provinces differed in some aspects, however significant differences were not observed.

The weighted average percentage total deviation for the Free State was 4.4 %. North West averaged 4.9 % and Mpumalanga 4.5 %.

The maize produced in the Free State averaged a hectolitre mass of 77.1 kg/hl, North West 77.5 kg/hl and Mpumalanga 77.4 kg/hl.

North West gave the highest average protein of 8.4 %, followed by Free State with 8.2 % and Mpumalanga with 8.1 %. All three provinces gave an average fat content of between 3.8 % and 3.9 %. The starch content in these three production areas averaged between 72.6 % and 73.0 %.

The 100 kernel mass for the Free State averaged 33.5 g, North West 34.3 g and Mpumalanga 34.6 g.

The North West province had the "largest" kernel size with an average of 25.2 % of the maize having kernels > 10 mm. (Mpumalanga 20.6 % and the Free State 20.5 %.)

Stress cracks were the same for the Free State and Mpumalanga at 6 % and North West had 4 %.

The average milling index in the Free State was 92.7, in Mpumalanga 93.1 and 94.9 in North West.

The average percentage breakage susceptibility of maize kernels passing through the 6.35 mm sieve was very similar between the provinces with the Free State 1.7 %, North West 1.6 % and Mpumalanga 1.5 %.

The white maize from North West gave an average whiteness index of 30.3 (unsifted) and 21.1 (sifted). The Free State had an average of 29.4 (unsifted) and 20.2 (sifted) and Mpumalanga 29.3 (unsifted) and 20.6 (sifted).

The % extraction total meal with the Roff mill averaged 79.0 % in North West, 78.6 % in the Free State and 78.1 % in Mpumalanga.

4. Imported Maize (2007/2008)

Five imported maize samples were analysed. The maize was imported from Argentina. All of these samples were graded as YM2.

The major downgrading factor of imported maize to YM2 was the high percentage of defective kernels below the 6.35 mm sieve.

The imported YM2 maize had an average hectolitre mass of 76.0 kg/hl. RSA YM2 maize had an average hectolitre mass of 75.0 kg/hl.

The imported maize had smaller kernels than the 2007/2008 and 2008/2009 local crop.

The average weighted fat, protein and starch contents of the imported maize were higher than the average of the RSA YM2 maize.

The mycotoxin and GMO analyses were done on a composite sample of the 5 imported samples received and compared with 2 randomly selected samples of the RSA YM2 maize samples.

In both the imported maize and RSA maize no residues of total Aflatoxin were detected.

The weighted average Fumonisin content of imported maize was 1.40 ppm (mg/kg). RSA maize in that same class and grade averaged 0.18 ppm (mg/kg).

There was no significant difference between the average values of Ochratoxin A, Zearalenone and Deoxynivalenol (DON) of imported maize and RSA YM2 as the values were very low or non detective.

The imported maize tested negative for GMO-MON810 and positive for NK603(Roundup Ready) while the RSA maize tested positive for both.

The quality of the imported maize for the 2007/2008 season, compared to the average quality of the RSA maize of the same class and grade and season, are given on page 51.