



tomato

Dutch Plantin Optima, the best choice for tomato growing

Introduction

Dutch Plantin cocopeat has been extensively tested with various vegetable crops (tomatoes, cucumbers and peppers), cut flowers (roses, gerberas and carnations), as well as various pot plants during the last two decades. The most important benefits which came to light are: fast controllability due to its excellent physical properties; faster growth due to improved rooting; minimal susceptibility to root diseases due to its organic properties and longer durability due to its stable composition. Dutch Plantin has developed a special new product for tomato growers, which is Optima cocopeat, a special grade of cocochips and Dutch Plantin coir. As a result, numerous tomato growers now use Optima cocopeat with excellent results, with the above mentioned properties being enhanced even further.

Controllability of Optima cocopeat

Dutch Plantin Optima Cocopeat contains an excellent air-water ratio which makes it easy to quickly steer tomato plants by changing the nutrition to a vegetative state as well as a generative state. The Dutch Plantin Optima mix is characterised by a high air content, even in conditions when there is little evaporation. This implies that a fast transition from vegetative to generative growth is possible, without a lack of air arising in the substrate. The material dries out less quickly than rock wool in warm conditions, because the material retains the moisture better (see figure 1, pF curve Dutch Plantin Optima). This results in a more stable production and quality.

Faster Optima cocopeat growth

Research has shown that tomato plant roots develop faster and more intensively through the Optima cocopeat. This is also why vegetative growth progresses faster than on other substrates. This faster growth facilitates early production, thus higher returns are realised.

Less susceptible to root diseases

The presence of useful micro-organisms which thrive in the organic cocopeat ensures the suppression of potential root diseases. The excellent physical cocopeat properties (more stable moisture content without a lack of air) are highly beneficial in the development and maintenance of healthy roots. Finally, the hygienic conditions at RHP accredited sites and our Organic certification

from IMO in Switzerland also contribute to a disease-free substrate. All these positive properties ensure the use of chemical pesticides can be minimised.

Longer durability

Cocopeat as such contains lignin, cellulose and hemi-cellulose. Lignin is the most stable component out of these three. The presence of lignin in the cocopeat helps the product to remain stable and retain its positive properties for several years. This in contrast to rockwool, which slowly compacts as a result of pH influences and becomes increasingly wetter. Cocopeat is ideal for re-use. Also the cocopeat is usable as soil conditioner in root-bound soil. Dutch Plantin cocopeat yields greater advantages than rockwool in terms of both an ecological and financial viewpoint.

Standard cocopeat versus Dutch Plantin Optima

When reading the physical data (see figure 1, air water ratio at pressure heights), it can be ascertained that Dutch Plantin Optima contains a higher air percentage under saturated conditions than standard cocopeat from other suppliers (see figure 1, pressure height - 3cm and 10 cm). Furthermore, the Optima's structure is more stable (shrinkage under saturated conditions is lower). All the improvements listed make opting for Dutch Plantin Optima cocopeat all the easier.



Dutch Plantin cocopeat specifications

Most standard cocopeat type : Optima
 Most standard growbag dimensions (l*w*h) in cm: 100*20*8,5 after expansion
 100*15*8,5 after expansion
 Most standard preparation : Washed, not buffered
 EC < 1,0 in 1:1,5 dilution method
 pH between 6.00 and 7.00
 moisture < 20% at production

Other dimensions and treatments are possible over and above the standard ones listed above; ones which are customised to your specific requirements. We can also vary the coarseness of the Optima cocopeat for specific demands, by changing the percentage of coco chips and coir upon request.

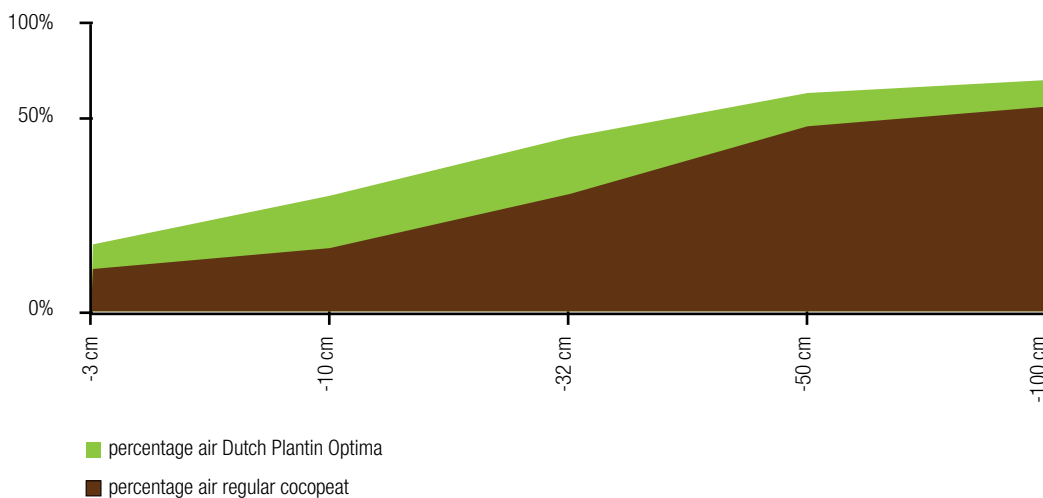
In short

Tomato plants need uniformity and stability in the substrate.

The root conditions are optimal with Dutch Plantin Optima:

- It is safe when the growbags are over-drained, because the substrate will not be too wet; no lack of air because of the perfect, physical properties.
- The water is divided throughout the whole substrate, therefore the roots are using the complete grow bag.
- Less influences from a dry climate because of the high water holding capacity.
- Different structures available, depending on the climate and demands of the grower: The Optima cocopeat can be customized by our technical experts in the Netherlands.

Figure 1: pF curve of Regular Cocopeat and Dutch plantin Optima



We are happy to assist you and your consultant to optimize the fertilization of your crop. Once we have an analyse of your base-water we can advice the best product and how to fertilize. Please contact our helpdesk in the Netherlands for more details or support issues: contact@dutchplantin.com



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Our agronomists in Holland are at all times available to supply you with more detailed information on growing Dutch Plantin coir for your crop.

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