

**Sample moisture readings- another tool to maximize whole grain yield**

Last week Mark Groat (SunRice Grower Services), Harriet Brickhill (Rice Extension) and some growers sampled their fields for moisture readings. A range of different moisture readings were as seen in table below. Grain is mature at 26% and at the moment Brian Dunn estimates dry down at 0.5%/day. Evapotranspiration next week is forecasted between 5-8mm/day. To estimate when the maturity of your crop is, collect a hand sample and do a moisture test. Then calculate approximately how many days to maturity using the formula below:

$$\frac{\text{Sample moisture \%} - 26 \%}{\text{Daily dry down rate (0.5\%)}}$$

For example grain is 30 % moisture less 26% at 0.5%/day dry down will take 8 days approximately to maturity.

You should aim to have field trafficable by 24% moisture, and SunRice accepts delivery from 22%.

Due to the sampling technique we often miss a lot of lower greener tillers and it is generally accepted to add another 2% moisture to your sample. Use this as a tool only to help guide your decision making.

Table 1: Moisture readings for different crops as at 13 March 2020

Crop	PI date	Moisture Reading
1. Reiziq Yenda	3 Jan	24.7%
2. Reiziq Benerembah	4 Jan	30.8%
3. Reiziq Benerembah	5 Jan	30.3%
4. Topaz Yenda	8 Jan	26.5%
5. Topaz Yenda	8 Jan	24.3% (riper areas), 31% (greener areas)



Crop 1 Rezieq Yenda 24.7%. The grower decided to begin draining as soon as he got this reading rather than wait till Monday as was originally planned



Crop 5 Topaz- Yenda. Moisture ranged from 24.3% - 31% in the spreader induced variable strips making drainage decision difficult.



(Left). Crop 4. Topaz Yenda 26.5%.

Table 2: Predicted ET figures for 13 -20 March 2020.

**ETO Daily (mm)**

Date	13/3	14/3	15/3	16/3	17/3	18/3	19/3	20/3	Total
Coleambally	7.5	6.8	6.1	6.0	6.2	7.2	4.7	4.8	49.3
Deniliquin	8.8	8.0	5.5	5.5	6.4	7.9	5.9	6.0	54.0
Finley	7.5	7.2	5.0	4.9	5.7	7.3	5.3	5.4	48.3
Griffith	7.8	6.7	6.6	6.3	6.1	7.4	4.6	5.0	50.5
Hay	8.7	8.4	7.1	6.9	6.5	8.5	5.2	6.2	57.5
Tullakool	9.0	7.8	5.9	5.4	6.3	8.2	5.7	5.8	54.1
Yanco	7.3	5.8	6.7	6.3	6.3	7.1	4.6	4.0	48.1

**Who do I contact to arrange sample moisture testing at Mill?**

Location	Name	Number
Deniliquin	Tony Connor	0419 429 496
Griffith	Keith Cox	0409 897 254

**How do I collect samples for moisture reading?**

1. Choose representative areas and sample near noon for constant results. NDVI Imagery can help you with this. Collect samples in container, removing as much stalk as possible. You will need a few cups of grain for each sample.
2. Transfer grain into bag to take to weighbridge. Write the paddock and zone to help you jog your memory if collecting from more than one spot.
3. At the weighbridge the sample will be put through a de huller to remove the husk and any remaining stalk.
4. Samples are then put through a grain analyser to determine moisture reading.
5. Work backwards from 26% to work out the approximate days till maturity.

