SOUTH AFRICAN

Commercial sorghum quality for the 2020/2021 Season

Acknowledgements
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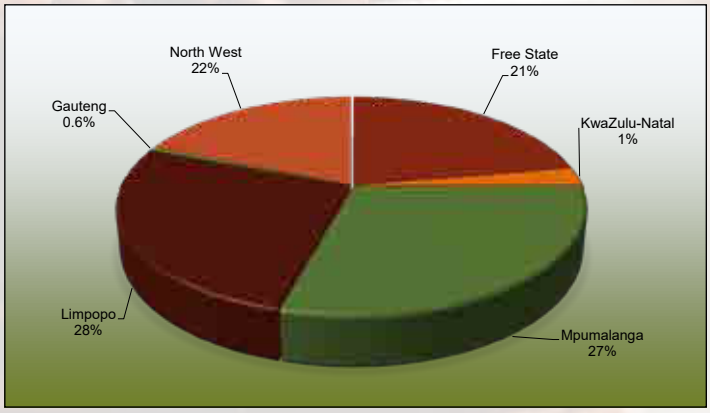
- The Crop Estimates Committee (CEC) of the Department of Agriculture, Land Reform and Rural Development (DALRRD) for providing production related figures.
- South African Grain Information Service (SAGIS) for providing supply and demand figures relating to sorghum.
- The Bureau for Food and Agricultural Policy (BFAP) for providing research-based market analysis.

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.

In addition to the quality information, production figures (obtained from the Crop Estimates Committee (CEC)) relating to hectares planted, tons produced and yields obtained on a national as well as provincial basis, over an eleven season period, are provided in this report. SAGIS (South African Grain Information Service) supply and demand information is provided in table and graph format. Import and export figures over several seasons are also included.

The national sorghum grading regulations as published in the Government Gazette of 8 January 2016 are provided as the last section of the report.

PRODUCTION

Sorghum is a tropical grass grown primarily in semi-arid regions of the world. Sorghum can grow in areas too dry for maize and is deemed to be the fifth most important grain crop grown in the world (after maize, wheat, rice and barley).

World sorghum production for the 2021/22 season to date, stands at 65.6 million tons with the United States being the largest contributor (11.4 million tons). Please see Table 1a for the world sorghum trade (import and export figures) as well as production and consumption figures in Table 1b.

Table 1a: World Sorghum Trade
October/September Trade Year, Thousand Metric Tons

	2017/18	2018/19	2019/20	2020/21	2021/22 Feb	2021/22 Mar
Exports						
Argentina	473	254	426	1 973	2 600	2 600
Australia	449	91	102	1 209	1 400	1 600
Bolivia	21	18	8	29	50	50
Ethiopia	75	75	75	50	50	50
India	123	53	31	56	50	50
Kenya	136	53	31	80	100	100
Ukraine	123	93	145	59	75	65
Others	310	286	163	149	213	213
Subtotal	***1 710***	***923***	***981***	***3 605***	***4 538***	***4 728***
United States	**4 839**	**2 410**	**5 404**	**7 052**	**8 000**	**8 000**
World Total	***6 549***	***3 333***	***6 385***	***10 657***	***12 538***	***12 728***
Imports						
Chile	49	73	36	26	70	70
China	4 436	652	3 709	8 669	10 300	10 500
Eritrea	30	60	35	60	70	70
Ethiopia	6	6	61	5	50	50
Japan	577	449	426	299	320	320
Kenya	141	109	52	181	200	200
Mexico	98	546	567	133	200	200
Somalia	80	85	80	50	50	50
South Sudan	148	26	81	71	100	100
Sudan	150	160	150	88	80	80
Others	992	1 079	429	355	430	430
Subtotal	***6 707***	***3 245***	***5 626***	***9 937***	***11 870***	***12 070***
Unaccounted	**- 209**	**87**	**758**	**719**	**667**	**657**
United States	**51**	**1**	**1**	**1**	**1**	**1**
World Total	***6 549***	***3 333***	***6 385***	***10 657***	***12 538***	***12 728***