

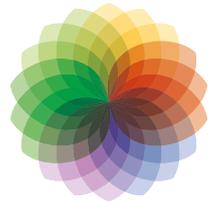
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AIPH

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CHINA DESERVES OUR SUPPORT

Just two months into the year and the markets have certainly given wholesale plant and flower traders plenty of break-ups, shake-ups and make-ups – right before Valentine’s Day.

Reporting from Aalsmeer, the hub of global flower trade, VGB – the Dutch Association of Wholesalers in Floricultural Products – says that Dutch flower and plant traders did good business in January, with the export value rising by six per cent in January to €471 million, based on new export statistics from market analyst Floridata. Plants outperformed flowers by five per cent to €302 million, growing by eight per cent to €169 million.

However, the trade association was quick to add that the shake-up on the export value to China is noticeable because of the coronavirus, making a dent in trade for Chinese New Year. At the outset of the Year of The Rat, export values to China showed a contraction of 27 per cent over January. Although the total Dutch export value to Southeast Asia is relatively small at two per cent, VGB Director Matthijs Mesken finds the situation worrying, “The Asian destinations are important growth markets for Dutch flower traders. The impact can have enormous consequences for the export of flowers if the virus spreads further.”

A lot of guesswork still surrounds the economic impact but evidence is mounting that the world’s second-largest economy is suffering a significant slowdown. And it is pretty safe to say that the effect will spread across the globe as China has become such a vital part of the global business.

Now that China’s road to success is not sprinkled with roses alone, the country deserves the world’s support, and its people need our sympathy. That’s why this issue is primarily focusing on China’s ornamental horticulture industry. Our man in China, Wen-Ke Dong (by industry professionals also known as Victor Dawn, walks the markets, meets with many merchants and feels the incredible pulse of an industry that has undergone transformation and growth (page 14).

Despite the vagaries of the Chinese market, Van den Berg Roses Kunming is run by Arie van den Berg and Nic Pannekeet, who were brave enough to set up their rose farm in China back in 2007. FCI sat down with Arie van den Berg in his home town of Pijnacker to get the full story. More recently, Halex Flower BV opened its Shanghai branch. Halex’s CEO Paul Hoogendoorn explains how their local business helps to serve the Chinese consumer better while highlighting the major trends in the country affecting his business.

Meanwhile, all business aside, let’s not forget that the coronavirus is for many people a personal and profoundly emotional issue involving a lot of worries which can run the risk of stigmatising people. When show-organiser Mae Law from Flower Expo China in Guangzhou announced a rescheduling of the event (new dates May 11-13, 2020) she thanked industry professionals worldwide for the heart-warming support. And that was good to hear.

Ron van der Ploeg



COVER STORY

- 14 CHINA IN FOCUS**
Transformation and growth mark the country’s ornamental horticulture industry
- 19 FERTILE GROUND FOR OPTIMISED PLANT NUTRITION**
Osmocote and Peters are gaining momentum amongst Chinese growers
- 22 PRODUCTION COMES FIRST**
Growing roses in the Westland of China

FEATURES

- 26 ROYAL FLORAHOLLAND**
Fulfilling Plastics Pact promises
- 30 DIGITAL MAPPING OF PESTS AND DISEASES**
Reduced crop losses
- 32 UPDATED MPS-ABC SCHEME**
Helping to make horticulture more sustainable

VOICES

- 04 FROM THE EDITOR**
- 07 PLANT VARIETY PROTECTION CHALLENGES IN CHINA**
- 29 CHANGE FOR THE BETTER**

IN EVERY ISSUE

- 06 WORLD NEWS**
- 08 VIS-A-VIS**
- 34 EXPOSURE**
- 37 SAVE THE DATE**
- 38 GREEN CITY POST**

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CHINA

Two major horticultural trade shows in China reschedule due to Coronavirus

Hortiflorexpo IPM Beijing and Flower Expo China hosted by China Great Wall International/China Flower Association and the Guangdong Grandeur International Exhibition Group respectively have been rescheduled because of Coronavirus.

Ms. Wang Xinyue and Mr. Wang Shuo of Hortiflor IPM Beijing's organising committee say that it is with regret that the show, originally scheduled for April 7-9, 2020 has been postponed until next autumn. "We will stay in close contact with government authorities and relevant departments and will announce the show's new dates as soon as they are available." Flower Expo China's show organiser Mae Law told FCI



that the 12th edition of the Flower Expo China, originally scheduled March 16-18 at the Guangzhou International Sourcing Centre, will now be held on May 11-13 at a different venue: the Guangzhou Poly World Trade Centre Expo. In 2019, the three-day event in Guangzhou attracted over 300 exhibitors and a record

number of more than 33,000 buyers from home and abroad. Visitors of the Guangzhou show are treated to fresh cut flowers, bonsai trees, succulent plants, young plants, packaging material, pots, vases, dried flowers, floristry supplies and garden tools. For the occasion Ms Law thanks industry profes-

sionals worldwide for the heart-warming support. "We are closely monitoring the situation," Law said, "people have returned to work after an extended Lunar New Year holiday. Please rest assured that we will keep you updated of any changes to the current situation."

BELGIUM

Flemish plant doctors and researchers raise awareness about plant health in 2020

The United Nations has declared 2020 as the International Year of Plant Health (IYPH), a great opportunity to raise global awareness about the importance of plant health for the welfare of humans and the planet. Climate change and increasing international travel impede efforts to prevent and manage plant pests and diseases.

At Flanders Research Institute for Agriculture, Fisheries and Food (ILVO) several specialised teams are working on this. Geneticists try to crack the code of disease resistance in plant DNA. Breeders test new candidate cultivars for their susceptibility to disease. Plant doctors examine plant and soil samples for all possible pathogens. The particularly challenging to identify - or newly emerging - harmful organisms end up at ILVO's accredited 'Diagnostic Centre for Plants'. In the meantime,

ILVO has gained expertise in several diseases and pests, like box moth and vine weevil, Phytophthora, Japanese rust on chrysanthemum, Fusarium in begonia, the bacterium Xylella fastidiosa, pine wood nematode and chrysanthemum stem necrosis virus (CSNV). To nip diseases and pests in the bud even faster, the plant doctors have recently started mobilising civilian observers. For the easily recognisable harmful organisms on the Belgian 'most wanted' list, they are creating an online

notification platform. But these doctors don't only focus on problems; they look for answers. Where does this threat come from; how does this organism develop and spread; and, under what circumstances does it become a problem? Then they can offer solutions like how to avoid and control potential contamination. They look not only toward chemical agents, but also biological pesticides such as bacteriophages, viruses that destroy specific harmful bacteria. Building on their colleagues' expertise, ILVO cultivation and crop specialists investigate how cultivation techniques, variety selection and soil and substrate management can help to prevent diseases and

pests. One line of research, for example, explores the replacement of peat in substrates with compost and other local biomass streams that show a potential bio-active effect. It's not for nothing that 'Healthy soils for healthy plants' is one of ILVO's priority research themes. Increasingly, this type of research is done in co-creation with growers and breeders, so that the investigated solutions are sure to be practical and economically feasible. The newly established Living Lab for Plants is responsible for managing this co-creation.



INTERNATIONAL YEAR OF
PLANT HEALTH
2020

GERMANY

Anthura BV wins AIPH International Grower of the Year 2020

Anthura BV, the Netherlands has been awarded the accolade of International Grower of the Year (IGOTY) 2020 by the International Association of Horticultural Producers (AIPH).

Anthura won the coveted 'Gold Rose' award, presented by Royal FloraHolland CEO, Steven van Schilfgaarde, at the AIPH IGOTY Awards on Tuesday 28 January 2020 at IPM Essen, Germany. The International Grower of the Year event is now in its 11th year, and it is an annual celebration of excellence and best practice in ornamentals production. Anthura were also awarded Gold in the 'Young Plants' category, presented by jury member and AIPH Vice-President Tim Edwards. The breeder also won Gold again in the 'Sustainability' category, bestowed by a representative from Pöppelmann. After winning the Young Plant Gold award, Marco van Herk, Commercial Director, at Anthura, says: "Winning International Grower of the Year, is a significant recognition. In horticulture, it means a lot." Anthura's Director, Iwan van der Knaap, added, upon winning International Grower of the Year 2020: "We are very proud. Together we can make the whole world more beautiful and sustainable." This year's overall winner

Anthura is known as a worldwide specialist in anthuriums and orchids. As a breeder and propagator, this organisation is continually working to develop new techniques, stimulate entrepreneurship and make the process chain more sustainable. Anthura reached a unique milestone for horticulture when its research and development department sequenced and mapped the DNA of orchids and Anthuriums. The company has since invested in infrastructure, technology and people to translate this breakthrough into more sustainable production of anthuriums and orchids. Years of innovation and sustainable product development have resulted in an unlimited assortment of colourful varieties. Due to Anthura's knowledge of genetics and its expert selection process, it offers customers vigorous plants in fabulous colours with long flowering periods. Anthura stands for innovation, expertise, pragmatism and entrepreneurship which its motto embodies: "Unlimited in varieties, offering unlimited possibilities".



PLANT VARIETY PROTECTION - CHALLENGES IN CHINA

Mr Hidde J. Koenraad is Partner in Intellectual Property at Boekx Advocaten (Amsterdam).

Since 2006, the European Commission has been publishing reports to strengthen the protection and enforcement of intellectual property rights (IPR) in countries outside the EU. The main objective of these reports is to identify those countries in which the state of IPR protection and enforcement gives rise to the highest level of concern and to help improve IPR protection and enforcement worldwide.

In the Commission's most recent report of 9 January 2020, for the first time, a separate annexe is dedicated to the protection and enforcement of plant variety rights. The report underlines the importance of the protection of plant varieties in the context of global environmental challenges and high exposure to IPR infringements.

EU stakeholders reported problems when protecting their new plant varieties in several countries, with particular concerns and high economic losses in Argentina, China, Ecuador and India. Although Argentina, China and Ecuador are parties to the UPOV convention, these countries have not implemented the UPOV 1991 Act.

More specifically for China, the report notes that only a limited number of species appear to be protectable in this country. Also, the farmer's exemption is very broad in China as it allows growers in the area of vegetatively propagated ornamentals and fruits to produce their cuttings and other propagating material and use them for further propagation.

According to Chinese plant variety legislation, promotion (without the commercial release of the product on the market) is a novelty-breaking act. Furthermore, even if the propagating material of a breeder's variety is imported and propagated in China without the breeder's knowledge, the variety may lose its novelty status.

The EU report rightfully notes that these provisions are not in line with China's international commitment as a party to the UPOV 1978 Act, which refers to offering for sale or marketing, with the agreement of the breeder as novelty-breaking acts.

On top of that, relevant Chinese authorities have an overly broad margin of discretion to determine if a variety is new. Finally, the report notes that Chinese legislation does not regulate essentially derived varieties (EDVs).

Plant breeding companies should carefully consider these and other issues and limitations when doing business in China.



'Kunming may become the Miami of China'

Hoxex Flower BV is known as global market leaders when it comes to the business of cut flowers by air. For several years, successful operations were in the Netherlands and Miami, USA, until 2018, when it launched its second branch office in a foreign country: Hoxex China in Shanghai. Wholesale and consumer expectations of ornamentals may not be dramatically different in China's flower market worth €20 billion in 2016, but one thing is for sure, as CEO Paul Hoogenboom explains: "Customers are always looking for new and niche products."

AUTHOR: RON VAN DER PLOEG PHOTO CREDITS: BIANCA FENNE

FCI talks to Hoogenboom and Hoxex Flower's area manager of Middle East & Asia, Reinier Voskamp on Wednesday 22 January. It's the countdown to the Chinese New Year, with three billion passengers ready to journey across the country to celebrate this holiday, and the news is just breaking about a coronavirus epidemic.

FCI: Do the Chinese bring flowers when visiting family and friends?

Paul Hoogenboom: "I guess quite a few will bring along locally grown flowers. Those who want to make a big impression will buy specially imported florals. Showing off your money is very acceptable in China, and one way to do so is spending on luxury goods, including imported flowers."

Are there other Chinese holidays that celebrate with flowers?

Hoogenboom: "There are three Chinese Valentine's Days. Marking the seventh day of the seventh lunar month is the Qixi Festival. It falls in the middle of summer, which is great for us as in that period of the year there is a plentiful supply of fresh cut flowers available. I genuinely consider Qixi as a blessing as the holiday is less associated with roses so you can sell all kind of floral products. The prices of flowers rise dramatically, just as they do during Valentine's Day in the West. The second Chinese Valentine's Day is during the Yuanxiao Festival. It takes place during the Chinese New Year celebrations, which is around the same time as Valentine's Day in Western cultures. The third Valentine's Day is a fanciful date inspired by e-commerce group Alibaba in 2009 and called Singles Day, on 11 November. It's an annual celebration of China's lonely hearts as an antidote for the purple prose involved on Valentine's Day. It is now the world's most significant online sales event, fuelling also the online sales of flowers. However, very few Dutch flowers are used for this occasion just because they are simply too expensive."

Reinier Voskamp: "As for sympathy flowers, Tomb Sweeping Day is on 4 April, when the Chinese flock to graveyards to clean tombs and pay their respect to those who have died. It is a big thing. In terms of flowers for personal use or home decoration, the country is still miles away from that type of floral consumption as we see in the West."

Supermarket intervention may increase consumption of florals for own use...

Hoogenboom: "You're right, but the mass-market floral industry in China is still in its infancy. So far, I haven't seen many supermarket stores selling flowers. The Shanghai office of Royal FloraHolland set up a series of trials with large supermarket chains in China. These proved to be unsuccessful and costly using flowers from Africa and Holland. One should not forget that China is dominating the e-commerce market, so that the mass-market flower business may cut out a few distributors."

If Royal FloraHolland's exercise in China was unprofitable, do you have a viable business model for a blooming floral mass-market in China?

Hoogenboom: "By finding good partners and reliable e-commerce businesses in China, you'll be able to get a grip on this market. Partnering up may allow you to establish local flower factories producing flower bouquets combining cheap, locally grown products and more expensive imported flowers. To set up this kind of activities; however, Kunming is the place to be and not Shanghai, at least that's how we see it. My frequent trips to China strengthened my conviction that Kunming, is China's epicentre of cut flower production. It's the country's leading hub for wholesale cut flower imports. It will become the Miami of China, as soon as Kunming Changshui International airport welcomes direct flights from Kenya, South America and Holland and expands its perishable centre. It is ready to take off as number one port for flower imports and distribution."

Are you feeling confident that you know what Chinese customers want?

Voskamp: “As in all parts of the world, seasonal factors affect demand. In the run-up to the Chinese New Year, you’ll see flower markets packed with some fancy imported flowers but mostly filled to the brim with pussy willow a symbol of prosperity and luck and frequently dyed in red or yellow, the most popular colours for this holiday. There are also huge amounts of Ilex and Forsythia from the Netherlands.”

Hoogenboom: “This year we were overwhelmed with a crazy demand for Forsythia, which exceeded the supply. Prices skyrocketed, and Dutch growers told me that they had never seen such a thing before. However, I anticipate the Chinese will set up Forsythia production soon as it’s a fast-growing no-fuss shrub. In establishing contacts with new Chinese wholesale customers, the first thing they will ask for is the availability of Forsythia and Ilex for the Chinese New Year. If you can guarantee a supply of a minimum of 50,000 Forsythias branches, you’re mostly off to a head start.”

Voskamp: “At Holey we are specialists meaning that exporting flowers to distant markets is the only thing we do. Whether you send your flowers to a wholesaler in Los Angeles or Singapore and Shanghai, markets behave quite similar with roses mostly purchased in Ecuador. At the same time sourcing tulips, Cymbidium and niche type products from the Netherlands.”

Hoogenboom: “Chinese customers demand an extensive product range and small production volumes. Novelties are sure to drive foot traffic and constitute a large part of the wholesaler’s ability to drive all other cut flower sales. However, when visiting the Kunming based flower markets or the KIFA auction, I am not particularly impressed with the level of novelty. In roses, for example, you see old cultivars and little exiting colours, a product we would never buy. I guess that out of fear of PBR infringement flower breeders are not so willing to introduce their latest varieties to the Chinese market. However, there’s some wind of change blowing as Dutch-based rose breeder De Ruiter has set up a new farm in China aimed at providing its local customers with strong and attractive varieties.”

What are your concerns about compulsory eco-certification for all growers (members and non-members) by 2021 as announced by Royal FloraHolland?

Hoogenboom: “We find that offering a diverse product portfolio is essential for maintaining a competitive edge. We often forget that among the auction’s suppliers there is still a high number of small growers, for me, they are artists who grow flowers with every imaginable attention to detail, who cannot even afford the costs involved in certification. I fear that if the auction and the large floral wholesaler houses will adopt such stringent regulations, we will lose an awful lot of niche flowers which are so vital for our business.”

Do you feel comfortable with the rosy picture painted for the cut flower market in China?

Hoogenboom: “In recalling how former Royal FloraHolland CEO Lucas Vos talked about China being a multi-billion-dollar industry, this, in my opinion, will never happen. After the auction embarked on a trade mission to China with the Dutch royal couple, many Dutch wholesalers jumped on the bandwagon. Quite a few burnt their fingers in the Chinese market and withdrew. Currently, relative calm has returned to the market. Honestly speaking I don’t see room for more than 20 Dutch



REINIER VOSKAMP

Job title: Holey Flower’s area manager of the Middle East & Asia
Age: 30
Former working experienced: different part-time jobs, next to his studies horticulture and floriculture. Lived and worked in China to write a thesis and finished his studies in 2013.

PAUL HOOGENBOOM

Job title: managing director Holey Flower BV since 2003.
Age: 57
Former working experience: Florexpo BV, Zurel and Baardse BV.

HOLEX FLOWER QUICK FACTS

Founded: in 1982 by Gino Hol who stepped back in 2003. Acquired by Zurel in 2001
 In 2005, Holey Flower became part of the Dutch Flower Group (DFG) which until today continues its ownership.
Type of business: floral wholesale, imports and exports
Annual revenues: 77 million of which 10 million generated by Holey USA in Miami and Holey China in Shanghai.
Export destinations: distant export markets with a focus on North America, the Middle East and Asia.
Estimated number of cut flower stems sold: 170 million
Portfolio: the broadest range of fresh cut-flowers and cut foliage possible
Sourcing: worldwide

exporters. In some ways, you can draw a parallel with the US floral wholesale market where Holey has been doing business for more than 30 years. Overall, Dutch flower imports into the USA represent a value of around €100 million, and I anticipate China to have the same market size. The US and China are Holey’s largest export markets. Still, our role will always be that of a complementary supplier with Dutch flowers representing not more than five to ten per cent of the floral turnover in the US. I think in China this percentage will not surpass even five per cent. However, it’s still sizeable thanks to the country’s huge population of 1.4 billion.

Looking ahead to the next decade, China will expand its domestic cut flower production and imports from surrounding low-cost countries such as Vietnam, Thailand and Malaysia. But I don’t think the Netherlands will largely contribute to this growth other than Dutch breeders and growers will set up Chinese branches such as rose grower Arie van der Berg, breeding companies De Ruiter and Anthura.”

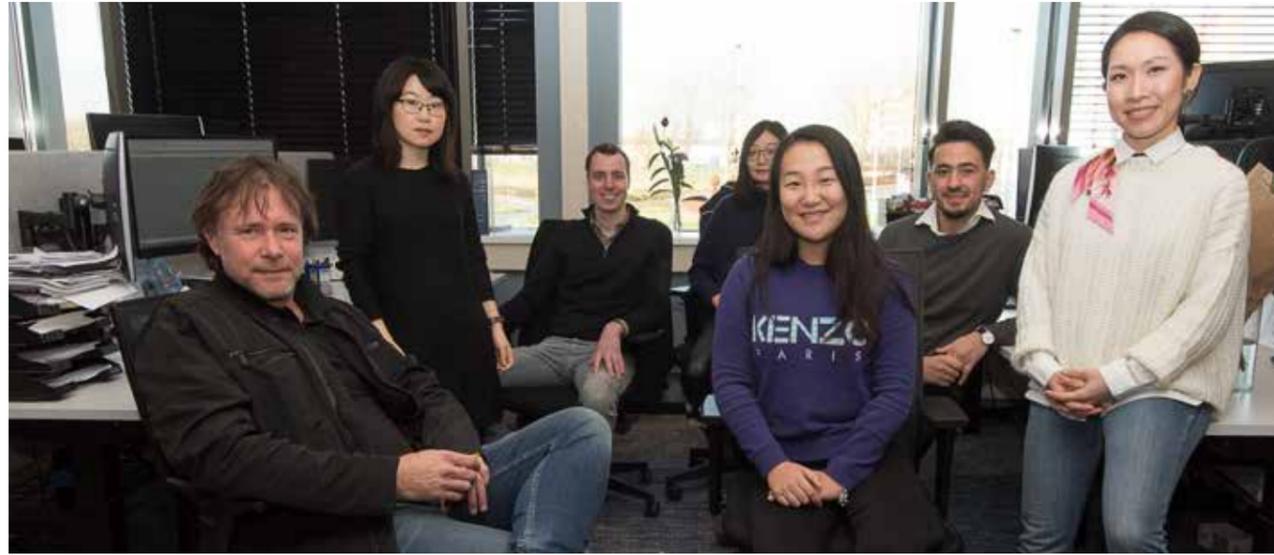
How important is market share to your business?

Hoogenboom: “To be the biggest is not a goal per se, but market leaders enjoy some benefits. For transporting flowers to China in (mostly) the belly holds of passenger aircraft on a long-haul route such as China, you need product volume. Any shipment below 250kg is a waste of time money and energy. So, in air cargo, we try to consolidate as much as possible while saving money on custom clearance procedures.

Voskamp: “Market leadership automatically comes with a large customer base and as such a large product portfolio including a range of niche type products. An extensive customer base allows you to get a better feel for the market with the procurement and sales team working closely together to identify and define customer needs. If you cater to only a small portion of the market, this is more difficult to achieve.”

So, you get to know your Chinese customer by setting up a China branch?

Hoogenboom: “In October 2018, we opened the wholly-owned Holey China branch close to Shanghai’s domestic Hongqiao Airport, 13km west of downtown Shanghai. Its business model is more or less a copy of our successful Miami branch, which opened eight years ago. Holey China’s core business is flower



Hoxex' sales team China. Pictured left to right are Léandre van Rees, Qian Zhou, Reinier Voskamp, Miao Yu, Mengmeng Li, Emre Yentur and Gwen Park.

sourcing from around the world, cut foliage from South Africa, roses from Ecuador, peonies from Israel; you name it. With only ten per cent of flowers from Dutch origin, the Netherlands play only a minor role, mostly reserved for seasonal flowers such as tulips and Frittelaria or specialties such as cut Hydrangea. China's import route for Kenyan roses goes via Royal FloraHolland which has its own office

in Shanghai's city centre from which the cooperative also provides sales support to Ethiopian companies such as Florius in the sales of Veronica and Hypericum."

How is the situation in China in terms of domestic versus imports?

Hoogenboom: "My feeling is that floral imports into China make up not more than 15 per cent of total sales with Ecuador, Columbia, Vietnam, Thailand, Malaysia and Japan being the most significant suppliers. For the last couple of years, import duties hover between 20 to 24 per cent, so this is pretty high. On the other hand, phytosanitary control may be somewhat less strict than, for example, in Japan."

What do you identify as the major trends in China affecting your business?

Hoogenboom: "When it comes to buying via your cell phone and using payment apps, no country even comes close to China. We do the best we can and try to stay on top of online sales. Chinese customers can make use of our online store, but there's room for improvement. It would help if you teamed up with the important e-commerce businesses in China. A few years ago, I had the chance to visit Alibaba offices. However, to make use of their website, you need to pay a high fee upfront. Then the problem still is that people don't especially go to Alibaba to shop for flowers, so you need a special URL which costs extra money. In 2015, Royal FloraHolland signed Memorandums of Understanding (MOUS) with e-commerce business YiHaoDian, online flower delivery service OurBloom and Tencent, the holding company of Wechat. We have never heard from it again, and we know that in most of the case these MOUS do not intend to make a binding agreement even on the surface things are presented and look just the opposite. Speaking of WeChat, its role is vital. When communicating with their Chinese customers, our staff mostly use WeChat, considering that not all internet connections in China are great. I cannot help feeling respect for these ladies as their job can be a tough one, chatting and above all, negotiating for the extra penny for hours with their customers. But that's how the Chinese business culture is, and I guess it also proves that the Chinese are tradesmen just like the Dutch."

AIPH'S TREASURE TROVE OF INFORMATION ON CHINA

According to AIPH's International Vision Project Production and Markets, China will continue to develop domestic production to be optimally self-sufficient. This prediction will leave a gap between supply and demand due to seasonality, climatic and resource constraints or simply the economics of production. Most of these variables are not reliable predictors, so the report has taken production economics as a benchmark to assess likely sources of supply. This prediction has taken the average 5-year unit values at the wholesale level of each of the top 5 cut flowers in a combined basket. When calculated, this shows a significant difference and illustrates the barriers for global competition with China's domestic production. In light of the highly competitive advantage on the price that local Chinese growers have nowadays, addressing the mainstream demand of China with imported ornamentals will be difficult. Based on the Producer Price Index, Chinese growers are likely to retain that advantage throughout the 2030 forecast period. For the higher-value and niche products, there will be more opportunity for other countries to export to China. The supply and demand gap is theoretically two-fold as China could further develop into an exporter of ornamentals. This goal is an ambition of respondents, however, other inhibitors like plant breeders' rights, trade agreements, phytosanitary regulations or coordination of logistics are essential pre-requisites to enable a strong export position. Progress is not developing quickly so the researchers do not expect to see a significant increase in export volume in this forecast period.

For more information on China's market and production:
www.aiph.org/the-international-vision-project/

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CHINA'S ORNAMENTAL HORTICULTURE IN FOCUS (1)

The ornamental horticulture industry in China arose in the early 1980s. Before that, there were only a few small state-owned companies in large cities, such as Beijing, Shanghai, and Guangzhou, plus some smallholdings in smaller cities.

AUTHOR: WEN-KE DONG

Over the past two decades, China's ornamental horticulture industry has undergone transformation and growth, successfully managing to raise the profile of flowers and plants and their contributions to society thanks to Expo 2019 Beijing, the AIPH (International Association of Horticultural Producers) approved A1 World Horticultural Expo that took place last year.

THE WORLD'S LARGEST PRODUCTION AREA

China has the world's largest production area devoted to growing ornamentals, covering 1,461,207 hectares and representing an output value of \$24 billion, according to the latest 2018 statistics, provided by the Chinese Flower Association.

Liaoning and Yunnan stand out as the main production areas of cut flowers, cut foliage and branches while Fujian and Guangdong specialise in potted plants. Jiangsu and Sichuan are known for the production of bonsai on a large scale; Heilongjiang and Xinjiang for edible flowers; and, Henan, Jiangsu, and Zhejiang for nursery stock products. In turn, Shanghai is known as the epicentre of young plant production while Gansu and Inner Mongolia are famous for their flower seed production.

Land availability, land prices, rising labour and transportation costs are among the industry's most significant challenges. In terms of demand, consumers increasingly are asking for added-value products, better quality, and revealing the potential of PBR protected varieties, especially in the cut flower sector. A lack of skilled workers, product standardisation, is somewhat stunting the industry's growth; and, there is also room for more substantial production mainly in the young plant segment.

Chinese growers mainly produce for the home market, but in cut flowers, young plants and bonsai there are several fledgling exporters.

The whole industry is in the process of production and structural transformation and China's relevant policies still dramatically affect the industry.

Mapping China's different sub sectors of ornamental horticulture.



NURSERY STOCK

More than half of the total production area in China is for nursery stock, the most complicated and the most accessible sector for entering the horticultural industry. This market, however lucrative it appears, is in a state of constant transformation with new cultivars reacting to changes in demand and quality. This disruption brings mixed production standards and quality of many products.

Senhe Group Co., Ltd. is a well-known nursery with more than 2,000 hectares of production in Zhejiang. It is the first company to achieve silver recognition at the AIPH International Grower of the Year. Deputy director of Senhe Institute, Dr Yue Wang says, "We're focused on shrubs and their cultivars with the container and standardised production for high quality,

especially native ones bred by ourselves." For this sector, there is a trend that some companies focus on one or several plant groups for better mass, mechanised and standardised production, such as bougainvillea, camellias, crabapples, crape myrtles, magnolias, and maples. Mr Ming-Li Wang, CEO of Sichuan Colorlink Co., Ltd., which focuses on

colourful maples with a 2,400 hectares production area and 10 million stocks, says, breeding is their next plan. "It is an arduous task and needs a long way to go for suitably modernised stock production in China."

Photo: one of the production sites of Zhejiang Senhe Group Co., Ltd.

BEDDING PLANTS

The production areas of bedding plants, including finished plants, flower seedlings, and seeds are 44,502 hectares, 8,507 hectares and 5,658 hectares, respectively.

An estimation is that there are more than five billion finished plants and one and half billion seedlings annual outputs. Begonias, impatiens, marigolds, pansies and violas, petunias, and primroses are the main crops. Seedling production is the core part of this sector, and its specialisation is quite significant: seeds are traditional, and cuttings and flasks are more professional and need more skilled employees.

Recently Beijing Florascape Co., Ltd. built a new production location in NW Yunnan for cutting production; a first in China, producing an output of 18 million annually. However, cultivars are still finding a problem mass-producing high-quality products. Commenting on the status of

tissue culture industry Mr Xue Li, general manager of Sunshine Horticulture Co., Ltd., one of the largest TC production companies in China, says, "The country produces between 600 to 800 million flasks a year, but between 70 to 80 per cent does not entirely live up to international quality standards."

Photo: cutting production at Beijing Florascape Co., Ltd.





PHOTO CREDIT: BENJIAN

CUT FLOWERS, CUT FOLIAGE AND BRANCHES

The total production area of cut flowers, cut foliage and branches are around 64,328 hectares, including 25 per cent of them for roses, and other staple crops are carnations, chrysanthemums, gerberas, gladioli, and lilies. Baby's breaths, hydrangeas, lisianthus, and wax flowers are increasingly popular.

Half of the cut flower production area is in Yunnan due to its advantages in climate and soil with the output of 11 billion cut flowers in 2017. Over the past twenty years, China has made breakthroughs in plant patent protection and product quality. The Chinese government has protections in place for nearly 200 genera and more than 20 other species of ornamentals. There are 22 related national standards and

around 100 industrial standards. Products with high yield and high quality become sought-after, especially those bred in China. Mr Yu-Yong Yang, CEO of Kunming Yang Chinese Rose Gardening Co., Ltd., a leading cut flower producer, explains the pricing is, "The sector's characteristics allow us to easily calculate total sales, based on statistics provided by Kunming International Flower Auction (KIFA), the only spot where we sell our products. So we can successfully claim royalties which are between five to ten per cent of the price."

Photo: large-scale hydrangea production at Kunming Yang Chinese Rose Gardening Co., Ltd.

POTTED PLANTS

The total production area of potted plants is more than 126,095 hectares, and it has the most diverse products in the industry. For example, potted plants such as phalaenopsis harvested around 60 million pots in 2018.

Mr Xue-Shun Liao, CEO of Jiangsu Runzhou Super Flower Co., Ltd., a phalaenopsis breeding company, says, he is aiming for 120 million flasks nation-wide in 2020. "Most of the cultivars are Taiwanese, harvesting 2.8-, 3-, and 3.5-inch pots." According to the China Flower Association the output of potted anthuriums in 2018 was 40 million; azaleas and rhododendrons 50 million; cyclamens 15 million; cymbidiums six million; guzmanias 20 million; kalanchoe 20 million; miniature roses 40 million; spathe flowers 40 million; and succulents 500 million. There is an increase in demand for more high-quality ornamentals and cultivators are noticing this demand here and abroad.

Mr Yong-Gen Fang, CEO of Jinhua Yonggen Azalea Breeding and Growing Co., Ltd., a significant breeding and production azalea supplier says, "I'm the first breeder to register membership of CIOPORA in China, and breeding is the core competitiveness for production."

Photo: large-scale hydrangea production at Kunming Yang Chinese Rose Gardening Co., Ltd.



PHOTO CREDIT: BENJIAN

TRANSFORMATION AND GROWTH

The seed for China's ornamental horticulture industry was sown during the Ming Dynasty (1368-1644) when peasants began to grow and sell ornamentals.

In mid-20th century China there were only a handful of state-owned companies dedicated to the production of flowers, plants and trees and located in large cities such as Beijing (est. 1956), Guangzhou (est. 1958), Shanghai (est. 1959), and Chongqing (est. 1960) as well as a few smallholdings in other cities.

A crucial decision was taken in 1978, to reform and open the country and steer China's economy onto the path to prosperity with the late President Deng Xiaoping being the first Chinese leader to visit the USA. What followed among other changes were reforms in agriculture, and the country's ornamental horticulture started flourishing. Back in 1984, China hosted 14,000 ha of land devoted to the commercial production of flowers and plants.

Over the past two decades, the industry witnessed growth and transition with breakthroughs in plant patent protection and product quality. Nearly 200 genera and more than 20 other species of ornamentals currently fall under plant protection law. Meanwhile, there are 22 related national standards and around 100 industrial standards.



PHOTO CREDIT: ICL

The year 2012 marked a special year as the government proposed to build an 'Ecological Civilisation' an approach which was written in the country's Communist Party Constitution the same year. This legislation pushed forward a series of urban and rural adornment projects such as the 'Beautification of China Strategy' in 2012, the 'Construction of Characteristic Towns' project, in 2016 and the 'Rural Revitalisation Strategy,' in 2017 alongside more specific policies for promoting the development of the flower industry across the country.

These strategies were not only about

words but resulted in clear actions. In 2018, for example, the city of Chang'an (Zhejiang province) not only hosted a World Garden Show but also earned the title as the country's flower city. Today, China's government policies continue to impact the industry dramatically, and the prospect is worth waiting for a modernised production.

Photo: a technician of fertiliser giant ICL and his Chinese customer discuss how controlled slow-release Osmocote can improve product quality.

OTHER PLANTS

Bonsai production is a little more complicated, since the species, styles, sizes, and production cycles are quite different, its production area was about 18,994 ha in 2017. Turf is more than 55,908 hectares. Aquatic plants cover approximately 700 hectares.

Flowers for medicine, food, industry, and other usage are almost 343,377 hectares. But there is a lack of statistics for perennials, grasses, and groundcovers, and their application is becoming increasingly important in the future.

Eco-friendly grown ornamentals for sustainability hasn't come yet, I guess the sectors of cut flowers and flower seedlings may achieve it first and also have a big export potential if the PBRs are protected well.

FERTILE GROUND FOR OPTIMISED PLANT NUTRITION

Operating in a market that is buoyant but challenging, ICL Specialty Fertilisers' Business Lead Asia for Turf and Ornamental, Arnoud Touw explains why the company's iconic fertiliser brands Osmocote and Peters Professional are gaining momentum amongst Chinese growers of containerised nursery stock and potted plants.

AUTHOR: RON VAN DER PLOEG PHOTOS: ROGIER BRAND AND ICL SPECIALTY FERTILISERS

ICL has a proud 25-year track record and experience in the Chinese fertiliser market. Touw says that while the company is now consistently delivering double-digit revenue growth in China, the pursuit of success hasn't always been easy. Initially the difference in language, business practice and long lines of communication prevented the company from reaching its full export potential. "Market acceptance of high-quality fertiliser in the early years proved slow with Chinese growers being very price sensitive and unwilling to spend more for a well-established and premium brand such as Osmocote. However, Chinese customers slowly but steadily became less fixed on price, eventually valuing quality over price", Touw explains.

VALUE

Assigned to one of four key sales territories each (South West, North East, East and South), ICL's sales reps are always travelling, on-call and WeChat and meeting with growers across the country. Job number one is highlighting the value of ICL's range of high-quality fertilisers. Touw says, "As well as impact on yield and overall product quality, the tailor-made feeding regimen of controlled release and water-soluble fertilisers help growers save money as fewer applications are required." He continues, "What's more, Osmocote's controlled release rates and non-leaching properties help prevent environmental pollution and that's good news in a country whose government wants to build an 'Ecological Civilisation'. Adding credibility to the sales staff's claims are a series of trials. Touw says, "Currently we are running trials at two levels. First, we teamed up with the universities in Beijing and Guangzhou to run a series of trials comparing eight different fertilisers, representing both Chinese and international brands. This experiment allows us to test products under Beijing's continental climate and Guangzhou's subtropical



ICL Specialty Fertilisers' Business Lead Asia for Turf and Ornamental, Arnoud Touw.

climate. The first official results will be revealed in March. So far, the only thing I can say about it is that the evidence is speaking for itself."

DEMOS

Coinciding with the university trials are demos in collaboration with ICL's five regional distributors of specialty fertilisers used in ornamental horticulture, Runjor, Meizhija, Hortiry, JYN and Tiainjiang. Demos run at the nursery level allow invited growers to listen, ask questions, understand and comment on the value of controlled-release fertilisers. Mr Wang Zhiping, for example, operates from an 8ha site near Zhanjiang producing palms in pots sized 35-40 cm. He started replacing compound NPK and organic fertiliser by Osmocote Plus in 2018. One year later, his greenhouses are brimming with lush healthy and, above all, voluminous plants which are easy to sell even when the market has been sluggish. As the use of Osmocote Plus doubled plant volumes, Zhiping is happy to apply the fertiliser on all his palm trees this year. In another testimonial, Mr Hu Peiyong tells how at first he was reluctant to use Osmocote in his cyclamen crop



as the fertiliser's nutrient release is driven by average soil temperature. Following a series of successful trials using Osmocote Exact 5-6M (dosage 4g/ltr), he has seen how the fertiliser has proven effective even in the summer heat with nutrient release remaining secure and controlled. During a grower's meeting, he told his industry peers how the use of Osmocote led to a price spike from 10RMB per plant grown in the conventional way to 16RMB grown with Osmocote. Touw believes independent trials and demos, backed by reliable data are very effective as precision-fertigation requires additional learning. "Chinese show eagerness to learn. In 2018, we invited Global Category Lead Gerard Klein Onstenk for a series of product seminars to update Chinese sales reps on Osmocote and Peters Professional. He was amazed to see how easily the Chinese grasped the information without being overwhelmed. They continued to ask questions when Europeans would struggle with information overload."

VIBRANT ENERGY

Touw joined ICL in 1989, when Grace Sierra owned the company. He started his career as area sales manager Asia until 1996 when he was offered a new position within the company. In 2018, he was appointed International Business Manager Asia with a clear focus on fertilisers for ornamental horticulture. He recalls, "China was rather new to me so in the first year I travelled extensively throughout the country to learn more about the different production areas, the type of growers and their needs." In a market nearly the size of Europe, the entrepreneurial spirit and the huge market potential struck him most. Touw enthuses, "The moment you get off the plane you can feel the vibrant energy in the air. In meetings with growers, I am always impressed by their

Greenhouses brimming with lush healthy and, above all, voluminous plants.

ambitions and relentless drive to move forward. This explains why in ICL's strategic plan China is highlighted as a growth engine."

CONSISTENT GROWTH

ICL currently markets around 7,000 tonnes of fertilisers with Osmocote and Peters Professional each accounting for half of the sales volume. "Growth is consistent," stresses Touw. He adds, "Ultimately the goal is to increase our market share in product volumes from 30 (in containerised nursery stock and potted plants) to 60 per cent in the next five to seven years." The outlook is positive, he says. "China's ornamental horticulture industry is healthy, making significant steps forward in improving product quality. What is promising is an ongoing trend towards containerised production in a protected environment, although the coronavirus will result in slower growth." Another reality is that the landscape is still dominated by a sizable number of smallholdings relying on manual labour. What does not help is that agricultural land is state-owned which hampers private investment and innovation as a whole. Growers mix their own media using inaccurate measurement tools as European peat suppliers are active in the Chinese market but only in bulk peat and not in custom mixes. Having said that the country is by far the most interesting one in Asia in which to build new business relationships." ICL sells Osmocote and Peters Professional predominantly to growers of containerised nursery stock (CNS) and greenhouse growers of potted plants. In terms of geographic concentration of ornamental plant growing, Touw cites Shandong province near Beijing as an important supplier of nursery stock and potted plants. Located further down the country's east coast the Shanghai area specialises in potted plants and

Perfect timing, perfect growth.



Chinese growers have a relentless drive to move forward.

young plants, while Guangzhou and Hainan host a larger number of nurseries focusing on subtropical (foliage) plants. Yunnan in the south-west is known for its cut flower production, a market with growth opportunity as flower growers increasingly switch from soil-bound production to grow bags. Here Osmocote can be used as base dressing in the substrate and top dressing with Peters Professional (phosphate for rooting, nitrogen for growth and potassium for flowering).

NEXT STEPS

When asked about ICL's next steps in China, Touw says the future is about further promoting the third generation of Osmocote: that is Osmocote Exact which offers growers a fertiliser of extreme finesse. Touw explains, "So far the majority of Chinese growers have stuck with first-generation Osmocote and second generation Osmocote Plus. These are good products but can show some fluctuations in release. Osmocote Exact with its guaranteed release pattern is the safest of controlled-release fertilisers."

Meanwhile, ICL is not alone in supplying Chinese growers with a range of high-quality fertilisers. Over the past decades, China has evolved into a fertiliser powerhouse with the country ranking as the world's largest consumer and manufacturer of fertilisers in the world. On top of that, ICL is joined by a host of international producers of controlled-release fertilisers in China, all of which collaborate with local distributors.

"China cherishes its position as a key player in the global fertiliser market. Local fertiliser plants contact us to inform us that they also developed a biodegradable coating, considered the holy grail for the European market. So far, these products don't live up to the degradable standards set in Europe. However, local suppliers are making big strides forward and I anticipate

that domestic fertilisers will become much more important than the imported ones."

Wielding an array of advantages, substantial financial resources, a 50-year track record, advanced technology, superior products, powerful brands and seasoned marketing and management skills, ICL's position in specialty fertilisers is truly unique. So unique that the company is not afraid imitators will steal its ideas and products. Touw underlines, "Simply because it is not easy. All the coating of fertilisers for China is done in the Netherlands using advanced and automated coating lines. The processing technology is so sophisticated that all batches contain an end-product that is completely identical. When a grower opens a bag of fertiliser he is sure to find the same granules with the same release pattern month after month, year after year."

SCRATCHING THE SURFACE

He adds that ICL has only just started to 'scratch the surface' in China. "We will need to offer continuity, listen to our customers and their needs. Chinese want cheaper products and longer payment terms. These two wishes are not easy to fulfil but we can offer product safety and cost savings in terms of reliable and eco-friendly products."

But it is no secret that local production will improve with future competition from local suppliers becoming fiercer. Whether the right answer to that is joining forces with a local fertiliser plant is a question the company has yet to answer. "We will first continue on our own strengths."

China's digital economy is rising and this has not gone unnoticed by ICL. "We are currently busy incorporating a WeChat element into our CRM system, which will allow us to interact real time with our customers in China. When asked about the social and economic outbreak of the devastating Coronavirus, Touw concludes, "It is too early to say how big the shake-up on the export value to China will be.

Many companies shut down to prevent the further spread of the virus including partial closures of ports. Safety for our people in China comes first. We asked them to stay calm and not to travel for the Chinese New Year. The province of Hubei hosts a number of plant nurseries and consumer brand Miracle Gro has its Chinese branch based in Wuhan. It's a situation we will continue to monitor closely over the next few weeks."

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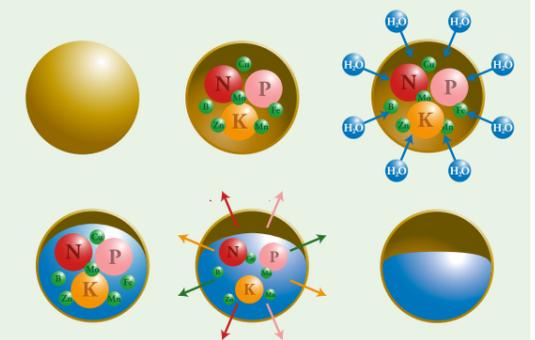
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OSMOCOTE WORKING PRINCIPLES

Osmocote are coated fertilisers containing nitrogen, phosphorus and potassium.

- 1 Every granule is covered by an organic resin coating that regulates the daily release of nutrients to the plant.
- 2 Granules contain NPK, B, Fe, Mn, Mo and Zn.
- 3 Water penetrates the coating and dissolves the nutrients inside the granule.
- 4 Osmotic pressure releases the dissolved nutrients through the granule coating.
- 5 Influenced by temperature, the nutrients are released at a constant, regular and controlled rate during the longevity.
- 6 Once empty, the coating eventually breaks down.



PRODUCTION COMES FIRST

Fourth-generation grower Arie van den Berg from Van Den Berg Roses in the Netherlands and China-resident expert, Nic Pannekeet began a rose farm in Kunming, China in 2007. Despite the vagaries of the Chinese market, the enterprise of these two Dutch pioneers is growing strong. FCI sat down with Arie van den Berg in his home town of Pijnacker to get the full story.

AUTHOR: RON VAN DER PLOEG PHOTO CREDITS: BIANCA FENNE

Hanging on the walls in Van den Berg Roses' headquarters in Delfgauw is a collection of faded black and white photographs of yesteryear. Snapshots of long-gone grandparents, uncles and other family members, pose stiffly for the camera, wearing a flatcap on their heads, their feet snuggled in the quintessential Dutch wooden shoes. The overall atmospheric settings are overwhelmingly 'horticultural' with producers proudly standing between their vegetable and flower crops. The photos tell visitors the story of four generations of Van den Bergs who all earned their living in horticulture, growing vegetables in the open field or cold frames in the first decades of the 20th century, swapping edible plants for cut roses in 1975.

PRODUCTION 'ALWAYS COMING FIRST'

Arie van den Berg recalls his earliest moments working for the family business, disbudding and sorting roses, using a Jamafa machine. "From the day I started walking; I was out there in the greenhouse with my dad. We grew quite an extensive range of roses including 'Motrea', 'Madelon', 'First Red' and later also 'Red Berlin'. 2001 marked the year we first started growing 'Avalanche+' which proved to be one of our most successful cultivars ever."

Arie, now aged 41, is the current owner of the company when he took over his father's business in 2007. Van den Berg Roses is a 16-hectare rose farm in Pijnacker. It is entirely devoted to growing large-headed rose varieties such as 'Avalanche+', 'Avalanche Peach+', 'Avalanche Candy+', 'Avalanche Pink+', 'Avalanche Clarence+', 'Miss Piggy+', 'Sophia Loren', 'Jumilia', 'Buttercup Layla+' and 'Myllena'. Adding to the growth of this Dutch business, are large scale rose farms in Kenya and China. Van den Berg continues his father legacy and shares the same passion for the technical aspects of flower growing with production "always coming first". But every age has its thoughts, ideas and values. Back in the 1980s and 1990s, father Thijs was a typical



Arie van den Berg standing between his rose crop in the Pijnacker-based greenhouses.

'clock grower' at a time when there was still limited interaction between individual buyers and selling growers and a fair deal of anti-import sentiment among Dutch growers. The next generation of growers quickly realised that they could not close themselves off from international trade flows, and was more ready to participate actively in the global economy in an increasingly borderless world.

OPPORTUNITIES GALORE

As such, Van den Berg's announcement in 2007 of the introduction of a new rose farm to emerge amid the rice fields in the Chinese city of Kunming came as little surprise. "Two years before, I had embarked on a trade delegation to China when I met with Aalsmeer-born Nic Pannekeet who had been living and working in China for quite a long time already," Van den Berg notes.



He adds, "Nic, is fluent in Chinese and has built up an extensive network working as a sales agent for Dutch flower breeders such as Anthura. His many years of flower trading experience gave me valuable insight into the Chinese market, where I saw more opportunities than challenges for serving local customers. Labour costs were a lot cheaper, and no professional flower farm was serving this giant market. We had been growing roses for more than 45 years and began to operate in Kenya in 2004. In China, I saw another opportunity to increase our portfolio of growing regions."

What followed were several other trips to China to find out about the different climate zones, business culture and the best locations for commercial flower growing. Back home, a consultancy firm helped Van den Berg secure PSOM government funding. This funding resulted in a €1.5 million flower farm in Kunming with half of the investment subsidised by the Dutch government and with Pannekeet and Van den Berg owning each 50 per cent of the company.

TRIAL AND ERROR

They started the business in a 3.5 ha poly hoop houses on leased land from the government; however, cultivating roses in Kunming was initially trial and error. Market pioneers develop first-mover advantages, but are also confronted with the trivialities of daily life. Van den Berg recalls, "Trying to decode the Chinese labels on fertiliser bags and learn more about the market availability of crop protection products."

The Kunming branch also supplies over 12 million tulips this spring, next to cut anthuriums, cut hydrangea and gerbera.

Business-wise the China branch is the most complex, he says, but it has proven itself and is providing a fair return. "Overall business growth is accelerating. The customer base, the market presence and the organisational structure are clear with three Dutch managers reporting to the two Dutch owners, and there's a pool of 425 workers among which are very valued collaborators."

Over the past 13 years, Van den Berg Roses Kunming has added a lot of ornamental crops, some of them successful, others not. He explains, "Currently, we operate from 35ha of plastic greenhouses across two sites, of which 30ha we devote to growing cut roses. In addition, we will also supply millions of tulips this spring, next to cut anthuriums, cut hydrangea, amaryllis and gerbera. Offering such diversified cut flower product began in the company's first years of operation when the market was in its introduction phase. Demand was not always apparent, and the industry was highly fragmented. The decision of 'putting not all eggs in one basket' was a practical one and helped us to boost business. Now more than a decade later, the industry is slowly but steadily maturing and specialising with some pioneering companies like ours achieving economies of scale and requiring larger volumes of roses and tulips. Meanwhile, we chose to specialise entirely in cut flowers. We stopped production of potted plants such as anthurium and spathiphyllum as their market dynamics is altogether different with the epicentre of production in Guangzhou, near Hong Kong."



THE WESTLAND OF CHINA

Kunming is the capital of Yunnan sheng (province), and both city and province are centres of the flower industry, sometimes touted the Westland of China. Van den Berg says that although the region isn't the World's most ideal growing spot for cut flowers – if such places exist – its climate is one of the best in China and Asia alike. "Rising between 1,600 and 1,900 above sea level, our two production sites enjoy warm days and cool nights. At such altitudes, the summer is hot, but winters are cold, forcing us to heat the greenhouses. Monitoring and maintaining adequate heat and ventilation during winter are crucial in managing botrytis. And gives us a competitive advantage to local farmers."

SAME LATITUDE AS CAIRO

In line with Dutch and Kenyan production methods, Van den Berg Roses Kunming grows its roses hydroponically with self-produced young rose plants planted onto raised gutters filled with coco peat from Sri Lanka. Water from a nearby river is the primary water source for irrigation. Irrigation water is recycled using gravel filtration and UV systems. The reuse of water is not only beneficial for the environment but also impacts on operating costs. The greenhouse structures, with a 6 metres post height, are made in China. In contrast, the essential running equipment such as greenhouse control computers, gas heaters, vents and valves and pipe paint and cultivars come from the Netherlands. Inside the greenhouse, 45 mm tubes serve to heat the greenhouse and to guide harvest carts. Since last year, plastic pipes delivering CO₂ to the rose crop have been in place. It is delivered in liquid form and stored onsite. Van den Berg admits, "It would be cheaper to use the flue gas from the gas boiler, but we only heat in winter and CO₂ is needed all year round." In terms of lighting, Van den Berg is happy that Kunming is more or less at the same latitude as

Van den Berg's announcement in 2007 of the introduction of a new rose farm to emerge amid the rice fields in the Chinese city of Kunming came as little surprise.

Cairo and so it is bathed in natural light. "Naturally, additional lighting helps to increase yields. However, in Kunming we would need only the fifth of the hours needed in Holland with light demands mostly limited to November, December and January, making it difficult to gain profitability."

THERE'S NO SINGLE CHINESE CONSUMER PROFILE

At Van den Berg Roses Kunming, the large-headed roses from Dümme Orange rule supreme. "Ours is a selection of thirty European rose cultivars, among which are spray roses, mostly creations of Dutch breeder Interplant." Van den Berg acknowledges there are issues regarding the protection of plant variety rights, and there is a sizeable number of PBR protected varieties in China, but many are royalty-free. He says, "I trust Dutch breeders are adequately addressing these problems."



Colour demands for the pink and pastel tones are stronger in China. 'Avalanche+' (right) is a firm favourite among Chinese consumers.



The Van den Bergs have deep roots in horticulture.

Van den Berg talks about consumer preferences in Europe versus China; they may not be dramatically different with 'Avalanche+' being a firm favourite worldwide. He says, "This rose has a high yield in summer and winter, excellent shelf life and transports well over longer distances. The same applies to the blood-red 'Hot Blood' rose from Dümme Orange. There is no single Chinese consumer profile. The only difference I note is colour demands for the pink and pastel tones are stronger in China." Wholesalers, bouquet makers and florists make up the company's customer base. However, according to Van den Berg, wholesale in China has a different significance compared to Europe. He explains, "Trade flows are much more direct with fewer middlemen." It is no secret that China's digital economy is rising and Van den Berg attributes a growing percentage of the company's turnover to income from online sales. He says, "Our online store offers a group of 2,000 florists the possibility to order 24 hours a day, and in the future, we expect more and more business to happen online. In a vast country such as China, the logistical infrastructure is a challenge. "We deliver the flower under Ex Works from Douan to the airport of Kunming with the

VAN DEN BERG ACKNOWLEDGES THERE ARE ISSUES REGARDING THE PROTECTION OF PLANT VARIETY RIGHTS

customer organising and paying their transport." Unfortunately, it is hardly possible to secure the integrity of the temperature-sensitive flowers during transportation. A current logistical problem Van den Berg regrets, "Up to 99% of our customers don't have a cold room. Roses are dry-packed in boxes as in Kenya. Yes, it can be frustrating that as a company you live up to the highest quality standards, and in the end, your product end up in rather untidy flower markets."

RETAIL SALES

Van den Berg casts scorn on programmes designed to drive floral export sales to China, such as Royal FloraHolland's 2015 World Flower Exchange. He says as a long-time member of the cooperative; he finds it somewhat weird that neither board members or programme-makers ever approach him to share their plans or to participate. "Occasionally, we met in Shanghai but they never asked me in what ways this programme could help me nor did they explain its value to my business. The costs of the entire exercise must be equal to its benefits. For me, the World Flower Exchange is an example of window dressing designed

to divert attention for the serious challenges the auction faces. And that's too bad as the Chinese market undoubtedly has growth potential, especially in terms of retail sales." When asked why so far very few Chinese supermarket have ventured into the sales of flowers, Van den Berg says, "I believe it all

boils down to logistics. In Germany, for example, you'll easily find a large number of different supermarket stores in a 35km radius while in China supermarkets density is not so high, and procurement challenges are bigger. Here, the procurement systems and logistics are less developed and not as centralised as in Europe. More recently, we started a trial with a big box store selling mono bouquets of roses and tulips. There was interest in them, so I guess sales have been pretty good so far. However, it's still too early to say something about the outcome. The good thing is that we have two production sites on different altitudes with the lower one supplying flowers which are ideally suited for mass merchandising. At the same time, the higher location caters for a mix of exclusive and premium quality flowers."

In 2019, Van den Berg Roses Kunming added 5 ha greenhouses to its business and there are plans to construct another 3ha greenhouse this year. Van den Berg maintains a pragmatic tone when asked if there are more plans for expansion. It depends on the economy, "The social and economic impact of the coronavirus (COVID-19) is huge with the government ordering companies to temporarily shut down including the flower market in Kunming. Some of our employees are confronted with travel restrictions and are stuck at home. In terms of flower sales, we just had the best January ever, but this February may as well be the worst on record ever."



Van den Berg Roses Kunming currently operates from 35ha of plastic greenhouses across two sites, of which 30ha are devoted to growing (large-headed) cut roses.

Fulfilling Plastics Pact promises

On 21 February 2019, the Dutch Ministry of Infrastructure concluded a Plastics Pact with 85 companies, including Royal FloraHolland. This Pact is a voluntary agreement led by industry groups committing to increased recyclability and reduced use of packaging materials. FCI sat down with Royal FloraHolland's consultant on transport materials, Jacco Duindam, who shares the public appetite for change over the environmental consequences of plastic waste. He says, "It's not a question of whether we should do this, but how."



Royal FloraHolland's consultant on transport materials, Jacco Duindam.



AUTHOR: RON VAN DER PLOEG PHOTO CREDITS: BIANCA FENNE

Duindam is delighted to announce that one year after the Pact's inception, Royal FloraHolland has already reached two of the Pact's four key goals. That is, ensuring that all transport packaging is 100 per cent recyclable by 2025 and that per company, all transport materials must contain a minimum of 35 per cent average recycled content across all plastic packaging. Duindam stresses that only transport packaging comes within the purview of the Pact, sleeves, pots and consumer packaging fall outside the agreement. Much work, he says, is still to be done with regards to the remaining two goals – in 2025 using 20 per

cent fewer plastics than in 2017 and recycling a minimum of 70 per cent of all single-use plastic products and packaging. Duindam says that to create a 20 per cent reduction in the number of plastics (in kg) is "quite something" as the cooperative operates in a growing market. He says, "This percentage is relative to the total volume placed on the market in the base year (2017) but also includes the growth until 2025. However, we are lucky enough that the Pact brings together businesses from the entire value chain all with the same objectives."

NO DECLARATION OF WAR
Duindam stresses that Royal FloraHolland's signature under

the Dutch Plastics Pact is not a declaration of war against plastics. It's more about changing times and Royal FloraHolland being a prime example of a company with an upward trajectory, while everything is in a constant state of flux and change. "I prefer to call it an initiative to create a circular economy. The Plastics Pact is more about rethinking the future of plastics, a future ornamental horticulture industry in which plastic never becomes waste." The biggest challenges the auction faces is a 20 per cent weight reduction of transport packaging. Duindam cites multi-use plant trays, non-plastic plant trays and less heavier plant trays as possible solutions.

Currently, around 50 per cent of single-use trays at Royal FloraHolland are recycled. While plant trays are primary B2B transport materials, a portion ends up at consumer level as shoppers use single-used trays to take their newly acquired plants back home. As such, packaging larger than five litres but even carbon black pots are still being burnt or put in the landfill. There needs to be more collaboration with supermarket chains and garden retailers to reach the required 70 per cent level of recycling. The additional benefit of the Pact is that it brings all the different stakeholders together which facilitates cross-sector communication.

MULTI-USE PLANT TRAYS HAVE COME A LONG WAY
The multi-use plant tray by Royal FloraHolland is progressing with a standardisation that facilitates a lean, efficient, and functional workplace. It all began when Bloemenveiling Aalsmeer and Bloemenveiling Holland teamed

up in SIVEPO in 1994, a packaging scheme, partially based on deposit return, for plant trays and boxes. Launching in that same year was the first line of terracotta-coloured multi-use trays which took more than 25 years to receive the attention it finally deserves now that to 'plastic or not to plastic' is among the world's top environmental debates. Duindam explains the current view: "Wholesalers tell us that single-use trays offer a much wider range

Multi-use plant trays score better in terms of sustainability than single-use plant trays.

many years Royal FloraHolland's flower buckets work with a deposit scheme, and they travel back and forth to Moscow, so it's a matter of getting wholesalers used to this new practices."

PREVALENT ENOUGH TO GROW
Duindam believes that the idea of a sustainable ornamentals sector using fewer plastics is now widespread enough to grow, referencing to the two per cent growth in the use of multiple-use trays which Royal FloraHolland reported last year. "We have made multiple-use plant trays even more attractive with a substantial rental-cost reduction on the Floratino multi-use plant trays."

'IT'S NOT A QUESTION OF WHETHER WE SHOULD DO THIS, BUT HOW'

of configurations (80 different single-use trays versus 19 multi-use trays). The usage of multi-use plant trays is mostly limited to countries in close geographic proximity where the wholesalers know their customers and plant tray deposits are less complicated to claim back. For

Speaking of Floratino, Royal FloraHolland acquired this line of multi-use plant trays and its deposit system from floral wholesaler Frans Timmermans. Both parties agreed that Royal FloraHolland would do its utmost to promote the Floratino transportation packaging. In turn, Timmermans promised to discontinue transactions bypassing the auction. The cooperative's



Multi-use Floratino trays.

Normpack line of single-use, polypropylene trays, is wholly-owned and manufactured under license by a pool of five companies: Bachmann, Desch PlantPak, Modiform, Partners2Pack and Poppelmann.

LESS BULKY AND ALTERNATIVE PLANT TRAYS

Another way to crack down on plastic pollution is to make the single-use Normpack trays lighter. "Take the 10 per cent less heavier Normpack 300 series," says Duindam. He adds: "By fitting the 400 series with the same support bridge structure as seen in Normpack 300 we will make them stronger and lighter. There's a risk that lighter trays can break or crack more easily, so that's why collaboration with the leading plastics manufacturers is so important."

Royal FloraHolland's third solution foresees in plant trays made of alternative materials such as trays made from recycled paper pulp and cardboard and which are recyclable, can be composted or will degrade naturally in the landfill. Meanwhile, it is no secret that using any material has environmental

costs. Some experts are even suggesting that the ecological costs associated with plastic products are often significantly lower than using alternatives materials.

"To provide grower member and buyers more insight into what kind of plant tray holds the biggest chance of damaging the environment, Royal FloraHolland carried a Life Cycle Assessment of single-use and multi-use plant trays. This study aims to assess the scale and to explain the significance of the environmental impact of plant trays. A second LCA study of recycled paper pulp, corrugated cardboard and solid cardboard trays is currently underway with results anticipated this spring."

MULTI-USE TRAYS MORE ECO-FRIENDLY

The first study revealed that multi-use plant trays score better in terms of sustainability than single-use plant trays. The environmental impact of the single-use trays is caused mostly by the production of the material and the waste treatment process (incineration of plastic). Duindam adds: "On the other hand, with

five years lying ahead of us, new alternative materials may be brought to the market, so we follow all developments in this field with keen interest."

Generally, the word 'pact' relates to international relations, where diplomats speak of an arms or trade pact. The Dutch Plastics Pact, however, has a strong national focus while plastic pollution has hit public consciousness around the world. Duindam explains: "The Dutch Pact follows European guidelines and law. In addition to the Dutch Pact, France and the UK have launched their own Plastics Pact and a European Plastics Pact is currently underway. At the same time, countries outside Europe are launching a host of different initiatives. Take China, one of the biggest users of plastic; this country has presented a plan to reduce single-use plastics across the country. Major cities will ban non-degradable bags by the end of this year and in all cities and towns by 2022."

Closer to home, 80 per cent of Dutch member growers and buyers at Royal FloraHolland think that the cooperative's efforts to shift to sustainable packaging solutions are essential with buyers (2/3) predominantly deciding what kind of tray to use. Both groups indicate that loading efficiency, sturdiness and cleanliness of the packaging are equally crucial with multi-use and single-use plant trays scoring better in terms of product strength and loading efficiency/cleanliness, respectively.

Duindam concludes: "Most of the questions growers ask me are practical: what packaging is available, which product code should I use to order and what is the cost? Additionally, they are asking for more information to make a better comparison between single-use, multi-use and alternative material trays so that in the end, they can make evidence-based decisions. Judging from what I see at growers and users' level, it is safe to say that most grower groups and trading companies have alternative packaging readily available. They've made a pretty good picture for themselves."



Looking back on 2019, we can conclude that the weather has had a significant influence on the floriculture sector. Several production areas had to deal with extreme weather conditions. There were substantial differences between the regions. Unusual wet conditions in the second half of the year in Kenya after scorching summer weather in the European Union. Cold and wet climates in Colombia, but a blistering hot and dry spell in Australia - with the big forest fires as a sad consequence.

The impact of this was, of course, high, especially for the local population who had to deal with the unpredictable results. Other countries felt the effect of unstable weather; and, although opinions about the causes differ, our climate is changing.

Climate change affects us all; it's good to see our sector seriously addressing issues of sustainability more and more every year. Individual growers around the world are taking initiatives that have a positive impact on the environment. For example, replacing plastic packaging material with recycled articles or using pots based on natural materials for plants. And we must continue to improve in this way. It is our responsibility towards the environment that we all use to grow our beautiful products.

I don't think we can go fast enough. When I am travelling, and I see the amount of plastic next to the roads, it makes me sad. We still have a long way to go. When I see the videos showing a 'plastic soup' in our oceans, I realise that significant efforts are needed to make our planet clean and habitable for future generations. More and more multinationals are taking this responsibility and ensuring that the use of plastic decreases in, for example, the packaging of food, such as fruit and vegetables. With more ecological protection regulation by governments, this will go faster. It is nice to see that Kenya is setting an example by no longer allowing the use of plastic bags. And more and more countries are

considering to charge a deposit on plastic bottles. That way, I'm proud of our industry. We don't wait for more regulation, but we take initiatives ourselves. It's something that suits us. With our flowers and plants, we bring joy and happiness into people's lives. But above all, we bring in a part of nature. Many people never get the chance to visit the most beautiful natural areas in our world. But with some of the best gifts, nature has brought us, ornamentals can help you see, feel and smell it at home.

As Royal FloraHolland we joined the Plastics Pact NL in 2019. Our ambition is to use 20 per cent less material for single-use transport packaging or to reduce its use by 2025. We will also ensure that at least 35 per cent of our new trays are made of recycled plastic in that year and that 70 per cent of the trays come back through recycling.

Also, we want our products to be 100 per cent recyclable. We have already achieved two of these targets with 100 per cent recyclable material trays and new single-use trays containing 90 per cent recycled plastic. Of all our single-use trays, 50 per cent are recycled. Together with our growers, we contribute to a world with less plastic. How will you join us?

Fred van Tol
Manager International Development
Royal FloraHolland

DIGITAL MAPPING of pests and diseases

The cut flower industry can significantly benefit by applying digital pest and disease mapping principles to the crop in their greenhouses. In this article, FCI outlines the cost, visibility and management benefits gained from using digital solutions to provide a precise and detailed view of pests and diseases across entire farms.

AUTHOR: LISBETH RIIIS

Mapping of pests and diseases in some of the biggest cut flower greenhouses in Africa and Latin America is still often a manual, inaccurate and inefficient process relying on paper-based analysis and individual knowledge. Typical farmers expect to lose 5–10 per cent of yield to pest and diseases, which is why effective control can greatly increase the number of plants sent for harvest in the first place. Not only do they benefit in terms of total yield—they can also better focus staff and resources on the farm and even limit wastage of pesticides and biological control agents.

MANUAL DATA ANALYSIS QUICKLY BECOMES UNFEASIBLE

With cut flower growing in such a competitive market, gaining a differentiating advantage is key. To manage pests and diseases, farms use a team of scouts to collect data on many hectares of greenhouses. But the same manual methods are being used to measure the effectiveness of pesticide spraying and coverage once a pest or disease problem has been found. Using these manual processes to analyse data is complicated enough in one greenhouse—let alone 20 or more, all of which will have their own unique factors impacting pest and disease control such as temperature, moisture and risk of physical damage.

ADVANCED MAPPING AND ANALYTICAL TOOLS AVAILABLE

Advanced GPS mapping and analytics tools are readily available to digitise a large portion of pest and disease mapping, tracking and control—changing how the world targets crop pests and disease. While the technology has been available for some time, there are still too many farms fighting a losing battle by using inefficient manual processes to interpret the spread of pests and disease in their cut flower greenhouses. It is in the interpretation and analysis stage where digital mapping can unlock true value—monitoring scout effectiveness, measuring pests and disease outbreaks and gauging intervention success. The three key benefits across the farm included reduced crop losses, improved pesticide and biological control and better farm management.

REDUCED CROP LOSSES

A digital GPS-based map will present a clear basis for problem shooting by correctly mapping out the extent of pests and diseases in an individual greenhouse. Take a disease such as Downy Mildew for example—which occurs in moist, cool and poorly ventilated conditions. Firstly, early intervention from effective scouting can pinpoint the affected plants. By using scouting data to map digitally the greenhouse, farm managers can see the pattern of activity visually represented.



One of the cases witnessed by Scarab agronomists was the presence of a small amount of Downy Mildew in only some spots at the end of some rose beds in a particular greenhouse. On initial review, the farm manager was completely unaware of the presence of the disease in the house, but on inspection, it was found that poorly constructed downpipes splilt over water and caused the ideal moist conditions for this disease out of reach of the manager's eyesight. If farm managers did not have this map, then things could easily get worse for them. They could run the risk of the disease spreading to other plants, with potentially catastrophic impact to total yield. Instead, they can react accordingly—even putting preventative measures in the form of quality control of the farm's works departments to protect plants from being at risk in the same way in the future. Whereas preventive treatments,

Every full scouting cycle from each and every greenhouse should be completed one to two times per week—tracking a whole range of pest and disease information.

Mapping spider mites.



including biological ones, require blanket treatment, early interventions with curative spot treatments, especially in less susceptible varieties, proved effective for manager Ing Enrique León of Ecuadorian grower Naranjo Roses who implemented a mapping system to manage Powdery Mildew, Head Botrytis and Downy Mildew and in a single year managed to boost its number of flowers available for export by 7.5 per cent.

IMPROVED BIOLOGICAL CONTROL

Another key area where effective mapping pays dividends is in the deployment of pesticide and biological control. As highlighted earlier, all greenhouse environments are slightly different—so pest and disease presence and proliferation will vary for each and every one. So, using the same volume and coverage of pesticide spraying across them all makes no sense. With an effective map, farm managers can target spraying to specific areas in specified rows, minimising the volume of pesticide used across the entire farm.

The same applies to biological control. Let's take the presence of spider mites for example. There is a significant cost associated with the deployment of predatory mites. Excellent scouting and mapping of the locations within a greenhouse allows the spatially targeted release of the predatory mites, specifically where there are spider mites and insufficient numbers of predators. This action avoids wasting predatory mites where there are no spider mites, or where there are already sufficient numbers of predators. Whereas the more resilient predatory mite *Amblyseius californicus* is recommended for preventive and maintenance releases, the excellent hunter predatory mite *Phytoseiulus persimilis* can be spot released in spider mite hot spots and where the analytical mapping shows a deficient balance between predator and prey. This analytical tool is what provides a cornerstone for biological control and one such control program at Equinox Horticulture near Mount Kenya in East Africa has benefited significantly from the improved information and analysis delivered by this technology. The company reduced its requirements for *Phytoseiulus persimilis* (a predatory

mite) by 60–90 per cent, depending the season.

BETTER FARM MANAGEMENT

The scale of a typical cut flower farm makes it naturally difficult to manage on an overall level—paper-based reporting makes it difficult to gain full visibility into pest and disease levels. Farm management can be revolutionised by using software to analyse these huge data sets and graphically represent an accurate view of every greenhouse. This software is available and is being used to great effect in many cut flower farms across the world – the Scarab Precision system, for example, is already implemented with 25 per cent of rose producers in Latin America and East Africa. Here's how it works.

Every full scouting cycle from every greenhouse should be completed one to two times per week—tracking a whole range of pest and disease information. When the data is logged into a mobile device, it becomes straightforward to build an overall picture of the performance of the whole farm.

Daily reports containing key information are delivered directly to the farm or crop protection manager—such as spider mite presence, Downy Mildew, Powdery Mildew, Head Botrytis, Thrips and damage and much more. Not only does this allow farm or crop managers to track performance daily, they can dig deeper into particular focus areas dating back months or years.

They can then make data-driven decisions to focus scouts and farm workers on target areas and report accurate and up-to-date management information to farm owners. If they are working with an experienced solution provider who owns a wide enough dataset, they can even anonymously track their performance against the average data for other farms in their area.

It's time for the cut flower community to allow digital mapping solutions to take their operations to the next level. Those who don't act quickly risk being left behind, leaving money on the table, owners frustrated and a workforce unguided.

When it comes to yield and cost control, we all know that just a few percentages points either way can make a huge difference to a farm's bottom line.

Updated MPS-ABC scheme to make horticulture more sustainable

Transparency regarding the use of crop protection agents, fertilisers and energy is becoming increasingly important in the horticulture sector. The social pressure to produce more sustainably is increasing, and growers want to demonstrate their positive response to these demands. To make this as effortless as possible, MPS is introducing an updated MPS-ABC certification scheme and registration system.



registered on periodic level and at the end of each period, it is necessary for users to confirm and send their consumption data.

“It might sound like more work, but it’s important to know that registration will also become easier. Currently, for example, setting up a crop plan is not an easy thing to do in the current registration tool. In the new version of the registration environment, this aspect is highly simplified,” Holtkamp explains. What’s more, customers can design their own registration environment and switch optional modules on or off as needed. Anyone limiting their participation to just MPS-ABC, for example, can switch off the options for MPS-GAP. This eliminates confusion and simplifies registration. Beek adds: “Growers can also use the collected data for their own purposes. Next year, if everything goes to plan, companies will have insight into their consumption by means of an interactive overview that is accessible 24/7. Growers can then use this overview to make adjustments in their operations.”



Harold Beek, Deputy Director at MPS.

Making sure that the system would be easy to use has been a priority throughout its development. “We have constantly been in touch with the retail sector and have involved customer panels when establishing registration requirements,” says Beek. “After all, we also want to know if we’re on the right track ourselves. The ultimate goal is getting sustainable products on the shelves. As of now, this is only visible by means of a logo, but the final goal is to be able to follow the product by digital means.”

UPDATE MPS-ABC SCHEME TIMELINE

- End of 2019:** publication of the certification scheme on the website
- Spring 2020:** phased transfer of participants to the new registration system begins
- Beginning of 2021:** new requirements become effective

AUTHOR: EVITA BRUIN

MPS is dedicated to making the quality and sustainability of horticultural businesses measurable and verifiable. “MPS-ABC is an internationally recognised scheme that helps companies make the necessary adjustments to reduce their environmental impact,” says Harold Beek, Deputy Director at MPS. “The certification scheme makes the use of fertilisers and crop protection agents transparent. Since this is having a beneficial effect on their consumption, we are helping horticultural companies to operate

more sustainably. MPS-ABC has been proving itself as a tool for improvement management for 25 years, and we continue our efforts to innovate in this area.” More than 5000 production locations in 51 countries use MPS-ABC to make their sustainability efforts measurable.

DEMANDS FOR SUSTAINABLE PRODUCTS ON THE RISE

“Since the market keeps demanding stricter requirements, meeting them meant that it was necessary to update the scheme. In this regard, real-time registration at crop level is the most important factor to consider”, says Martine Holtkamp, Product Development Manager at MPS, who is developing the new certification scheme for MPS-ABC. “This sector no longer sees certification as an odd request. Consumers – especially millennials who are aware of the environmental impact – ask for certified products. They also see the

pressure and influence of NGOs such as Greenpeace and Natuur & Milieu (Nature & Environment foundation) on retailers.”

An increasing number of initiatives that stress the importance of sustainability are emerging, one of them being the Floriculture Sustainability Initiative (FSI). Growers certified according to the MPS-ABC scheme already meet the FSI criteria post-2020, when digital environmental registration becomes obligatory. Beek says, “Growers have to make changes, and we also see them taking these steps. The horticulture sector is becoming more and more involved in sustainability measures. The figures also speak for themselves: ten years ago, the horticulture sector started reducing its use of crop protection agents and has continued to do so. Being aware of the need to make horticulture more sustainable is also something we want to encourage at MPS.”

USER-FRIENDLY

“A major advantage is that the new registration system will enable entering consumption values with a smartphone or tablet either before, during or after the application has been made,” says Holtkamp. “The revised scheme also wants to achieve transparency throughout the horticultural chain so that the buyer knows whether the product was sustainably produced from beginning to end. The purchase of starting material will be recorded because points can be earned for using certified starting material.”

The new scheme will mean changing from a periodic registration (recording the total amount used during the previous four weeks) to a registration at the application level. In other words: what was used where, when and in what amount with regard to fertilisers and crop protection agents? However, the periods do not disappear completely: energy, water and waste will still be



Martine Holtkamp, Product Development Manager at MPS.

After receiving AIPH approval, the 38th edition of the world's premier trade show for ornamental horticulture, IPM Essen welcomed 54,000 attendees from 100 countries; an attendance increase of 2.27% on 2019 figures, states event organiser Messe Essen.

IPM Essen returned to Essen, Germany from 28–31 January 2020, staged by Messe Essen. It was the first year AIPH – International Association of Horticultural Producers, granted IPM ESSEN with approval as trade show (D) category. This official certification confirms the event's position as a leading horticultural trade show with no fewer than 54,000 trade visitors and 1,538 exhibitors from 46 countries, occupying eight exhibition halls (ten if you include the floristry hall 1A at basement level and the Galleria exhibition corridor).

The show's focus was clearly on climate change, sustainable production and biodiversity.

While giving a speech at the 2020 IPM Essen opening ceremony Jürgen Mertz, chairman of Germany's Federal Association of Horticulture (ZVG), said "If you want biodiversity, you simply can't live without ornamental horticulture. Fortunately, the world of trees, shrubs, perennials and bedding and patio plants is vast, providing food and shelter for insects and birds. However, the protection of bees is a shared responsibility between the ornamental horticulture industry and the consumer." Mertz went on to say that beyond the story of the birds and bees and the flowers and the trees, the government's climate action strategy to reach its 2030 climate targets seriously threatens the industry. He fears that a phased-in CO₂ price for transport, buildings and agriculture (sectors that are currently not covered by the EU emissions trading scheme) will undermine the industry. If from 2021 a CO₂ price of €25/ton will be the rule, Mertz anticipates it will cost individual businesses between €18,000 and €50,000 per year. The carbon price will rise to €35/ton until 2025, costing horticultural entrepreneurs even more; between €50,000 and €80,000.



QUICK FACTS

54,000 trade visitors
40% of visitors from outside Germany
1,538 exhibitors from 46 countries
64% of exhibitors from outside Germany
Venue: Messe Essen
38th edition
AIPH – International Association of Horticultural Producers Certified Category (D) Trade Show



Bee-happy
Entries for IPM Novelty Showcase came in thick and fast with over 60 novelty plants submitted by 36 exhibitors in six categories. Scooping up the first prize in the Spring Flowering Plants category was the bee-friendly *Erysimum* 'Winter Charme' from Gensingen-based breeder and propagator Kientzler Jungpflanzen.



This is peanuts... for the garden
In the category Bedding and Balcony Plants *Arachis hypogaea* from Swiss Lubera AG was crowned best in show. This peanut plant can be planted in the summer garden and produces approximately 80 pods.

The star of the show
Hortibreed NV Hortinno walked away with the highest accolade in the category flowering houseplants. *Rhododendron simsii* Magisnow has unusual star-shaped blooms which consumers can enjoy for over four weeks.



Three-toned Rhododendron
Inkarho GmbH from Bad Zwischenahn submitted *Rhododendron* hybrid *HAPPYdendron* 'Pushy Purple'. This *Rhododendron* stands out for three-toned blooms: purple with a white-and-yellow centre.



Summer Breeze

In the category Perennials, Plantipp, an independent plant breeder's agent serving the European market, submitted Agapanthus 'Poppin' Purple' ('MPoo3') which was named Best New Perennial. Poppin' Purple is said to be the world's first evergreen reblooming Agapanthus. Plantipp is proud to represent it in Europe, and it is available as Ever Amethyst in North America represented by the sister company Concept Plants. The flowers of Poppin' Purple are an intense purple and profuse in quantity. Poppin' Purple grows faster than other varieties and becomes about 60cm high and 45cm wide. This Agapanthus also has a long flowering period and likes to stand in the sun in well-drained soil.



Poppin Purple

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In the presence of Germany's agriculture minister, Ms Julia Klöckner, Mertz made a plea for compensation and financial support for those companies who actively invest in the use of renewable energy sources. Mertz said he had some mixed feelings about how the industry performed last year. Wet spring weather harmed the sales of bedding plants while a scorching hot and dry summer did not bode well for the rest of the year. Given these testing circumstances, Mertz was delighted to announce that 2019 will make it in the history books as the year in which Germans spent €8.9 billion on flowers and plants, a 2.7 per cent increase compared with the previous year and the highest value since 2011. Equally on the rise is the country's pro-capita spending on flowers and plants, up from €105 in 2018 to €108 last year. However, Mertz finds it frustrating that the public spending on plants for urban green spaces is not more than 50 cents per inhabitant, revealed in the Flow of Goods Analysis for Flowers, Ornamental Plants & Woody Plants 2018 report. Despite World-wide acknowledgement about the benefits of green spaces in cities and the government's rhetoric about sustainability and eco-friendliness. Mertz also states that innovation occupies 'his' industry, adding that to meet the demands from individual customers and the society at large, new plants and flowers are a prerequisite. "Farms also need innovation to adapt cultivation methods and have alternatives to the use of plant protection products. The ZVG also sees great opportunities in new breeding

methods. The ZVG Executive Committee recently adopted a position paper in which it advocates the revision of EU genetic engineering law." Already in 2019, the exhibitors stated that the subjects of sustainability and climate change would exert the biggest influences on the sector in the future. What could already be seen in many places last year was omnipresent at this year's IPM ESSEN. No matter whether environmentally friendly packaging, climate-tolerant new breeds, insect-friendly plants for the promotion of biodiversity, air-cleaning green plants, planter boxes with integrated water reservoirs or peat substitutes - international horticulture showed its innovative power in an impressive form. Also, in the Technology area, the emphasis was placed on energy-efficient cultivation techniques and automation. This year, France was IPM ESSEN's partner country. Breeders and young plant producers in Hall 6 and nurseries in Hall 7 showed the diverse spectrum of French horticulture. Some of the best-known and most distinctive plant specialties produced by the country are roses, fruit trees, rhododendrons, camellias, hydrangeas, cyclamens, chrysanthemums, lavenders, alstroemeria and dahlias. True to tradition, the show's annual novelty showcase offered the perfect opportunity to spot the latest breeding breakthroughs in shrubs, cut flowers, houseplants, perennials, annuals and cut foliage. The four-day event was a platform for the good and great of horticultural technology with a host of conferences and seminars.

MARCH 2020

1-4. UNITED STATES

AIPH Spring Meeting, National Hotel Miami Beach, including the AIPH Board Meeting, the AIPH Expo Conference, and AIPH Green City reports. www.aiph.org

9-12. CHINESE TAIPEI

World Orchid Conference in Taichung www.woc23.com

9-18. CHINESE TAIPEI

Taiwan International Orchid Show (TIOS) in Taichung. www.woc23.com

17-21. QATAR

8th International Agricultural Exhibition Agriteq and 2nd International Environmental Exhibition Enviroteq in Doha. www.agriteq.com

18-20. NETHERLANDS

Tulip Trade Event www.tuliptradeevent.nl

24-26. MEXICO

GreenTech Americas at Querétaro Centro de Congresos, in Querétaro, Mexico. www.greentech.nl/americas

25-27. UNITED STATES

World Floral Expo 2020 in New York. www.hpp.nl

21 MARCH-10 MAY. NETHERLANDS

Keukenhof, one of the world's most beautiful spring garden. www.keukenhof.nl

APRIL 2020

8-10. UKRAINE

Flower Expo Ukraine at the Kiev's International Exhibition Centre (IEC). www.flowerexpo-ukraine.com

24 APRIL TO 10 MAY. KOREA

International Horticulture Goyang Korea. IHK2020. www.facebook.com/goyangflowereng



Tulip time in the Netherlands

Bringing a rainbow of colours and a plethora of shapes and sizes will be the fifth edition of the Dutch Tulip Trade Event, which is set to take place from March 18-20, 2020.

The three-day event, which launched five years ago under the name Dutch Tulip Days, will offer industry professionals from home and abroad to connect with the Dutch tulip community, discover the latest breeding breakthroughs, experience the latest trends and exchange new business ideas. During the event each of the now thirteen participating companies will set up their own miniature tulip show and trials. The Tulip Trade Event is an initiative of the participating tulip exporters, who became aware that their international customers lacked a well-organised opportunity to acquire an overarching view of what is currently on offer in the Netherlands. Currently, 13 tulip specialists are on board for the 2020

Tulip Trade Event: P. Aker, Amsonia, Boots Flowerbulbs, Borst Bloembollen, BOT Flowerbulbs, Haakman Flowerbulbs, Jansen's Overseas, Holland Bulb Market, P. Nelis, Nord Lommerse, C. Steenvoorden, VWS Flowerbulbs and Jan de Wit en Zonen. A convenient route has been put together, making it efficient and easy to visit the companies. Quality and availability are important considerations for many bulb buyers. So it is especially interesting that bulbs are available at the Tulip Trade Event for the beautiful varieties on display. Because the participating companies hold their open days at the same time, visitors can compare the varieties on offer. For more information please visit www.tuliptradeevent.nl

MAY 2020

11-13. CHINA

China International Floriculture and Horticulture Trade Fair at the Guangzhou Polyworld Trade Centre. (new dates, new venue) www.flowerexpochina.com

JUNE 2020

2-5. NETHERLANDS

Dutch Lily Days. www.dutchlilydays.nl

3-5. KENYA

IFTEX, International Floriculture Trade Expo at Nairobi's Oshwal Centre. www.hpp.nl

8-10. NETHERLANDS

GreenTech, the world's leading horticultural technology show at Amsterdam RAI. www.greentech.nl

8-12. SWEDEN

IX International Symposium on Light in Horticulture 'Light for life' www.ishslight2020.se

9-12. NETHERLANDS/ GERMANY

FlowerTrials, open house event for the pot and bedding plant industry, held in the Netherlands and Germany. www.flowertrials.nl

14-20. ESTONIA

16th International Peatland Congress in Tallinn. www.ipc2020.com/ www.facebook.com/events/1162609177193984

16-17. UNITED KINGDOM

HTA National Plant Show at Stoneleigh Park, Coventry. www.nationalplantshow.co.uk

JULY 2020

6-8. CANADA

2020 Garden Centres Canada Summit www.cnla.ca

SEPTEMBER 2020

3-5. POLAND

Green is Life and Flower Expo Poland at Warsaw's EXPO XXI convention centre. www.greenislife.pl

8-10. RUSSIA

FlowersExpo at Crocus Expo in Moscow. www.flowers-expo.ru

8-10. FRANCE

Salon du Végétal at the Parc des Expositions in Angers. www.salonduvegetal.com

15-17. ZIMBABWE

Hortiflor Expo at the HICC convention centre in Harare. (new dates) www.hpp.nl

23-25. ITALY

Flormart at Fiera di Padova in Padua. www.flormart.it

30 SEPTEMBER - 2 OCTOBER. NETHERLANDS

GrootGroenPlus, the world's premier amenity plant show in Zundert. www.grootgroenplus.nl

OCTOBER 2020

18-23. SOUTH AFRICA

Annual congress of the International Garden Centre Association (IGCA) in Johannesburg and Cape Town.

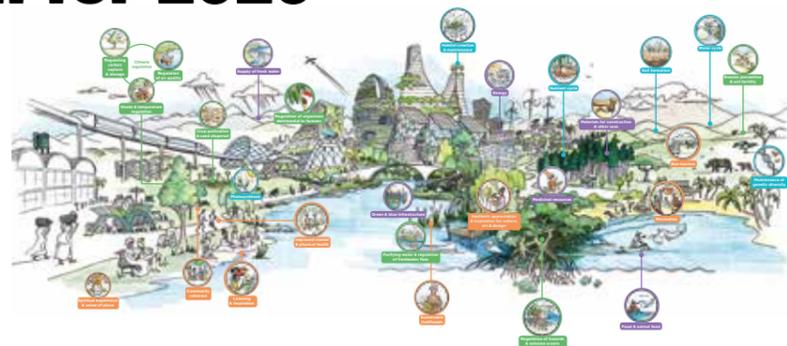
A clear vision for 2020

As the year 2020 gathers momentum, promises are made globally to secure the future of humankind and this planet that we call home.

Climate change and its impact on the environment and natural systems remains the focus of decision makers. At the C40 Mayors Summit in Copenhagen in 2019, newly elected Chair of C40 and Mayor of Los Angeles, Eric Garcetti, announced the support of C40 mayors for a Global Green New Deal. This call for a deal responds to disappointing intergovernmental action, and a recognition that mayors and local government leaders have both the responsibility and the authority to “drive an urgent, fundamental and irreversible transfer of global resources away from fossil fuels and into action that averts the climate emergency.” To avoid the worst impacts of climate change global emissions must be cut in half by 2030. In parallel with this, the European Commission announced a European Green Deal with the ambition to achieve a carbon neutral economy by 2050.

SHIFT IN DIALOGUE

Reducing emissions is a clear and essential goal, and advances in city design and operation offer innovative solutions to mitigate climate change. Responding to any crisis, however, requires two approaches: firstly to address the cause of the problem – in this case, strategies to reduce the magnitude of climate change; and secondly to reduce the effect, or impact of the crisis – in this case, reduced quality of life of city residents and damage to natural systems. As measures to reach these targets unfold, attention naturally moves to adaptation measures, with practical ways of improving quality of life and supporting urban biodiversity. Nature and nature-based solutions respond to these needs. We are seeing a shift in the dialogue, with the concept of sustainability being overtaken by the need for resilience. Sustainability is about using resources wisely and



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effectively. Resilience goes beyond this to provide elasticity and flexibility that enable city systems to adapt, repair and recover from disturbance. Plants have an essential role to play in city resilience, providing adaptation solutions that reduce the impacts of climate change. To address this changing need, new global initiatives are starting up with nature in the city as a core theme.

CITIESWITHNATURE

ICLEI has long been active in supporting a global network of local and regional governments committed to sustainable urban development. Recognising that our collective future is increasingly urban and the subsequent loss of nature is part of the problem, it is clear that restoring nature is part of the solution. The CitiesWithNature partnership was founded to provide a shared online platform for a growing network of local and subnational governments to facilitate cooperation and exchange of knowledge and experience. The initiative recognises that collective local action can achieve global impact in mainstreaming nature in and around our cities. As an informative inspiration ICLEI and partners developed an interactive poster that illustrates the many and diverse life-supporting and life-enhancing benefits that nature provides. Reaching a global audience, the poster is available in 7 languages: English, Arabic, French, Portuguese, Spanish, Swahili, and Chinese.

NATURE-BASED SOLUTIONS

Earthwatch recently introduced their research programme centered around the concept of “climate-proof” cities.

The programme studies how nature-based solutions connect urban green spaces and water bodies to protect the city from the negative consequences of climate change. Nature-based solutions are methods, technique and systems that use nature, or mimic natural processes. Bringing together researchers and policy makers, the programme involves 17 major cities around the world. The programme also monitors the wide range of benefits that nature-based-solutions bring, including promoting urban biodiversity, storing carbon, and improving health and well-being of citizens.

BEYOND URBAN BOUNDARIES

The responsibility of cities extends beyond its urban boundaries. Cities are dependent on resources around and distant from the city, such as clean fresh, water, and clean air. The World Resource Institute initiated the Cities4Forests programme to create and encourage bidirectional support between cities and forests. The programme catalyses political, social, and economic engagement to integrate inner city forests, nearby forests, and distant forests into city development policies and plans. Cities that join the programme are invited to share current best practises, and receive technical support from a global network with expertise in forests, climate change, water management, communications, finance, and policy. These powerful programmes are among many that bring an important focus onto the next natural step beyond reducing climate change – recovery from climate change.

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EDO ANSALONI DIES

Garden centre founder and containerised nursery stock pioneer Edo Ansaloni died in Bologna, Italy on 31 January, aged 95.

The news of Edo Ansaloni's death made headlines in Bologna and beyond. In most of the obituaries, people pay tribute to a great husband, family man, photographer and historian. Ansaloni, who fought as a partisan against the Italian fascists, the German occupation and the ruling elites during the Second World War, is also known for his role in setting up a museum about the efforts of the Italian Resistance, the Museo Memoriale della Libertà in San Lazzaro di Savena.

Ansaloni was a true pioneer of Italian, European and global nursery stock growing; a legacy which continues to increase. He also thought about the joy our industry brings and established Europe's first customer-centric garden centre, first in Rome and then Bologna. He was also a member of the European Commission proper of the nursery gardening, in Brussels, in the 1970s.

Recently in 2018, Patrizia Cardaci and Michele Tusi of Coplant in Canneto sull'Oglio, a leading wholesale supplier of outdoor plants to garden centres at home and abroad, invited me as one of the keynote speakers during their Verdeggiando garden retail event to mark the company's 25th anniversary. I shared my insights on Italian garden retail, and I had to dig deep into my country's garden retail market past. Being a former owner and publisher of horticultural trade magazine Floritecnica I was of course not wholly unfamiliar with the subject. Curious to know more details, I decided to give Ansaloni a call, who very kindly, and with incredible detail, explained how he became the first horticultural entrepreneur in Italy to design and build a garden centre in Rome.

Ansaloni spoke about what drove him to make this decision. It was the complicated politics of post-war Italy and the land reform risks posed by the governing communist party at the time which prompted him to leave 'Red Emilia-Romagna' and seek his fortune in Rome.

Ansaloni bought a plot of land on the Via Pontina in 1952 with the idea to establish a plant nursery. But then, he says he read an American magazine article about Martin Viette who ran a garden centre shop in Long Island (NY). He was enthusiastic about it and travelled to the US to see the store with his own eyes. As soon as he got back to Italy, he applied for a building permit and opened his first modest store. In 1958, he decided

to add to his business, and in January 1960, the then Minister Umberto Tupini officially opened what is said to be Europe's first garden centre.

What followed next was an AIPH meeting in Genoa and Turin with Italian delegate Comm. Ermanno Sozzi. Soon the news about Ansaloni's revolutionary garden centre reached AIPH members who flew to Rome to visit it. The story goes that when AIPH's American representative congratulated Ansaloni with his smart marketing ideas, he replied with, "thank you very much indeed. But actually, I copied the whole idea from the US", while handing him a business card with Martin Viette's address.

He said: "Arturo, didn't think that it was easy, back then. The situation was completely different than today, with a multitude of products for sale on retail shelves. Back then there was nothing ... and everything had to be invented, to begin with, plant pots."

In the late 1950s, potted plants were sold in earthenware pots, large shrubs and trees with root ball or in large tubs weighing several hundred kilos - clearly not suitable for self-service.

On another trip to the USA, Ansaloni visited Monrovia Nursery and returned home with a solution. He designed a machine to make cans for growing garden plants and his company, Vivai del Circeo di Sabaudia, became a pioneer in the production of containerised outdoor plants. It was from this idea that a few years later the brothers Bonanomi and Spreafico, owners of Plastecnic in Perego Brianza, designed the first plant pot of polypropylene and in March 1970 Armando Cassera founded plastic pot manufacturer Arca in Curno.

In the 1970s, as the political situation normalised, Ansaloni invested further within the garden centre business in Bologna. The loss of Ansaloni is a loss for the global ornamental horticulture industry. I am proud to call him, my friend. I send sincere heartfelt condolences to his children and his family, from his floriculture friends. Grazie Edo.

Sempre Viva La Vita
Arturo Croci

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