



## **AQUACHECK E-Support subscription service**

With this special subscription service, we aim to not only make sure that your AquaCheck equipment is utilized to its fullest potential, but to also give you peace of mind that qualified people are available to assist you with the interpretation of the data throughout the season. For tree crops season is defined as the period between the flowering and harvest dates and for sown crops the period between plant/ cut and harvest date. It is important to note that this is not an irrigation scheduling service, but aims to equip you with the necessary expertise in order to make informed decisions regarding your irrigation management, thus ensuring sustainable production in the long run. The final decision and outcomes thereof still remains your responsibility.

### ***What is included in the service?***

- Technical setup of each of the signed-in probes within the AquaCheckWeb software program.
- Evaluation of the data quality received from each probe as well as the quality of the probe installation.
- Setting up two or more root zones in order to manage the top and bottom soil differently, where necessary.
- Verifying the soil's water holding capacity and setting the upper and lower management lines.
- Assistance with setting up specific cultivar lines (according to your local consultant's instructions), where more detailed irrigation management is required in different growth stages.
- Access to the AquaCheck Helpdesk where you can direct specific queries to experts, whether it be of an agronomic or technical nature.
- An accredited expert will assist you with the interpretation of the data by means of regular feedback according to a fixed program of which the details are explained below.
- Feedback is provided on an electronic basis via email and does not include any farm visits unless specifically requested. Additional costs will then be applicable.

### ***What is needed from the producer?***

In order to provide meaningful feedback, the following basic information is required of you, which include: (1) personal details (contact details), (2) probe details (probe length, number of sensors, GPS coordinates, data ID number and orchard/ field number) , (3) soil (soil type as well as soil depth), (4) crop (type of crop, plant or flowering date and harvest date) and irrigation system (type of system and delivery rate). In cases where additional calibrations are requested (for example the normalised irrigation: normalised reaction), it will be expected of the producer to keep accurate records of irrigation and rainfall quantities throughout the season (preferable with an electronic rain gauge).

***E-support program content:***

Written feedback for each of the subscribed probes is given to you on eight occasions during the season. The first two reports mainly focus on technical aspects, while reports number three to seven have a bigger emphasis on irrigation aspects. The final report is delivered shortly after the final harvest and evaluates the irrigation performance of the past season. A brief breakdown of the contents of each of the eight reports is provided below:

**Reports number 1 and 2:**

- Confirm the data integrity (evaluate the quality of the data received as well as the quality of the installation).
- Use the available data to set up two root zones that will allow for more precise irrigation management of the top and bottom soil.
- Preliminary set the upper (Upper Readily Available Water, URAW) and lower (Lower Readily Available Water, LRAW) management lines for each root zone. The position of these management lines is confirmed and adjustments made, where necessary, during Report 2.
- Give a very brief assessment of the current irrigation strategy that focuses on obvious mistakes, such as over or under irrigation.

**Reports number 3 to 7:**

- Data integrity is evaluated very briefly as the main focus of this group of reports is on the all-important irrigation matters.
- Data graphs (namely the Sum, Single sensor and Root zone graphs) are interpreted in detail with specific focus on the following:
  - Are there obvious signs of over or under irrigation?
  - Is the existing irrigation sufficient to wet the entire profile or does water only pass through to the shallower soil layers?
  - Are there visible signs of long-term water logging in the subsoil?
  - Is the crop exposed to long periods of stress?
  - Where in the soil profile can most root activity be found?
- Based on the above findings, irrigation management is evaluated and general guidelines regarding adjustments in cycle lengths or irrigation quantities provided, where necessary.
- The second last report, namely Report 7, is delivered in the period just before harvest and aims to ensure that all irrigation aspects are managed correctly and that any proposed corrections have been made in time.

**Report number 8:**

- The last report is submitted after harvest and provides a short summary overview of the irrigation management during the season. Areas where management could be improved in future are highlighted with examples from the past season.