Commercial sorghum quality for the 2021/2022 Season

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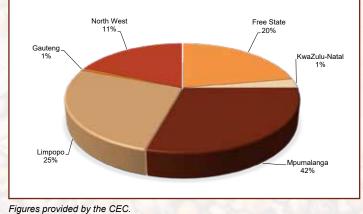
South African

- Agbiz Grain and its members for their cooperation in providing the samples to make this survey possible.
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- · 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 2021/22 production season as overseen by the National Crop Estimates Liaison Committee (CELC) is 103 140 tons. This figure represents a year-on-year decrease of 52% (111 860 tons) and the smallest crop since the 2015/16 season. Mpumalanga, the major sorghum producing province this season, contributed 42% of the total crop, followed by Limpopo with a contribution of 25%. The national yield decreased by almost 37%, from 4.37 t/ha in the 2020/21 season to 2.77 t/ha this season.





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 27. Twenty-one (21) 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. The crude fat content was also included in the scope of analysis for the first time this season. 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 fifth 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 2022/23 season to date, stands at 57.7 million tons with the United States being the largest contributor (4.8 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						
	2018/19	2019/20	2020/21	2021/22	2022/23 Mar	2022/23 Apr
Exports						
Argentina	254	426	1 973	1 900	1 700	1 700
Australia	91	102	1 235	2 267	2 200	2 200
Bolivia	18	8	30	5	25	25
China	49	29	4	5	30	30
India	53	31	56	40	50	50
Kenya	53	31	80	50	60	60
Nigeria	100	50	50	50	50	50
Others	306	305	198	208	122	122
Subtotal	924	982	3 626	4 525	4 237	4 237
United States	2 410	5 404	6 926	7 351	2 250	2 250
World Total	3 334	6 386	10 552	11 876	6 487	6 487
Imports						
China	652	3 709	8 669	10 991	4 800	4 800
Eritrea	60	35	60	95	70	70
Ethiopia	6	61	5	12	50	50
European Union	666	89	13	168	80	80
Japan	449	426	299	258	200	200
Kenya	109	52	181	79	150	150
Mexico	546	567	133	362	200	200
Somalia	85	80	50	50	50	50
South Sudan	26	81	71	55	50	50
Sudan	160	150	125	75	50	50
Others	488	378	351	384	330	335
Subtotal	3 247	5 628	9 957	12 529	6 030	6 035
Unaccounted	86	757	594	- 654	456	451
United States	1	1	1	1	1	1
World Total	3 334	6 386	10 552	11 876	6 487	6 487