

SOUTH AFRICAN COMMERCIAL MAIZE QUALITY 2014/2015



Acknowledgments

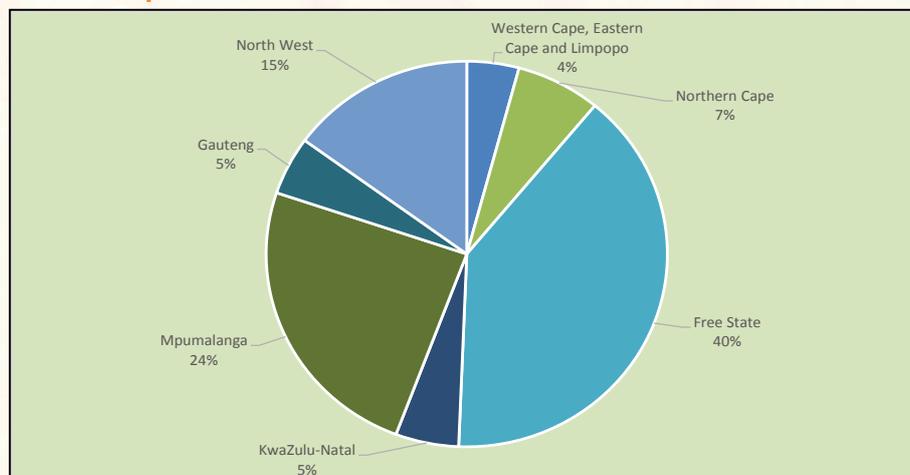
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- South African Grain Information Service (SAGIS) for providing supply and demand figures relating to maize and maize products.

Introduction

During the harvesting season (April to August), a representative sample of each delivery of maize 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 87. A total of 1000 composite samples, representing white and yellow maize of each production region, were received and analysed for quality. The samples consisted of 485 white and 515 yellow maize samples.

Graph 1: Production contribution of the provinces to the 2014/2015 maize crop



Figures provided by the CEC.

The quality attributes which were tested for, include:

- a. RSA grading: All samples were graded according to the following factors, as defined in the South African grading regulation: defective kernels above and below 6.35 mm sieve, total defective kernels, foreign matter, other colour kernels, combined deviations and pinked kernels.
- b. USA grading according to regulations on all samples to determine the following factors: Test weight per bushel (pounds), heat damaged kernels, total damaged kernels, broken corn and foreign matter (BCFM) and other colour.
- c. Nutritional values (on all samples): Crude protein, crude fat and starch.
- d. Physical Quality factors (on all samples): Hectolitre mass, 100 kernel mass, kernel size, breakage susceptibility, stress cracks and milling index.
- e. All white maize samples were milled on the Roff laboratory mill and the whiteness index of the maize meal determined.