

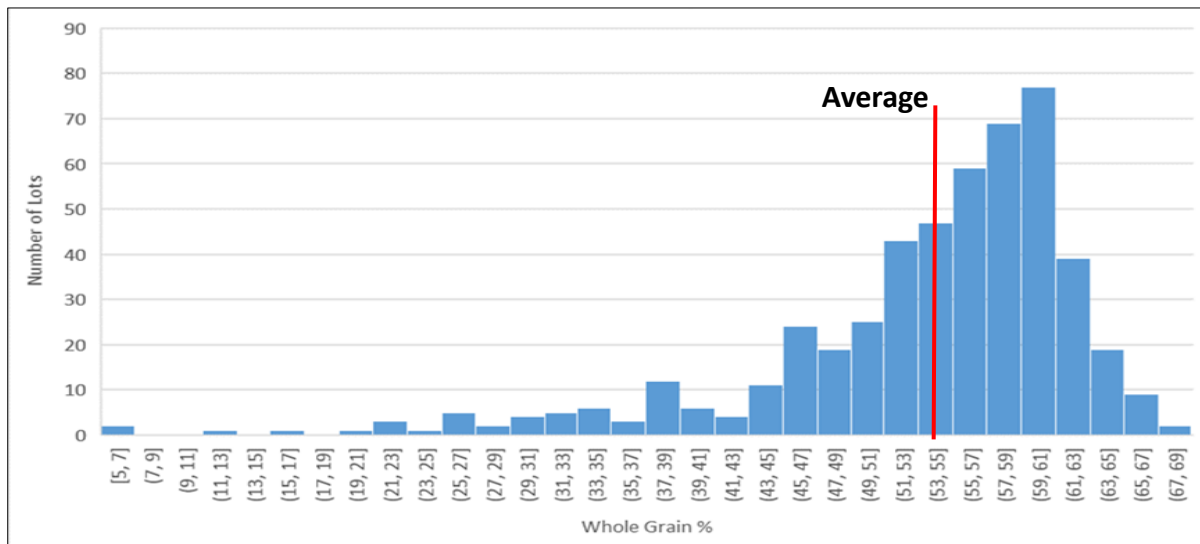
Whole Grain Yield (WGY) results for 2018 crop

- **Reiziq grown across all regions averaged 53.8% WGY**
- **The top 50,000 tonnes (when ordered by WGY) averaged 62.7% WGY at an average delivery moisture of 19.8% and yielded 11.9 tonne/ha.**
- **In comparison the bottom 50,000 tonnes averaged 36.4% WGY at an average delivery moisture of 15.5% and yielded 10.1 tonne/ha.**

There were many growers that achieved excellent WGY results this year even though the WGY seasonal average was low. This can be seen in the WGY distribution graph for Reiziq below. There were a number of lots with high WGY results around 55 - 65%. The highest WGY for Reiziq was 68.1%.

The lower seasonal WGY average can be explained by the 'long tail' of low WGY results, see the graph for Reiziq below (this long tail was common to all varieties). The delivery moisture of some crops was below 15% moisture. Some grain was delivered at below 10% moisture.

Distribution graph of all Reiziq lots delivered across all regions, showing the weighted seasonal average WGY% of 53.8% (red line). Many lots achieved higher than average WGY and a premium. Some lots achieved extremely low WGY and a big discount.



WGY Seasonal Average

Last season the period between flowering and 22% grain moisture was only 47 days compared to the long term average of 54 days according to the work conducted by Brain Dunn from NSW DPI. This early maturity caught many growers out. The hot dry finish to the season also made drainage decisions difficult, as a result many crops dried down while standing in water and this delayed harvest. Moisture levels were therefore lower than optimal at the start of harvest across the industry.

When high levels of cracking occur in rice it is usually related to changes in grain moisture cycles after the rice matures. A heat wave between the 8th and 12th of April was followed by a cool change, higher humidity, a small rain event and cool temperatures from the 14th of April. This change in grain moisture cycle on already dry rice (drying/wetting) significantly promoted cracking in rice.

Harvest equipment can also increase the cracking levels in rice. Harvest equipment needs adjusting and monitoring when grain moistures change in an attempt to reduce the rough handling of the fragile rice.

The variety average WGY also varies from season to season due to climatic factors beyond the growers' control (see table below). For example, high temperatures during grain maturation contribute to weaker starch bonds within the grain and more chance of breaking up with milling. This is one of the factors that contributed to a lower WGY average for all varieties this year compared to last year.

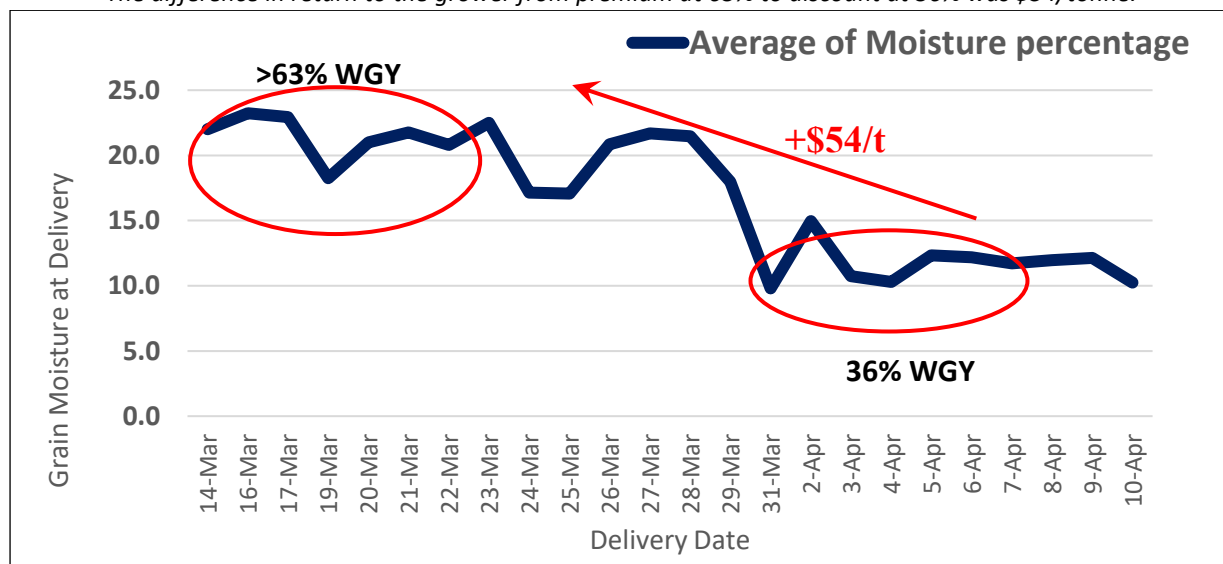
The average WGY% varies from season to season and by variety:

VARIETY	2017 WGY% average	2018 WGY% average	2018 Top WGY %
DOONGARA	64.9	61.5	68.7
LANGI	62.5	57.2	65.4
KOSHIHIKARI	68.8	53.5	70.4
OPUS	68.7	54.4	68.9
REIZIQ	56.1	53.8	68.1
SHERPA	64.1	48.2	68.9
TOPAZ	66.9	62.5	68.4
VIAND	62.2	56.1	68.1
YRK5	62.8	49.7	65.9

Monitoring crops closely to assess timing of drainage and harvest and adjusting harvesters for improved WGY would significantly increase industry grain quality. More 'valuable' whole grain per tonne of paddy delivered, would result in cost efficient processing at the mill and more whole grain available for high value markets - resulting in better long term returns for paddy to the grower.

Grower example of the influence of grain moisture at delivery on WGY (Benerembah High Moisture Trial 2018)

- The grain delivered from the 14 to 22 March was mostly above 20% moisture and the average WGY of these deliveries was above 63%.
- The grain delivered between 31 March and the 8 April was below 15% and the average WGY of these deliveries was 36%.
- The difference in return to the grower from premium at 63% to discount at 36% was \$54/tonne.



For further information about appraisal premium payment matters, please contact Grower Services on 1800 654 557 or 02 6953 0436. To speak with a SunRice Field Officer about your results, please contact Mark Groat on 0419 174 772 (MIA and CIA) or Anna Jewell on 0409 567 429 (Murray Valley).