

# Growblock®

**Keep your cucumber plants pathogen-free!**

*Growing cucumbers in coir instead of rockwool can help you reduce pythium risk to a minimum.*



## Conductivity to Pythium (Coir compared to Rockwool)



The Jiffy Growblock has proven its water holding capacity and excellent water-to-air ratio. Growblock has RHP certification from the Netherlands which guarantees a 100% compostable pathogen-free substrate. Research shows that antagonistic bacteria present in the rhizosphere play an important role in the suppression of Pythium. This micro-life is present in the Jiffy Growblocks while inert substrates like Rockwool do not host any of these crucial antagonistic bacteria. Utilizing chemicals will often be the only option when using Rockwool types of inert media. Rockwool can also hold too much moisture, lowering oxygen availability and resulting in a rapidly increasing risk of the pathogen Pythium. The only remedy for water saturated Rockwool users would be doubling the height of substrate, thus lowering moisture content but also doubling the cost of media.

**Jiffy®**

*It's all about the roots*

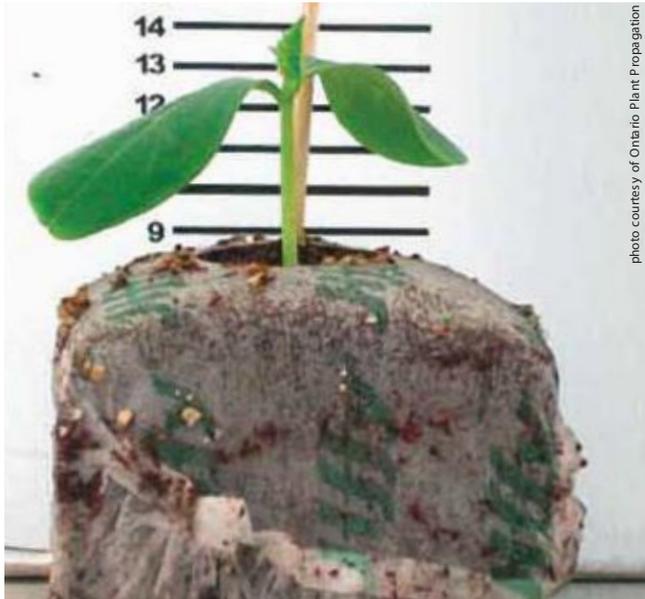


photo courtesy of Ontario Plant Propagation

## Nutrients

Jiffy Growblock provides a well-balanced nutrient supply right from the start, with all the required macro and microelements in order to give the young plant support in the earliest days.

## Good to know

- Nutrient contents of leaves and fruit will not differ according to substrate.
- Young plants in Jiffy Growblock show improved fruit setting and reduced fruit shedding.
- Even after facing mildew problems, young plants in Jiffy Growblock recover well and show new growth rapidly. However, with similar plants growing on Rockwool the crop would probably have been lost.

## Water Management in Coir

Due to the different physiological features of coir substrate, adjustments of the water supply to the plant will be required by means of calculating the transpiration and the amount of drainage. The following guidelines are based on a water supply of 4L/hour for substrate with a height of 7cm.

SUBSTRATE	SETPPOINT TRANSPIRATION (ML/M2)	DURATION (SEC)
ROCKWOOL	110	180
COIR	165	270



photo courtesy of Ontario Plant Propagation

## “Crazy Roots”

Besides soaked substrate being a direct cause of Pythium, a second, more dramatic effect is damage to the young cucumber plant. Even the smallest wound can allow Agrobacterium Rhizogenes to have their chance to develop “Crazy Root” symptoms. This abnormal development of the fibrous roots can result in a bursting of the Rockwool slab. “Crazy Root” growth is irreversible and will result in suffocation of the roots with the possibility of Phytium development as a final result. **Jiffy Growblock will reduce the incidence of “Crazy Root”.**

	ROCKWOOL	COIR
<b>BULK DENSITY</b>	53%	96%
<b>WATER CONTENT</b>	90%	85%
<b>Leak out; 10 CM</b>	43	75
<b>Leak out; 20 CM</b>	4	60
<b>Leak out; 50 CM</b>	2	51
<b>Leak out; 100 CM</b>	2	49
<b>pH</b>	6	5
<b>EC</b>	0.1	0.8

**For further information or to arrange a trial of Growblock please contact your area manager or use the contact options below**

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