

Aim:

To compare the ease of use and practicality of five different moisture meters.

Method:

Five different moisture meters were purchased:

1. EM50G remote logger with Decagon Sensors,
2. The Plexus Hub with gypsum block sensors,
3. The Irrometer with gypsum block sensors,
4. The Wildeye,
5. G-Dot.

The EM50G Decagon, Plexus Hub and Wildeye all have the ability to access the data remotely. The Irrometer required a data logger to collect the data and the G-Dot is a visual system.

These sensors were installed into a paddock irrigated by a Lateral Irrigator at the end of June 2017.



Results:

All systems were installed successfully with the Wildeye and Plexus going online immediately. The EM50G required the SIM card to be activated which was not successful. This system then had to be manually read for the remainder of the season much like the Irrometer.

System	Pro's	Con's
Plexus	<ul style="list-style-type: none"> • Easy to access website data via Greenbrain webpage on smartphone • Excellent service from MEA • Easy to read data 	<ul style="list-style-type: none"> • Expensive \$3610 with 4 sensors • Yearly annual fee of \$350 to access information.
EM50G Decagon	<ul style="list-style-type: none"> • Well set out program to read data and graph it. • Sensors read moisture and temperature 	<ul style="list-style-type: none"> • Expensive \$4419 with 4 sensors • Difficult to set up • Extra cost for program to chart data
Wildeye	<ul style="list-style-type: none"> • Reasonably priced \$500 with 2 sensors • Easy to access website data via webpage on smartphone 	<ul style="list-style-type: none"> • Ongoing monthly fee to access data \$30/mth • Data given as a moisture percentage rather than kPa measured with gypsum blocks
Irrrometer	<ul style="list-style-type: none"> • Easy to read data using Irrrometer WaterGraph • Reasonably priced \$1200 with 6 sensors. 	<ul style="list-style-type: none"> • Need datalogger to collect information. • No remote access of data unless additional parts bought.
G-Dot	<ul style="list-style-type: none"> • Easy to see data infield • Reasonably priced \$290 each 	<ul style="list-style-type: none"> • No remote access of information

Full report and further information available from Alleena Burger 0428278277 or Laura Kaylock 0431236045.

Project sponsored by:



Pre-Irrigated 20th April 2017 on a Border Check layout. The soil is a grey clay.

Sown to Trojan Wheat 12th May. This then received two rains of 45mm and 50mm within a fortnight and the paddock become waterlogged. The Wheat was sprayed out and sown to Barley in the first week of June.

Moisture Meters were installed in early August.

Plexus Hub with Gypsum Block sensors. This can only be viewed online.



Wildeye. This can also only be viewed online.



EM50G remote logger with Decagon Sensors. This can only be viewed online.



The two red lines are installed at 15cm and the two blue at 30cm.

G-Dot. Visual in paddock only.



Unfortunately the data wouldn't download off the **Irrrometer with the Gypsum Blocks**, however this has proven to be reliable moisture meter that can either be read in the paddock or downloaded on a data logger and viewed in a graph on a computer.

For further updates and information contact Alleena Burger burgera@bigpond.com or follow the Moulamein Cropping Group on Twitter [@MouliCropping](https://twitter.com/MouliCropping).



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