

South African

Commercial sorghum quality for the

2017/2018 Season



Acknowledgements

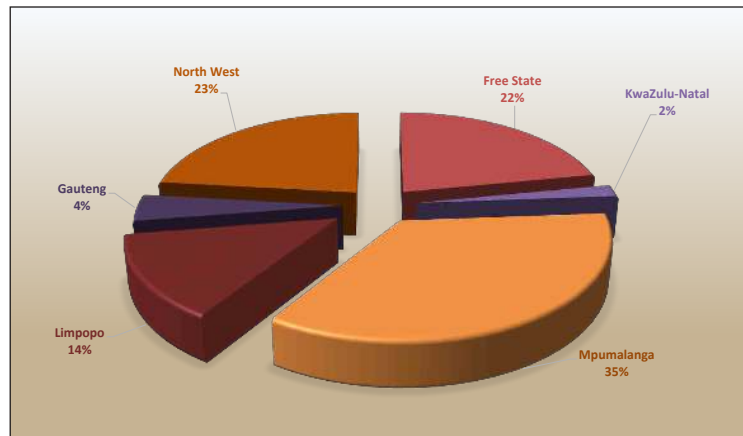
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Introduction

The final commercial sorghum crop figure of the 2017/2018 season as overseen by the National Crop Estimates Liaison Committee (CELC) is 115 0000 tons. This figure represents an upward adjustment of 4.68% or 5 145 tons, compared to the final crop estimate figure. The crop decreased by 24% (37 000 tons) year on year. Mpumalanga, the major sorghum producing province, contributed 35% of the total crop. Yield figures showed a 11% increase year on year, from 3.59 t/ha to 3.99 t/ha.

Graph 1: Contribution of the provinces to the production of the 2017/2018 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 31. Forty-two (42) composite sorghum samples, representing the different production regions, were analysed for quality.

The samples were graded and test weight and thousand kernel mass determined. Sub-samples were milled and analysed for moisture, crude protein and starch. After sieving and dehulling by means of a Barley pearler, the fraction of the sample above the 1.8 mm slotted sieve were milled and Hunter Lab colour analyses conducted. Multi-mycotoxin analyses as well as Image analyses (kernel size distribution, length, width and roundness on the whole kernels) were also performed on the samples.

This is the first 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 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.

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 to enable industry to comment on proposed legislative levels and to supply reliable data for targeted research projects.