South African
COMMERCIAL SOYBEAN QUALITY FOR THE 2016/2017 SEASON

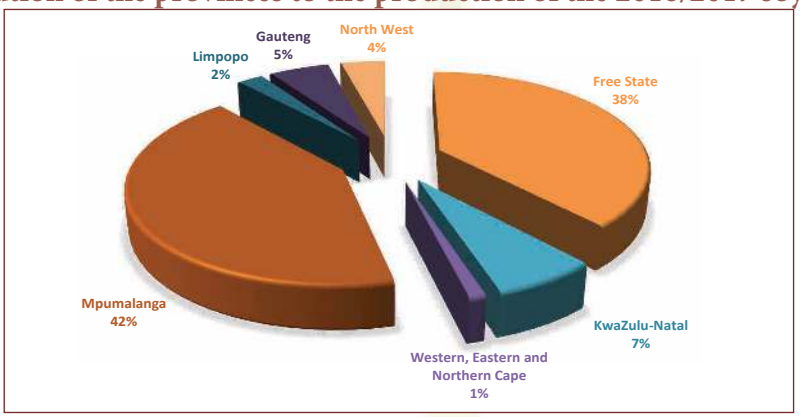
Acknowledgements
With gratitude to:

- ***The Oil & Protein Seed Development Trust for its financial support in conducting this survey.***
- *Agbiz Grain and its members for their cooperation in providing the samples to make the survey possible.*
- *The Crop Estimates Committee (CEC) of the Department of Agriculture, Forestry and Fisheries for providing production related figures.*
- *South African Grain Information Service (SAGIS) for providing supply and demand figures relating to soybeans.*
- *The Bureau for Food and Agricultural Policy (BFAP) for providing research based market analysis.*

Introduction

The final figure for the commercial soybean crop of the 2016/2017 season is 1 316 000 tons, as overseen by the National Crop Estimates Liaison Committee (CELC). The final calculated crop figure was adjusted downward slightly by 370 tons (0.03%). This all-time high record crop represents an increase of 77.4% (574 000 tons) compared to the severely drought affected 2015/2016 season. The major soybean-producing provinces, contributing 80.0% of the total crop, were Mpumalanga and the Free State.

Graph 1: Contribution of the provinces to the production of the 2016/2017 soybean crop



Figures provided by the CEC.

During the harvesting season, a representative sample of each delivery of soybeans at the various silos was taken according to the prescribed grading regulations. The sampling procedure for the samples used in this survey is described on page 28. One hundred and fifty composite soybean samples, representing the different production regions, were analysed for quality. The samples were graded, milled and analysed for moisture, crude protein, crude fat, crude fibre and ash content. Fifteen randomly selected samples were analysed to quantitatively determine the presence of genetically modified soybeans.

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 soybean crop, which is essential in assisting with decision making processes. The data reveal general tendencies, highlight quality differences in the commercial soybeans produced in different local production regions and provide important information on the quality of commercial soybeans intended for export when applicable.

This is the sixth annual soybean 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 results of this survey are available on the SAGL website (www.sagl.co.za). The hard copy reports are distributed to all Directly Affected Groups and interested parties. The report is also available for download in a PDF format from the website.

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 as well as information on the manufacture, import and export of oil seeds products, are also included.

The 2016/17 Report of the National Soybean Cultivar Trials conducted by the ARC-Grain Crops in Potchefstroom, is included in totality and as received, in this report. The national grading regulations as published in the Government Gazette No. R.370 of 21 April 2017 are also provided.

Production

Soybeans are the most important oilseed crop produced in South Africa, driven mainly by the demand for protein feed in the animal feed industry. Soybeans have benefits to producers in crop rotation programs, especially as part of conservation agriculture, but also due to lower input requirements compared to other commodities for example wheat and maize.

Sufficient and well-timed rainfall through most of the summer grain producing area resulted in a record soybean crop this season. The national yield increased from an average of 1.48 t/ha last season to 2.29 t/ha this season.

Table1: Soybean production overview over two seasons

Province	Type of production	2016/2017			2015/2016		
		Hectares planted, ha	Production, tons	Yield, t/ha	Hectares planted, ha	Production, tons	Yield, t/ha
Western Cape	Dryland	-	-	-	-	-	-
	Irrigation	700	1 050	1.50	800	1 200	1.50
	Total	700	1 050	1.50	800	1 200	1.50
Northern Cape	Dryland	-	-	-	-	-	-
	Irrigation	3 000	10 500	3.50	4 000	13 600	3.40
	Total	3 000	10 500	3.50	4 000	13 600	3.40
Free State	Dryland	232 600	477 700	2.05	167 900	137 500	0.82
	Irrigation	7 400	26 300	3.55	6 100	10 500	1.72
	Total	240 000	504 000	2.10	174 000	148 000	0.85
Eastern Cape	Dryland	1 850	2 775	1.50	1 500	2 100	1.40
	Irrigation	-	-	-	-	-	-
	Total	1 850	2 775	1.50	1 500	2 100	1.40
KwaZulu-Natal	Dryland	22 000	58 155	2.64	19 000	39 000	2.05
	Irrigation	8 500	31 450	3.70	9 000	27 000	3.00
	Total	30 500	89 605	2.94	28 000	66 000	2.36
Mpumalanga	Dryland	234 700	533 500	2.27	232 300	390 000	1.68
	Irrigation	6 300	20 800	3.30	7 700	18 000	2.34
	Total	241 000	554 300	2.30	240 000	408 000	1.70
Limpopo	Dryland	1 500	3 750	2.50	3 500	2 400	0.69
	Irrigation	7 000	26 000	3.71	12 500	36 000	2.88
	Total	8 500	29 750	3.50	16 000	38 400	2.40
Gauteng	Dryland	22 900	61 620	2.69	20 800	41 600	2.00
	Irrigation	2 500	9 500	3.80	2 200	9 000	4.09
	Total	25 400	71 420	2.80	23 000	50 600	2.20
North West	Dryland	15 600	25 500	1.63	12 500	6 600	0.53
	Irrigation	7 400	27 400	3.70	3 000	7 500	2.50
	Total	23 000	52 900	2.30	15 500	14 100	0.91
RSA	Dryland	531 150	1 163 000	2.19	457 500	619 200	1.35
	Irrigation	42 800	153 000	3.57	45 300	122 800	2.71
	Total	573 950	1 316 000	2.29	502 800	742 000	1.48

Figures provided by the CEC.