

## Main production regions – summary of results

The quality of the maize produced in the three main maize production regions (North West, Mpumalanga and Free State) compared very well overall. General trends observed between provinces differed little from last season. The figures given below are all weighted averages.

The Free State (77.0 kg/hl) and North West (76.9 kg/hl) had the highest hectolitre mass. Mpumalanga averaged 76.4 kg/hl. Mpumalanga however had the highest 100 kernel mass of 33.2 g and North West the lowest of 32.0 g. The Free State averaged 32.7 g.

The percentage stress cracks observed in the three regions compared well, with the Free State averaging 6%, North West 7% and Mpumalanga 8%. North West and Mpumalanga had the same percentage of maize passing through the 6.35 mm sieve with the breakage susceptibility test namely 1.5%, which was only 0.1% higher than that of the Free State.

The percentage of kernels above the 10 mm sieve varied little between the provinces. Mpumalanga had the highest percentage of kernels above the 10 mm sieve (20.1%) and the Free State the lowest with slightly smaller kernels (19.4%). The North West province had the lowest percentage total defective kernels of 5.1%, followed by the Free State with 5.4% and Mpumalanga with 5.5%.

The average milling index on both white and yellow maize was lower compared to the previous season. Mpumalanga averaged 87.8 (90.8), the Free State 92.0 (96.4) and North West 94.1 (101.4). The values in brackets are the averages for the 2012/2013 season. Mpumalanga also had the lowest percentage total extraction on the Roff laboratory mill, namely 78.7%, closely followed by North West with 78.8%. The Free State had an average extraction rate of 79.7%.

The meal obtained from the white maize in North West gave an average whiteness index of 28.0 (unsifted) and 17.8 (sifted). The Free State had an average of 25.5 (unsifted) and 15.7 (sifted) and Mpumalanga 23.5 (unsifted) and 14.0 (sifted).

There were no significant differences in the nutritional components. The Free State had the highest fat content of 4.0 %, followed by Mpumalanga with 3.9% and North West with 3.8%. The protein content in Mpumalanga was 8.5% and in North West and the Free State both 8.6%. North West and the Free State had starch contents of 73.3% and 72.9% respectively. Mpumalanga's starch content was 73.0%.