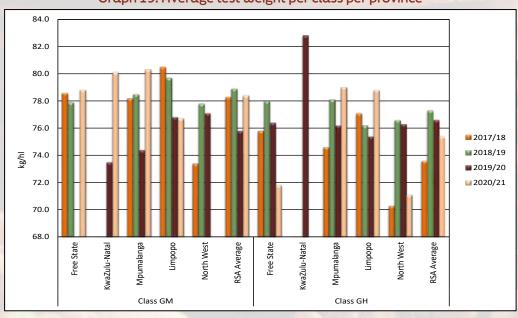
2.50 2.00 1 50 **2017/18** 1.00 2018/19 2019/20 **2020/21** 0.00 KwaZulu-Natal KwaZulu-Natal Mpumalanga RSA Average Limpopo Limpopo Free State North West Average Free State

Graph 18: Average percentage small kernel sorghum per class per province

GM sorghum had the highest weighted average test weight, namely 78.4 kg/hl, while GH sorghum averaged 75.4 kg/hl. Please refer to Graph 19. Test weight values for GM sorghum ranged between 65.0 kg/hl and 83.4 kg/hl, with Mpumalanga reporting the highest average and Limpopo the lowest. GH values varied from 61.1 kg/hl to 79.6 kg/hl. Mpumalanga again reported the highest average with the lowest GH average reported in North West. Test weight was determined on unscreened samples.

GM sorghum also had the highest 1 000 kernel mass values, ranging between 20.1 and 31.8 g (14% moisture basis) and averaging 27.3 g. GH sorghum averaged just over 1 g lower at 26.2 g and varied between 22.0 and 28.8 g. Last season these averages were 23.5 g and 23.8 g respectively.



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 5.0% for GM and 4.5% 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 four seasons on average 3% higher than that of GH sorghum.