

Competence in Orchids



Orchid propagation by Hark - Commitment and Passion

From a small family gardening business to a specialised orchid laboratory within 100 years.

Three generations after its foundation in 1904, our company has been devoted to the cultivation of plants. From the early days till the late 50s, vegetables and cut flowers in particular were produced for the local markets.

It was not until 1949, i.e. more than fifty years ago, that the father of the current owner laid the foundation for a development which is of historical importance for us today: Fritz Hark sr. bought his first orchids. His passion and love for these fascinating plants established the basis of our business today.



Fritz Hark was not only an excellent gardener, but also a cultivator of international reputation. A large number of his hybrids have been registered with the London-based Royal Horticultural Society (RHS) and have won numerous commendations and awards.

One of his most famous Phalaenopsis hybrids was the 'Lipperose', **the first pink Phalaenopsis worldwide**, which could be kept as a cut flower. In 1967, it earned him the "Award of Merit" by the RHS.

As early as the 50s, his sensitivity and understanding of plants enabled Fritz Hark to carry out seeding using artificial culture media. The expertise and know-how resulting therefrom eventually formed the basis of the first production of meristems.

Fritz Hark developed his own culture media which, combined with his own propagation methods, are of decisive importance for our production processes even today.

By the 1980s, our company had exclusively specialised in the production of orchids. On account of our outstanding varieties – Paphiopedilum and Phalaenopsis in particular – we enjoyed worldwide recognition already at that time.

In 1986 the company was taken over by Fritz Hark junior and his wife Ingrid. This generation opened a new chapter in the company history. The family gardening business with a small laboratory gradually became a specialised laboratory for the propagation of orchids.

Since 1999, an area of more than 17,500 square metres has been allocated to laboratories. Currently, orchids are being produced at 333 clean benches in our three state of the art laboratories. With its present staff of 650, our company has given priority to customised propagation.

Due to our long-established traditions at Hark Orchideen, plants have always been given the centre of attention. For us, orchids are more than just a product – they have and always will be a passion.



**Knowledge and experience
generate competence**



Hybridisation, cultivation and propagation of orchids require a great deal of knowledge and experience, which can only be acquired over several generations. Fortunately, our company can look back on a long-standing tradition in connection with this very demanding process.

Our success in the propagation of orchids mainly results from the culture media and propagation methods which we have developed ourselves over the years. A number of successful varieties together with the cultivation of meristems supplement this knowledge. Customers from all over the world can have their plants propagated by Hark and thus avail themselves using our staff's long-standing experience in producing orchids.

Even today, a sound knowledge in the production and cultivation of orchids is an indispensable prerequisite if you wish to keep your competitive position. As a competent laboratory, we have been cooperating with numerous hybridisers, large-sized breeding companies of meristems and cultivators of orchids.

With regard to the production of meristems, we have been able to set standards due to sustained innovation and development.



Long serving staff working in our lab management as well as in all other production areas, are the best guarantee for successful execution of even the most complex propagation tasks. In spite of the gradual expansion of our business, we have always been committed to the updating of our staff's vocational qualifications.



Confidence and trust are good – but control is better.



In contrast to many other ornamental plants, the orchid is much harder to calculate when it comes to its propagation or its production in laboratories. This is largely due to the long production cycles it requires as well as to the propagation rates which are hard to assess. Moreover, the mixing-up of clones within an earlier production phase may have unforeseeable consequences.

Our HARK SAFETY SYSTEM enables us to ensure a safer and more efficient production of orchids in our laboratories. On the basis of a bar code system, each individual cup in the laboratory is registered using a scanner. Therefore we can retrieve the exact data on actual stocks at any time.

Secured planning

In ornamental flower production today, orchids are amongst the most difficult and most expensive plants to produce. As a consequence, **production and sales planning** for these valuable plants are of vital importance to the cultivators.

The value of a meristem does not exclusively depend on its quality. Another characteristic of an efficient business partner is his ability to provide relevant laboratory data, thus enabling the customer to reliably plan his own production.

Many of our customers profit from this service **for their own cultivation projects**. Selling the requested clones in the required quantity at a given point of time is the main issue in orchid cultivation. We can offer you a competitive edge – with the support of our secured and reliable data.

Monitoring instruments

Our efficient data processing system offers a number of monitoring instruments enabling us and also you, the customer, to monitor our production. At any point of time, you may receive detailed information on all individual cups concerning the development and cultivation of your clones. **Production forecasts** based on exact cutting rates will enable you to monitor the production of your plants even on a long-term basis. You can obtain information on any one of your clones already, by phone.

It is our intention to create transparency in our company, which will add to our customers' trust and confidence. We want you to see at any point of time the endeavours we make on your behalf.







**Clones of whatever quantities
and distinctly identifiable**



The HARK SAFETY SYSTEM

Since the beginning of meristem cultivation, the mixing-up of clones in the early stages of their production has always been a serious risk in any laboratory.

As early as 1999, we took up this challenge by developing a **laboratory system which ruled out any form of mix-up**. Several years were successfully devoted to the development of this system, which was finally introduced into our laboratories in the autumn of 2002. Eversince, our internal electronic data processing department has been permanently working on the system's further development and perfection. For the invention of this unique production standard, we were awarded the **Innovationspreis Gartenbau im Bereich Pflanze** (Innovation prize for plant cultivation) by the Federal Ministry concerned in Berlin in 2004.

In our laboratory, each individual production cup is **labelled** with its own **barcode**, that means our computers are fed with all the relevant data exclusively via a scanner. All our staff have their own scanners and barcode printers at their clean-benches. On the basis of its barcode, each cup is registered and individualised and consequently subjected to checks. On account of complex controlling systems it has become impossible today to mix up cups or even mismark them.

When the cups are taken into or removed from the climatic chambers, they are identified via scanners again, as all our staff are linked to the central computer via WLAN.



Thus the HARK SAFETY SYSTEM checks every single production process until the dispatch of the cups.

For our laboratory management, detailed production figures per cup form the basis of a quantity check. Exact cutting rates of all clones enable us to plan our production carefully. Via notebook the managers of our laboratories are permanently linked to the system and can consequently evaluate and monitor the development of each clone easily and reliably. All necessary data relating to the product and its cultivation are available wherever and whenever required.

On account of our **controlling system** we are now able to guarantee reliable administration of even the largest number of clones and production quantities. In terms of security, your clones are top priority to us.

Currently, we are the world's leading propagator of customised orders and we enjoy the confidence and trust of numerous cultivators from all over the world. Comprehensive information enables our customers to monitor the propagation of their clones at any time.



Ingenious propagation methods ensure successful cultivation

In the past few decades we at HARK have been developing propagation methods and culture media for the complex production of a demanding process which has been continuously improved and optimised.

Due to sophisticated propagation methods (shot-by-shot) our Phalaenopsis meristems are of first-class quality.

During production, the Phalaenopsis plants undergo a **special separation process**. Typical features of our meristems are good rootage, strong habitus and standard size. Healthy, fast-growing clones are the ideal basis of a successful cultivation.



Due to **continuous research and development** of ever new culture media and propagation methods, we are today able to make use of our long-standing experience particularly with regard to intricate hybridisation processes.

It goes without saying, that along with the high quality standards which we guarantee to our customers as a producing laboratory, all our propagated orchids have to undergo a virus test. Within a period of six to eight months, all clones are tested twice with regard to a potential ORSV or CyMV infection.

This **double check** gives our customers the highest level of protection. These tests are carried out in the Netherlands by the NAKT.

Apart from Phalaenopsis meristems, there are numerous other varieties of orchids in our laboratories, such as intergeneric hybrids, Miltonia, Oncidium and Zygopetalum.

Among our other laboratory services, we also offer the production of seedlings. Numerous successful cultivators have their seeding done in our laboratories.



Transparency creates confidence and trust



Loyalty

The cultivation of orchids requires a high degree of experience and most of all: time. Therefore, the work of many years is reflected in the quality of the hybrids propagated in our laboratories. As a cultivating laboratory, we feel a strong commitment towards our customers with regard to the special care devoted to the cultivation of these valuable plants.

Any plant, entrusted to us for propagation purposes, can therefore be assured of the utmost care from the very beginning.

Due to the HARK SAFETY SYSTEM, we guarantee that the unique clone, which was propagated for you, is also exclusively produced and delivered to you.

We know that any form of successful business cooperation is based on mutual confidence and trust. Therefore, with HARK, your clones are in the safest of hands. Our long-standing and successful business relationship with numerous customers from all around the world is self-standing evidence of the quality of our work.

Understanding

Technical progress in the gardening sector nowadays has an unprecedented influence on the production of plants. Especially for such a high demanding task as the cultivation of orchids, cultivation techniques and logistic processes have to be constantly improved. Due to the continuous direct contact with our customers, we have been able to meet the requirements of a modern laboratory. Characterised by the appreciation of a gardener's work, we have been able to develop **innovative solutions** for a market which is permanently subjected to change.

When dealing with our customers, we offer a high degree of transparency, which is rather unusual for a laboratory. We have developed monitoring instruments which enable you to obtain an exact insight into the current state of the production of your order. On the one hand, this transparency motivates us in our daily routine; and on the other hand it establishes a sound basis for a trusting cooperation with our customers.





I. + A. Hark Orchideen GmbH & Co. KG
Windmüllerstr. 25
59557 Lippstadt – Germany –
Phone: +49 (0) 29 41 - 1 20 47
Fax: +49 (0) 29 41 - 1 07 39
www.hark-orchideen.de
info@hark-orchideen.de