# **START TRAY / DRAIN TRAY**



## Let plant evaporation control the irrigation

### Highlights

- Irrigation control of cultures grown in rockwool or perlite
- Exact dosing of water and fertiliser

Use a drain tray or a start tray and let the plants decide irrigation. The start tray and the drain tray are used to control the irrigation of cultures grown in Rockwool or perlite, for example tomatoes, cucumbers and other plants.

#### How the start tray works

Rockwool slabs with plants are placed on the start tray. It is important that the plastic foil is removed from the bottom of the Rockwool slab. If perlite is used, holes are cut in the bottom of the bags, so that the excess water can run off. During the irrigation, part of the fertilizing water will remain in the Rockwool, and part of it will seep into the reservoir of the tray. The reservoir of the tray is connected to a sensor. The sensor gives a signal for irrigation when part of the water in the reservoir has been consumed by the plants placed on the start tray.

The quantity of water to be used can be adjusted by lifting or lowering the sensor electrode. The electrode is connected to an irrigation device which starts the irrigation when the electrode has given a start signal.

#### How the drain tray works

The drain tray works in the same way as the start tray. The drainage performed during an irrigation is measured by a drain counter, which is connected to the tray.

Unlike the start tray, the drain tray cannot perform an irrigation itself. The drain tray has to be connected to a fertilizer mixer with a program controlling the drainage.

Control of the desired drainage percentage is performed by adjusting light quantity on the sun-integrator so that the pause between the irrigations is changed dependant on the deviation between actual and desired drainage percentage. The drainage percentage is to be adjusted in the program.

#### Water saving

Control of the drainage quantity saves water, and at the same time ensures that surplus nutrients and root exudates are not accumulated in the slabs.

#### **Further possibilities**

Registration of irrigations can be performed by connecting a PC with the SuperLink program installed. With the PC program, there are several possibilities to change the setpoints and collect the data.



## SPECIFICATIONS / START TRAY / DRAIN TRAY

#### What is required to use the drain program?

- A drain tray with drain registration equipment connected to an AMI Penta Fertilizer Mixer.
- Drainage from the drain tray must not exceed 300 ml/min
- Standard lengths of the start tray/drain tray are 200 cm and 240 cm, but special lengths can also be delivered on request

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