Design: Proforma, designers & consultants, Rotterdam



What else does Grodan offer you?

In addition to the advanced Grotop Master Dry slab, Grodan also offers you:

- Products with KIWA quality certificates and European Eco-label certification
- Water-content meters for monitoring and controlling water content, EC and temperature
- Sustainable recycling solutions
- Up-to-date user advice on the basis of the 6-phase model, sent by e-mail
- · Personal advice, if desired



All our information and advice is compiled with the greatest possible care and in accordance with the state of the art. However we are unable to assume any liability for the contents – July 2009

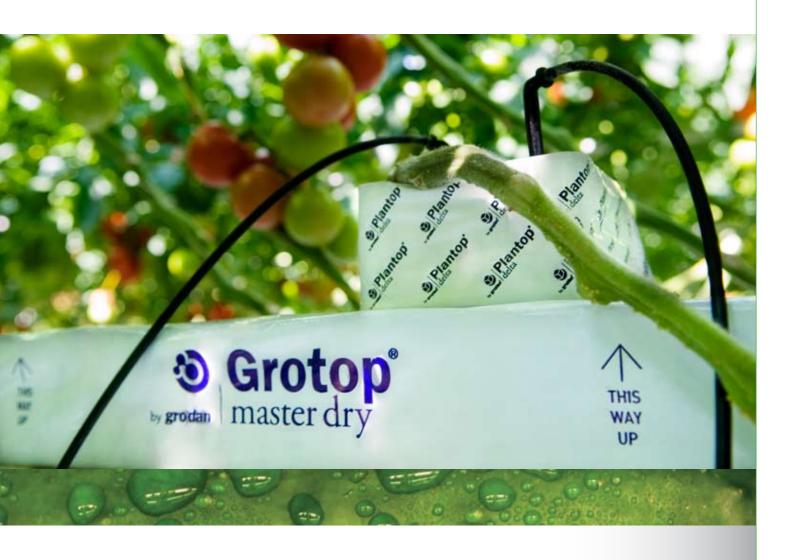
Grodan B.V.

P.O. Box 1160 6040 KD Roermond The Netherlands T +31 475 35 30 20 F +31 475 35 37 16 www.grodan.com



Grodan's 6-phase model offers you recommended values – at a glance – for the relevant type of slab and cultivation phase of your crop. You can use these recommended values to make any adjustments to the watering strategy that may be required, thereby further improving your control of the cultivation and assuring you of an optimum crop.

gro dan®

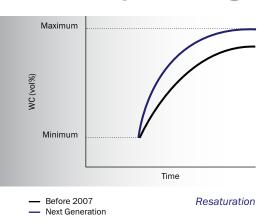


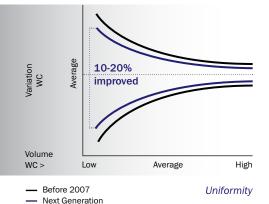
Broad control range and generative growth



Broad control range and generative growth

Introducing Grodan's new Grotop Master Dry slab — one of the company's most advanced substrate solutions. Characterized by a dual- density fibrous structure, just like its predecessor, Grodan's new slab consists of a firmer top-layer, a porous lower layer and a coarser structure. The new, advanced Grotop Master Dry is based on our patented Next Generation Technology, which offers growers several major advantages.





The slab can offer these advantages because of its unique hydrophilic fibres and special fibrous structure that make it easier for the substrate to absorb water. New production technology means the slab can be resaturated even better and faster than before (see figure 1). Distribution of water content and EC is also more even, not only within slabs but also between slabs (see figure 2). This allows a greater control range and better root development in the new Grotop Master Dry, while retaining the generative character of the slab.

Why choose Grotop Master Dry?

The new Grotop Master Dry is the ideal slab for growers who want to steer their plants into generative growth towards harvesting top-quality products, through water management.

Optimum quantity and quality

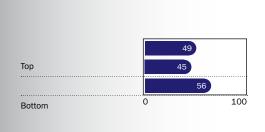
The Grotop Master Dry slab makes it possible to achieve a substantial improvement in the quality of end product and the yield of crop.

Trials carried out by PPO (Applied Plant Research: the leading research station for floriculture and greenhouse-grown vegetables in The Netherlands) in the 1990s showed that consciously steering on the basis of water content increases yields.

Recent field trials by Grodan have also demonstrated that improved crop yields are possible with Grotop Master Dry slabs compared with their predecessor.

Product specifications

- Single-season slab
- Dual layer: firm top layer and porous lower layer
- Coarser fibrous structure
- Unique hydrophilic fibre readily adsorbs water
- Maximum water control range: 50% to 80% (day level)
- Extremely uniform water content and EC distribution throughout the slab
- Large re-saturation capacity

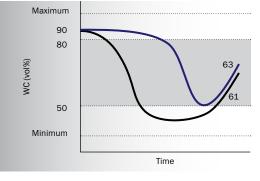


Water distribution



The benefits of Grotop Master Dry

- Broad control range
- Efficient EC replacement with less drainage
- Generative crop response

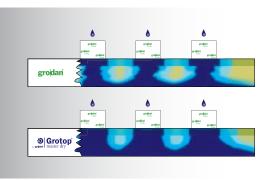


From 50% after 1 dayFrom 30% after 1 week

Control range

Broad control range

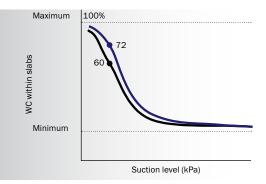
The Grotop Master Dry slab can offer a broad control range, as a result of which, water content can be readily varied between 50% and 80% (water content day level). The improved controllability of water content and EC, together with the dry character of the slab, makes it easier to steer crops towards generative growth during rooting and plant development. In addition, the water content can be easily adapted to suit the demands of the season. The Grotop Master Dry allows you to always obtain a maximum yield from your crop.



Efficient EC replacement

Efficient EC replacement

The new slab has a higher level of irrigation efficiency than its predecessor. Trials have demonstrated that almost 90% of the nutrient solution present is displaced with the application of a new nutrient solution. The drainage water therefore consists almost entirely of 'old' feedwater. In this way, maximum EC replacement can be achieved with minimal watering. Even in darker periods, the EC remains perfectly controllable without the water content reaching undesirably high levels.



Reduction water content

Generative crop response

The coarser, fibrous structure in the new product enables the slab to drain more easily. The lower water content level thus achieved in the slab (see graph) produces a generative crop response. The water content in the case of suction of 1 kPa (-10 cm) amounts to 60% in the Grotop Master Dry slab. In the Grotop Master, the water content is then 72%. This offers particular advantages for a strongly vegetative variety or a variety with weaker roots.