



CropARM: A Free Online Decision-Support Tool

Key Points

- CropARM is a **simple software tool** that indicates possible outputs to critical management decisions
- It is **freely available online**, and for the first time contains **Tasmanian specific-data sets**.
- The tool can be used to **compare how different crops, pastures and irrigation scheduling perform** with local soils and conditions.

Testing new business decisions

What is CropARM?

CropARM is a simple software tool that indicates the effect of management decisions (e.g. crop type, fertiliser, irrigation strategy) with farm resources (e.g. soil and weather) on yield, by using years of scientific research, crop modelling and climate forecasting capabilities.

CropARM is freely available online, but up until now wasn't accessible for Tasmanian agriculture.

Additions by the *Water for Profit* modelling team at TIA will allow farmers to compare how different varieties, fertilizer timing and irrigation scheduling perform with local soils and conditions by using the tool.

This can help farmers answer questions such as: what level of nitrogen fertiliser would probably result in maximum potential grain yield for my farm? Knowing this threshold is important for optimising productivity.

Water for Profit



Steps to use the CropARM online tool

Temporary test site: www.iage.usq.edu.au/#/

Results will soon be integrated into the full, faster site:
<http://www.armonline.com.au/#/wc>

1. On the 'Home' page, click on CropARM

2. On the left side of the screen, click on 'Regions' button

- On the new window, select your state and a region that suits your interest. Click apply.

3. Back to the CropARM menu, click on the 'Crops' button

- Select the crop that suits your interest.
- Note: the only option currently available for Tasmania is 'Wheat'. The next step is to include irrigated results for green peas .

4. Back to the CropARM menu, click on the 'Scenarios' button.

This is where you will create the scenario you want to test.

- On the left side of the window, you'll see the how many scenarios you created. Each new management option selected creates a new scenario.

4.1. Select the management strategies.

You can choose more than one option for each strategy.

If Tasmania selected, these are the choices:

- Soils
- Initial water content (%)
- Cultivar
- Plant density (plants/m²)
- Sowing date
- Starting N (kg/ha)
- Sowing N (kg/ha)
- Top dressing N rate (kg/ha)
- Irrigation strategy

After creating your scenarios, click apply.



6. A chart will appear with the information of your scenario(s).

You can change what you want to know, on the button 'Dry grain yield (t/ha)'. You can change the chart itself, on the button 'Box Plot'; Both buttons are located on the right side on your screen.

7. If you put your mouse cursor on your chart, a pop up box will appear with the exact numbers of your selected information. E.g. 1.91 t/ha for average yield.

8. To save your chart click on the 'three parallel horizontal lines' icon (≡) on the right of your screen.

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