Sorghum Crop Quality 2022/23 – Summary of results

The national Grading Regulations (Government Notice NO. R.15 of 08 January 2016, Regulation 4. Standards for classes) states that a consignment of sorghum shall be classified as Class GM Sorghum if it consists of malt sorghum that does not have a dark testa and complies with the standards for the grades. A consignment of sorghum shall be classified as Class GH Sorghum if it consists of malt sorghum that has a dark testa and complies with the standards for the grades.

Seventy-nine percent (26) of the 33 samples analysed for the purpose of this survey was determined to be class GM. Of these, 18 samples (69%) were graded as Grade GM1. One sample was graded GM2 and two samples GM3, while five samples were graded Class Other Sorghum (CO). Of the 7 samples determined to be class GH, 71% (5 samples) was graded GH1 and the remaining two samples were grade GH2 and Class Other respectively. No white sorghum samples were received this season for inclusion in the survey.

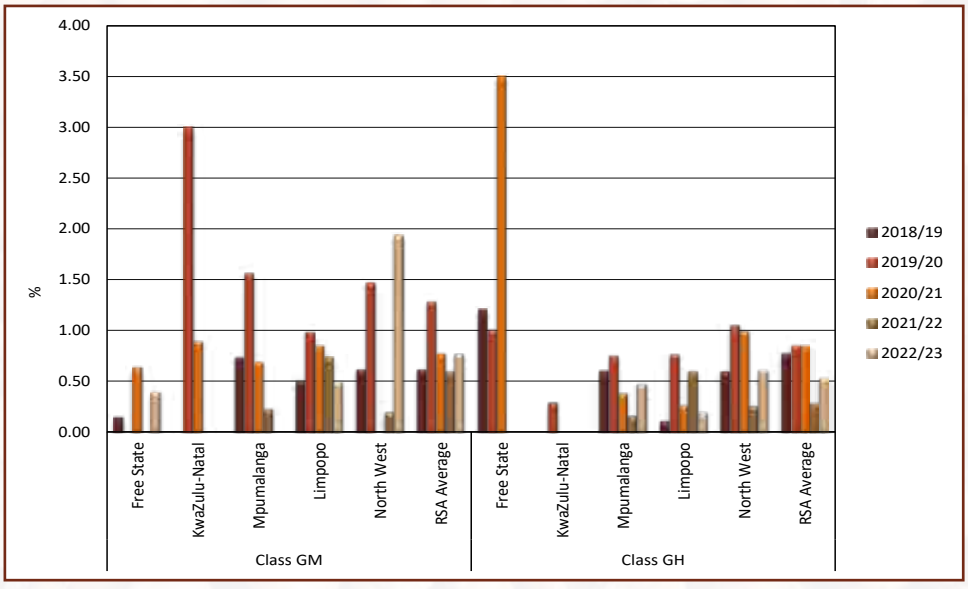
Certain varieties of sorghum contain tannins (specifically condensed tannins) in the seed coat layer beneath the pericarp (commonly referred to as the testa layer) of the grain. These varieties are variously referred to as: tannin, high-tannin, brown, bird-proof, bird-resistant, or bitter sorghums.

Varieties of sorghum not containing tannins are referred to as: non-tannin, low-tannin, condensed tannin-free, or sweet sorghums.

The detection of tannin in sorghum grain for grading purposes is done by SAGL by means of the bleach test. Please refer to the methodology followed under Methods on page 35.

See Graphs 16 to 18 for the weighted average percentages foreign matter, defective sorghum and small kernel sorghum per class per province over five seasons. The five samples received from North West had the highest average percentage foreign matter (1.94%) for GM sorghum. Another five samples from North West also had the highest foreign matter percentage (0.62%) for GH sorghum. The national weighted averages for GM and GH sorghum were 0.77% and 0.54% respectively.

Graph 16: Average percentage foreign matter per class per province over five seasons



The average percentage defective GM sorghum was the highest (1.13%) in the 20 samples from Limpopo. North West had the highest percentage defective GH sorghum, namely 1.62%. The national averages were 1.07% for GM and 1.46% for GH. GH sorghum showed the highest percentage small kernels (national average 2.50%), with the samples from North West having the highest percentage namely 2.90% and the sample from Mpumalanga the lowest with 0.96%. GM sorghum had the lowest percentages small kernels in the sample from the Free State with 0.26% and the highest in Limpopo (1.48%), the weighted average for the class was 1.34%.