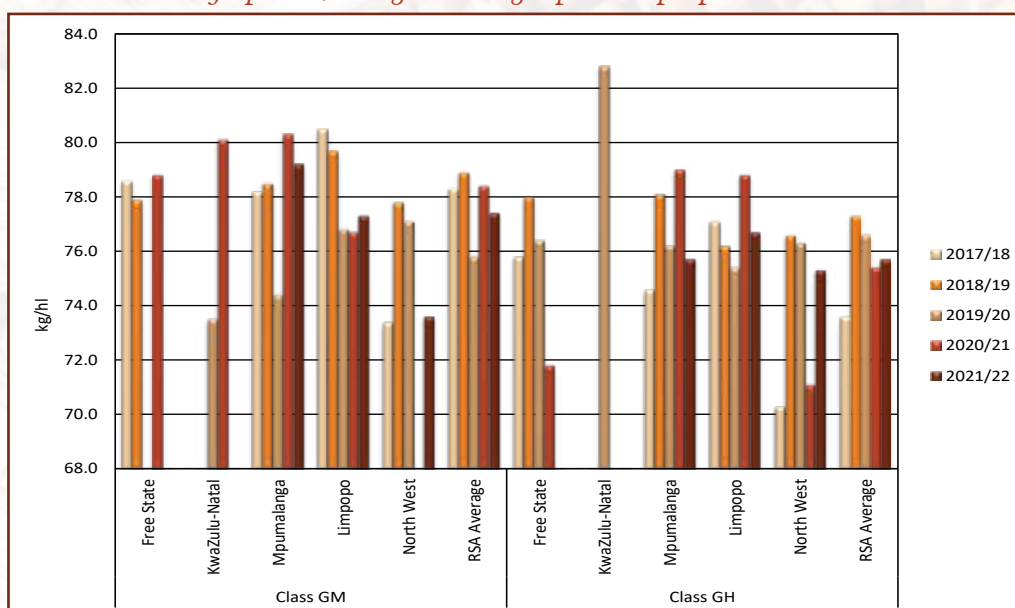


*Graph 19: Average test weight per class per province*



The image analysis results showed that the GM sorghum on average had longer kernels and also slightly wider kernels than the GH sorghum. The variation (indicated by the standard deviation) in these parameters is similar for both GM and GH sorghum. Kernel elongation, defined as W/L% (width divided by length, expressed as a percentage) showed a wider variation as the length and width parameters as can be expected, with average standard deviations of 5.4% for GM and 5.0% for GH sorghum. A totally round kernel will have a W/L% of 100. GM sorghum's volume to surface ratio was over the last five seasons on average 3% higher than that of GH sorghum.

The crude protein, total starch and crude fat contents of the samples were calculated and reported on a dry basis. North West had the highest protein average of 11.4% for GM sorghum, while Limpopo averaged the lowest with 9.4%. For GH sorghum, the sample from Limpopo had the highest protein content with 11.3% and North West averaged the lowest with 9.6%. Nationally, GM and GH sorghum averaged 9.8% and 9.9% respectively. The highest average total starch content for GM sorghum was reported in Limpopo (73.7%) and the lowest (70.1%) in North West. The highest average total starch content for GH sorghum, namely 72.2%, was reported in Mpumalanga. The weighted total starch content of GM sorghum was 73.3% and that of GH sorghum 71.6%. Please see Graphs 20 and 21.

*Graph 20: Average percentage crude protein per class per province*

