

# Anthurinfo

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## VARIETIES

### POT ANTHURIUM ALABAMA PINK®: A TRUE BEST-SELLER AMONG THE BLOOMING PLANTS

All the positive qualities of the Alabama® such as growth, structure, root system, solidity, vase life and cold tolerance are also present in the Alabama Pink®.

For several years now, Alabama has been a household name among pot Anthuriums. This variety was first delivered in 2002. Since then, it has held its own among the red Anthuriums. By making a sort of cross-fertilization at the time, almost 10 years later a 'new Alabama' has arrived: the Alabama Pink®. Sometimes you have to be lucky as a breeder. Once in a while, a 100% pure colour mutant is found. Alabama Pink is one of them.



This intensely pink pot Anthurium stems from the 'common' Alabama. In recent years, this variety made both a good and strong impression among growers and traders throughout the world. All the positive qualities of the Alabama such as growth, structure, root system, solidity, vase life and cold tolerance are also present in the Alabama Pink. In addition, this variety also has beautiful dark leaves.

All these qualities make this new cultivar a true best-seller among blooming plants. If we treat this variety with the same respect as the Alabama, we will be able to enjoy it just as long or perhaps even longer.

*Richard Smit*  
Product Manager Pot Anthurium



*Alabama Pink®*

#### Product details Alabama Pink®

Variety name	anthcaszim
Colour	Pink
Flower size	Maxi
Pot size (advice )	14 and 17 cm



# GARDEN ORCHID

## GARDEN ORCHID: ANTHURA'S HARDY OUTDOOR ORCHID FOR THE REAL GARDEN LOVER!

Garden Orchid produces strong hybrids of several types, guaranteeing the garden lover good growth and flowering in the ornamental garden. The aim is to turn the Garden Orchid into a strong consumer brand representing a wide range of qualitatively strong garden orchids.

Orchids are generally known as indoor plants. These orchids are originally found in tropical and subtropical regions. It is less well-known that orchids also grow in areas where the temperature can fall below -20°C. These orchids protect themselves by staying under the surface in winter, as tulips and narcissi do. In spring the shoots appear above the surface, blooming after 3 to 4 weeks. It is as if they have no time to lose in taking advantage of the sun's warmth. After flowering, the green leaf ensures that new shoots are formed underground for the next year. Each year more new shoots appear, as a result of which more and more flowers grow on the same orchid plant.

An exceptionally hardy orchid is the Cypripedium, the Dutch name of which is Vrouwenschoentje (woman's shoe). There are dozens of Cypripedium varieties that have without exception a spectacular inflorescence. The Cypripedium blooms annually in May and June.

Garden Orchid produces strong hybrids of several types, guaranteeing the garden lover good growth and flowering in the ornamental garden. The plants are cultivated by Anthura under controlled conditions. These strong, healthy plants survive the transition to ornamental gardens very well. Garden Orchid will be bringing out new varieties every year, which will allow garden fanciers to create a varied orchid garden.

For the time being, Anthura takes care of the breeding, propagation, cultivation and sales of Garden Orchid. The objective is to turn Garden Orchid into a strong consumer brand that represents a wide range of qualitatively strong garden orchids. The website [www.gardenorchid.com](http://www.gardenorchid.com) has been created especially for consumers. The speed at which the worldwide garden orchid market is going to evolve over the next few years will determine Anthura's policy for issuing young growth material of this Garden Orchid.

Robert Kuijf  
Product Manager Phalaenopsis



April

November

## TRAVELLING ABROAD



ENERGETIC

When you travel to China regularly, you go from one surprise to the next. Especially in the field of infrastructure, the world can learn from the Chinese approach.

Last year I visited two regions in China where they approach the infrastructure with a lot of drive. Tianjin and Kunming are both cities with over a million inhabitants that are experiencing tremendous growth.

### Kunming

In Kunming 700 cars are sold a day. Logically, the roads must be adjusted to these figures. During my last visit, the construction of an enormous roundabout and a double ring road around the city had begun; half a year later it was finished. As soon as the asphalt was dry, vehicles laden with flowers and plants were coming and going.

### Tianjin

In Tianjin, Dutchmen have raised a huge piece of land for the development of a city. The picture clearly shows how the infrastructure is built first; a dual carriageway to truck in building material.

This drive is not only evident in infrastructures. The world's largest horticultural farm with Ebb & Flow floors is being established near Tianjin. An ultra-modern 100-hectare project, completely heated with geothermal energy. This company will grow pot plants using little energy per product unit, already focusing on a market that is still developing. Foresight means power!

Centrally-guided 5-year plans are being made and the developments in China show that if you plan well, five good years do not have to be followed by five bad years; that is real drive. And when it is not possible to drive through the country without traffic jams, in spite of all these plans, then new solutions are found. The solution is taking as much as possible in one go when the journey takes a little longer. There are inventive drivers who turn their trucks into true puzzle pieces to avoid having to do the journey twice. This kind of enthusiasm and inventiveness is clearly present in the country's culture.

The world will have to bear in mind that China is becoming one of the key players of the future.

*Marco van Herk*  
Commercial Manager



## NEW JUNIOR AREA MANAGER

In the past few months I have spoken to or even met some Anthurinfo readers via e-mail, telephone or during a visit to Anthura, but for those who do not know me yet, I would like to introduce myself.

My name is Gert Hoogendoorn, I am 24 years old and I have been working as a junior area manager at Anthura since September 2010. I focus on regions like Southern Europe, North and South America, the Caribbean and Africa.

Since I was a young lad I have been involved in horticulture. In my free time I worked in a greenhouse, as a result of which I developed my interest in this branch. After secondary vocational education I studied at the HAS School in Den Bosch where I finished my education in Business Administration & Agribusiness with success. I wanted to work in export and after finishing my studies I started to work at Anthura with a lot of enthusiasm. The

contact with growers around the world as well as the fact that attention is focused on development and innovation in all sorts of fields in a challenging market, attract me.

In the last few months I have gained some considerable experience and knowledge in my new function. I hope to be of service to you in the future and I am looking forward to a close cooperation.

Gert Hoogendoorn  
Junior Area Manager



## VARIETIES


### TESLA®: A DEEP PINK ANTHURIUM CUT FLOWER WITH OUTSTANDING PRODUCTION

Stop/start systems and brake energy regeneration are a few examples of solutions introduced by the automobile industry to minimize as much as possible the CO<sub>2</sub> emissions of passenger vehicles. These new techniques are also being applied to sports cars, the manufacturer Tesla® being the precursor with its electrical propulsion system.

Anthura focuses on the development of 'flowerpower' by introducing Tesla! This variety, developed for the cut flower

cultivation, stands out for its special appearance. Deep pink veins, lying on a creamy/white background, could be compared to an electric pulse. A power explosion that produces about 90 flowers. There is limited availability, so please contact your sales manager.

*Hans Prins*  
Product Manager Anthurium cut flower cultivation



Product details Tesla®	
Variety	Anthisoc
Colour	Cream
Colour Spadix	White
Colour Spadix tip	Green
Flower size	14 - 17 cm
Production per gross m <sup>2</sup> /year	90 flowers
Vase life	38 days

Tesla®

This year, the subject of the Anthura Relation Days was 'Distinguish'. On Thursday 26th May cut flower cultivation was on the agenda and on Friday 27 May Anthura welcomed many pot plant cultivation growers and traders.

The programme started on the Cyclamenweg where, after a presentation on the evolution of the last two years, a guided tour was organized with special attention on the technical highlights. Then all the visitors headed to the Anthuriumweg to hear the presentations of Jo Kloet and Wilbert van den Eijnde on the subject of 'Distinguish'. This year subjects such as product management, area, Full Colour® and Unlimited Colours® were discussed during both days. Both growers and traders were also given the opportunity to judge the many new varieties in the show greenhouse.

Anthura would like to thank those present for coming and invites the traders who could not attend the Relation Days on 26 and 27 May to visit our show greenhouse. The show greenhouse is currently featuring many new varieties in full bloom, which makes a visit undeniably worthwhile!

You can visit the show greenhouse by appointment; please contact Richard Smit (Product Manager Pot Anthurium), Robert Kuijf (Product Manager Phalaenopsis) or Hans Prins (Product Manager Cut Anthurium). If you have any questions or remarks with reference to the Relation Days, please contact one of the abovementioned product managers.



## IRRIGATION IN POT ANTHURIUM CULTIVATION

**Insufficient irrigation sessions after potting and/or during cultivation, an excessive irrigation session in one go and/or uneven water distribution can cause uneven pot humidity. This unevenness can cause root reduction, compact growth, growth stagnation or even loss. By applying small changes to the irrigation, huge improvements are possible, as a result of which the pot humidity of the different pots will be the same.**

When growing Anthurium, factors such as climate, fertilization, planning and irrigation are important. The following article studies irrigation in depth, assuming that sprinkling is done from above using a rain pipe.

One of the most frequent problems in pot Anthurium cultivation is the unevenness of pot humidity. This problem usually appears after 15-20 weeks, but is often already present from the start. The consequence is that one pot stands wet and the other dry, which makes it nearly impossible to water at the right moment. This unevenness causes root reduction in the wetter pots, resulting in possible loss. In the event of dry pots, this leads to compact growth or growth stagnation.

The main reasons for this problem are:

- 1) insufficient irrigation after potting;
- 2) insufficient irrigation sessions during cultivation;
- 3) an excessive irrigation session in one go, one after another;
- 4) uneven water distribution.

### Insufficient irrigation after potting

Because of insufficient irrigation at the start, the pots are not saturated well, as a result of which a difference in pot humidity appears. Therefore it is important that the substrate in the pot is dark after watering and that there are no clear (dry) parts left.

A good method to check whether the plants are evenly wet is to weigh the pots. When there is a variation of 20% or more after the first irrigation session, this means that irrigation has been insufficient. For a 14 cm pot cultivation you should maintain regular irrigation of 6-9 litres per m<sup>2</sup>. For the first irrigation session after potting, you can use 15 litres per m<sup>2</sup>.

### Insufficient irrigation sessions during cultivation

For insufficient sessions during cultivation it is more or less the same story as above. In this case it is possible that irrigation started evenly, but the following sessions were insufficient. Suppose you give 5 litres per m<sup>2</sup>, while 7 litres is advisable for the substrate in question. Due to this, the dry plants get increasingly drier and the inequality between the pots themselves gets worse. Increasing the total number of litres per irrigation session can solve this problem.



*Difference in pot humidity*

### A large irrigation session in one go

When the soil is rather dry, you might do a one-off irrigation with, for instance, 8 litres.

When this volume is given in one go, the chance of unequal irrigation is bigger because a dryer substrate needs time to absorb the water. The substrate has to 'fetch' the water, as it were. So if you give 8 litres in one go, there is a good chance that quite a lot of water is not absorbed and drains out directly through the pot. A solution for this problem is dividing the sessions into 4 x 2 litres with an interval (5-10 minutes) so that the substrate has more time to absorb the water.

### Uneven water distribution

Another problem that might arise is uneven water distribution. This can be caused by obstructed rain caps or by a lack of pressure in the pipe.

The problem with obstructed rain caps reveals itself when certain corners stay structurally dry. By checking the caps once or twice a year during an irrigation session, problems can easily be avoided.



*Problems caused by difference in pot humidity*

It is also possible that there is too little pressure in the pipes, as a result of which the water distribution is not sufficient. In this case, increase the pressure in the pipes. Release from the caps can be controlled by placing a cup on the cap and collecting the water from one cap. By doing so in several places along the length of the pipe, you simply get more insight into the release from the caps.

In order to control the water distribution, you can put cups every 50 cm on the cultivation table or cultivation floor to collect water and check whether each cup collects the same quantity of water. This way you can gain some understanding of a possible uneven water distribution.

Make a critical check to see if the above also applies to your own nursery. Small changes allow huge improvements!

Albert van Os  
Bureau IMAC Bleiswijk B.V.



## ROOT ACTIVITY IN THE CULTIVATION OF PHALAENOPSIS

In the cultivation of pot Phalaenopsis the roots are very important. A well-developed and healthy root system guarantees a strong plant that will resist stressful conditions such as cold or excessive light. In addition, the root tips produce the growth hormone Gibbereline that stimulates branch induction.

### Morphology

The root of an orchid like Phalaenopsis consists of a core and an outer shell. This outer shell consists of a sort of spongy material called velamen. The multilayered epidermis surrounds the core, which we call the central cylinder. When the velamen is dry, it is white or silvery, and when it is moist, it is green, because the underlying layer becomes visible. The velamen is a storage depot for water and nutrients. The transport of water and nutrients occurs via the root core, via the Xylem (see picture below), just like the roots of any other plant. Assimilates are transported by the Phloem.

### Epiphyte

In order to be able to understand the properties of Phalaenopsis roots, it is good to know more about the origin of the Phalaenopsis. Phalaenopsis is an epiphyte. This means that in nature the plants grow non-parasitically on trees. The roots of Phalaenopsis are air roots. The roots have the function to adhere to their host and to absorb nutrients from the water that runs off the tree during rain showers. Due to their origin, Phalaenopsis roots are not used to high salt levels and are not adapted to long-lasting moist or wet conditions either.



Phalaenopsis in its natural environment; grown on a tree



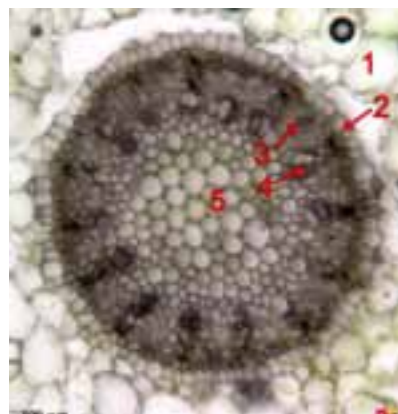
Cross section of an orchid root.

The upper picture is a cross section of the entire root: 1=Velamen, 2=Cortex (bark), 3=central cylinder.

The picture below is a cross section of the central cylinder: 1=Cortex (bark), 2=Endodermis, 3=Phloem, 4=Xylem, 5=Medulla.

Source: Virtual Classroom Biology - Radboud University Nijmegen

[www.vcbio.science.ru.nl](http://www.vcbio.science.ru.nl)



### Green roots

Phalaenopsis roots are generally green. This green colour is explained by the presence of chlorophyll in the roots, with which they can contribute to the assimilation process. However, the roots do not have stomata and therefore cannot absorb CO<sub>2</sub> from the air. The CO<sub>2</sub> used by the roots for the assimilation process is the CO<sub>2</sub> produced by respiration. This way, the roots contribute a little to the complete assimilation process.

### Substrate

When choosing the substrate, it is important to choose an airy substrate that retains some moisture, without the roots staying wet too long. An essential condition is that the substrate has to be at least 80% dried out for approximately 5-7 days after an

irrigation session. A quick dry-up ensures that the root growth stays active. The root tip takes on a vivid green colour and the root tip surface is somewhat shiny, even slimy; a sign that the root cap is active.

Bark is still the main component of the substrate mixture in Holland. In other parts of the world, however, good quality bark is not always available, as a result of which one is forced to grow Phalaenopsis in other substrates. Coconut chips can be a good alternative for bark (either mixed with bark or not), provided that they are perfectly clean from salts and contaminants. Furthermore, in many Asian countries pure sphagnum moss is used as a substrate. The disadvantage of this substrate is that it is fairly wet. Also, it is not easy to moisten when the substrate has dried out. In short, the water retention of this substrate is not easy to regulate



Phalaenopsis plants with air roots



A pot full of good, healthily-developed roots

### Irrigation

Irrigation of Phalaenopsis is one of the most important parts of cultivation, because it directly affects the root activity. It is therefore very important to pay a lot of attention to this matter. Normally, an irrigation session of 12 - 14 l/m<sup>2</sup> is considered large when watering once every 5-7 days. Do not deviate too much from this standard. Larger irrigation sessions can generate more drainage, as a result of which any possible excess salts present are washed away. Too much moisture can also be prejudicial: the substrate may not stay wet for too long. There is a high chance that the root growth may come to a standstill.

### EC

Normally, a root thrives best in a bark substrate in an environment with 0.8-1.2 mS/cm EC. Higher EC values can lead to excessive EC levels in the velamen, as a result of which the absorption of the water by the xylem vessels can be hampered. In extreme cases this can lead to root loss. By using urea in fertilization schemes, the EC can increase even further above an EC of 1.2. By regularly measuring the EC of the drainage water, an excessive EC can be noticed in time. An excessive substrate EC can be corrected quite simply by watering once or twice without nutrients.

### Heating

The key to growing a Phalaenopsis with a good root system is an under-table pipe heating system. The cultivation tables have to be open to allow an unhindered stream of warm air from the pipes among the pots so that the substrate in the pots dries up well.

When the heating can be controlled in two parts, by using a separate bottom and top net heating, you can provide more warmth with the lower net to achieve quick drying. Adjust the minimum lower pipe temperature to 40-45°C. Then the lower pipe heating can be reduced during the day under the influence of the sunlight. Furthermore, the upper net has to follow the lower net with ±10°C exceeding the temperature of the lower net only when the lower net reaches its maximum value. This maximum value depends on the distance between the heating pipe and the cultivation table, although it usually varies from 50°C to 60°C.

### Conclusion

If matters such as substrate, heating, irrigation and EC are well attuned to one another, as described above, you create the ideal environment for a healthy, active root system. This will ensure a good cultivation result.

Menno Gobielle  
Bureau IMAC Bleiswijk B.V.



# WORKING TOGETHER THROUGH ANTHOGETHER

“Based on our promise, we offer customers a unique and innovative source for exclusive varieties and concepts in the field of cut Anthurium, aimed at an integrated chain approach.”



For some years now, the topic of collaboration has become increasingly important on the agenda of cut Anthurium. Anthura has commissioned two market research projects: FloraHolland was asked to investigate the market position of Anthurium and together with Pull Position research was conducted on partnerships between growers and their critical success factors. This research showed that there were opportunities for cut Anthurium in the field of delivery to retailers and mass orders. It appeared that filling large-scale orders had not been entirely successful because of the shortage of sufficient numbers of flowers from individual companies. Consequently, Anthura started talks with several growers to try to encourage them to work together with a view to addressing these market opportunities. Finally, this has led to the formation of the growers' association Anthogether, with the participation of the companies Spek Beheer B.V., V.O.F. Gebroeders Bac and Anthuriumkwekerij Ichtus B.V. Hans Prins (Anthura) has a conversation with Klaas van der Spek on this subject.

## How do you see Anthura's initiative to encourage collaboration between growers?

Our research revealed that there were opportunities that could actually be transformed into a positive contribution to our management performance through collaboration. (Anthurium) growers are initially strongly focused on their own company. By working together you can professionalize further as a group and grow. Anthura's initiative has contributed to this. I would like to describe it as a boost, which has started off our process. Pull Position has also contributed largely to the supervision of the process. By asking the right questions, we were forced to think critically about the main issues. Because of this we were able to formulate clear objectives and get a precise understanding of what we wanted to achieve as a group. It is a long journey, in which the right coaching has brought us a step further.

## Which were the main points of interest when forming Anthogether?

Several aspects of this issue constituted a challenge for us. Fortunately, mutual trust was already there through orders in which we had given support to each other on previous occasions. Thanks to this sporadic collaboration, we already knew that our characters went well together. Next, the tasks and duties had to be divided and it had to be determined how we would handle the distribution of the orders within the partnership. Therefore we developed a system in which each participant has a certain share in the partnership. Each participant is also responsible for contributing a certain percentage of the turnover. By doing so, we allow each other much more scope. When the part of the turnover of a member falls out of line, it can avoid orders being transferred. The distribution of orders is also linked to a certain extent of overlapping of assortment. In the future we will shape this idea further in order to better attune the range to each other.

## How does Anthogether work?

During the year we distinguish two important periods. In the summer months our focus is on supplying the retail sector. Anthogether is able to deliver significant volumes of a wide selection of Anthurium bouquets. In the winter our attention is focused on the wholesale trade, which starts planning its purchases for the coming festive periods. For the fresh daily trade we have set up a new service, offering service and convenience at this point. We visit the different auctions several times a day so as to be able to take care of the cares of our customers. With the bus we supply orders that we receive from buyers online. At Anthogether buyers find a wide assortment for one-stop shopping in both large and small volumes, and with the customer's choice of packaging.

In terms of sales we do everything together under the Anthogether brand and before that we had already done our purchasing jointly (covers, boxes, etc.). All clock trade is carried out under our own name and is no part of Anthogether.

## In November 2010 you officially went public with Anthogether. Before that, you had filled some huge orders in the summer. What have you learnt from your experiences?

We have made a flying start. During our third session with Pull Position we received a phone call from a customer who asked us to deliver an important retail order. Although everything was ready to go, suddenly we had to start organizing all sorts of things at the same time. We learned that it is important to make clear agreements about who takes care of what. It is all about good communication and all mutual agreements have to be met. For now we have to make sure that Anthogether operates in a structured and planned way. We have to ensure that the organization is as solid as a rock and it is our ambition to grow further as an association.

## What have you done so far in the field of marketing/communication?

Before the kick-off of Anthogether in the autumn of 2010 at the Flora Holland Trade Fair in Aalsmeer, we arranged a lot of things. Logo, brochure, posters, product pictures, website, you name it. After the kick-off we organized a well-attended house show, where we talked to our customers



Klaas van der Spek

about what they might expect from us. We got a lot of positive reactions and buyers were especially attracted to the custom-made services. As a group we attend trade fairs, give presentations to buyers and deliver Cash & Carry services. Needless to say, the regular buyers' contacts are also very important to us.

## Which reactions have you received from your customers?

As I already mentioned, we have received a lot of interest from buyers for our open day. It is always exciting when you organize something like that, but we were very pleased with the attendance and the positive reactions to our presentations. Reactions such as: 'it is unique that there is one party offering such a broad assortment' or 'custom-made services are possible and this is ideal for web shops!' Web shops certainly appreciate the fact that it is possible to buy stock directly. This way, buyers have no extra work.

## What is your vision and where do you want to be in five years as a group?

Our vision encompasses different aspects. Based on our promise, we offer customers a unique and innovative source for exclusive varieties and concepts in the field of cut Anthurium, aimed at an integrated chain approach. Our vision focuses on two channels: wholesalers/florists and retailers. In terms of the product, our focus is on the big flowering cut Anthurium, in which quality, durability and personality/perception must excel.

In five years' time we want to have achieved good brand awareness and reputation among our customers, the exporters; with Anthogether as a partner we want to supply the final customer together with the exporter by offering a balanced range and recognizable concepts.

## What has turned your collaboration into a success?

The process had already been embarked upon in the start-up phase. We received excellent coaching from an external consultant and the interests and the objectives were clearly formulated for everybody in advance. Furthermore, you have to be enthusiastic and 100% committed, because you really have to want to succeed. Just standing there and watching what the future might bring is not the right attitude! During the year you have to give and take. And last but not least: trust your partners!

Hans Prins  
Product Manager Anthurium cut flower cultivation



## TRADE FAIRS UP TO OCTOBER

### Hortitec

Holambra, Brazil (Anthura)  
15/06/2011 – 17/06/2011

### OFA Short Course

Colombus (Ohio), USA (Anthura)  
10/07/2011 – 12/07/2011  
Anthura's stand number 1959

### Flormart

Padova, Italy (Unlimited Colours)  
15/09/2011 – 17/09/2011

### Alden Biesen

Bilzen, Belgium (Dutch Creations)  
23/09/2011 – 26/09/2011

### Proflora

Bogota, Colombia (Anthura)  
28/09/2011 – 30/09/2011

AS OF TODAY ANTHURA'S  
WEBSITE IS ALSO AVAILABLE  
IN POLISH!  
[WWW.ANTHURA.COM](http://WWW.ANTHURA.COM)

## COLOFON

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