

South African

Commercial sorghum quality for the

2017/2018 Season



Acknowledgements

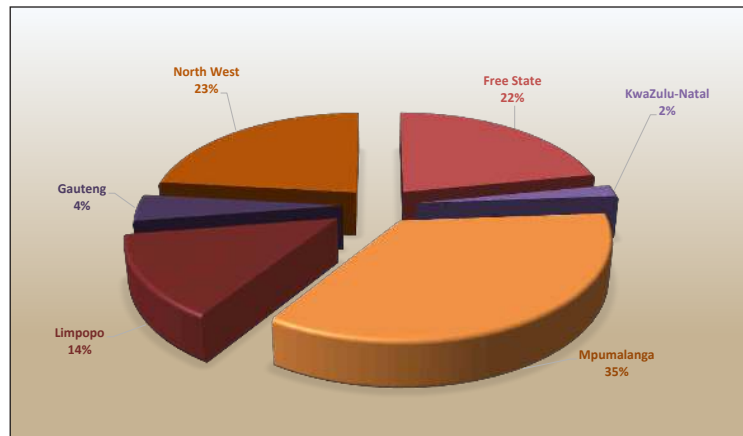
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Introduction

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.

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.

Data on sorghum imported for domestic use during the period March 2018 to February 2019 is included in the report and compared to the quality of the local crop over the corresponding period.

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 2018/2019 season to date, stands at 58,4 million tons with the United States being the largest contributor (9,3 million tons). Please see Table 1a and 1b for the world sorghum trade (import and export) as well as production and consumption figures.

The local area utilized for sorghum production decreased by 32%, compared to the 42 350 hectares of the 2016/2017 season. The 28 800 hectares planted this season, is the lowest area seen in a steady decline in area over the last number of seasons.

	2014/15	2015/16	2016/17	2017/18	2018/19 Dec	2018/19 Feb
Exports (1 000 MT)						
Argentina	954	772	457	296	500	200
Australia	1,701	717	542	449	1,500	1,300
Ethiopia	75	75	75	75	75	75
India	122	74	24	140	50	50
Kenya	73	41	73	136	50	50
Nigeria	100	50	100	100	100	100
Ukraine	156	119	164	123	80	120
Others	138	115	229	212	102	102
Subtotal	3,319	1,963	1,664	1,531	2,457	1,997
United States	9,269	7,928	6,022	4,961	3,000	3,000
World Total	12,588	9,891	7,686	6,492	5,457	4,997
Imports (1 000 MT)						
Chile	98	134	54	49	100	100
China	10,162	8,284	5,209	4,436	2,000	1,700
European Union	131	119	194	486	800	800
Japan	903	649	561	594	600	600
Kenya	117	54	146	141	150	150
Korea, South	6	4	5	62	70	70
Mexico	29	661	548	98	500	500
Somalia	20	70	60	80	100	100
South Sudan	87	19	36	148	150	150
Sudan	120	200	120	150	200	200
Others	390	669	381	542	504	504
Subtotal	12,063	10,863	7,314	6,786	5,174	4,874
Unaccounted	498	-1,070	328	-345	283	123
United States	27	98	44	51	0	0
World Total	12,588	9,891	7,686	6,492	5,457	4,997