



RICE EXTENSION

FUNDED BY THE RURAL INDUSTRIES RESEARCH AND DEVELOPMENT CORPORATION

Connecting growers

NEWSLETTER | April 2017



The Rice Extension team now have a drone

Our drone is collecting some great images of commercial crops and trials across the region this season. There are interesting responses to nitrogen timing and rates, planting density and sowing methods on each of the varieties in the amount of lodging, crop timing and yield.

Watch out in our coming newsletters for an update on the trial results and the results of our commercial crop monitoring.



OUR NEW TOY!

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Events Calendar:

9am Wed 31 May, Griffith	Innovator's Workshop Class V	Save the date!! More info soon
9am Thursday, 29 June Yoogali Club, Griffith	IREC, Deakin and Murrumbidgee Landcare Drone and Technology Day	Register and pay at this web address http://irec.org.au/events/ or email irec@irec.org.au



YRM70 crops have had mixed results with lodging. Yield results will tell us whether the standing crops can yield well.

< Tweet 🔍 📌

Harvesting #Sherpa #drillsown #rice17 that averaged 13.9t/ha dry at #goldentriangle #logiebrae #murrayvalley



Ian Singleton @ian_... · 15/4/17
#koshi done and dusted, thanks for staying upright. @RiceExtension #riverina #riceharvest17



Harvest Update

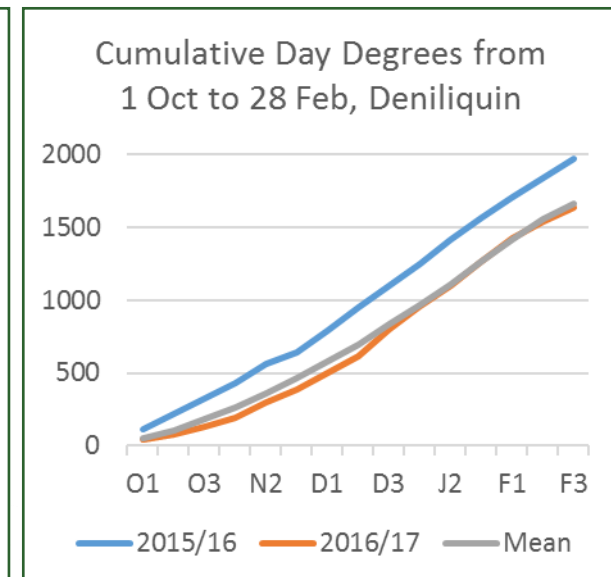
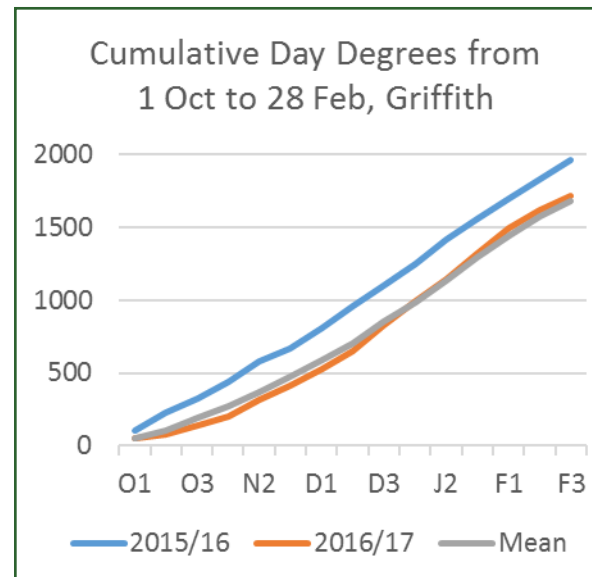
Harvest is now well underway with just over half of the expected receivals delivered (as at Monday 24 April), approximately 60% of which has come from the Murrumbidgee Valley and 40% from the Murray Valley.

Growers have reported that Koshihikari crops have stood out so far this season. Early reports are that lodging in Koshihikari has been lower than usual. Medium grains in the Murrumbidgee and Sherpa in the Murray Valley, however, have had more lodging than usual. There has been much discussion as to why, but no conclusions yet.

We have had reports YRM70 has been yielding up to 12 t/ha in the Murrumbidgee. Not enough YRK5 or YRM70 has been harvested in the Murray Valley for an indication on yields yet. We will be analysing the harvest data and comparing different management practices and will report back to you on what worked well.

Not surprisingly early indications show average yields for most varieties are likely to be lower than last year, with the cumulative day degrees over the temperature-sensitive months of the season being close to the long-term average.

Thanks to Laurie Lewin for processing the temperature data.





“High trash levels - slowing sheds down - adjust your headers” TXT sent to growers from AGS last week

2016-17 Quality specifications

- Excessive Trash - The specification for trash in paddy is no more than 1.5%. - For each 0.1% above 1.5%, a discount of \$0.20 per tonne applies.
- Paddy Contaminated with Foreign Matter (burrs, mud, dirt, stored grain insects) - The specification is NIL contamination with foreign material.
 - If declared at delivery, a discount of \$1 per tonne for the first two pieces and \$1 per tonne thereafter to a maximum of \$5 per tonne applies.
 - If not declared at delivery, a discount of \$3 per tonne for the first two pieces and \$2 per tonne thereafter to a maximum of \$10 per tonne applies.

2016-17 Quality Specifications in full are available on the Harvest App <http://harvestinformation.sunrice.com.au>

From the SunRice Grower Services Harvest Newsletter:

“Remember that the Model S dockage tester at the testing platform is testing wet paddy and gives a higher reading than the trash measurement on dry paddy in the Quality Appraisal Centre (QAC). The testing platform measurement will be up to twice as high as the QAC measurement. Up to 1.5% trash measured in the QAC is permitted without discount.”

In the 1997 season, a project carried out by the Kondinin Group and Ricegrowers' Association investigated the causes of trash and ways to reduce it. The key findings found that field factors significantly affected trash levels. First and foremost was degree of lodging, then grain moisture content, rice variety and location. Harvest delays also exacerbated trash problems. Trash levels rose later in the season as the grain moisture content declined, but whether it was time in the season or moisture alone that affected trash was not determined. Attention to details in machine operation helps, such as keeping up fan and forward speeds consistent with acceptable levels of loss. Mind that the cleaning system is not overloaded otherwise excessive trash will show. Get feedback from the receival platform operator with each delivery to pinpoint harvester adjustments that need to be made to

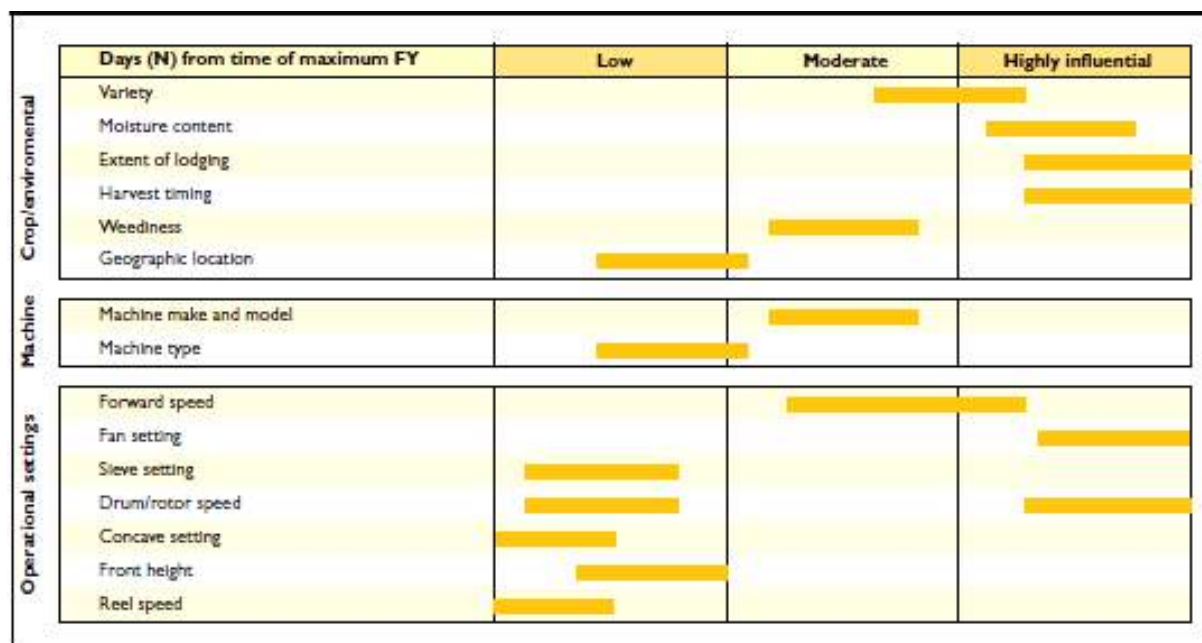
keep trash levels down.

Of all adjustments, fan speed was the most sensitive factor on trash levels.

The higher the fan speed, the lower the trash. Lowering fan speed only 300rpm could lead to a doubling in trash level with some harvesters. Sieve settings were not so sensitive. Cylinder speed and concave settings greatly affected degree of pearling (paddy dehusking) but were not highly sensitive on trash.

Pearling increased sharply with higher cylinder or rotor speed and whole grain millout declined accordingly.

This info is from the RIRDC [Rice Harvesters Reference 1999](#)



Sensitivity of trash levels to various factors.



Smoke drifting at low levels can cause serious health problems in the local community. Photo thanks to Ian Braithwaite.

Burning stubble

The stubble from last year's high biomass winter crops and summer crops can cause issues with planting equipment, reduce establishment at planting and tie up residual herbicides. A hot burn can kill weed seeds and eliminate trash problems.

However preventing smoke drifting onto neighbours and into the regional cities and towns is vital:

Don't put your right to burn at risk.

Assess local wind and air conditions prior to burning. Avoid burning late in the day or when there is no wind, as this is when inversion layers are most likely to be present.

The Bureau of Meteorology website has a tool to help growers plan stubble burns. Click on the MetEye link and the 'Wind Forecasts' tab to use the tool to get a forecast for burning conditions with wind speed and direction as well as the mixing height over the next few days at your location.

SEE EXAMPLES OVER PAGE

Indicators of stable air conditions include smoke or dust moving horizontally and staying close to the ground, and fog. Indicators of unstable air conditions include tall, white, fluffy cumulus clouds and smoke rising into the atmosphere. From GRDC



Click below on this article from the GRDC website - it has some good tips for managing this year's winter crop after the wet winter last year:

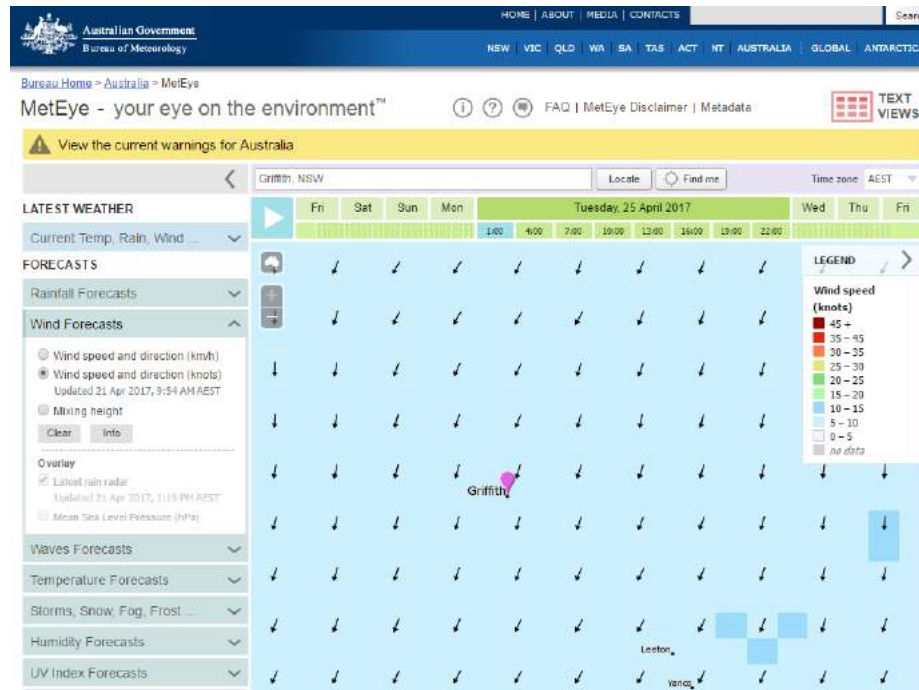
[Impacts of a wet season on crop nutrition](#)

Rob Norton (International Plant Nutrition Institute)

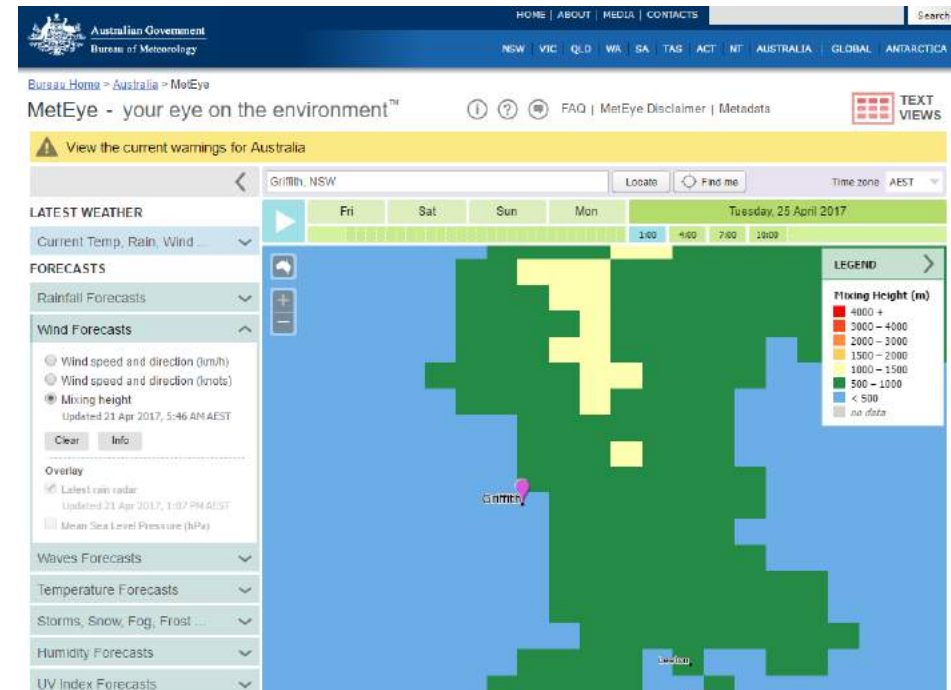
Connecting growers



Login to the Rice Extension pages at www.sunrice.com.au/growerservices



Using the wind 'speed + direction' tool, look for wind direction to avoid local towns and roads, and light blue colours for the best wind speed.



Using the 'mixing height' tool, look for dark orange and red as indicators of the best conditions for burning

Are you missing your IREC Farmers Newsletter?

Since 1944, the IREC Farmers' Newsletter, has been a valuable source of information for irrigators. The magazine brings together relevant articles on research trials and demonstrations based on crops and management techniques, plus stories on policy, legislation, programs and opportunities that affect irrigators in the Murrumbidgee Valley.

To keep up to date with the latest newsletter make sure you are a member of IREC.

Go to this website <http://irec.org.au>

(Note: Coleambally Irrigation has paid IREC membership for all their customers)





Good management practices for growing rice on rice?

With a promising outlook for water allocations many growers are considering growing rice on rice this year. If this is the case now is the time to start planning for C2018 crop.

Paddock hygiene is important for growing a profitable crop in the second or third year due to the build-up of weeds and disease in an aquatic environment. The best way to achieve this is through an integrated management system.

Stubble management

Removal of stubble with a hot burn is the best way to reduce the stubble load for the next crop and will control late maturing weeds and seed. A hot burn will also reduce stem rot sclerotia, as stubble is the source of new infections of diseases.

A hot burn is the key- so the stubble needs to be dry which will require good weather conditions combined with rolling the stubble, mulching or waiting until early spring. Stubble removal is effective but the cost is prohibitive in most cases.



A hot burn is an integral part of reducing weeds and disease in a second year rice crop

Weed management

Rotating rice with other crops reduces weed numbers. Use a knockdown herbicide during the fallow and prior to sowing. Rotate herbicides in the following rice crop by using a herbicide with a different mode of action to minimise weed resistance to one herbicide. Apply all herbicides at label rate.

Control weeds, such as Cumbungi, post-harvest particularly those in borrow ditches and channels as this is where most seedlings establish and encroach into rice bays and infestations restrict water supply. Post-harvest but prior to dormancy is a good time to spray Cumbungi as the leaf surface area is larger than at sowing time.

Paddock management

Timely cultivations play an important role in reducing established weeds by burying weed seeds. Where stem rot is present cultivation will bury the sclerotia. Cultivation will reduce any trash left over from a burn which can cause green slime issues and herbicide tie up issues in drill sown crops. Rice bank renovation helps prevent build-up of new weed populations and ensures good drainage is achievable pre harvest.

Sowing method

Changing sowing methods will influence the types and numbers of weeds, pests and diseases. Grasses are built up after a drill sown crop where the flushing and draining reduces aquatic weeds. Permanent water on aerial sown crops inhibits the barnyard grass growth after a prior drill sown crop.

Nutrition

It is important to soil test or calculate a nutrient budget to determine the nutrition program for the following crop - particularly if there were underperforming areas of the current rice crop. Nutritional issues have been identified in a few Murray Valley rice crops in C2017.

Start with a clean seed bed





Reduced biomass, tillers and vigour in rice can be seen above and below as a result of Glean residue where there was spray overlap.



What impacts will winter crop herbicides have on the following rice crop?

Growers contemplating growing a rice crop next season after this winter crop need to think about what herbicides are used to prevent any damage or yield losses to the following rice crop.

Rice Extension has presented the effects of herbicide residues previously but as winter crop sowing gets underway it is worth revisiting the risks as a couple of this year's rice crops were affected by residues from winter crop herbicides, see *photos*.

Malcolm Taylor conducted trial work by applying twice the label rates of herbicide in the winter prior to a rice crop. The results showed that, in the worst conditions, rice sown immediately after a prior cereal or broadleaf winter crop may be susceptible to injury from carryover of herbicide residues.

Severe injury to rice occurred from:
INTERVIX, SAKURA

Moderate injury to rice occurred from?:
GLEAN, ATRAZINE, BOXER GOLD, SIMAZINE and LOGRAN
(in descending order).

In only the most severe cases (**INTERVIX and SAKURA**) the injury remained profound and was expected to reduce rice grain yields.

No or negligible injury was discernible with:
AVADEX XTRA, TRIFLURX, ALLY, STOMP and DIURON.

Herbicide carryover will be influenced by temperature, seasonal rainfall, soil pH, organic matter and soil texture, thus it is difficult to offer definitive answers to questions regarding the risk of damage to a following rice crop.

Ensure you discuss your cropping program fully with your agronomist or advisor prior to sowing to reduce any potential risks to your rice crop in a double cropping program. If you need to use one of the herbicides shown to have a residual effect on rice you can do a bioassay test prior to sowing your rice crop which a number of farmers did prior to C2017 sowing. Dig up some soil prior to sowing rice and plant some rice seeds in. Watch for emergence and/or damage.

Further information on herbicide residues can be found in the [2016-17 Rice Crop Protection Guide](#).



Save the Date for the next **Innovator's Workshop 31 May**

These photos are from the last Innovator's Workshop held in December

where there was lots of hands on learning about layouts, weeds, new varieties, and using drones on farm.





3 years clover with no Nitrogen applied on YRM70 aerial sown with pre-germinated seed. Minimal lodging for Bruce Evans at Coly

Sherpa on the left planted same time as the YRM70 on the right.
Water just off Sherpa in bottom bays, YRM70 ready to go - 2 to 3 weeks quicker.



Left - YRM70 150 N up front going down

Right - YRM70 90N upfront 60 N at PI still standing

