Information Sheet

IS13025

Irrigation scheduling tools

Irrigation scheduling is important when trying to maximise crop production. Some of the more commonly used irrigation scheduling tools are described below.

Capacitance Probe

A capacitance probe measures water content by detecting how easily an electric charge travels through the soil. In continually logged systems (for example, EnviroSCAN and AquaSpy), the sensors are connected to a central data logger by cabling or radio frequency to record sensor readings.

The probe measures at multiple depths which can be analysed separately or combined to determine the moisture availability. The data logger records moisture variation at regular time intervals. The trends that are logged are used to determine optimal irrigation scheduling.

Capacitance probe deficit figures are not a measurement of actual soil moisture deficits. They only provide a guide of when to irrigate not how much water to apply.

Minipan

A minipan is one of the easiest and cheapest irrigation scheduling tools to use and to calibrate. Crop growth is recorded against evaporation from a container to determine the trigger point for irrigation.

Once calibrated the minipan is used and maintained by waiting for the trigger point to be reached then refilling the bucket.

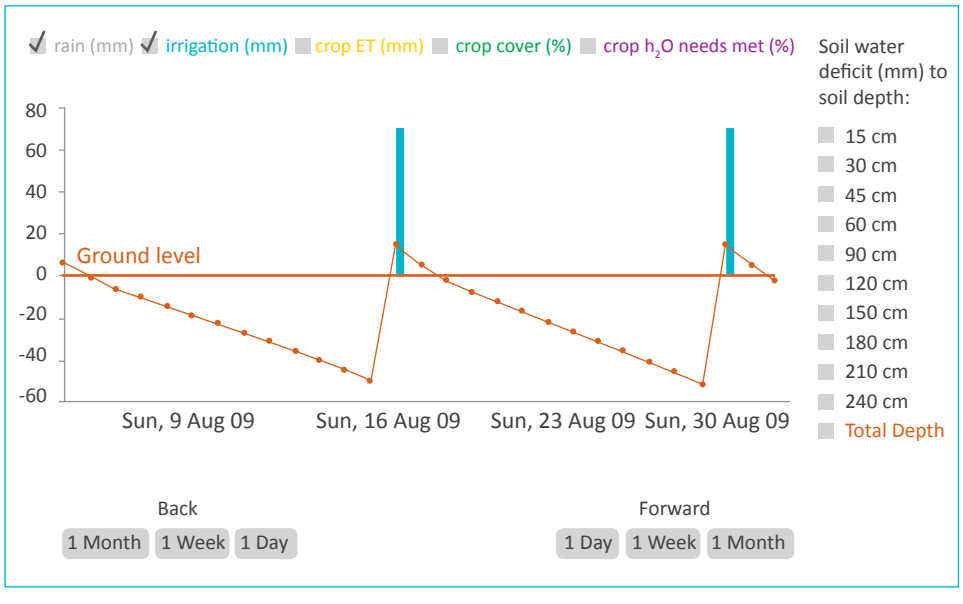
Minipan deficit figures are not a measurement of actual soil moisture deficits. They only provide a guide on when to irrigate.

WaterSense

WaterSense is a computer based irrigation scheduling tool. The program uses regional weather data and basic crop information to provide an estimate of crop water use. This estimate of crop water use is used to schedule irrigations and also gives an indication of how much water to apply.

Above: Capacitance Probe.

Above: Minipan.



Above: WaterSense.

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RURAL WATER USE EFFICIENCY IRRIGATION FUTURES

CANEGROWERS