Soil Moisture Monitoring

Water plays a significant role in crop production. Adequate and timely irrigations are essential to excellent crop yield. Soil acts as a reservoir for water storage. Over-irrigating leads to increased energy and water costs, increased potential for leaching of valuable plant nutrients, and longer periods of saturation limiting crop growth. Likewise, under-irrigation may be detrimental to plant growth because it limits transpiration and nutrient uptake, thereby placing the crop under stress.

Continuous soil moisture monitoring allows you to observe each irrigation event and what happens in between. You see how deep the moisture moves based on how much you apply. You can also observe the depletion of water through evapo-transpiration. As that soil moisture curve begins to flatten out, you know the crop is working harder to extract more water. You will want to schedule the next irrigation prior to reaching the refill point to avoid placing the crop under drought stress.

We market and support the latest devices for monitoring soil moisture. The better soil moisture sensors available today use capacitance technology to distinguish relative soil moisture levels. Multiple sensors can be placed from as shallow as 4 inches to as deep as 60 inches. Data is automatically collected and transmitted several times daily via a remote wireless network. Using the internet, you have convenient access to your specific soil moisture monitoring sites anytime and anywhere.

Please contact your local Crop Production Services’ field representative for more information.
Example of Soil Moisture Monitoring Data