWCIT) for its financial support in conducting this survey.
- Agbiz Grain and its members for providing samples to make this survey possible.
- National Plant and Plant Production Inspection Services (NCPPIIS) of the Department of Agriculture (NDA) for submitting samples of imported wheat.
- The Crop Estimates Committee (CEC) of the Department of Agriculture (NDA) for providing production related figures.
- South African Grain Information Service (SAGIS) for providing supply and demand figures relating to wheat and wheat products.

Summary

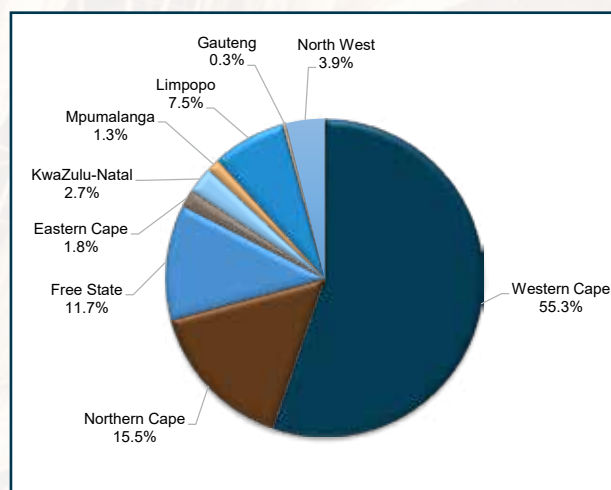
The 2024/25 season's commercial wheat crop was set at 1 930 000 tons, almost 6% lower than the previous season. A total area of 505 300 hectares was utilised for wheat production during this season and the average yield was 3.82 tons per hectare (Figures obtained from the CEC).

The whole wheat protein average of 11.6% decreased by 0.2% compared to the previous season. The percentage samples from this crop survey with a protein content equal or higher than 12.5% (minimum protein content for Super Grade) was 28% (28% and 44% during the previous two seasons respectively). The hectoliter mass averaged 80.3 kg/hl, 0.4 kg/hl lower than the previous season. 7% of the samples reported values below the minimum requirement of 76 kg/hl for Super Grade, Grade 1 and Grade 2. The ten-year national average is 80.3 kg/hl.

The average falling number this season was 371 seconds. Only 2% (5) of the samples analysed gave falling number values below 250 seconds and of these two samples were below 220 seconds. The average mixogram peak time was 3.2 minutes compared to the 3.1 minutes of the previous season. The ten-year average is 3.0 minutes.

Introduction

This report provides the results of the twenty-seventh annual wheat crop quality survey performed by the Southern African Grain Laboratory NPC (SAGL). SAGL was established in 1997 on request of the Grain Industry. SAGL is an ISO 17025 accredited testing laboratory and



Graph 1: Provincial contribution to the production of the 2024/25 wheat crop

participates in a number of proficiency testing schemes, both nationally and internationally as part of our ongoing quality assurance procedures to demonstrate technical competency and international comparability.

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 by the commercial grain storage companies.

A sub-sample of each of these grading samples was collected in a container according to class and grade per silo bin/bag/bunker/dam at each depot. This composite sample was then divided and a 3 kg sample was forwarded to SAGL for the

annual wheat crop quality survey. SAGL analysed 322 samples to provide a proportional representation of the production of wheat in all the different production regions.

The samples were graded and the thousand kernel mass determined. Sub-samples were milled on a Quadromat Junior mill for mixograph analyses. Composite samples per class and grade for each production region, 65 samples in total, were milled on a Bühler MLU 202 laboratory mill. Moisture, protein, ash and colour determinations were done and RVA analyses conducted. Rheological analyses, namely gluten, mixogram, farinogram, alveogram, extensogram and 100-gram baking tests, were then performed. Multi-mycotoxin analyses were performed on 40 samples randomly selected to represent the different production regions.

The results (as averages per region) are made available weekly on the SAGL website (www.sagl.co.za) soon after the first samples are received. The report, in an easy to page format, is available on the website. Hard copy reports are also distributed to Directly Affected Groups and interested parties.

In addition to the quality information compared over a number of seasons, production figures (provided by the CEC) relating to hectares planted, tons produced and yields obtained on a national as well as provincial basis, over a ten-season period, are provided in this report. Sales figures of seed sold by the commercial grain storage companies were requested to calculate national total quantities per cultivar.

SAGIS supply and demand figures over several seasons are presented in table and graph format. Information with regards to the processing of wheat per province, the manufacture, import and export of wheat products as well as the manufacture of pan baked products nationally and per bakery group, is incorporated into the report.

Data on wheat imported for domestic use during the 2023/24 (previous) season is included and compared to the quality of the local crop of the corresponding period.

The national bread wheat grading regulations as published in the Government Gazette of 29 November 2019 are provided as the last section of the report.

The goal of this crop quality survey the accumulation of quality data on the commercial wheat crop on a national level. This valuable data reveals general tendencies and highlights quality differences in the commercial wheat produced in different local production regions. A detailed database containing reliable analytical data collected over several seasons is essential to enable industry to comment on proposed legislative levels and to supply reliable data for targeted research projects.

Production

Wheat contributed 73% to the total winter cereal crop production in South Africa this season. Other winter crops produced are barley, canola and oats.

South Africa (comprising nine provinces) is divided into 36 crop production regions with wheat planted in approximately 28 of these regions. Please see Figure 1 (RSA Provinces map) and Figure 2 (RSA Crop Production Regions map) on pages 28 and 30.

The national CEC's estimated total production figures were revised, using as basis for the calculations, SAGIS' published figures of actual deliveries. Figures to determine on-farm usage and retentions obtained from a wheat utilisation survey conducted by the NDA, were added to the SAGIS delivery figures to calculate the final crop production figures.

The final production figure of 1 930 000 tons is almost 4% higher than the ten-year production average of 1 860 300 tons (2014/15 to 2023/24 seasons). The Western Cape produced 1 067 200 tons of wheat this season, representing a year-on-year decrease of 1.5% and a 55% contribution to the total crop. The irrigation areas of the Northern Cape, the second largest wheat producing area this season, produced 298 300 tons, 2% more than last season. The Free State's wheat production figure (225 260 tons) decreased by 20% year-on-year. The remainder of the local wheat was produced mainly in Limpopo with 145 550 tons, representing a 25% decline compared to the 2023/24 season and North West, where production increased by nearly 12% to 75 600 tons.