**TIPS on selecting a soil water sensor**

1. Soil water could be measured directly or indirectly. Know how your sensor measures soil water.

2. Soil water sensing is just one of three feedbacks to schedule irrigation. Using more of these independent methods gives you greater confidence.

3. Selection and implementation of your sensors:
   - Make sure the irrigation system is at optimum operating condition.
   - Verify the irrigation capacity and plan an appropriate management strategy.
   - Be willing and ready to turn off the system when the feedback says so.
   - Make a conscious effort to check feedbacks daily.
   - When in doubt, check the field.
   - Be prepared to question your crop advisor when your feedback says otherwise.

4. Agree to these terms before committing:
   - After-sales support is vital in product selection.
   - Install soil sensors as early as possible to achieve adequate soil settling.

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Soil water measurements
- Direct
  - Gravimetric sampling
- Indirect
  - Electromagnetic property
  - Heat conductivity
  - Neutron count
  - Water potential
  - Electrical resistance
  - Capacitance/frequency domain probes
  - Time domain reflectometry/transmission
  - Thermal sensors
  - Cosmos
  - Neutron probe
  - Tensiometer
  - Granular matrix sensors

Soil water sensing is just one of three feedbacks to schedule irrigation: Weather-based, Soil-based, and Plant-based.

- Weather-based: Good
- Soil-based: Better
- Plant-based: Best

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