



MANAGE RICE for 2007

John Angus¹, Alexander Suladze¹, Ranjith Subasinghe², Kathryn Bechaz² & John Lacy²

¹CSIRO Plant Industry, Canberra, ²NSW DPI, Yanco Agricultural Institute

MANAGE RICE is a collection of computer programs, documents and images distributed by mail on a CD to all rice growers and advisors to the rice industry.

The 2007 version (v 6.3) contains three new features:

- Growers' toolkit, a collection of documents and links from NSW Department of Primary Industries, SunRice and the Ricegrowers' Association
- Images of weeds of rice as a separate section in the Rice Diagnostics section
- A time-of-sowing calculator that displays predicted yield in relation to sowing date for each year of historical record.

If you have not received a copy of the CD in the mail, there are two ways to obtain one.

- Contact Ranjith Subasinghe at Yanco Agricultural Institute (02 6951 2679 or ranjith.subasinghe@dpi.gov.nsw.au).
- Download from the secure part of the SunRice website (www.sunrice.com.au)

The downloadable version does not contain the large files for rice growers' toolkit and Rice Diagnostics. In future we hope to distribute upgrades to MANAGE RICE through the internet.

Predicting dates of drainage & harvest

One of the little-used parts of MANAGE RICE is the screen (Figure 1) that predicts the date when grain dries to 20% moisture and when the soil is just dry enough to support a harvester. Harvesting at this moisture content maximises percent whole grain and expected grain price.

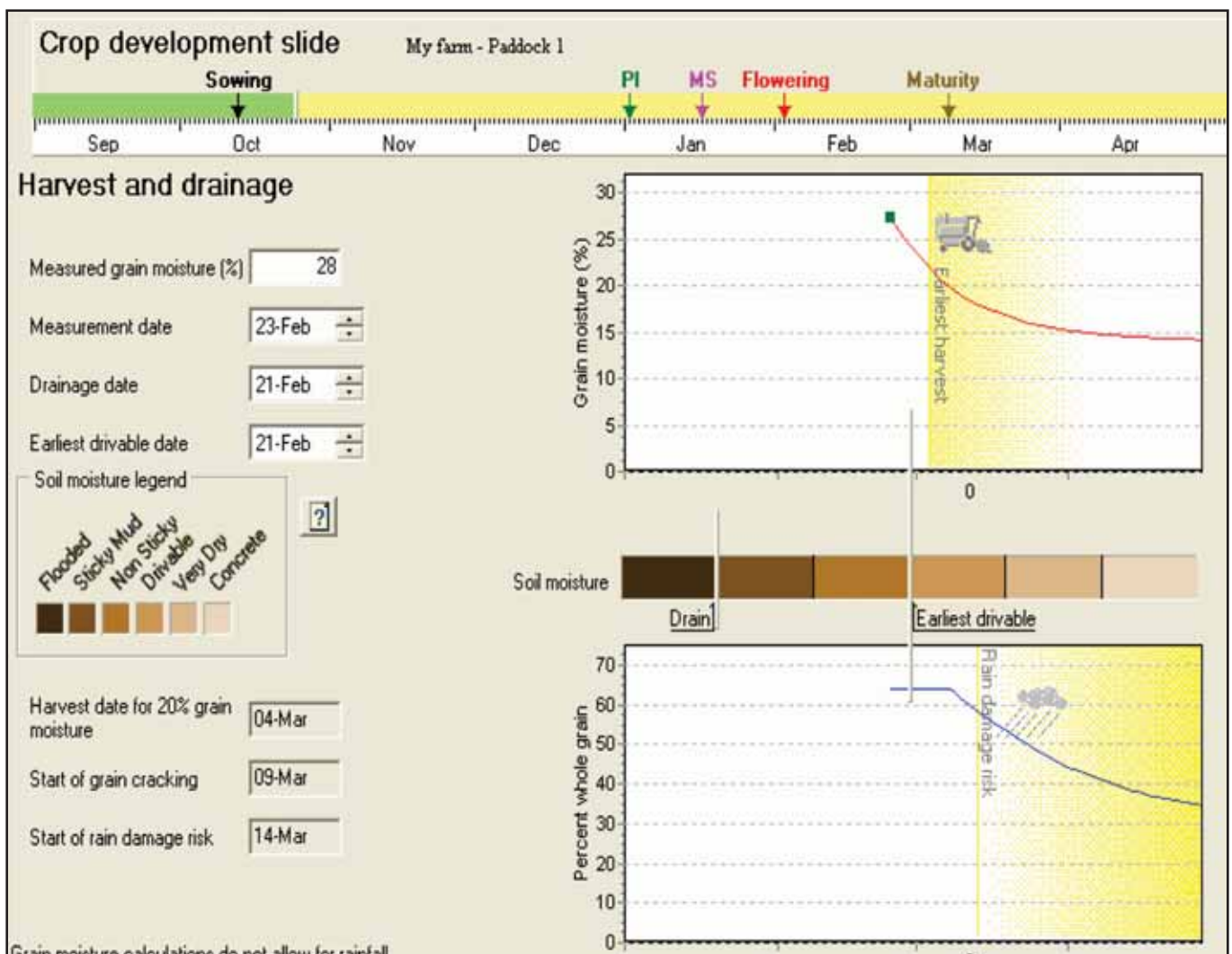


Figure 1: A screen from MANAGE RICE that predicts the dates for drainage and harvest.




The key to using this screen is to collect a few handfuls of grain several weeks before harvest and measure its moisture content by weighing, drying it in a microwave oven and reweighing. The initial grain moisture value should be 31% or less. You can obtain details by clicking on the Question Mark. Then there are two stages in using the program:

1. enter the measured grain moisture and the collection date, either in the two boxes or by dragging the blue dot in the upper graph using the mouse
2. place the mouse on the vertical line representing the Earliest Drivable and drag it until it lines up with Earliest Harvest. It usually takes two or three attempts to line up Earliest Drivable and Earliest Harvest because of the feedback between soil water content and grain dry-down.

The Program then estimates the Drainage date that is expected to lead to Earliest Harvest and Earliest Drivable at the same time.

The models used in calculating the dry-down curves were developed by Rob Williams from a large set of data for Amaroo. This model uses recent daily evaporation rates that you can obtain using Download on the toolbar. It uses long-term averages for future evaporation rate. The Earliest Harvest date may not always agree with Maturity estimated on the Crop Development Slide. The dry-sown method is the more reliable.

The model accurately describes the rapid dry-down for grain maturing in February-March and the slower dry-down for grain maturing in April. Try it and see. 

Further information

John Angus
CSIRO Plant Industry, Canberra
T: 02 6264 5095
E: john.angus@csiro.au