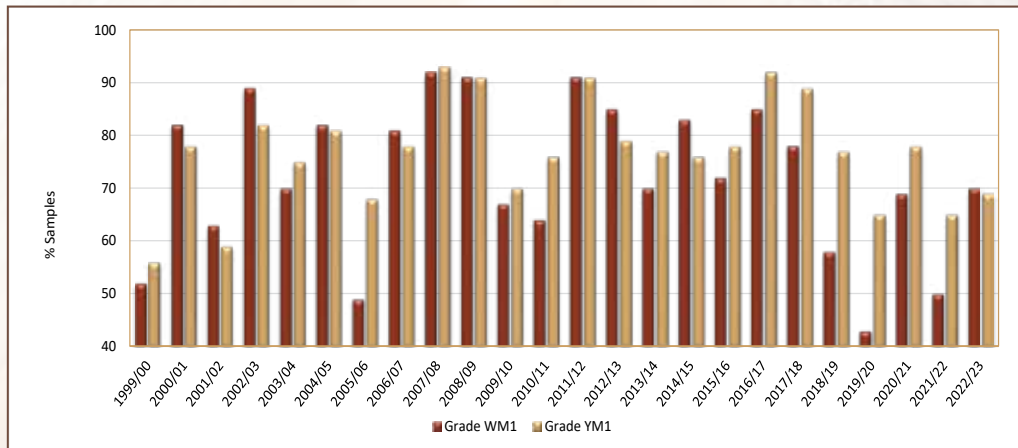


# Maize Crop Quality 2022/23 ~ summary of results

## RSA Grading

70% of white maize samples received for the purpose of the crop quality survey were graded as maize grade one, last season this figure was 50%. 69% of yellow maize samples received and graded were graded as grade one, compared to 65% the previous season. Please see Graph 33 for the percentages of samples (white and yellow) per season graded as grade 1, since commencement of the annual maize crop quality survey in 1998.

**Graph 33: Percentage samples graded as Grade 1 over seasons**



As shown in Table 2, the percentage total defective kernels above (larger than) and below (smaller than) the 6.35 mm sieve, 5.1% for both white and yellow maize, is 2.5% and 1.6% respectively lower than the previous season. Defective white maize kernels above the 6.35 mm sieve decreased by 2.4% to 3.3% and yellow maize decreased by 1.5% to 2.8%. The percentage defective kernels below the 6.35 mm sieve for white maize decreased slightly from 1.9% to 1.7% while yellow maize equaled last season's 2.3%. The average percentage Diplodia infected kernels in white and yellow maize was 0.8% and 1.4% respectively this season, the previous season's averages were 1.2% and 1.5% respectively. Fusarium infected white maize kernels were 0.4% compared to the 1.7% of 2021/22 and that of yellow maize 0.5% compared to 1.6% previously.

The percentage of white maize samples that were downgraded to class other maize as a result of the percentage foreign matter exceeding 0.75%, was 6% (31 samples) and that of yellow maize 5% (23 samples). No samples were downgraded as a result of other colour maize exceeding the 10% and 5% maximum permissible deviation for grade 3 white and yellow maize respectively. The average percentage combined deviations of white maize was 5.5% compared to the 8.0% of the 2021/22 season and that of yellow maize 5.4% compared to 6.9% previously.

Please refer to Tables 3 to 7 and Graphs 34 to 36 on pages 35 to 48.

## USA Grading

Of the 1 000 maize samples graded according to USA grading regulations, 59% were graded US1, 23% US2, 7% US3, 5% US4 and both US5 and sample grade 3% each. The percentage samples graded as US1 varies substantially over seasons, varying from 27% to 62%, 30%, 41% and 51% over the previous five seasons. The percentage samples graded as US2 was lower than the 31% of the previous season. Grades 3, 4 and 5 compared to the percentages of samples in season 2020/21. The main reason for downgrading the samples was (as in previous seasons) the percentage total damaged kernels exceeding the maximum limit per grade, followed by broken corn and foreign material. Please see Tables 8 and 9 on pages 49 to 54.

## Physical Quality characteristics

Bushel weight/Test weight is applied as a grading factor in the USA grading regulations and is also routinely done at most intake points locally for stock verification purposes. White maize had an average test weight of 76.3 kg/hl compared to the 76.4 kg/hl of yellow maize. The average test weights of white and yellow maize were respectively 0.8 kg/hl and 1.0 kg/hl higher than in the previous season. The test weight in total varied from 69.1 kg/hl to 82.2 kg/hl.