

Anthurinfo

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VARIETIES

POT PHALAENOPSIS ANTHURA VIENNA^P: 9CM

The perfect alternative to a bouquet of flowers: the ultra-compact and very flowery Anthura Vienna.

The breeding of a new variety takes many years. Therefore, the point of departure for a new variety is often not current trends but the anticipated desires or needs of consumers in ten years' time. What kind of plant, what colour, for which occasion, which place, with or without a fragrance?



As a breeding company, Anthura is constantly following up new developments all over the world and uses them as input for our breeding programme. 'Out of the box' thinking is very important in this case; it is difficult to establish certainties with a view to 10 years hence. A new product which is very different from present standards can also initiate a new future trend!

A beautiful example is the new Anthura Vienna^P variety, a Phalaenopsis which can not only be put on large windowsills in living rooms but also in smaller kitchen windows, at the workplace and on the coffee table. It is an ultra-compact plant with an awful lot of flowers, which can even serve as an alternative for a table centre. Consumers always want to be surprised, so new varieties will have to keep introducing unique features. The Anthura Vienna^P variety certainly fulfils this need.

Featuring a height of approximately 35 cm, Anthura Vienna^P is very compact and beautifully filled by numerous lateral branches

with countless flowers. The many small, lightly striped purple flowers give the Anthura Vienna^P variety a fresh and playful character. The variety is suitable for both 9 cm and 12 cm pots. In the 12 cm pot the variety easily produces three branches.

With the Anthura Vienna^P variety we are offering consumers the chance to enjoy the Phalaenopsis at any time of the day, anywhere they like!

Robert Kuijf

Product Manager Phalaenopsis



Anthura Vienna^P

Product details Anthura Vienna^P

Variety name	CHUNLI
Base colour	Purple
Colour code	PURNX
Flower size	Small
Flower size	6 cm
Plant height (incl. pot)	35 cm
Pot size (advice)	9 and 12 cm

9 CM POT ANTHURIUM: A BIG TREND IN THE CULTIVATION OF SMALL POT ANTHURIUM

Barely three years ago, Anthura introduced a special 9 cm series, the Lentini series. The Lentini Pink®, White® and Red® turned out to be real bestsellers.

Thanks to active breeding policies aimed especially at the 9 cm pot size, several varieties in this smaller pot size have appeared.

Newer cultivars such as Royal Champion®, Joli® and Picollo® are not only suitable for the more standard pot size such as the 12 and 14 cm pots, but also for the 9 cm pot.

Varieties which were placed on the market a little sooner, such as White Champion® and Sierra®, are also suitable for the 9 cm pot.

However, not every new cultivar can be grown in the 9 cm pot by definition. The 9 cm cultivation also requires a specific climate, but by attuning the climate to the 9 cm cultivation better results can also be obtained from existing varieties.

The specific tuning of the climate for smaller pot sizes is particularly relevant to moisture levels during cultivation. In the first cultivation phase it is necessary to grow in moister soil to allow the shoots to come out and the aerial roots to anchor. In the second phase it is advisable to grow in much drier soil to speed up the formation of flowers.

Further on in this Anthurinfo, Bureau IMAC offers you full advice on the cultivation of the 9 cm pot Anthurium.

In the present market, growers are always looking for more possibilities to distinguish themselves from other suppliers on the market. One way of doing so is supplying an extra-small pot size such as the 9 cm pot. This small pot size is extremely suitable for adding value and offers countless variations.



Lentini Red®

A very broad range of 9 cm ornamental pots is available, offering numerous applications, such as their use in arrangements. The 9 cm pots can be used alone, but placed together in a large ornamental pot they can achieve a very different look from the more standard pot sizes.

The smaller pot size offers growers the chance not only to distinguish themselves but also to deal more flexibly with market needs and demands. By growing both the small and standard pot sizes, growers can adapt their cultivation to market demand according to needs; if there is less demand for the 9 cm size, this small pot can still be transplanted into a bigger 12, 14 or 17 cm pot.

All in all, a tiny pot size with huge possibilities. Maybe this could also be something for you?

Richard Smit
Product Manager Anthurium pot plants



BREEDER'S RIGHT SUCCESSFULLY APPLIED IN SOUTH KOREA, OFFERING ADVANTAGES TO BOTH BREEDERS AND GROWERS.

In 2010 I took part in a mission to South Korea. Around that time, a South Korean submarine had been sunk by the North Korean navy, so I was expecting very strict safety measures during the Dutch mission to Seoul.

As well as our own mission, the Dutch Prime Minister and the World Cup 2018 committee were on their way to Seoul too. But most of the attention at the airport was focused on Guus Hiddink, as a result of which the luggage clearance only took five minutes.

Nevertheless, the most important item on my trip agenda had nothing to do with football, but was a lawsuit concerning breeder's right for Anthurium. Together with our Korean agent, Anthura had instituted legal proceedings against an importer of illegally-grown plants in China that were being sold in South Korea.

Anthura strives for breeder's right worldwide. All our varieties are protected by breeder's right in order to prevent and fight the production of illegal copies as much as possible. Anthura growers from all over the world benefit from this protection; they pay royalties for the cultivation of Anthura varieties and are protected as much as possible against unfair competition of illegally grown Anthura varieties.

After discovering the illegal Anthura plants at a South Korean import company, the matter was taken to court. When the formalities were finished, it turned out that our agent and I, accompanied by several growers, were expected at the courthouse. As soon as we arrived, a complete hearing was held including an interrogation of the growers. They were called to give testimony, confirming that the illegal plants were genuine Anthura B.V. varieties.

This was the first lawsuit on breeder's right in South Korea. Just before the start of Horti Fair (October 2010), we received the happy news that Anthura B.V. had won the case and the guilty party had to clear his greenhouse containing more than 100,000 illegal plants.

Thanks to the professional approach and procedures of the South Korean authorities, the successful application of our breeder's right in South Korea is a fact.

With this, the high quality of Anthura growers in South Korea is even further endorsed.

In addition, South Korea has even gone one step further; a group of growers has obtained the exclusive right to use a so-called Anthurium replanting pot (see picture). This pot is protected and can only be used by associated growers, another extra quality guarantee for Anthura varieties.

Guus Hiddink might have put in a good word for us? Perhaps we should name an Anthurium variety after him after all...

Rick Kroon
Commercial Manager Export



Pot cover Anthurium association



South Korean Anthurium greenhouse

CULTIVATION OF POT ANTHURIUM IN SMALL POT SIZES

In the last few years we have noticed a strong development towards smaller pot sizes coming from other cultivations such as Kalanchoë, Spatthphyllum and Phalaenopsis. This trend has also created a demand for pot Anthurium in smaller pot sizes.

In the last three years, the 12 cm pot Anthurium market has developed favourably. The varieties are improving and the plant quality is increasing strongly. Lately, the possibilities for the 9 cm pot and the 4 inch (10 cm) pot abroad are being studied more often than the 12 cm assortment.

For the purpose of conceptualization it is good to consider the combination of the pot size and the plant height.

POT SIZE	PLANT HEIGHT
9 CM	20-30 CM
12 CM	35-45 CM
14 CM	45-55 CM
17 CM	55-65 CM

Chart 1: Ratio of pot size to plant height

Advantages of the smaller pot size

The advantages of the 9 cm pot size are especially prevalent in transport thanks to the excellent load factor. This size is also ex-



tremely suitable for added value as an ornamental pot. In addition, the numbers per square metre of cultivation area are much higher with smaller pot sizes. As an indication; on a yearly basis you can grow 100 plants/m² for 9 cm pots, while the number for 12 cm pots is approximately 45 plants/m².

Cultivation and varieties

For a profitable cultivation of 9 cm pots, the growing time is important; this should take approximately 26 weeks. If it takes longer, this means that the plant has produced too few flowers. A possible cause can be too much shoot growth, resulting in late flowering.

It is also possible that, because of the lack of light, bud development started too slowly. It is known that an older pot Anthurium flowers more easily in a light-poor season (= winter period). For example, a 17 cm White Champion® flowers more easily than a 9 cm White Champion®.

Also, drier cultivation (= not the same as bone-dry) can achieve better flowering compared to 'wetter' cultivation. Drier cultivation results in a more generative crop.

Coarse-leaved to fine-leaved varieties

For the choice of the 9 cm varieties it is important to consider the flowering speed and the plant structure. A division can be made between coarse-leaved varieties with a large flower and small-leaved varieties with more flowers.

CULTIVATION PHASE	WEEKS	PLANTS	PLANTS/M ²	NUMBER M ² /1000 PLANTS	REQUIRED SPACE IN WEEK/M ²
POT PHASE	10	1000	100	10	100
FINISHING PHASE	16	1000	40	25	400
TOTAL	26				500

Chart 2: Spacing scheme coarse-leaved varieties

CULTIVATION PHASE	WEEKS	PLANTS	PLANTS/M ²	NUMBER M ² /1000 PLANTS	REQUIRED SPACE IN WEEK/M ²
POT PHASE	10	1000	100	10	100
INTERMEDIATE PHASE	8	1000	60	17	133
FINISHING PHASE	8	1000	45	22	178
TOTAL	26				411

Chart 3: Spacing scheme fine-leaved varieties

Varieties such as Sierra®, Royal Champion® and Joli® belong to the group of coarse-leaved varieties for the 9 cm pot. The coarse-leaved types should be grown according to the following spacing scheme (chart 2).

On a gross area of 1,000 m² with a net use of space of 85% x 52 weeks = 442,000 net week m²/500 (see required space) = 88.4 plants per m² on a yearly basis.

Varieties such as Lentini White®, Red®, Pink®, Okapi® and Chico Orange® belong to the group of fine-leaved varieties and should be grown according to the following spacing scheme (chart 3).

On a gross area of 1,000 m² with a net use of space of 85% x 52 weeks = 442,000 net week m²/411(see required space) = 107.5 plants per m² on a yearly basis.

During the coming years, cultivation of 9 cm plants will expand even further. With the current 12 cm varieties and the arrival of new varieties, the 9 cm pot size can look forward to a magnificent future.

Do you want to receive more information on the possibilities of the 9 cm cultivation? Please contact Bureau IMAC Bleiswijk BV



Albert van Os
Bureau IMAC Bleiswijk B.V.



A “NEW CULTIVATION CONCEPT” FOR PHALAEOPSIS

Phalaenopsis cultivation has been very much on the move over the last two years. Further to the results of the test carried out at the WUR (Wageningen UR) in Bleiswijk, the Dutch horticulture research centre, many Dutch breeders started growing using more light and a higher relative air humidity. The conclusion of this Dutch test indicated that more light and a higher moisture level led to faster growth, resulting in accelerated cultivation.

This new concept requires a specific cultivation approach because apart from the advantages of faster growth, it can also entail a higher risk of plant loss. This article analyzes the advantages and disadvantages of the new cultivation method for Phalaenopsis.

The new cultivation concept: what does it mean?

The most important part of this cultivation method is the increase of light quantity, being up to 50% higher than the previously standard values. In the last few years, Bureau IMAC Bleiswijk has recommended a higher light level than what used to be common practice, but the light values which are aimed for nowadays far exceed this recommendation (see chart).

Apart from the fact that more light is allowed, cultivation is also moister. This implies more frequent watering and a lower moisture deficit (=a higher moisture level). Formerly, a moisture deficit of 8.5-10 (60-65% at 28°C) was considered very normal; now the values fluctuate between 6-7.5 (70-75% at 28°C).

As a rule, more nutrients are added: when several years ago it was generally accepted to water with an EC of 0.9-1.0 mS/cm, the EC levels nowadays fluctuate between 1.2 and 1.6 mS/cm.

Advantages of the cultivation concept

Besides the results obtained in the Dutch WUR test, practice has also proven that more light, moisture and nutrients can lead to faster growth. The potential acceleration of cultivation is estimated at ±2-4 weeks.

The average duration of cultivation stays the same for most growers; they prefer a larger plant to a shorter growth cycle. In this case, the cooled plants have on average half a leaf more, as a result of which the two-branch percentage is higher.

Research Wageningen UR-Glastuinbouw in Bleiswijk:

From 2009 up to February 2010, the effect of more light, higher air humidity and temperature during the cultivation of Phalaenopsis was examined. It turned out that more light, in combination with a higher RH, stimulates the growth of Phalaenopsis. All cultivars produced more dry matter at a higher light sum, plants growing best at a light sum of 5 mol/m²/day at the beginning through to 6 mol/m²/day at the end of the cultivation. The higher dry matter production revealed itself in a faster leaf division and a larger leaf surface.

An increasing light sum resulted in more CO₂ uptake and the absorbed CO₂ quantity was strongly influenced by the light sum. At 4-5 mol/m²/day light, approximately double the CO₂ was absorbed during the night than at a light sum of 3 mol/m²/day. It should be noted that young plants are sensitive to overly-high light intensities. Therefore it is advisable to start with a lower light intensity at the beginning of the cultivation and to increase the light intensity only after some weeks. Optimisation of the climate led to acceleration of cultivation and growth in Phalaenopsis from 3 to 6 weeks. An increase in light sum from 3 to 5 mol/m²/day resulted in an average of 0.5 more leaves during the cultivation. When assuming a production of approximately one new leaf per 6 weeks, this means an acceleration of cultivation of 3 weeks.



More lighting in the greenhouse



Double leaf division by faster growth

Risks

It is very important that all cultivation factors are well balanced. Allowing more light implies automatically that the moisture level needs to be higher. With a higher growth speed it is important that the plant can absorb sufficient nutrients; the nutrient level will have to be incremented too.

When these factors are not balanced, plant loss can occur. Too much light causes damage and an excessively high moisture level

or an overly-fast increase in EC (blunt and salinated roots, root shrinkage) can cause plant loss by fungi and bacteria.

In the months of April to September it is easy to let in a lot of light. The days are longer than 12 hours and the intensity is such that high light sums can be reached without additional lighting. In the November–February period this is more difficult, even more so when the light installation is not powerful enough. Prolonged lighting can be a way of reaching the target light sum, although this is not possible without reservation. Phalaenopsis is a CAM (Crassulacean acid metabolism) plant, for which the dark period is very important for CO₂ uptake. When this period is too short, insufficient CO₂ can be absorbed, as a result of which the prolonged lighting will overshoot itself. A Phalaenopsis needs a minimal dark period of 6-8 hours so as to be able to absorb sufficient CO₂.

Phalaenopsis can support more light when the moisture level is higher. Also, watering the plants more often results in a better microclimate for the plants; they can grow more quickly. This is probably due to better and more efficient CO₂ uptake.

The main risk of growing with a higher moisture level is the faster development of fungi and bacteria. A fungus such as Fusarium and bacteria such as Erwinia and Acidovorax (Pseudomonas)





Humidification in the greenhouse

Phalaenopsis culture throughout the world:
 For a lot of growers abroad who grow in less advanced conditions, it is difficult to adopt this new “cultivation concept”. It is important that the parameters such as moisture, light and temperature are seamlessly attuned to one another to be able to grow without any problems.

Factors such as high pressure air humidification, light metering in the greenhouse by means of a PAR-meter, lighting and the maintenance of a stable temperature are of the utmost importance to be successful with this cultivation method.

If you want to know more about this cultivation method, please contact Bureau IMAC Bleiswijk BV.

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	Light				EC (mS/cm)	
	Target max. ($\mu\text{mol/s/m}^2$)	Sum ($\text{mol/m}^2/\text{day}$)	Target max. ($\mu\text{mol/s/m}^2$)	Sum ($\text{mol/m}^2/\text{day}$)	“New cultivation”	Current IMAC recommendation
	“New cultivation”		Current IMAC recommendation			
Cultivation 1	100-130	4,0-4,5	90-120	3,5-4,0	1,2	1,0
Cultivation 2	140-170	5,0-6,0	110-140	4,5-5,0	1,3	1,2
Cooling	180-250	7,0-8,0	160-220	6,5-7,0	1,5	1,2
Finishing	210-280	7,5-9,0	190-250	7,0-8,0	1,5	1,0

Chart 4

get more chance to develop. Also, watering more often entails a greater risk of root reduction and pot worms are given more of a chance to develop.

Costs

Growing with more light and moisture uses more energy. Lighting is needed for longer, usually with higher light levels, and more moisture is brought into the greenhouse, as a result of which the heating must be turned on more often to let the pots dry sufficiently. This factor certainly deserves particular attention when calculating the productivity of this cultivation method, but for the time being the additional energy costs seem to be covered by the faster growth.

Conclusion

An increase in light sums in Phalaenopsis cultivation can lead to clear growth and quality improvements. A higher light level does require more nutrients and more moisture around the plant for optimal growth; only then are climate conditions balanced. This

requires intensive daily care in the cultivation. Regular adjustment of the climate is a must. When no timely action is taken, this can lead to more plant loss and a lower growth speed.

Chart 4 shows the current IMAC recommendations for light quantity and the EC of irrigation water; values that are well balanced with regard to the growth speed and the risks of diseases and plagues.

The new cultivation concept of Phalaenopsis requires a totally new cultivation approach. Bureau IMAC Bleiswijk can assist you if so required.



Menno Gobelje
 Bureau IMAC Bleiswijk B.V.

TRADE FAIR ATTENDANCE

METZ DAY On Monday 24 January, Dutch Creations took part in Metz Day 2011. Florists from all over France and the French colonies attended this event.

Metz is an international flower and plant supplier for florists with an eye for quality and exclusivity. Because of the absence of an exhibition for florists in France, it organizes yearly Metz Day, a special floristry event in Paris.

Metz Day offers an excellent opportunity to reach French florists and this year Anthura was present with Dutch Creations.

A continuous demonstration programme under the skilful guidance of Karin Pasman (the Dutch champion) resulted in a very well-attended stand. A special guest at Metz Day was the world champion Stein Are Hansen from Norway. He performed on the main stage and impressed the visitors with his breathtaking flower arrangements.

The numerous visitors to Metz Day were wildly enthusiastic. At the stand, florists were given a more detailed explanation of the web portal offered by Dutch Creations. Florists registered en masse for the newsletter.

Many florists from all over the world are inspired by Dutch Creations’ newsletters, in which your Anthura varieties will also receive full attention, increasing the brand awareness of your varieties.



Dutch Creations stand at Metz Day 2011



Brand Plaza at IPM

IPM The new initiative to introduce a real A-brand plaza has proven to be a success. Brand Plaza was a true eye-catcher and offered visitors a host of top-grade branded products in one place.

Together with the companies Air So Pure, Anco Orchids, Decorum Plants, Opti-flor and Smit Kwekerijen (Eden Collection) Anthura made an appealing presentation of the joint brand portfolio with Unlimited Colours.

From 25 to 28 January, every visitor to the IPM had to pass by the Brand Plaza in Hall 1. A green and white coloured plaza drew the attention of many traders, exporters, florists and growers. A luxuriantly decorated table with white/green arrangements, all made using branded products from Holland, stood in the middle of the plaza.

Hotspot

This year the Brand Plaza was the perfect place for traders, growers, and breeders to meet. The added value of joint presentations of top brands soon showed: the Brand Plaza was exceptionally busy every day. Brand Plaza could be compared to a chic warehouse where stylish boutiques present their own top brands.

Thanks to this success and the many enthusiastic reactions to Brand Plaza, plans are already being made for 2012.

Eveliëne Hartmanns
 PR & Marketing manager



Full Colour®

Anthuriums from the jungle

FULL COLOUR® THE 'CONVENIENCE' PRODUCT DEVELOPMENT IN CUT ANTHURIUM

Full Colour® is a new product concept that anticipates the worldwide consumer need for convenience and offers cut flower culture growers new opportunities.

It is a ready-made product with twelve premium quality, big-flowered Anthurium cut flowers in a hand-blown glass vase, including a greetings card and integrated knife.

Full Colour is positioned as a luxury gift article for the high-end retail segment. Full Colour is a unique product for Anthurium cut flower culture, for which 'convenience' is an important and unique selling point (USP).

Full Colour® anticipates consumers' need for convenience. It is a ready-made product and unlike the sale of loose flowers, consumers do not have to set off on an adventure to compose a bouquet themselves.

From his vision of 'convenience flowers', Nic van der Knaap (former manager and founder of Anthura B.V.) has taken many courses to place cut Anthurium on the market, not just as a semi-finished product but as a final product. An important starting point was making the Anthurium cut flowers fully convenient for consumers.

Simplicity and convenience for the whole chain

The Full Colour concept is not only convenient for consumers. The seven-day sales period in combination with a shelf life guarantee of ten days is very interesting for retailers. Another important advantage for the retailer is that Full Colour hardly takes any looking after at all in the shop; no extra care, handling or water are needed. In addition to this, the product offers good protection during transport, one of the main obstacles for tropical flowers in the distribution chain. By using the flow pack technique, hygiene and quality are also guaranteed.

The Full Colour® concept consists of the following parts:

1. Twelve premium quality, big-flowered Anthurium cut flowers bound in three bouquets forming one big bouquet of flowers;
2. Specially designed, hand-blown glass vase, in which the flowers stand up firmly and beautifully arranged. In addition, the vase can be fully recycled or reused;



3. Packaging:

- Three flow packs offer protection against weather and temperature influences and conserve the Anthuriums during transport and in the shop;
- Solid cardboard base holding the glass vase;
- Instructions for use and greetings card with integrated knife to cut the stems slantwise.

Development and testing phase

The development phase is practically finished and positive reactions to the concept were received from several important (inter)national retailers. Anthura has chosen to run a pilot scheme on a small scale in the introduction phase with a selection of retailers. The first deliveries were made in December 2010 and are continuing in the first half of 2011.

The challenge for 2011 consists of positioning Full Colour successfully on the market with the ultimate aim of increasing the sales of Anthurium cut flowers.

Award

At the TPIE (the Tropical Plant Industry Exhibition), held from 19 January to 21 January in the United States, Full Colour® pocketed a magnificent award: the Cool Product Award 2011.

The professional jury's judgment on Full Colour® read as follows: "A cool convenience product with value for money." The vase concept was proclaimed one of the best ideas in the tropical flower industry.

Do you want more information on Full Colour®?

Please contact product manager Hans Prins or your sales manager.

Hans Prins

Product Manager Anthurium cut flower



Unique cutting tool





TRADE FAIRS UNTIL JUNE 2011

Flora Holland Trade Fair
Naaldwijk, Holland
(Unlimited Colours)
03/09/2011 – 03/11/2011

Hortiflor Expo
Shanghai, China (Anthura)
04/13/2011 – 04/16/2011

Hortitec
Holambra, Brasil (Anthura)
06/15/2011 – 06/17/2011

MORE INFORMATION?

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COLOFON

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