



# THE PLANT EMPOWERMENT CYCLE

Once the Plant Empowerment Cycle is completed and the plant responds to a precise irrigation event, the system is designed to do it all over again in real-time 24/7. Simply stated, without Plant to Irrigation (P2i) via the Plant Empowerment Cycle, the precise and timely application of water to meet precise plant needs that reduces crop stress for improving yields would be impossible.

- The traditional irrigation practice of alternatively flooding and drying out is counter productive because it upsets the sensitive balance the plants and the roots themselves live in.
- In the quest for avoiding such imbalances, P2i is designed to accurately apply water to meet the crop's specific needs in a precise, accurate and timely manner.
- P2i is designed to remotely administer real-time optimal water applications for achieving crop quality and higher yields objectives without human intervention.



Water Solutions for a Growing World!

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# THE PLANT EMPOWERMENT CYCLE

The Plant Empowerment Cycle involves three coordinated elements.

**PRECISE PLANT INTELLIGENCE** translated into **PRECISE EVALUATION** which is then communicated for **PRECISE ACTION**. Together, these three elements work together to meet precise crop needs...instantly.

*But what are the principles behind this methodology and where do we start?*





# PLANT EMPOWERMENT

## implementation

**PRECISE ACTION**

Without human interaction, **Plant-Triggered Irrigation** supports real-time communication between the growing plant (P) and action taking irrigation machines/devices (I) in order to meet precise crop demands for water without the side effects of negative plant stress.



## communication



**PRECISE PLANT INTELLIGENCE**

Plants have the ability to adjust and adapt to changing circumstances relative to a particular environment. They accurately compute their circumstances, make sophisticated internal adjustments and take defined actions to mitigate and control diverse environmental situations.



## translation

**PRECISE EVALUATION**

Water is one of the most important factors that has both a positive and negative effect on the plant's performance. When we precisely determine the plant's needs related to the **Most Active Root Zone (MARZ)**, we dramatically improve the **Plant Water Health** and **Soil Water Health** for the crop.

