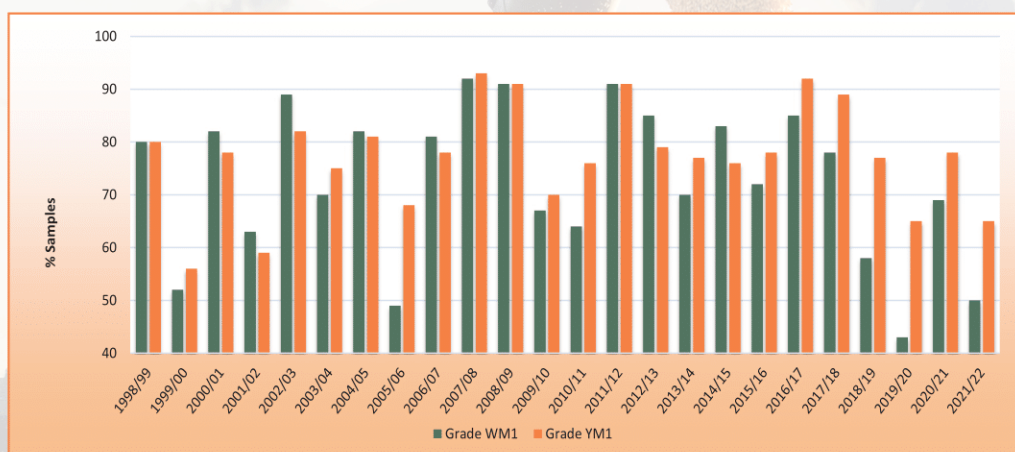


# Maize Crop Quality 2021/22 - summary of results

## RSA Grading

Based on the results reported on the 2021/22 season's crop samples, the maize crop was of below average quality. 50% of white maize samples received for the purpose of the crop quality survey was graded as maize grade one, last season this figure was 69%. 65% of yellow maize samples received and graded was graded as grade one, compared to the 78% of 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



The percentage total defective kernels above and below the 6.35 mm sieve, 7.6% for white and 6.7% for yellow maize, was respectively 1.5% and 2.5% higher than the previous season. Defective white maize kernels above the 6.35 mm sieve increased by 2.7% to 5.7% and yellow maize increased by 2.2% to 4.3%. The percentage defective kernels below the 6.35 mm sieve for white maize decreased slightly from 2.1% to 1.9% and that of yellow maize increased slightly from 2.1% to 2.3%. The average percentage Diplodia infected kernels in white and yellow maize was 1.2% and 1.5% respectively this season, the previous season the average for both was 0%. Fusarium infected kernels of white maize were 1.7% compared to the 0.8% of 2020/21 and that of yellow maize 1.6% compared to 0.6% 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%, increased from 5% (29 samples) to 6% (34 samples) this season. The percentage for yellow maize equaled last season's 5% (23 and 21 samples respectively). 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 8.0% compared to the 5.6% of the 2020/21 season and that of yellow maize 6.9% compared to 4.5% 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, 27% were graded US1, 31% US2, 15% US3, 12% US4, 8% US5, while sample grade and class mixed corn represented 6% and 1% respectively. The percentage samples graded as US1 varies substantially over seasons, varying from 62% to 30%, 41%, 51% and 71% over the previous five seasons. The percentage samples graded as US2 was higher than the 21% and 25% of the previous two seasons. Grades 3, 4 and 5 as well as sample grade also reported increases in the percentage samples compared to a number of previous seasons. 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 56.

## 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 75.5 kg/hl compared to the 75.4 kg/hl of yellow maize. The average test weights of white and yellow maize were respectively 0.4 kg/hl and 1.1 kg/hl lower than in the previous season. The test weight in total varied from 56.6 kg/hl to 83.9 kg/hl.