

PLRPR003_EN

PRESS RELEASE

Major water and fertilizer savings attainable for tomato crops grown on DP Optima™ coco slabs

Made, the Netherlands, 9 January 2012: In greenhouse trials carried out over the course of 2011 at the facilities of PlantResearch in Made, the Netherlands, the DP Optima™ double layer coco slabs from Dutch Plantin were found to require 10 to 20% less water and fertilizer feed than rock wool slabs of similar dimensions, while still producing the same tomato yield. This would not only make coco slabs well suited for areas where water is a limiting factor in horticultural production, it also provides sustainability benefits in horticultural advanced regions such as Europe or North America.

The research was conducted at the request of Dutch Plantin, one of the world's leading suppliers of coco coir for use in horticultural substrates. The trial ran from late January until mid-December 2011 in a 180m² greenhouse without additional CO₂ dosage or assimilation lighting. The tomato variety used was *Solanum lycopersicon* L. var. 'Ever', with plant density being 1.4 plants per m² and a fertilizer feed of EC 3.5 mS/cm and pH 5.2.

Developed for emerging economies

"The double layer coco slab was especially developed for emerging economies in Asia and South America, or for regions where water supply is a limiting factor," says Wim Roosen, Account Manager at Dutch Plantin Coir India Pvt. Ltd. "We realised we had a good product, but the trial results at PlantResearch exceeded our expectations. Less water and less fertilizer mean lower costs for our customers, which is further enhanced by efficient logistics. A 40ft (12m) sea container can hold three times more coco slabs than rock wool slabs. When you take into consideration we sell more than two million of these slabs every year, that makes a huge difference."

Additional financial benefits

Roosen goes on to say, "The coco slabs have potential even for horticultural advanced regions here in Europe or North America. Even though water supply is usually not an issue, less drainage usually means less water to be cleaned and decontaminated, so smaller installations will suffice.

Furthermore, at the end of the growth cycle coco slabs can be disposed of as low-cost compostable waste or even used as fuel in bio-energy plants thereby providing additional financial benefits when compared to rock wool, of which only a small portion can be recycled."

Environmental benefits

Ron Galiart MSc., Senior Researcher at PlantResearch adds, “The result of this trial has significant environmental benefits. Less drainage means fewer waste nutrients seep into the environment. Further many of the regions that see an increase in demand for fresh vegetables also happen to be disadvantaged by a limited supply of fresh water. Our research has shown that the DP Optima coco slabs will still offer a good yield due to their water-retention capacity and thus positively contribute to feeding our world,” Galiart concludes.

About Dutch Plantin

With more than ten production sites in Asia, Africa and the Netherlands, Dutch Plantin is the world's largest producer of coco coir and other coco related products. The company was established in 1984, and has since developed a range of applications for coco coir, such as a growth medium for horticulture and as an additive for peat based potting soils. Dutch Plantin now produces and supplies coco peat and other coco products in all shapes, sizes and mixtures. Dutch Plantin stands for continuity in quality and an environmentally sound and sustainable production of coco peat. For more information www.dutchplantin.com

About PlantResearch BV

PlantResearch BV is a dedicated, independent research and consultancy company specialized in substrates, organic and non-organic fertilizers and growth enhancing products for the horticultural industry. In addition to carrying out greenhouse trials, PlantResearch can provide customized product development and registration, and has a wealth of understanding in solving cultivation problems and analyzing production losses. Due to the combination of fundamental knowledge and the practical experience of its highly trained staff, PlantResearch is one of the fastest growing horticultural research companies in the Netherlands. For more information: www.plantresearch.com

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Note for editors

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Available charts and images:

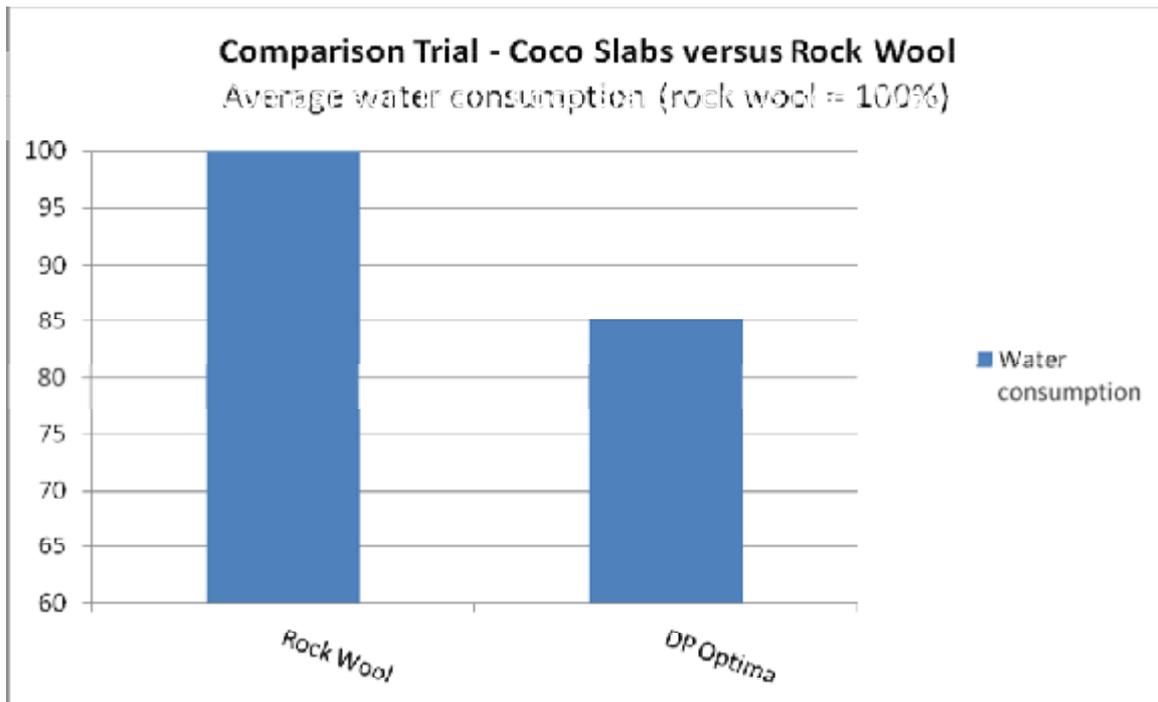


Chart 1:
Average water consumption of rock wool versus coco slabs

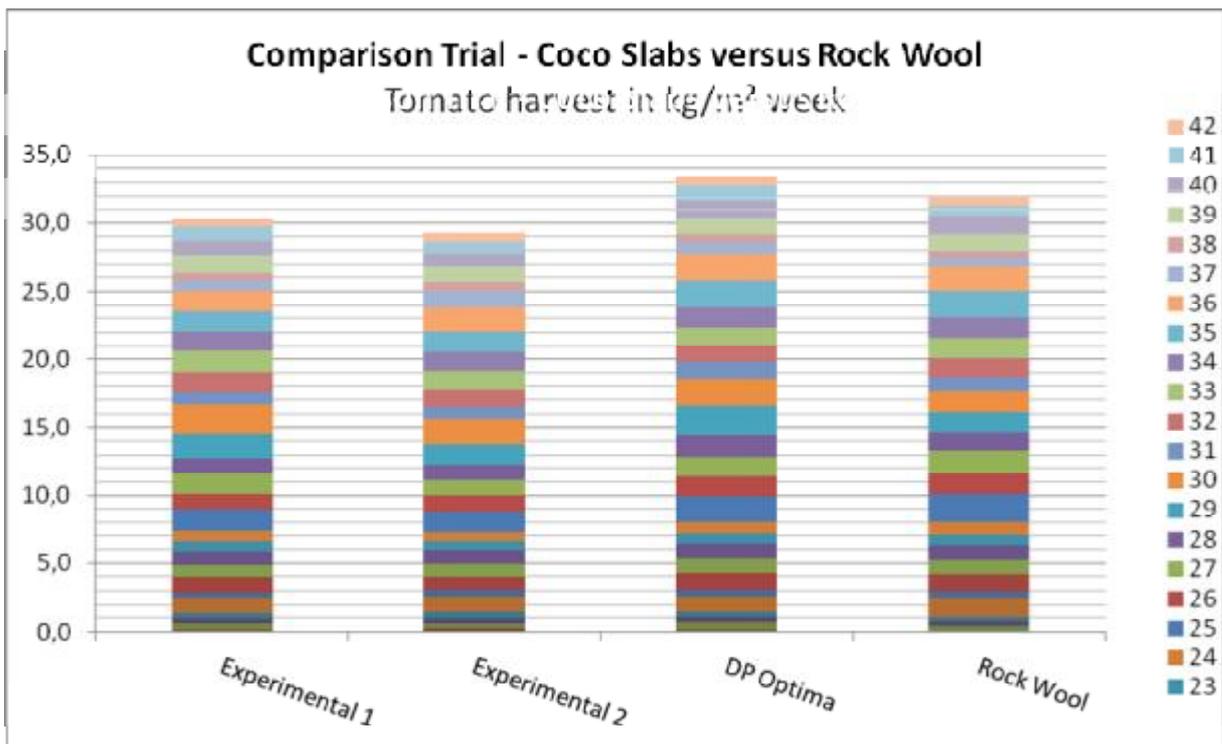


Chart 2:
Total tomato harvest in the comparison trial of rock wool versus coco slabs



Photo caption 1:

A peek into the trial greenhouse at PlantResearch; using a range of (wireless) devices the electric conductivity, acidity, temperature, root pressure and moisture content were monitored at various levels within each of the rock wool and coco slabs tested, while the input was used to automatically adjust the fertilizer feed.

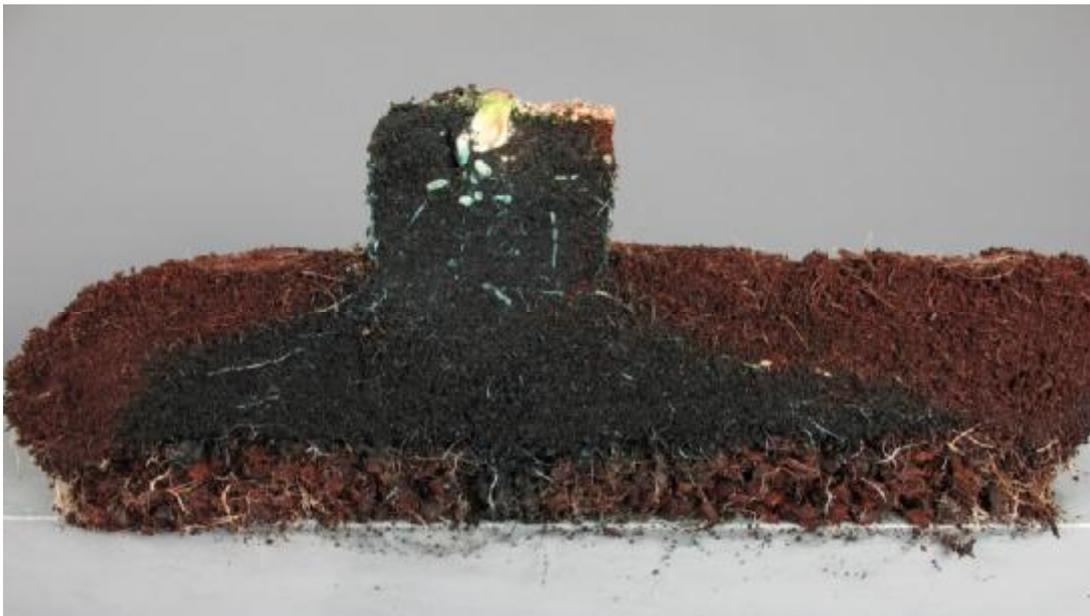


Photo caption 2:

The typical water flow within the Dutch Plantin double layer coco slab, made visible using a water soluble blue dye in the watering system