

SOUTH AFRICAN

COMMERCIAL SOYBEAN QUALITY FOR THE 2011/2012 SEASON

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Introduction

The seventh production forecast figure for soybeans released by the National Crop Estimates Committee on 28 August 2012 is 646 950 tons. This is 1.33% less than the sixth production forecast released in July 2012 and 8.88% less than the final calculated production figure (710 000 tons) for the 2010/2011 season.

Based on the production forecast figure, the average yield this season will be 1.37 tons/ha compared to the calculated average yield of 1.70 tons/ha the previous season. The lower yields are due to unfavourable weather conditions during the 2012 growing season and explains the slightly lower production figure for 2012 even though the area utilized for soybean production increased from 418 000 hectares to 472 000 hectares. The Mpumalanga and Free State Provinces are expected to contribute 70% of the soybeans (planted on 375 000 hectares) to the total crop.

This soybean crop quality survey was performed by the Southern African Grain Laboratory (SAGL). SAGL is an ISO 17025 SANAS accredited testing laboratory that serves as the reference laboratory for the grain industry. The SAGL SANAS Certificate and Schedule of Accreditation are shown on pages 21 to 23. SAGL is an independent Section 21 company.

The goal of this crop quality survey is to accumulate quality data on the commercial soybean crop on a national level. This valuable 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. A detailed database containing information collected over several seasons is essential and will assist with decision making processes.

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 17. 100 composite soybean samples, proportionally representing the different production regions, were analysed for quality. The samples were graded, milled and chemically analysed for moisture, protein, fat and ash.

Eighty-five of the samples were graded as Grade SB1 and fifteen of the samples were downgraded to COSB (Class Other Soya Beans). The samples that were downgraded was mainly due to the percentage defective soybeans on the 4.75 mm round hole screen as well as the presence of other grain and noxious seeds in the samples.

The protein, fat and ash components are reported as % (g/100g) on a dry basis (db). The average protein content of these samples was 39.42% (db). The average fat content was 18.7% (db) and the average ash content 4.62% (db).

Ten randomly selected samples were analysed for mycotoxin residue levels, genetic modification and protein bound amino acid profile according to the Methods on pages 17 to 18.

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