

South African

Commercial sorghum quality for the 2023/2024 Season

Acknowledgements

With gratitude to:

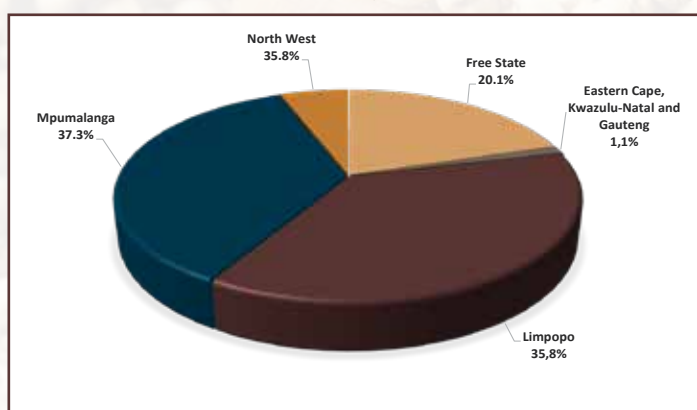
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Introduction

The final commercial sorghum crop figure of the 2023/24 production season as overseen by the National Crop Estimates Liaison Committee (CELC) was 98 000 tons. This figure represents a year-on-year increase of 3.9% (3 640 tons). The two major sorghum producing provinces, Mpumalanga and Limpopo, respectively contributed 37% and 36% of the total crop. The national yield average of 2.33 t/ha declined with 16% compared to the previous season.

Graph 1: Provincial contribution to the production of the 2023/24 sorghum crop



Figures provided by the CEC.

During the harvesting season, a representative sample of each delivery of sorghum at the various grain intake points, was taken according to the prescribed grading regulations. The sampling procedure for the samples used in this survey is described on page 28. Twenty-five (25) composite sorghum samples, representing different production regions, were analysed for quality. In addition, nine (9) imported sorghum samples from Brazil were analysed and the results compared with that of the local sorghum crop.

The samples were graded, and test weight and thousand kernel mass determined. Sub-samples were milled and analysed for moisture, crude protein, crude fat and starch content. After sieving and dehulling by means of a Barley pearler, the fraction of the sample larger than 1.8 mm were milled and Hunter Lab colour analyses conducted. Multi-mycotoxin analyses as well as Image analyses (Length, Width, Elongation (% Width/Length) and Volume/surface area (%)) were also performed on these samples.

This is the seventh annual sorghum 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 participates in various proficiency testing schemes, both nationally and internationally, as part of our ongoing quality assurance procedures to demonstrate technical competency and international comparability.

The goal of this crop quality survey is the compilation of a detailed database, accumulating quality data collected over several seasons on the national commercial sorghum crop. The data reveal general tendencies and highlight quality differences in the commercial sorghum produced in different local production regions. A detailed database containing reliable analytical data collected over several seasons, is essential in enabling industry to comment on proposed legislative levels and to supply reliable data for targeted research projects.