South African

Commercial sorghum quality for the 2020/2021 Season

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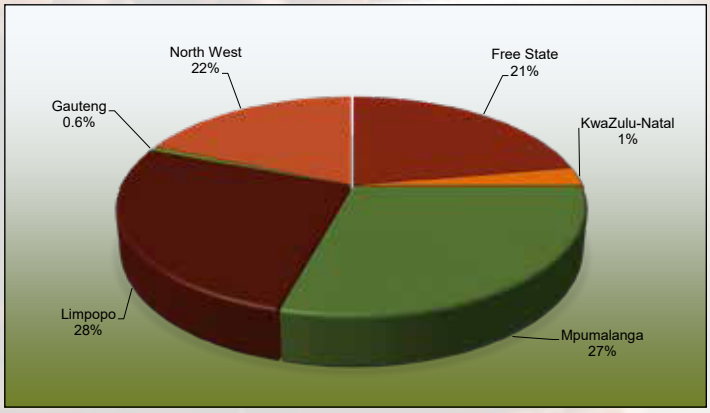
Introduction

The final commercial sorghum crop figure of the 2020/21 production season as overseen by the National Crop Estimates Liaison Committee (CELC) is 215 000 tons. This figure represents a year on year increase of 36% (57 000 tons) and the largest crop of the last seven seasons. Limpopo, the major sorghum producing province this season, contributed 28% of the total crop, followed closely by Mpumalanga with a contribution of 27%. The national yield increased by 17%, from 3.72 t/ha in the 2019/20 season to 4.37 t/ha.

Graph 1: Provincial contribution to the production of the 2020/21 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-one (41) 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 content. 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, relative roundness and volume to surface ratio on the whole kernels) were also performed on these samples.

This is the fourth 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.