

South African

COMMERCIAL SOYBEAN QUALITY FOR THE 2020/2021 SEASON

Acknowledgements

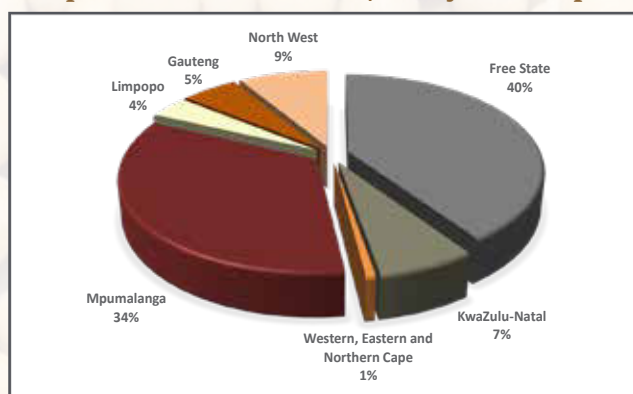
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- South African Grain Information Service (SAGIS) for providing supply and demand figures relating to soybeans.
- The Bureau for Food and Agricultural Policy (BFAP) for providing research-based market analysis.
- Precision Oil Laboratories for providing Fatty Acid Profile analyses.

Introduction

The final commercial soybean crop figure of the 2020/21 season, as overseen by the National Crop Estimates Liaison Committee (CELC), is 1 897 000 tons. This all-time high record crop represents a 52% increase (651 500 tons) year on year. The major soybean producing provinces, namely the Free State and Mpumalanga, contributed 74% of the total crop.

Graph 1: Provincial contribution to the production of the 2020/21 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 37. 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. Twenty samples, randomly selected to represent the different production regions, were submitted to Precision Oil Laboratories for fatty acid profile analyses.

This is the tenth 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 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 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.

The results of this survey are available on the SAGL website (www.sagl.co.za). Hard copy reports are distributed to all Directly Affected Groups and interested parties. The report is also available to read or 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 2020/21 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 Government Notice 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.

| Table 1: Soybean production overview over two seasons | | | | | | | |
|---|--------------------|----------------------|------------------|-------------|----------------------|------------------|-------------|
| Province | Type of production | 2020/21 | | | 2019/20 | | |
| | | Hectares planted, ha | Production, tons | Yield, t/ha | Hectares planted, ha | Production, tons | Yield, t/ha |
| Western Cape | Dryland | - | - | - | - | - | - |
| | Irrigation | - | - | - | - | - | - |
| | Total | - | - | - | - | - | - |
| Northern Cape | Dryland | - | - | - | - | - | - |
| | Irrigation | 1 000 | 3 500 | 3.50 | 2 000 | 7 000 | 3.50 |
| | Total | 1 000 | 3 500 | 3.50 | 2 000 | 7 000 | 3.50 |
| Free State | Dryland | 353 000 | 734 700 | 2.08 | 304 000 | 486 750 | 1.60 |
| | Irrigation | 12 000 | 31 800 | 2.65 | 11 000 | 33 000 | 3.00 |
| | Total | 365 000 | 766 500 | 2.10 | 315 000 | 519 750 | 1.65 |
| Eastern Cape | Dryland | 2 700 | 7 850 | 2.91 | 1 300 | 2 300 | 1.77 |
| | Irrigation | 400 | 1 450 | 3.63 | 200 | 700 | 3.50 |
| | Total | 3 100 | 9 300 | 3.00 | 1 500 | 3 000 | 2.00 |
| KwaZulu-Natal | Dryland | 20 500 | 71 500 | 3.49 | 22 000 | 56 000 | 2.55 |
| | Irrigation | 15 500 | 58 100 | 3.75 | 13 000 | 45 500 | 3.50 |
| | Total | 36 000 | 129 600 | 3.60 | 35 000 | 101 500 | 2.90 |
| Mpumalanga | Dryland | 282 000 | 614 550 | 2.18 | 252 000 | 390 000 | 1.55 |
| | Irrigation | 8 000 | 30 000 | 3.75 | 8 000 | 26 000 | 3.25 |
| | Total | 290 000 | 644 550 | 2.22 | 260 000 | 416 000 | 1.60 |
| Limpopo | Dryland | 4 000 | 10 700 | 2.68 | 2 700 | 4 350 | 1.61 |
| | Irrigation | 16 500 | 61 050 | 3.70 | 12 800 | 43 700 | 3.41 |
| | Total | 20 500 | 71 750 | 3.50 | 15 500 | 48 050 | 3.10 |
| Gauteng | Dryland | 38 500 | 92 400 | 2.40 | 34 000 | 63 200 | 1.86 |
| | Irrigation | 3 500 | 12 600 | 3.60 | 2 000 | 7 000 | 3.50 |
| | Total | 42 000 | 105 000 | 2.50 | 36 000 | 10 200 | 1.95 |
| North West | Dryland | 57 400 | 130 500 | 2.27 | 30 000 | 51 000 | 1.70 |
| | Irrigation | 12 100 | 36 300 | 3.00 | 10 000 | 29 000 | 2.90 |
| | Total | 69 500 | 166 800 | 2.40 | 40 000 | 80 000 | 2.00 |
| RSA | Dryland | 758 100 | 1 662 200 | 2.19 | 646 000 | 1 053 600 | 1.63 |
| | Irrigation | 69 000 | 234 800 | 3.40 | 59 000 | 191 900 | 3.25 |
| | Total | 827 100 | 1 897 000 | 2.29 | 705 000 | 1 245 000 | 1.77 |

Figures provided by the CEC.