

# Anthurinfo

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## VARIETIES

### ANTHURIUM LUMINA®: A UNIQUE CUT FLOWER

**“Fresh, different, frivolous, new, talked-about”, are some of the reactions that Lumina stirred up among decision-makers further on in the chain.**

The truly unique combination of colours fits perfectly in every interior. The meandering, playful shape of the flower allows exciting creations. Top designers and florists said they could hardly wait to work with Lumina. This is finally possible and Lumina can now steal the hearts of consumers. This treasure obviously has a great deal of applications in flower arrangements. The cream-white base provides a beautiful contrast with the light green nerves and the purple spadix, without the flower being

too obtrusive. Perhaps this is where the strength of Lumina lies; namely its tremendous versatility!

During its cultivation, Lumina is also an enthusiastic plant which can easily reach a production output of far more than one hundred stems per square meter. Another attractive feature is the short plant structure, as a result of which controls to prevent bending of the stem only become important at a later stage of the cultivation process. It seems that Lumina is a thirsty plant, so keep that in mind when watering. Or could that be explained because you can work with higher plant quantities because of the relatively small leaf?

Lumina, the Anthurium with a playful twist...

#### Product specifications Lumina®

Variety name	Anthasadom
Colour	Cream
Colour spadix	Purple
Colour spadix top	Purple
Flower size	7 - 8 cm
Production gross m <sup>2</sup> /year	120 flowers
Plants gross m <sup>2</sup> (advice)	18



Lumina®

**ANTHURIUM POT PLANT PANDOLA®: ROCK CANDY PINK FLOWERS**

Pandola® is the perfect variety because of its beautiful structure, stunning flowers and strong roots.



Pandola®

The variety shows vegetative growth with a bushy structure from early on. Because of this, the plant can be cultivated 4-6 weeks longer in the first phase compared to other varieties in order to obtain enough height. This results in an advantageous cost price, because the total growth period stays the same. In comparison to Amis®, another pink cultivar in the assortment, the total growth period of Pandola® is a bit longer, but Pandola has the best plant structure and offers many large flowers.

To reach the desired height of 65-70 cm this variety should be spaced a bit later towards the second phase. If spaced too early all the light will fall on the shoots, as a result of which the plant will be too short and the growth period will slow down considerably.

After the vegetative growth in the first phase and a partly vegetative growth in the second phase, the buds appear in quite a short

time. The beautiful rock candy pink flowers start flowering massively just above the plant. Eventually, Pandola produces several shoots, as a result of which the plant often has four to five flowers in one go.

The Pandola variety is suitable for the 17 cm pot. Because Pandola puts all its energy into the shoots, the flowering starts a little later. Because of this, this variety is less suitable for the 14 cm pot.

In summery conditions, the greenhouse temperature and thus also the leaf temperature will rise, as a result of which the flower can discolour. Yet Pandola has strong roots, and that's why this variety is easy to cultivate and has a remarkable leaf quality.

This variety can look forward to a bright future and will bring a lot of joy to a great many consumers who love a bushy plant with large bright pink flowers.

Product specifications Pandola®	
Variety name	Anthabasawa
Colour	Pink
Flower size	Medium
Pot size (advice)	17   21 cm
VBN code	25927



TRAVELLING ABROAD

**FLOWERS AND EMOTIONS ARE AN IMPORTANT PART OF THE PORTUGUESE CULTURE**



At the beginning of the 19th century, with the smell of cod and fried sardines in the air, a new music genre was born in the poor quarters of Lisbon: Fado.

As well as all the emotions that are also characteristic of other music genres, Fado is distinguished by evoking Saudade. Saudade describes blissful feelings that bring back pleasant memories of what has gone before mingled with sadness at the same time, because those happy days are over. Today, Fado is synonymous with Portuguese sentimental song. Saudade is difficult to translate into other languages and reflects the mood of the Portuguese soul.

The average Dutchman will not normally give the mood of his soul a moment's thought when he is trying to do everything with just his intellect today, or perform even better tomorrow. A Portuguese, on the other hand, will experience a whole range of feelings from complete drama to perfect happiness before he makes a decision. A vivid example of this can be found in the national sport of both countries: football.

All over the world many people admire both the Dutch and the Portuguese style, where both make a lot of space for elegance and creativity. During the last encounter between the national teams at the 2006 World Cup, however, the game developed into an emotional battlefield. Portugal eliminated Holland; naturally because the Dutch national coach had lined up the wrong players. Or was it because the Portuguese by birth are more used than the Dutch to achieving their ultimate goal through a struggle between deep drama and delirious euphoria?

Although today the Fadistas also perform in other countries, you will still be able to go on the biggest emotional roller coaster ride in one of the bars in Lisbon's old quarters. A must-see for everybody who works with Anthurium or Phalaenopsis.

Just as the Flower Council Holland's new slogan 'Really beautiful what flowers do' is aimed purely at the emotions evoked by



General view of working-class quarter Alfama where present-day Fado diva Mariza grew up.



Old quarter Bairro Alto with a lot of Fado bars.

flowers and plants, these will be felt even more intensely in a Southern European country like Portugal.

Tell the story behind the flowers and the plants and intensify the consumer's experience when they buy them. Bring the nostalgia of the Saudade back to the consumer with Anthurium and Phalaenopsis.

## PREMATURE FLOWERING PHALAENOPSIS

In the cultivation of Phalaenopsis, two main growing phases can be distinguished: a growing phase (vegetative phase) and a flowering phase (generative phase). In the growth phase the intention is for the plants to grow, postponing flowering a bit longer.

In the winter in particular, it can happen that plants produce a stem and then premature flowering is a fact. Premature flowering of a plant can have one or several causes. In this article you can learn how to prevent premature flowering as much as possible.

### Induction

For the transition from the vegetative phase to the generative phase of Phalaenopsis there are two important conditions: there has to be an assimilation surplus and the plants must experience stress to some extent.

An assimilation surplus is caused by temperature drops. This causes the energy consumption to be reduced, as a result of which the plant has a surplus of energy. By increasing the amount of light, the level of assimilation reaches a higher level. This also creates an assimilation surplus.

A plant in a stress situation switches to 'survival mode'. This means that the plant becomes generative and starts flowering to produce progeny. Cold, dryness, too much light and fluctuations in temperature and humidity can unbalance the plant, causing stress.

### Temperature

The greenhouse temperature must be divided into three categories, i.e. the greenhouse temperature measured on the measuring box, the local temperature and the plant temperature.

The main cause of premature flowering is the temperature dropping too low. When the temperature falls under the

critical limit of 26 °C, premature flowering can occur. The time that the temperature needs to stay under the critical limit for premature flowering to appear, varies according to the variety. One hour could be enough, but often a longer period is necessary.

The location of the measuring box is rarely the coldest spot in the greenhouse, because there are always colder places to be found. Façades in particular are notorious for their low localised temperatures. Cold façades interfere with the climate and can cause cold currents in the greenhouse.

The plant temperature is an important factor too. At the end of the afternoon, the outside radiation decreases considerably. As a consequence, the plant temperature drops because the direct source of heat disappears; then radiation occurs. The plant temperature drops quickly  $\pm 2$  °C below room temperature because of radiation. Furthermore, at the end of the day a Phalaenopsis cools down more quickly by opening its stomas, as a result of which evaporation starts. The plant temperature must also be kept at a minimum of 26 °C to prevent premature flowering.

### Light

Besides temperature, light is an important factor with regard to premature flowering. A great deal of light produces a lot of assimilates, which contributes to a positive assimilate balance. This makes the plant in the growing phase more sensitive to premature flowering. When the amount of light in the growing phase is high (above 4.0 mol/m<sup>2</sup>/day), the chance of premature flowering is considerably higher.

### Natural flowering

In the autumn and the spring, premature flowering peaks. This is especially due to the transition towards another outside climate. In the autumn, the average greenhouse temperature falls because it gets colder outside. This is exacerbated because the plant temperature drops more quickly from the autumn onwards as a consequence of higher radiation. In the spring, it is the increasing amount of light that disturbs the assimilate balance. Premature flowering is caused by the increasing light.



Premature flowering in the growing phase.

### Prevention

The main weapon to fight premature flowering is maintaining a good temperature, i.e. a high enough temperature. For this purpose, the following measures can be taken:

- Heat at a temperature of 28 °C and only ventilate at 29 °C in the autumn;
- Façades must be well insulated to prevent cold façades. Use fans to keep the temperature differences in the greenhouse to a minimum;
- Close the screens on time at the end of the afternoon to temper the cooling in the greenhouse and reduce radiation. This has a big influence on the plant temperature;
- In the case of lighting: only switch it off in the afternoon or evening when the screens are completely closed;
- If necessary, heat the greenhouse at the end of the day 0.5 °C warmer at certain times;
- Prevent major light changes and aim to get as uniform a climate as possible with as few peaks as possible.

If you follow the above measures, you will be doing everything possible to prevent premature flowering.

### GOOD LUCK WITH YOUR CULTIVATION!

Menno Gobielle  
Bureau IMAC Bleiswijk B.V.



## BLUISH DISCOLOURATION AND GLASSINESS AT ANTHURIUM

A high quality of the Anthurium flowers is an important feature. A grower will take as many measures as possible to optimize this quality. Bluish discolouration of flowers of the red and orange Anthurium species, glassiness of flowers and spots on the ears of flowers are the main causes that diminish the flower quality in Anthurium cultivation. Below you can learn how to prevent these problems as much as possible, allowing you to produce top quality flowers.



*Bluish discolouration.*

The cause of the abovementioned quality problems is that the cells of the flower die. In the long run, this results in the brown discolouration of cells, shortening the vase life. With red and orange species the first indications of damage become visible when parts of the flower show bluish discolouration. In the case of glassiness and spots, slight glassiness is often the first stage of flower damage. The slight bluishness and glassiness can disappear from the flower without causing any damage as long as they do not remain in the flower too long. More serious forms of bluishness and glassiness lead to permanent damage. The degree of damage is closely related to the sensitivity of the cultivar and the cultivation method.

In order to reduce or even prevent the problem, it is important to include as much calcium as possible to create strong cells. Then the condition of the cells must be optimized to prevent them from dying. In order to build stronger cells, before and during the critical period (the winter and/or rainy season), the uptake of calcium must be stimulated.

### Calcium uptake

Calcium is absorbed passively, especially by the root tips. In order to allow the plant to absorb as much calcium as possible, a relatively large amount of calcium should be provided compared to the smaller, positive molecules like ammonium ( $\text{NH}_4^+$ ) and potassium ( $\text{K}^+$ ).

This means that before and during the critical period,  $\text{NH}_4^+$  will be eliminated from or reduced in the fertilisation scheme. Calcium will have to be provided in larger amounts, reaching a ratio of 1:1 for potassium: calcium for perlite! When the EC is increased towards the critical period, the ratio of potassium must be decreased and calcium added (in greater amounts) when watering. Increasing the amount of calcium does not mean, however, that it actually ends up in the flowers.

Calcium is the only element that is not conducted along the phloems but along the vessels, and distribution via the vessels only takes place through evaporation. A disadvantage for calcium uptake in a flower is if there are barely any stomas in the flowers. Therefore, sufficient root pressure has to be built up to transport the calcium to the flower.

By removing young leaves, the distance between the evaporating leaf of the plant and the flower becomes larger. By replacing old leaves shortly before the critical period, the distance will decrease, thus stimulating the transport of calcium towards the flower.

### Preventing cells from dying

When supplying a lot of calcium, cells will die less quickly. Older cells become weaker and will die more quickly. In order to prevent cells from dying, it is important to optimize the

climate conditions. In addition to this, EC and earlier harvesting of the flowers can also prevent cells from dying.

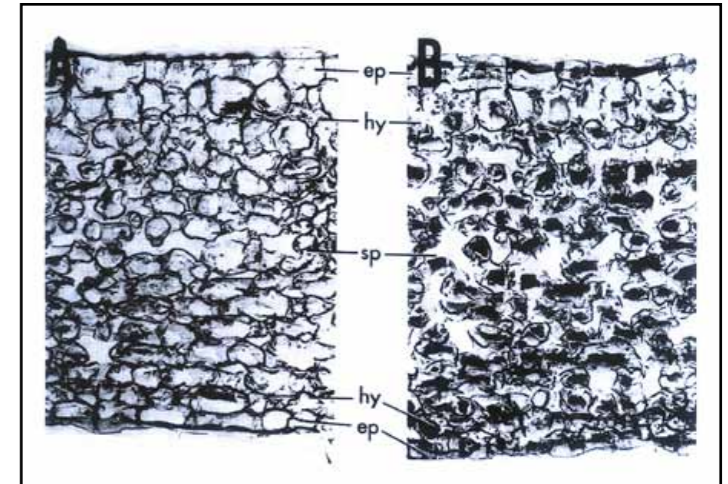
Cells will be crushed if too much water ends up in them. The water supply and drainage are out of balance. This can be due to an excessive supply caused by root pressure, but mostly the cause is lack of water drainage from the plant.

The root pressure can be tempered well by increasing the EC for the critical period. Bear in mind that when increasing the EC, the ratio of the elements should also be adapted.

Guaranteeing sufficient water drainage generally entails stimulating evaporation in the periods when it is too low. This can be achieved by decreasing the relative air humidity (RH), increasing the tube temperature or just using the upper tube, but also by allowing the sun to bring the plant temperature



*Formation of spots: necrotic spots on the ears of the flower.*



*Cross-section of flower leaf (100:1)  
A = normal tissue, B = tissue blue flower,  
ep = epidermis, hy = hypodermis, sp = mesophile*

above room temperature. In short, all the measures to prevent too low but also excessive moisture deficit (VPD - vapour pressure deficit).

Aging cells are more sensitive. By cutting flowers earlier, the cells will be crushed less quickly. Cutting the flowers at an earlier stage is also the quickest way to prevent quality problems as a consequence of bluish discolouration and glassiness. The uptake of calcium is a slower method for improving flower quality, but it can constitute the basis for the prevention of the problem.

The above measures allow you to optimize the quality of your Anthurium flowers!



*Hans van Eijk  
Bureau IMAC Bleiswijk B.V.*

# INTERVIEW WITH WATERDRINKER

Unlimited Colours is a marketing initiative of Anthura for growers and the trade to stimulate sales of Anthura's Anthurium and Phalaenopsis varieties on the market. To celebrate the kick-off of this initiative, a unique savings campaign has been set up for the last trade fair. By collecting the 21 Anthura action varieties, some fabulous prizes could be won. The first prize was a horticultural trip to China for two people which was won by Waterdrinker Aalsmeer; a good reason to get to know this company more closely. We speak with Ed Mol, purchasing coordinator of special plants, and Eric Mooren, the buyer of orchids, among others. They will both be making the horticultural trip to China.

Waterdrinker Aalsmeer was founded in 1972 as a Cash & Carry store. A lot of people still think that we are just a Cash & Carry, but since then we have grown into a European market leader, as an export wholesaler in ornamental house plants and garden plants. We supply florists, garden centres, wholesale distributors and chain stores in the whole of Europe. Waterdrinker Aalsmeer has a sales and processing area of about 50,000 m<sup>2</sup> and employs 200 workers. In addition to ornamental and garden plants, we also do pottery. We not only offer a large basic assortment of plants, but also innovation, knowledge, support and many special new, forgotten and exclusive plants.

The products are divided into three groups, namely: green plants, flowering plants and garden plants. Each group has its own buyers who are responsible for several product groups. For a lot of products, agreements are made with the growers on a yearly basis, only a small part is bought on the clock. The company employs 25 salespeople.

## What do you look at when purchasing an Anthurium/Phalaenopsis?

The most important features are colour and character. So attention is paid to leaf compactness and the use of covers is reduced to the minimum. Virtually everything is sold on variety; the percentage sold as mix is less than 1%.

For Phalaenopsis the main colour is still white. We are noticing a trend towards increasingly stronger colours and more compactness. The multifloras fit well in this trend and consequently sales are increasing. In the standard assortment the Anthura variety, Anthura Sacramento, is selling well on colour.

In the Anthuriums we are seeing a considerable broadening of



From left to right: Richard Smit (Anthura), Ed Mol en Eric Mooren (Waterdrinker)

the colour palette, with white, salmon pink and purple. A real best-seller in this segment is Anthura's White Champion®.

## How do you see developments with respect to the added value of pot plants?

In the Cash & Carry the added value aspect is minimal. This situation is not likely to change, because florists prefer to determine themselves what kind of pot an Anthurium or Phalaenopsis is presented in at their shops. When you look at the export market, on the other hand, we do see an increase in added value. The 14 cm pot size in particular is very suitable for this, because of their optimal loading on a Danish container.

## “UNLIMITED COLOURS IS WELL ATTUNED TO OUR STRATEGY OF PRODUCT LEADERSHIP!”

## What minimum stock does Waterdrinker hold?

We are aiming at a high inventory turnover ratio. Therefore products are supplied daily, with a supply peak on Sunday evening for the start of the new week. Within a week at the most, the Anthuriums and Phalaenopsis must have left, before the plants need to be watered again. The garden plants must have left with



in two days. In the Cash & Carry approximately 200 cartloads of Orchids and 40 cartloads of Anthuriums are sold per week.

## What is your opinion of Unlimited Colours?

Unlimited Colours is well attuned to our strategy of product leadership! When a customer is looking for something new, different or special, then he should be able to find it at our store first. For this purpose, we have developed a new concept with the name of 'Our choice'. Our buyers are continuously looking for plants at breeders and growers in the whole of Europe that satisfy our 'Our choice' criteria. Then the plants are divided into several categories and they each have something unique and their own story:

- Exclusive: plants exclusively grown for Waterdrinker;
- New: new (e.g. in variety, size, pot, shape) at Waterdrinker;
- Forgotten Plants: a bestseller in the past, but fallen into oblivion;
- Special: special plants with regard to shape, format, colour, aroma or quality;
- Best Buy: plants with an excellent price/quality ratio.

In order to achieve this, we are in constant contact with growers and breeders, a beautiful example of chain collaboration.

## How have employees experienced the Unlimited Colours trade weeks at Waterdrinker?

Our fellow workers have had a positive experience. By increasing familiarity with the Anthura varieties, it will also be easier for the seller to offer them. Furthermore, it is also good to know which novelties are arriving and to stay updated with new market developments.

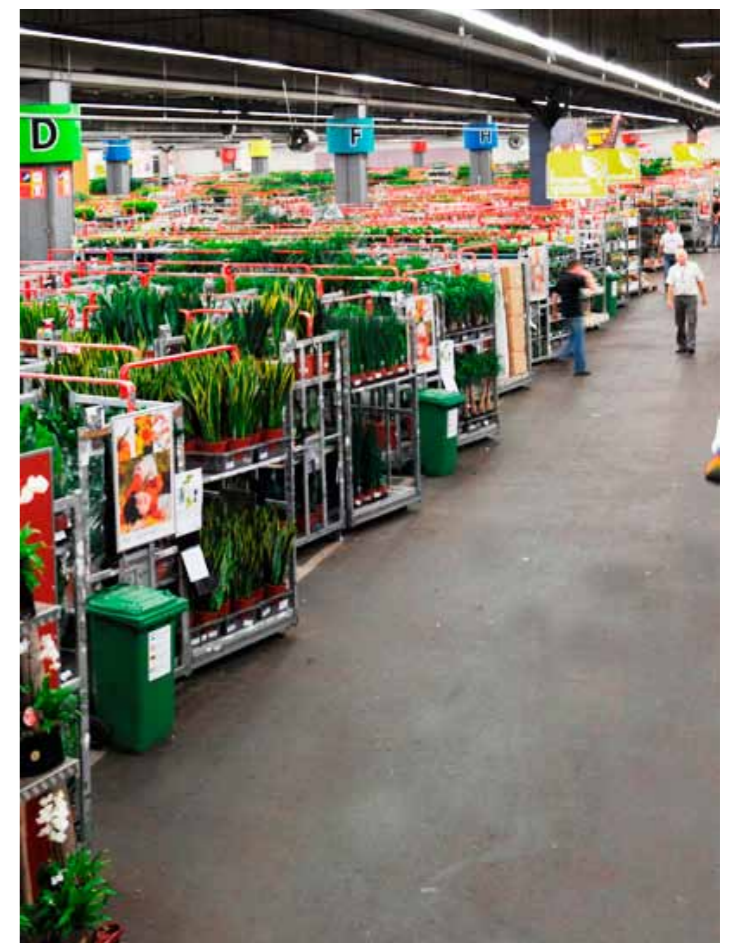
“We expect a lot from Anthura in the field of product information. With our combined market knowledge we can optimize the introduction of new varieties. The current issuing policy of new varieties fits in well with our needs and vision. Furthermore, Anthura is an important interlocutor in our vision of the future of Anthurium and Phalaenopsis.”

## You are going on a horticultural trip to China. What do you expect to see?

We are both going to make the horticultural trip. For us, this is our first visit to Asia. Therefore it's difficult to form a picture of what we are going to see. We hope we will learn some new ideas during the trip concerning product presentation and possibly see new products. We hope that the trip to China can contribute to our company being able to keep surprising our customers in the future!



One of the lifestyle greenhouses where customers can be inspired.



One of the streets at the Cash & Carry of Waterdrinker.

# WHITE ASSORTMENT PHALAENOPSIS

A persuasive sales argument for Phalaenopsis is its versatility in terms of size, colour and flower pattern. The main colour group for Phalaenopsis is still white. The colour white is timeless and fits in with every interior. So it's only logical that this colour group is widely represented at Anthura. For every type of grower and market, the ideal white variety is available. Below we discuss the most important white varieties for the 12 cm pot.



*Anthura Bristol<sup>®</sup>*

is ideal for the 60-65 cm mix and the shelf life of Anthura Bern is outstanding.

### Anthura Cambridge<sup>®</sup>

Anthura Cambridge is a variety for growers who aim at the high-end, exclusive segment. The variety features beautiful, bright white flowers of 10-11cm with a striking yellow lip. The flowers form a beautiful, closed crest on the spike. The plant height of 55-65 cm is considered compact for a variety with this flower size. This combination of flower size and plant height is really unique! The Anthura Cambridge variety grows easily. With a growth period of 26-28 weeks in the growing phase, the variety produces 60-70% plants with two stems. This variety is more suitable for companies with a longer growth period in the growing phase, because as from 30 weeks (until 32 weeks) the percentage with two spikes increases towards 100%. Offering good shelf life for consumers, Anthura Cambridge is the best orchid promotion ever!

**“THE MAIN COLOUR GROUP FOR PHALAENOPSIS IS STILL WHITE.”**

### Anthura Casablanca<sup>®</sup> and Anthura Bristol<sup>®</sup>

Both varieties are important members of the white assortment thanks to their reliability in the percentage of plants with two spikes. With a normal growth period of 26 weeks, Anthura Casablanca and Anthura Bristol practically always produce two spikes. A longer growth period is rewarded with a large percentage of plants with three spikes! Because of this, these varieties are suitable for both large mix companies and for growers who are focused on the high-end segment. Both varieties belong to the 50-55 cm height segment. Anthura Casablanca has a flower size of 7.5 cm and Anthura Bristol has a flower size of 9.5 cm.

### Anthura York<sup>®</sup>

The Anthura York variety can be described as Anthura Bristol's big brother. The flowers are virtually identical to those of Anthura Bristol, whereas the plant is 60-65 cm. With practically 100% of plants producing two spikes after a normal growing period of 26 weeks, this variety will be one of the key products for mix companies, not just now but also in the future.

### Anthura Bern<sup>®</sup>

If you want a Phalaenopsis plant with three spikes, then Anthura Bern is extremely suitable. The plant needs to be cultivated longer than average, because from a normal growth period the plant always produces two spikes. Characteristic features of Anthura Bern are its thick green spikes with a lot of flowers and side branches, and the flower width of 8.5 cm. The flat white flowers make the flower diameter seem larger than it really is. The variety



*Anthura Bern<sup>®</sup>*



*Anthura Bristol<sup>®</sup>*



*Anthura Cambridge<sup>®</sup>*



*Anthura Casablanca<sup>®</sup>*



*Anthura York<sup>®</sup>*



**TRADE FAIRS UNTIL NOVEMBER 2010**

**UNLIMITED COLOURS**  
Flormart in Padua, Italy  
09/09/2010 – 09/11/2010

Flora Holland Trade Fair in Aalsmeer, the Netherlands  
11/03/2010 – 11/05/2010

**ANTHURA B.V.**  
HortiFair in Amsterdam, the Netherlands  
10/12/2010 – 10/15/2010

IFEX in Tokyo, Japan  
10/28/2010 – 10/30/2010

**MORE INFORMATION?**

[WWW.ANTHURA.COM](http://WWW.ANTHURA.COM)

**COLOFON**

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