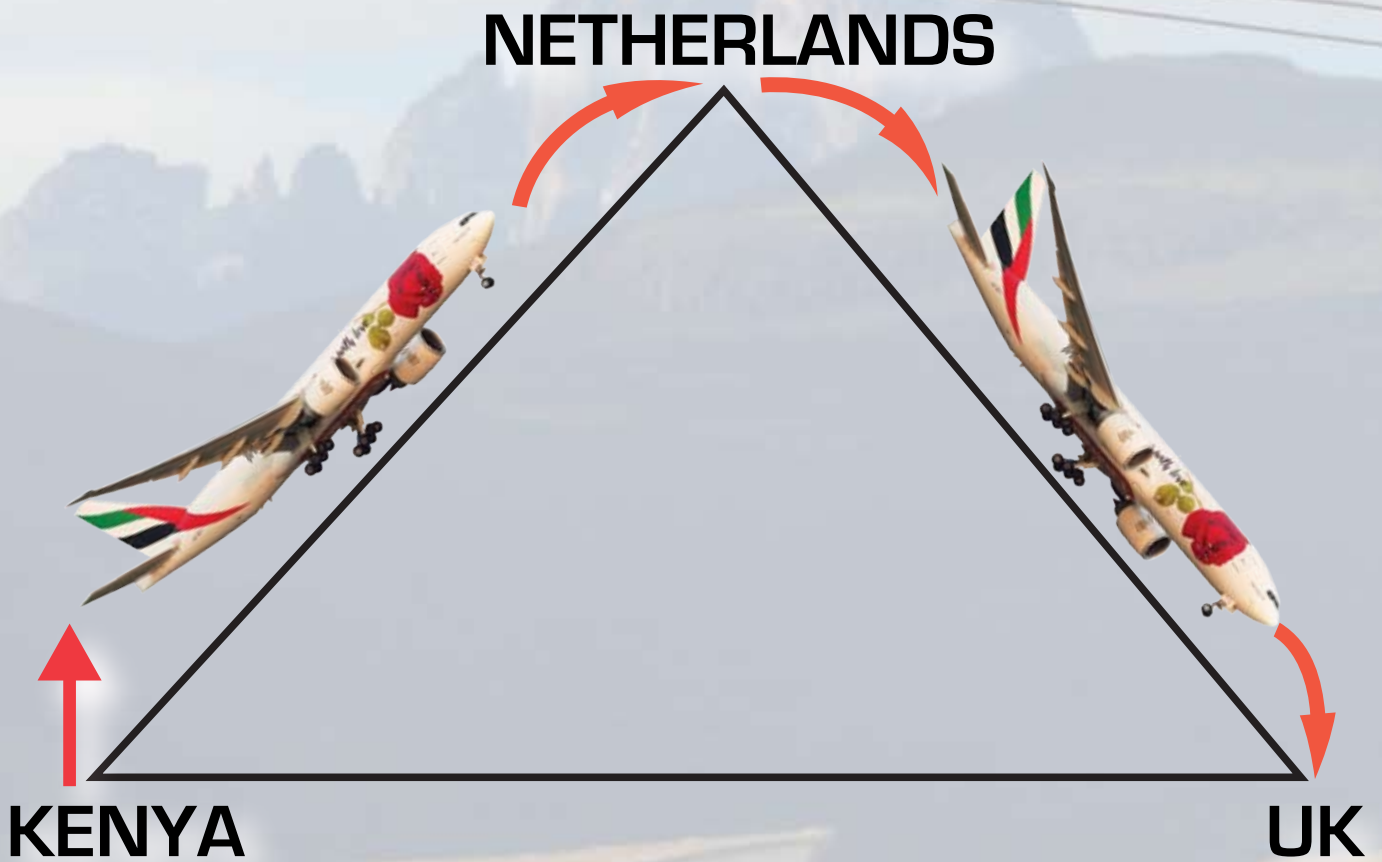


July - August 2020

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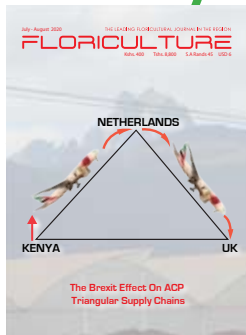
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The Leading Floriculture Magazine

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Floriculture is published six times a year and circulated to personnel in the Horticulture Industry, foreign missions and Kenyan Embassies abroad, Flower Growers, Exporters and Consumers, extension officers in the Ministry of Agriculture and counties, research offices and suppliers of agricultural inputs in Kenya.



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United we will Conquer

Keeping up with the world's demand for flowers involves an intricate and delicately balanced supply chain of workers, farmers, wholesalers, airlines, cargo ships, traders, florists and supermarkets. Getting something as delicate as a bunch of flowers from one continent to another without them being crushed or wilting is a daunting technological feat. Corvid-19 has cut down this.

Cut flowers have to be transported quickly using a "cold-chain" – a series of refrigerated facilities on farms, lorries, planes, and boats – which put the flowers into a dormant state, so they stay fresh. This allows a rapid transfer from farm to shop within 24-48 hours, if going by plane. Supply chain must go round this.

Time is critical: for every extra day spent travelling flowers lose 15% of their value. Vase life – the length of time flowers stay fresh after reaching the customer – is then usually 12-15 days.

The biggest buyers of cut flowers are the EU and the US, but the biggest growers and exporters are the Netherlands, Ecuador, Colombia, Kenya and Ethiopia. Roses, carnations and chrysanthemums are the most popular blooms.



Kenya is particularly important as a source of roses – the country supplies one third of all roses sold in the EU, according to Union Fleurs. This means flower sector is one of the most affected and the government must come in and support it.

*Masila Kanyingi
Editor*



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How To Keep A Farm Running In Coronavirus Times

Kenya's flower industry turned out to be the hardest hit sector by the COVID-19 pandemic, seeing that most farms send home their employees as a result of reduced business. According to industry statistics, more than 30,000 seasonal workers from various flower farms were sent home, with some of them seen their contracts being terminated altogether.

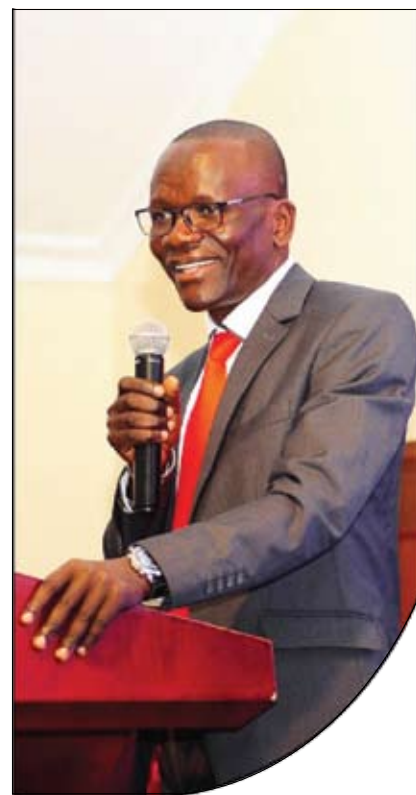
According to Kenya Flower Council CEO, Clement Tulezi, the peak of the pandemic occurred during the peak of flower exports. This was just after a poorly serviced valentine and before the Easter holiday and mothers' day. Several flower farms suspended shipping of their flowers to several EU countries, US, Middle East and Asia markets. The Dutch auction, which is the main market for Kenya's flower exports at one time recorded 0%. "There was no demand in Europe. Almost the entire market had collapsed. Technically,

our industry was on lockdown," adds Tulezi.

Additionally, *Floriculture Magazine* confirmed that farms were exporting only 20% of the tons of cut flowers they would normally send daily to markets including the UK, Netherlands and Germany, with the rest being destroyed. Most countries had issued travel bans to Europe following the COVID-19 virus outbreak, a move which was meant to curb the spread but had adversely affected the supply chains for trading partners.

Impact

The world experienced the COVID-19 pandemic, impacting world economies in unprecedented ways. It may be too early to determine the actual long-term impact on supply chains and the Kenyan economy, but what's evident is that the economic impact of the coronavirus outbreak has begun taking hold in Kenya, with businesses and their employees suddenly confronting a harsh new reality of what



Mr. Clement Tulezi
Kenya Flower Council CEO



lies ahead. This is much more defined in agriculture, particularly the fresh produce industry.

The Kenya cut flower industry experienced the impact on the restriction of movement of people in the destination market countries. During UK Mothers' Day, traditionally one of the biggest opportunities for Kenya flower exports, direct sales orders were cut by more than 50% and sales on the Dutch Auction were down by 70% and prices were significantly down on reduced demand. Official advice to close public gatherings and to keep people's transit/movements as low as possible by destination countries, severely restricted consumer activity. Consequently, all Kenyan farms drastically reduced export volumes to around 50 per cent, with a sizable number suspending exports altogether.

The ripple effect for the Kenya flower industry include:

Downsizing and closure of businesses:

The lack of sales will severely impact cash flow and will not meet fixed overhead costs. Farms will not be able to sustain their existing workforce. This situation is expected to persist for almost two years and businesses will be forced to either send workers on unpaid leave or radically lay off workers.

With reduced earnings companies will not be able to meet the cost of operations. This is against the backdrop of delayed Value Added Tax refunds, poor prices in the international market in 2019, low volumes this year during the Valentine's period and escalating cost of doing business locally. If the situation is to be contained, there is need for a strong fiscal response by the national government to put measures in place to support the flower industry to get through these critical times.

Composting unused flowers: Due to the



coronavirus pandemic, the demand for flowers greatly decreased worldwide. As a result, farms discarded millions of rose stems. This means the loss is absolutely devastating. To avoid creating waste from this unfortunate situation, the farms have been composting all the unused stems, maintaining standards of sustainability and environmental consciousness. However, the question is, for how long will this continue? Or should the farms stop managing the crop? The answer is definitely NO because the crop has a future.

Limited cargo space: With the minimal operations of passenger flights, there is going to be limited space to ferry flowers. The market which is slowly opening will not be served sufficiently. Additionally, freighters may not be able to sell all their freight space and will look for other destinations to pick up cargo.

Shrinking of the sector: We may witness closure of some farms and those which had

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some expansion plans shield them. This is because the farms will run into losses hence no operating capital. Additionally, there is an expected recession even after the pandemic which will erode the purchasing power of most of the customers. With the minimal cash flow, industry activities will also be minimised.

Farm challenges

Unavailability of flights, lower demand, and negligible export of fresh cut flowers forced flower growers to destroy millions of stems at the farm which resulted in a huge loss for the growers. The farms have taken some serious actions to survive in this turbulence time. To control the cost farms have deducted the salaries, reduced the manpower, used minimum spray, and fertigation, put some plants and varieties on rest by cutting back to stop production of the flowers for few weeks till the demand picks up.

As many countries are lifting the lockdowns and easing the restrictions and demands for the flowers are picking up in some destinations, but challenges of the Kenyan floriculture industry do not seem to be at ease for the months.

Some of the measures taken by the farms to control the cost have affected the production cycle and had a severe impact on the quality of flowers. Lower manpower resulted in less attention on the flower plants and minimum spray and fertigation make plants fragile and susceptible to pest and disease, the current rainy and wet weather conditions have made the situation even worse on the quality of some flowers. Flowers are in short supply as compared to the current demand.

Labor Shortage

Farms are unable to get all their employees back because of continued travel restrictions and between provinces. Social distancing restrictions forced farms to work with a limited number of workforces. The existing nationwide curfew also restricts the number of hours employees can be engaged per day.

Production Planning issues

As the lockdowns are lifted in many destinations and export has resumed, due to quality issues and 'cutting back' of the



flowers, the flower supply in the less and there is a shortfall in the market. It will take time for the farms to be able to work at full capacity. This will make it difficult for them to plan production and meet demand.

Shortages of Planting material

Growers usually add some new plants and varieties in their assortment every year to launch at the exhibition to attract buyers. Also, Farms examine current assortment uprooted and replanted nonperforming varieties (due to age of crop or market demand) with new plants and varieties. Due to the unavailability of flights and proper transportation channels farms have not received planting materials that will further add in shortage of flowers in the market in the long run.

The quality of the flowers is always a serious factor for the clients, but a supply chain disruption caused by delays in shipments, and the quality of flowers is affected when it is received by the client. Good quality and consistency in supply and reasonable pricing is necessary to keep the product attractive and for the wholesaler's and florist. Flower Exporters are consistently feeling the pressure to consistently supply good quality flowers to avoid any claims by buyers as during this time of COVID-19 quality is more important than ever.

This has been an unprecedented season in the flower industry in Kenya that will have a massive impact on growers and the country's economy long into the future, strategies have had to be reviewed to survival mode to keep growers afloat until the end of this and past.

Way Forward.

The floriculture industry currently ranks as one of the economy's fastest growing industries and something we and the Country are proud of. Cut flowers are among the four leading foreign exchange earners in the country - generating important forward and backward linkages with sectors such as manufacturing and agro-processing, inputs markets, and transportation services.

The industry contributes significantly to the achievement of Kenya's Vision 2030 and the Governments Big 4 agenda and the National Export Development and Promotion Strategy. This is a sector that cannot be ignored at any cost and should be leveraged by the government.

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should expedite all the VAT refunds owed to flower companies. This will improve cash flow and go some way in the short term to make up for limited sales from the export markets.

In addition, the Government should consider suspending VAT on farm inputs, including fertilisers, pesticides, machinery etc., to help meet other costs production costs.

Moratorium on principal repayment of term loans: Government should engage lenders to extend moratorium period to individual growers during the current financial hardship. The next several months will be a very difficult time financially for the industry to keep operational albeit at reduced levels. Hopefully the industry will be able to recover its markets and return to normality after this period of major uncertainty. In addition, this is the time for the government to offer financial support through their financial.

Now more than ever the refunds will make a huge difference in assisting investors stay afloat as they explore long term alternatives. But to further cushion the industry at a time when the world remains uncertain on when the virus will be contained and revenues plummet to unprecedented lows, the government should look at even bolder steps of rescuing the sector including tax rebates, cash injections, loans and loan guarantees.

Maybe it is time to check what is happening elsewhere. In Netherlands, the auction took it upon themselves to discuss with banks on behalf of their members for loans to keep the farms afloat. In the UK, Waitrose supported some of their customers in Kenya to support their staff. So, it could have been wise for the government to offer financial support through their financial

institutions like Agricultural Finance Corporation (AFC).

What the Kenyan government is doing very little. The tax relieve measures it announced will do very little to ease the cash flow crisis most of the farms could be facing.

Operational

Allow Freight Handlers to continue operations unhindered: What will happen after Mother's Day which was celebrated on May 10? It is the final large holiday before the 'low season' of cut flowers. "Afterwards

days quarantine after every trip is also affecting airlines. The government should consider any staff who does not show any signs for more trips.

Labour

Government should support the industry in labour management and facilitate discussions with the Unions and Employee Organisations. Flower production and export is a labour intensive 24hr operation that cannot be serviced working from home. Reduced sales will inevitably lead to reduced labour requirements. How this can



flower demand only lifted for Mother Day's in Poland (May 26) and a little in France (June 7). But how was the situation at that point? Was the cost of airfreight lower or not? Flight costs per kilo were high and when a grower supplies to the clock, it all gets risky as he does not know what it costs to get his product there, but not what he will get for his products. Many decided to lower the supply with some stopping supply.

It is therefore important for the Government to continue facilitating freighters on airlifting Kenya's exports unhampered, with full support by KEPHIS and KAA. It could also consider reducing landing fees at JKIA. Similarly, trucks carrying produce should not be harassed between farms and the airport. The airline staff going for 14

be achieved needs all parties to recognize the unique nature of the pandemic and the effect it is having on the entire supply chain. Farms will put in place measures to ensure health and safety of workers, guided by the laid down guidelines and protocols.

The farms are well-equipped with personal protective equipments including face masks, hand sanitizers and gloves. Not only are the farms encouraging social distancing between one



another, but they have reduced hours to combat the virus, along with other extra precautions. Every vehicle that enters the farm is safely fumigated, and the company is also monitoring the team's health by checking their temperatures daily. These extra steps not only ensure the safety of the team, but keep the company operating efficiently so that the farm is well-maintained without affecting the quality of our roses.

Crop Management

Maintaining the set up without income is a tough task. But the sector cannot stop their operations entirely as they need to keep crops alive to avoid a total collapse. Growers must give it a phytosanitary and agricultural maintenance, so that the plants are in conditions to produce later, when exports resume.

Workers should be working round the clock to maintain the crop by minimising watering, nutrition and chemicals. This should be done through broad spectrum products for preventive sprays and use of more biologicals and organic fertilisers.

However, the use of more biologicals than synthetic as preventive sprays must depend on the variety. Some varieties are more challenged by disease like downy mildew and botrytis more than others. Even the use of less nutrition and water will depend on whether the crop is on soil or hydroponics.

To keep the crop safe, growers have to go to the farm for nutrition and disease management, and harvesting. They will in-turn export a few to maintain the few customers and discard the rest for crop maintenance. They need to flash the crop and prepare the crop for next season.

Looking forward

During this state of isolation, people need flowers more than ever, and to

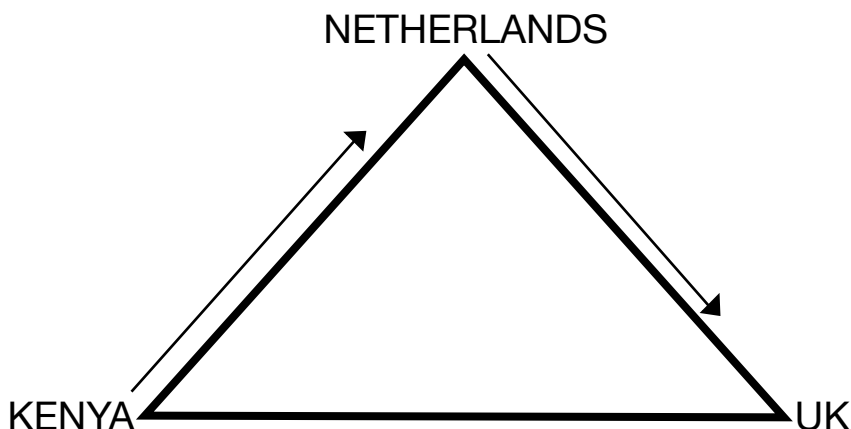
surround themselves with nature and beauty. Growers are doing whatever is humanly possible to support the floral industry during this unfortunate supply shortage. "Let us help each other out during this time of need, and do whatever we can to support the floral industry together", adds Kenya's president, Mr. Uhuru Kenyatta.



Covid-19 Pandemic Raises Questions Over The Brexit Effect On ACP Triangular Supply Chains

The Covid-19 pandemic is highlighting the supply chain problems which can arise when border clearance arrangements come under stress from increased demands and reduced capacities. This is bringing into question the future commercial viability of existing ACP triangular supply chains for short shelf life products in serving the UK market.

This needs to be seen in the light of the border clearance challenges and associated transportation disruptions which are likely to arise as a result of the UK governments' current approach to future trade relations once it leaves the EU customs union and single market. Current policy responses to transportation disruptions associated with border clearance problems linked to the Covid-19 pandemic, could provide a basis for longer term arrangements to facilitate the continued smooth functioning of triangular supply chains. In the absence of such initiatives ACP exporters will need to explore opportunities for direct exports to the UK or diversification away from the UK market.



effects of the current Covid-19 pandemic, in light of the possible lessons this experience could provide for dealing with a 'hard Brexit'.

- **Cost Increases:** Reefers
Border clearance and associated transportation disruptions linked to the Covid-19 pandemic is seeing refrigerated containers (reefers) being tied up in unproductive delays. This is resulting in an increase in the costs of leasing refrigerated containers. On average in recent weeks these prices have increased been between 30-50%. However, for short term leases these price increases have been of the order of 200%. This is serving to

The impact of these disruptions could prove particularly severe for ACP producers of short shelf life fruit, vegetables and cut flowers exporting to the UK along triangular supply chains. This is vividly illustrated by the impact of the Covid-19 pandemic on Kenyan cut flower exports. Press reports indicated 'exports to Holland were suspended' with

'only flowers meant for supermarkets' in the UK being shipped.

This strongly suggests that at a time of border clearance delays and associated transportation disruptions the more direct and shorter the supply chain the better. Against this background it is worth reviewing some of the short-term trade



increase the costs of moving cargoes onward to the UK market along triangular supply chains. This is compounding the problem of getting cargoes to Europe in the first place, given the reduction in scheduled commercial airline services on which, on average, around 80% of air freighted cargoes are shipped.

• **Cost Increases: Vehicle and Driver Availability**

Border clearance delays and driver fears of being caught away from home as further border restrictions were introduced, saw a shortage of drivers emerging for transport services along certain routes, particularly to Italy, the initial European centre of the Covid-19 outbreak.

Similarly, the prospect of delays at UK ports arising from the reintroduction of customs and other border controls on EU27/UK trade would seem likely to make individual drivers and smaller haulage operators reluctant to contract for cargoes for delivery to the UK for fear of losing out on further contracts through both drivers and trucks being caught up in port congestion and traffic delays in the UK. This is likely to drive up the cost of onward shipment of cargoes from initial ports of landing in an EU27 member state

to the UK market. It could even lead to an absolute shortage of drivers and trucks along routes serving the UK market.

This however could potentially be eased by moving over to unaccompanied freight movements (including greater use of railways). This is already happening to a certain extent in response to the Covid-19 pandemic.

This would however be likely to lead to

longer unloading times than is currently the case, and as such could prove problematic for ACP short shelf life products.

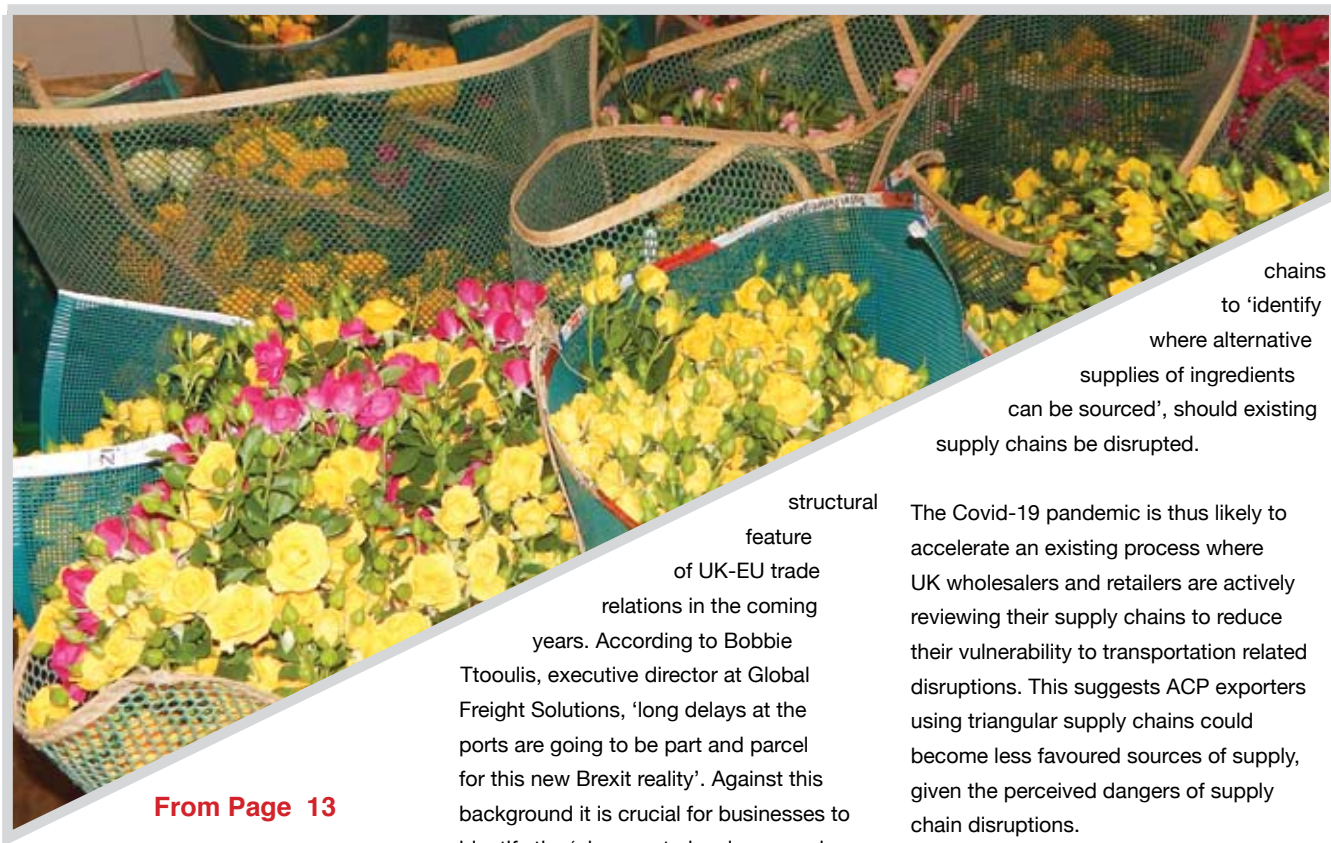
• **Loss of Value**

For short shelf life products, delays in border clearance, alongside possible traffic congestion and any possible additional phytosanitary checks upon entry to the UK

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“While the UK government has recently announced the Covid-19 pandemic will have no impact on its commitments to leaving the EU customs union and single market on 1st January 2021, this needs to be seen in a context where face to face UK/EU negotiations have been halted and plans to continue internet based negotiation have not so far got off the ground.”



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market, could serve to strip value out of the supply chain as the in-shop shelf life of delivered products is reduced. This loss of value could come to fall on the shoulders of ACP exporters using triangular supply chains, depending on the nature of the individual supply contracts ACP exporters have entered into (i.e. at which point along the supply chain the ACP exporter takes payment).

• **The Need to Get to Grips with Challenges Faced**

These are three of a multiplicity of factors which would be likely to erode the benefits of using single distribution hubs in Europe in serving just-in-time supply chains in the UK and could bring the future use of such supply chains into question.

These problems have been brought into focus as a result of the Covid-19 pandemic, with similar problems likely to become a

structural feature of UK-EU trade relations in the coming years. According to Bobbie Ttooulis, executive director at Global Freight Solutions, 'long delays at the ports are going to be part and parcel for this new Brexit reality'. Against this background it is crucial for businesses to identify the 'changes to border procedures, documentation, duties, taxes and pressures that will impact their supply chains'.

ACP exporters of short shelf life products to the UK market along triangular supply chains will be unable to avoid these challenges unless specific arrangements are set in place to facilitate the continued smooth functioning of triangular supply chains.

In addition it should be noted how the current intensification of dialogue between the UK government and the UK food industry underway as a result of the Covid-19 pandemic has highlighted how 'UK food makers are relatively well-prepared to weather the storm, in no small thanks to the preparations already being made due to concerns over a potential no-deal exit from the European Union'. Preparations for a 'hard Brexit' have seen UK food businesses reviewing the functioning of their supply

chains to 'identify where alternative supplies of ingredients can be sourced', should existing supply chains be disrupted.

The Covid-19 pandemic is thus likely to accelerate an existing process where UK wholesalers and retailers are actively reviewing their supply chains to reduce their vulnerability to transportation related disruptions. This suggests ACP exporters using triangular supply chains could become less favoured sources of supply, given the perceived dangers of supply chain disruptions.

This suggests a need for ACP exporters to actively explore their options for:

- a) The direct shipments of short shelf life products to the UK market;
- b) Diversification away from the UK market; or
- c) Contractual arrangement for the supply of goods to EU27 importers which ensure payment for delivery to the first port of unloading in the EU, with any risk of on-transportation disruptions being carried by the EU27 re-exporter.

This will be particularly important if no administrative and border clearance facilitation arrangements are set in place to ensure the continued smooth functioning of existing ACP triangular supply chains. However, for a range of smaller ACP exporters some form of market adjustment support may be needed if they are to continue to profitably serve export markets in Europe.



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COVID-19 and Fresh Produce: A Quick Summary of Impacts and Paths to Resilience

The COVID-19 pandemic has plunged the world into a crisis of previously unknown magnitude, disrupting every single supply chain. Actions to restrict movements have generated important changes in consumption, trade and logistics that have led companies to re-think their processes and systems so as to keep ensuring their business' existence.

Fresh fruit and vegetable supply chains are on the list of the most disrupted industries. Changes in global eating habits and food logistics and

impacted the global food trade, especially the first tiers of the supply chains. Farmers, exporters, distributors and logistics suppliers are struggling to keep up with a constantly changing environment.

The African agricultural sector has been affected by the pandemic as it is largely dependent on exports. It is estimated that exports from Africa to the rest of the world range from 80% to 90% of total exports, of which a huge share is made up of agricultural produce. Intra-African trade accounts just for around 2%.

The main impacts

Africa's top trading partners for agriculture products are based in Europe, who are also facing financial strains from lockdowns which have inevitably curbed demand for some imports, turning them into less reliable trade



partners for African countries.

The pandemic has caused shifting buying habits that have directly affected the trade with African countries. Consumers now prefer to buy affordable fresh fruit and vegetables with a good shelf life. For instance, healthy, vitamin-rich products and everyday consumables, such as citrus fruit, kiwis, apples and bananas, are in high demand. Anything out of the ordinary, such as expensive and exotic fruit or vegetables, has seen a decline in demand. In addition, the closure of bars and restaurants has also affected the demand for exotic fruit and vegetables.

African fresh produce exporters are also affected by limited and costly transport. As airlines have cancelled their passenger flights, the airfreight capacity is scarce, limited to cargo flights, with increased (in some cases doubled) tariffs. Sea freight has been operating, although with scarce refrigerated containers available. Additionally, exporter and importer



countries are reporting problems in finding enough truck drivers, with delays at borders.

Any logistical problem means products take longer to get to their destination. As reported by several African agro-exporters, delays in logistics are leading to shortages in storage capacity, more specifically cold storage capacity.

The labor shortage is the third main issue F&V exporters are facing. Limitation of movement is one of the main reasons, but also fear of infection by workers. High-value supply chains are particularly affected and these include food processing plants, which are labour-intensive. Currently, most of the sorting and packing lines do not comply with the social distancing requirements.

The route to resilience

• **Disruptions can also bring opportunities**

The crisis is also seen as an opportunity to build more resilient food systems. As quick as the effects of the pandemic have been, we have also seen quick responses that are allowing the fresh produce sector to recover and reestablish itself.

• **E-commerce & digital marketing**

Global lockdowns have forced brands to adapt to an online business model whether they were ready or not. Social media and e-commerce (online sales) is already a strategy many farmers are using to sell their produce and an easy way to create linkages between farmers and consumers.

One of the principal recommendations for making the jump into digital is to first make sure customers know you are operative and

that you have pivoted your offering to online sales, local markets, value-added products etc. Social media is a good way to inform people about this and to promote company websites and pictures of your operations, highlighting standards in terms of hygiene, certifications and quality.

• **Local trade**

Considering how consumption has changed with lockdowns, the local demand for fresh produce has increased considerably. Producers of some fresh products have had order reductions or cancellations, forcing them to redirect products to local markets (supermarkets), or consider value-addition processing. Many supermarkets have suffered a shortage of fresh supplies, they have had to keep up with the increased demand and look for more suppliers.

• **Local demand will increase once open markets are allowed to operate**

Interregional trade: Another way to reduce dependence on exports is to strengthen regional trade, by selling to neighbouring countries. For instance, several agro-exporters in Zimbabwe traditionally selling to UK markets, have started to sell to South African markets. Many organizations, such as World Bank and FAO, are promoting the strength of the African Continental Free Trade Area, aimed at creating a single

market for goods and services, as well as promoting the movement of people across borders. As a response to the pandemic, requests have been made regarding reducing import tariffs and temporarily reducing value-added taxes, as well as other taxes, as a way to rapidly facilitate regional trade.

• **Farm logistics**

Longer time lags in logistics are generating temporary over-stock of produce, which has meant that many farmers are lacking sufficient cold storage in order for it to arrive at the destination with good quality standards and sufficient shelf life. Many agro-exporters have reported they urgently require immediate cold storage capacity and have rented reefers, cold room space from third-party logistics (3PL) providers, and have rented out space to other farmers or whatever options available.

Therefore, many have argued that there is a lack of cold storage service providers specifically those who can offer rental and portable cold rooms and pre-coolers, that can be placed anywhere close to production points, thus reducing the need for mobility because they are movable according to requirements or seasons.

Innovative Packaging Saves Growers at This Time of Corvid-19

The clarion call at this time of Corvid-19 is minimal touch points hence a strong box. SoliQ is the solution as it will keep the product safe and will remain neat on arrival. The box is constructed using reinforcement band within the box, under patented technology.

Packaging might be the unsung hero of the fresh produce industry. It might not be the sexiest part of the supply chain. It is a sector that might be perceived – wrongly – as a less glamorous component of the supply chain. But without adequate solutions that work up and down the chain, produce will never arrive for presentation at the right quality.

However, behind the scene as **Mr. Masila Kanyingi** found out in a thirty minutes tour of Silpack Industries Ltd, there exists a wealth of innovation and dynamism within fresh-produce packaging. Silpack the introducers of SoliQ brand in Kenya has been exploring innovative methods to boost sustainability, increase efficiency, reduce costs and improve packaging as a marketing medium. Though introduced in their R&D department over six years ago “SoliQ”, is still the next generation packaging solution as Mr. Parit Shah, a Director with Silpack Industries Ltd, proudly refers it.

Masila: *The flower industry has been yearning for quality packaging solutions; briefly discuss your efforts to quench their thirsty.*

Parit: Over the past few years, we have recognised that growers have invested heavily in selection of the right variety and employed the best production practices for quality production. However, today the bottom line has become more dependent on ensuring quality produce reaches the market in the same quality. To ensure that our customers maintain the same quality throughout the cold chain, Silpack Industries Ltd introduced the SoliQ branded cartons, printed SFKs and other branded packaging products. However, despite this advancement



In all our products, we have always concentrated on the Total Cost of Ownership philosophy. The Total Cost of Ownership tests the true cost of packaging including benefits or losses that arise from using that option. ”

in technology, some customers continued to prefer the traditionally constructed box using relatively weaker paper. This compelled Silpack Industries Ltd R&D department to engage into further innovation to ensure these growers still enjoy a strong box all through the cold chain. The fruits of these efforts are “SoliQ”, the next generation packaging solution.

Masila: *Briefly discuss SoliQ, the products it covers and how it works.*

Parit: As stated above, SoliQ is the next generation of packaging materials designed to enhance performance.

The solution is the best suited at this time of Corvid-19. The clarion call is minimal touch points hence a strong box. SoliQ is the solution as it will keep the product safe and will remain neat on arrival. The box is constructed using reinforcement band within the box, under patented technology. This will ensure customers enjoy a continuous drive for increased efficiency and commercial advantage in their facilities and through their supply chain. The carton ensures when flowers are packed at farm they remain fresh all through the supply chain. It is an high performance carton which can remain intact from farm to the customer.

Masila: You have kept on calling it a solution; explain to growers why you believe it is a solution to them.

Parit: Despite all the advancements in paper technology and the availability of SoliQ boxes to reduce damages and waste, some growers have continued to prefer to use the traditionally constructed box. This naturally results in bulging and breakage as the boxes move through the cold chain. To compensate for this damage, growers tend to request for over specified materials which in turn make the boxes heavier and more expensive. The net cost of going “cheap” is actually expensive as heavier boxes mean higher freight cost and a larger carbon footprint. A lot of these challenges have been addressed through the SoliQ range of boxes.

This is why we are calling it a solution all the way along the supply chain, a solution for the grower, the packer, for the retailer, for the logistics... right the way through the supply chain. We introduced solutions and responsibly trying to take costs into account. It's not just about the packer and

it's not just about the retailer, it's about the whole supply chain.

Masila: *The Flower sector is battling Corvid-19 which has skyrocketed the freight cost. Do you still believe Soliq is the solution?*

Parit: Thank you for that question. Yes, it is. Most of the growers who were not 100% soliq are requesting for it. Others who had not embraced SoliQ are placing their orders.

SoliQ is a premium product which will remain the frontier box that have over the past four years provided solutions to the market of reducing the total cost of packaging in the cold chain. They have evolved over time and constantly fine-tuned to respond to any changes. They remain the box of choice for growers/ buyers that can benefit from freight saving as they deliver cargo CIF to customers or auction, or want to provide their customers with assurances that they have taken the best packaging to safeguard their valuable products as well as provide a freight saving to them.

Masila: *These supply chain solutions seem to be an additional cost to growers at a time most growers are cutting on costs, are you not pushing them out of business?*

Parit: As a pivotal part of the supply chain, quality packaging is expensive but growers have to be mindful of solutions all the way down the chain. To understand the benefits, one must look at it as an integral part of the cold chain. In all our products, we have always concentrated on the Total Cost of Ownership philosophy. The Total Cost of Ownership tests the true cost of packaging

including benefits or losses that arise from using that option.

As illustrated, SoliQ box – Costs USD 0.20 more than a conventional box but saves 250gms on airfreight thus the total cost of ownership of using a SoliQ box is USD 0.30 less than using a conventional box to do the same job. This time of Corvid-19 growers may be saving more.

Masila: *Give your final comment*

Parit: Crushed cartons are a common feature at the bottom of regular air pallets. It damages the flowers and results in revenue loss. SoliQ in flower packaging goes a long way in increasing the protection of those boxes from crushing and save growers from unnecessary damages.

Additionally, the customer is becoming more aware of the premium price fetched by quality product flowers and the need to buy quality packaging. That is why packaging is increasingly playing a key role. The future lies on premium packaging solution and that is why every grower must embrace the next generation of packaging solutions.

On the premium ranges we're helping both retailers and discounters drive sales. The term premiumisation, as it is now referred to, is becoming a key added-value battleground for the produce market. After introducing SoliQ boxes into the market with a stated aim of shaking things up, Silpack now wants to utilise its expertise in transforming boxes from simple receptacles of produce to mediums of communication.

Masila: *Thanks for your time.*

Mother's Day

Flower sells: A Blooming Success

Last year, nobody could have predicted that the next Mother's Day would land smack in the middle of a global pandemic. Going into Mother's Day 2020, who knew what the demand would be? Yet, despite everything, the results show that Mother's Day was a bright spot for floral retailers this year.

The Society of American Florists (SAF) conducted their annual survey after Mother's Day, and the results were fantastic: 70% of those responding saw an increase in their Mother's Day sales! Many of them also said that they could have sold even more if they'd been better prepared with more staff, and been able to get more product.

How much did people spend on Mother's Day Flowers?

The median amount spent on Mother's Day flowers in 2020 was \$45, a \$10 increase from the past two years. 42% of florists said that their average transaction was between \$51 and \$70; 36% said it was between \$71 and 100; 15% said it was between \$101 and \$150. The average transaction was almost \$76, compared to \$68 in 2018.

What were people buying for Mother's Day?

Fresh flowers and plants continued to be the most popular floral gift item for Mother's Day, purchased by 28% of American adults. Fresh bouquets and arrangements made up 60%

of their floral purchases. Cut flowers were far more popular than other segments, with 79% of sales, followed by flowering plants at 20% and green plants at 8%. This trend is similar to past years, as fresh flowers continue to be the most popular type of flower purchase. Purchases of fresh flowers by men were 63%, and by women, 53%.

Where did customers purchase their flowers?

Supermarkets and grocery stores continued to be the location for most floral purchases at 33% of sales. However, this represents a drop from both 2019 (39%) and 2018 (48%). So, where are they taking their businesses? Mass merchandisers and wholesaler clubs, where 24% of adults purchased their flowers. 16% purchased at florist shops, which is slightly up from 2019 (15%) and down from 2018 (21%).

How were florists receiving orders?

Not surprisingly, consumer floral purchasing was mainly done on the internet this year: 46% of Mother's Day orders came via florists' websites compared to 20% last year. Many florists noted just how vital their sites were, and how important it was to limit their offerings and direct customers to more

flexible options, due to supply issues.

How did retailers deal with supply issues?

One of the biggest challenges this Mother's Day was retailers getting enough product. Nearly 50% of respondents said they sourced more products from their wholesaler compared to last year, and 30% said they sourced more directly from farms and growers.

The lack of enough product caused retailers to pivot late in the game so that they could fill the orders they already had. 60% of survey respondents stated that they had suspended incoming orders by Thursday, May 7, with an additional 30% suspending orders by Friday. 32% cut off orders completely by Friday, and another 36% by Saturday.



Despite any supply issues, most floral retailers had a wonderful Mother's Day. This is a great sign: Flowers are helping all of us move through tough times and into a brighter future.

Floral Wholesalers Report Strong Sales for Mother's Day 2020

Sure, we're in the middle of a pandemic, and things have been unpredictable. There's no way of knowing when—or if—things will go “back to normal” for the floral industry. Perhaps our industry will never be the same, but that doesn't mean there hasn't been good news for wholesale florists! Mother's Day sales were far better

conducted on the website flowersandcents.com showed that nearly 52% of wholesalers reported Mother's Day 2020 to be “Way better than expected,” and 33% said it was either “Good” or “Great.” That's encouraging news to be sure!

Mass market stores were the center of floral sales

Supermarkets are booming in floral sales, and Mother's Day was no exception. While many floral shops had to close for some time during COVID-19, supermarkets and mass-market retailers never did. As a result, many consumers went to their local grocer or big-box store to purchase their bouquets. Plus, as some wholesalers were

attention to the mass market to sustain future growth.

Wholesalers overcame some significant challenges

Since Mother's Day demand proved to be so much higher than expected, it brought many challenges to the floral wholesalers. Their sales depended on florists being open, and regulations varied from state to state. Some wholesalers had no choice but to close down, while others didn't.

Also, back in March, many growers were forced to reduce their staff, and some cut back crops in anticipation of a slow Summer. Then, when Mother's Day demand

was so high, they couldn't catch up, resulting in a lot of empty flower buckets at floral wholesalers.

There were also logistical challenges: With so many commercial airlines cutting back their flights, the cargo that would have shipped in passenger planes had to ship in cargo planes, including much-needed PPE. This airline situation continues to make once-reliable floral shipments highly unpredictable.

than expected, and the lessons learned from this holiday will help all wholesalers refocus their efforts towards a bright future.

More people sent flowers than expected

With all the pent-up frustration of not being able to share Mother's Day in person, people turned to flowers in higher numbers than wholesalers anticipated. A survey

closed or had to cut back their product severely, many retail florists went to mass market stores to add to their stock.

This trend of mass-market floral sales shows no signs of slowing down, plus market prices remain strong due to a limited supply. While continuing to provide flowers to retailers, wholesalers must pay close

With all those challenges, wholesalers still managed to reap the benefits of Mother's Day—a beacon of hope in an unpredictable time. Using what they've learned, smart floral wholesalers will align their business to meet the demand and ensure a bright future for the floral industry.

The power of flowers is still going strong!



The journey to get a perfect rose

On their journey from farm to vase, roses can face some tough conditions. They may travel long distances, face wide temperature fluctuations, high humidity or very dry conditions. It can be a challenge to ensure an optimum level of water uptake, preventing Botrytis and ethylene damage and giving

adequate nutrition. Chrysal has got you covered all the way. We have developed solutions to address all of these issues, keeping quality high and wastage low at all the stages of the journey. Our technical consultants are there to help you along the way. The result? **The perfect rose and happy customers.**



For more info please contact us at info@chrysal.co.ke



AT HOME

Every consumer wants their rose to last as long as possible. Using Chrysal products at every step of the journey will ensure this. Chrysal Rose specialty flower food increases vase life up to 60% and ensures optimal flower development.



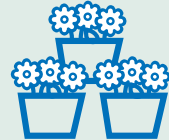
TRANSPORT

Roses are shipped all over the world for longer or shorter periods and keeping them in top condition during transport is a challenge. Our Rose Dip Service aims to prevent roses from developing Botrytis and allows for longer storage and travelling increased distances. Our Freshliner keeps roses fresh without water during transport.



GROWER

From the moment they are harvested, roses start to lose their vitality. Our RVB Clear boosts water uptake and prevents bent-neck. Our unique Rose Dip Service will prevent Botrytis, while AVB can protect roses against the effects of ethylene damage.



FLORIST

At the wholesaler, supermarket and florist our T-Bags and Professional 2 keep roses in top condition without opening them too much. It reduces flower wastage up to 50%.



GROWER PACKHOUSE & COLD STORE

At the packhouse and cold store roses need hydration and should stay in optimum condition. Our Rose Dip Service enables for longer storage.



CHRYSA

Air Travel Demand and the Cargo Impact

Let us examine some of the mid to long-term impacts of COVID-19 on the air freight market. Many shippers and forwarders are wondering when we might return to a “normal” market condition and there are many factors that will come in to play. One of the most significant is demand for travel.

Capacity Impact

Each lane is different, but passenger flights make up a large portion of air freight capacity globally. As demand for air travel steadily increased over the years, airlines have responded with more passenger aircraft to support this demand. This additional equipment increased cargo capacity, even in years where demand for air cargo did not increase at a corresponding level.

With cargo capacity (supply) increasing faster than demand, many airlines operating both passenger and freighter aircraft

reconsidered their need for freighters. Some airlines got out of the freighter aircraft market altogether, while others chose to let aging cargo aircraft retire without replacing them.

As a result, when the demand for passenger travel plummeted in the wake of the COVID-19 pandemic, a dramatic reduction in cargo capacity followed. As more countries issued various “stay-at-home” measures, air cargo demand fell, but not to the same level as capacity. This has resulted in congestion and increased rates globally with some lanes more affected

than others.

Compared to 2019, we can expect decreased demand for air freight indefinitely. At this point, however, capacity has dropped more than cargo demand. Air rates have accordingly increased around the world. As social distancing measures ease globally, demand for all modes of cargo transportation should increase from the current low levels. At what point will capacity catch up with demand?

Airline Strategy

As previously mentioned, many





through to the shippers.

Final Thoughts

It is likely demand for domestic air travel will recover more quickly than international. The International Air Transportation Association (IATA) recently projected that roughly 50% of the decline in passenger demand for international travel will recover by the fourth quarter of 2020. Without the belly capacity supported by high yield passengers, the air

airlines have shifted their focus towards passengers in recent years. It seems very likely, at least for the remainder of this year, that focus will change. We have seen the efforts of passenger airlines to use a portion of their fleet for cargo alone. Most Airlines have turned very aggressive in this strategy, going so far as to remove the seats from some aircraft to load cargo on the passenger deck.

appreciated during this taxing time, but that doesn't change the fact that this additional capacity is less cost effective. Even when seats are removed or cartons are being loaded in the seats and overhead bins of the passenger deck, they are loaded and unloaded by hand through the passenger entry door. Because of this the capacity available will only be accessible for certain types of cargo and take more time. These inefficiencies add to the cost of operations and ultimately

freight market appears unlikely to return to "normal" anytime soon and it is clear the air freight landscape has changed for the foreseeable future.

As the market remains volatile, growers can rely on their shippers to provide alternative modes of transportation that can mitigate the challenges expected with the air market. Their international footprint, local expertise, and global suite of service offerings allow them to evolve with the changing market and deliver value to their customers. The new "normal" will not be defined for some time, but airlines will continue to provide value generating solutions to their customers in this dynamic market.

This initiative and additional capacity is welcome and need to be passed



Overcoming Today's Challenges With Strategic, Collaborative Innovation



Tamer Farouk

As the pandemic continues to influence how organisations operate and behave, *Tamer Farouk*, regional senior director at Oracle South Africa and East & West Africa writes how African businesses need to adapt its workforce and technology considerations.

There is something remarkable about the African continent, the scarcity and complexity brings light to innovation and invention. Within the challenges of infrastructure resides the potential of technology and organisational agility. As the pandemic continues to influence how organisations operate and behave, African businesses need to adapt its workforce and technology considerations to fit the needs of the continent and the customer.

Rebalancing the business

The recent weeks and months have likely been the biggest challenge for all businesses across the continent. With almost no warning, millions of businesses – indiscriminate of size or stature – suddenly went from operating as usual to facing enormous challenges under the weight of uncertainty.

When global uncertainty is coupled with increased scrutiny from the CEO, board, investors, employees, and customers, every move they make is critical.

With these challenges to meet and tough decisions to make, the CFO is at the centre of a rapidly changing economy. There are four areas where a CFO-led rethink and innovation will be crucial:

managing cash flow, investing in the supply chain, working closely with HR, and focusing on customers.

The most immediate challenge faced has been managing cash flow. Many businesses, whilst inherently profitable, found themselves struggling to make ends meet with insufficient working capital readily to stay solvent. This lack of economic resilience does require short-term cuts, but it also relies on intelligent decisions that will keep the business healthy in the long-term.

The next focus area is supply chain. For decades 'lean' has been the name of the game. But lean, just-in-time supply chains have struggled in the face of global crisis. To get back on track and plan ahead, spending big to ensure supply chains are robust and resilient, not lean, will be critical.

Balancing cost-cutting while ensuring the business can still function effectively is vital, especially when your biggest asset – talent – is also your biggest expense.

To walk this fine line and ensure every decision made helps safeguard business continuity and survival, the CFO should work closer than ever with HR. Together, they can master their business' data to see where skills and resources are needed most in the here and now, while planning for whatever the future may bring.

A people-driven approach is vitally important, and not just when it comes to staff and employees, but also customers. Delivering good customer experience is one thing, but right now, CFOs and finance teams getting closer than ever to their customers – and indeed their suppliers – is what will set you apart. Showing you can balance their needs with those of the business' proves that you are the partner they can trust to guide them through uncertain times, now and in the future.

Building resilience

In building resiliency, organisations need to focus on building a resilient community amongst employees, customers, partners and suppliers. Having issues of cash flow front and centre forces the cost of talent into the limelight – but it doesn't mean putting profit before people. Relooking their relationship, this is where the CFO and HR team need to come together, working more closely than ever before. Together, the CFO and HR need to evaluate skills and resources, minimise temporary and long-term loss of staff, and look after their people. All of this will build a resilient business.

Focusing on bringing an overarching view of the health of the organisation is key; data is crucial to shape every discussion, aiding in quick decisions and allowing for agility and innovation. Building resilience is not finance's job alone, this could be collaborating with the CIO and R&D teams, to ensure any future innovations align with customer strategies as well as the business' purpose. Or it could mean working more closely with HR to ensure the business can meet changing customer demands.

“ To walk this fine line and ensure every decision made helps safeguard business continuity and survival, the CFO should work closer than ever with HR. Together, they can master their business' data to see where skills and resources are needed most in the here and now, while planning for whatever the future may bring.”

Right now, cloud based applications such as Enterprise Resource Planning (ERP) and Human Capital Management (HCM) are immensely valuable as they help build business resilience and innovation in an extremely complicated market. These solutions provide insights that can offer improved control over factors such as supply chain management, inventory and purchasing. They integrate systems and data, connecting systems and information so that data becomes transparent and accessible and relevant. These applications also help the organisation use business intelligence (BI) to analyse data, to create KPIs that are based on strategic targets, and measure performance versus targets to meet goals based on current market conditions.

With this strategic approach, companies are able to manage the complex balancing act more deftly between legacy and futureproof without whittling away at the bottom line. It has also stimulated greater interest in how digital applications can benefit the organisation. These applications need to support the balancing act between the business and its potential, between the CFO, CHRO, CIO and all lines of business, and ensure that they deliver more value to the organisation.

U.S. should avoid phased approach in trade talks with Kenya - Chamber of Commerce

By Andrea Shalal

The United States should work to achieve a single, comprehensive agreement with Kenya that removes barriers to trade and investment, instead of pursuing a phased approach, the U.S. Chamber of Commerce said in a document viewed by Reuters.

In comments submitted to the U.S. Trade Representative, the Chamber's U.S.-Africa Business Center said a high-standard agreement that eliminated all tariffs would boost the long-term economic outlook for both countries, and further position Kenya as a model for economic reform across Africa.

It said the bilateral negotiations would enhance work by African countries to

forge a broader African Continental Free Trade Agreement.

U.S. President Donald Trump and Kenyan President Uhuru Kenyatta announced the intention to start formal talks on what would be first U.S. bilateral trade deal with a sub-Saharan African country. The Trump administration invited comments on negotiating objectives for the talks.

Two-way goods trade between the United States and Kenya totaled \$1.1 billion in 2019, up 4.9% from 2018.

To be effective, negotiators should work out a comprehensive deal that addresses "all issues under negotiation ... rather

than seeking agreement on a subset of issues or pursuing a phased approach," the Chamber said.

It should eliminate all tariffs and address non-tariff barriers for industrial and farm goods, including U.S. tariffs on imports of steel and aluminum from



More Kenyan Flowers in U.S. Bouquets as Trade Talks to Start

Kenya is Europe's biggest supplier of flowers, shipping about \$1 billion to the continent annually before Covid-19 struck. Could it grow exports to the U.S. to assume the top spot there next?

U.S. Trade Representative Robert Lighthizer told Congress on Wednesday that talks with Kenya on what would be America's first bilateral trade deal with a sub-Saharan African country are due to start in the next couple of weeks.

Working toward a pact with the region's third-biggest economy comes as the continent as a whole is about to kick off commerce under its own new free-trade area, the world's largest. Lighthizer and Kenyan President Uhuru Kenyatta both see a bilateral deal as being complementary to continent-wide efforts to integrate trade.

"We have to get a real FTA, as much as we can, with one of the significant African countries and then see if we can profligate that and have others start doing that," Lighthizer told a House committee. "What fundamentally they need, is the legal and regulatory infrastructure for trade. They have hard-working people, they have the resources. My hope is we can develop that in Kenya and then have it spread."

A possible pact between the two nations would go against the Africa Continental Free Trade Area, or AfCFTA, experts have said.

Kenya, while expanding market access for remanufactured goods exports.

It also called for commitments to ensure U.S. access to Kenya's services market, and address IP rights and enforcement as they relate to patents, copyrights,

trademarks, and trade secrets.

In addition, the deal should eliminate forced technology transfers, include an investor-state dispute settlement mechanism, and formalize a joint commitment to follow good regulatory practices.

To facilitate digital trade, it should spell out a mutual right to transfer and store data across borders for all sectors, prohibit data localization requirements, and ban customs duties and taxes on electronic transmissions.

The region's heads of state in July 2018 agreed that no country should negotiate bilateral agreements with a third party once the bloc comes into force.

Kenyatta insists that any U.S. pact has to be done without undermining the AfCFTA.

Africa's Trailblazers

"That's why we delayed our discussions, because we wanted the Africa free-trade arrangement to kick in and come into force" in July, he said in an Atlantic Council webinar Thursday. "We're seeing ourselves as trailblazers — we're just the first because we know many will come. We hope that others will also follow through."

Some Kenyan products are among the roughly 7,000 from the continent that have duty-free access to the U.S. under the African Growth and Opportunity Act and the 1974 Generalized



System of Preferences, America's biggest and oldest trade-preference program.



The U.S. in 2015 extended AGOA, first signed into law in 2000, to 2025. While calling it a "good program," Lighthizer said its shortcoming is that it doesn't require many obligations on behalf of the African side. "We want to have trade, but we want to build up this legal and regulatory infrastructure so that people have confidence when doing business there and that will make Africa more prosperous."

In its summary of negotiating objectives with Kenya, released last month, the U.S. seeks duty-free access for its apparel and agricultural goods. The lion's share of Kenya's exports into the U.S. are clothing, followed by nuts, fruit and coffee.

Kenyatta is optimistic. "I don't believe it is in America's interest to dominate discussions or to dominate trade, because if trade is not going to be two ways, it's not in their interest and it's not in our interest."



Flower industry is picking up quite quickly, with peak in online sales”

With 33 individual companies, they supply flowers and plants to all distribution channels, importing wholesalers and the large-scale retail sector all over the world, and when looking at the past, present and future of the COVID-19 crisis, they notice that the flower industry is picking up quite quickly, with a current peak in online floral sales, he explained during the PMA Virtual Town Hall meeting.

From Covid-19 outbreak till now

After China, several other important export countries for DFG, like Germany, the UK, Italy and Switzerland went into lockdown mid-March. It had a major impact on the floral industry, with 50% of the auction volume being destroyed on March 16. Fortunately, over the last weeks, more and more countries opened up a bit and are now open or partly open for trade, and DFG's sales increased. "In China, we are again back at the volumes we were before COVID-19, and we see Switzerland, Italy, France, and Spain picking up slowly, and Germany faster. Also out of the US, the demand for flowers is increasing again, but airfreight restrictions and the increased cost (doubled) make it challenging to ship the flowers from the Netherlands. The same goes for Kenya, where only 25% of airfreight is available. This drives freight costs up and as a result the pricing of, for example, roses."

Online sales skyrocketing

In all channels, DFG is nearly back to normal

volumes, except for online sales. "At garden centers, DIY stores and wholesale, we are back at 80%, mass retail at 90%, but online is about 4 to 5 times higher compared to last year. Bear in mind that online is of course still a limited part of the total business."

Campaigns during COVID-19

In the midst of the pandemic, DFG did not sit still, doing their utmost to keep flowers (and plants) top of mind in Europe. On March 27, they launched the campaign Let Hope Bloom together with the Flower Council of Holland, and they joined forces with breeders and growers to bring 150,000 bouquets to elderly people in the Netherlands on Good Friday (April 10). In the meantime, the Dutch floriculture industry was working hard to receive support from the government, and they are now receiving two ways of support, namely a labor cost compensation and an emergency fund for floriculture, he explains.

Change in assortment

Van Zijverden sees that consumers continue to buy flowers and plants. "They keep their meaning and even with a more positive impact on people." However, the assortment at the wholesale business has changed a bit in this moment of time. "As there are no events, there is less demand for the exclusive flowers and plants, but as there is more focus on home use, decoration and the garden, the mass flowers and plants are in higher demand. In turn, this is reflected in the prices: luxury

flowers are currently cheaper in price and the mass flowers receive good prices, and people continue buying them."

Expectations post COVID-19

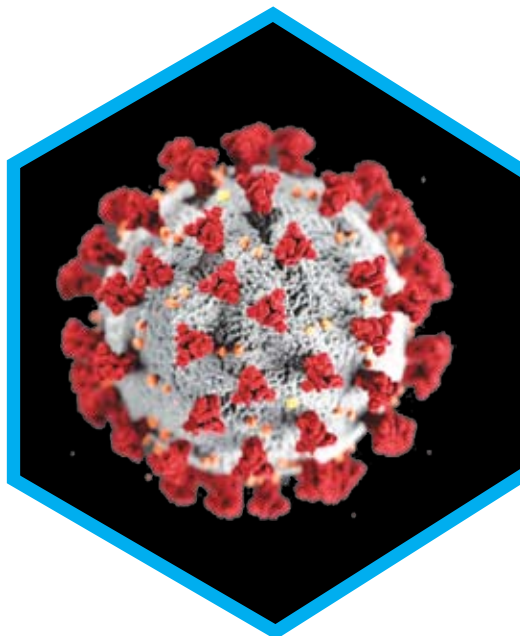
When looking at the post-COVID-19 situation, DFG expects that floral retail will keep growing at a higher pace, with "discounters" even faster than supermarkets. And as more people will stay home, it is expected that plants and flowers are in higher demand. But will there be enough flowers? That might become a question, due to the current situation at the growers.

Employment is expected to become a challenge as well. "On the one hand, unemployment will be high, but on the other hand, many labour immigrants currently have left, which leaves jobs open."

Also it is expected that companies within the floral industry will go bankrupt, but Van Zijverden stresses that those will only be the companies that weren't in a good situation before the pandemic. They expect 10% of these flower businesses to go bankrupt.

Last but not least, they expect that logistic alternative options, like seafreight, will grow. "Now, we already started to ship more flowers by sea from Colombia to the UK, but also from Kenya. And still then, after 20 to 25 days travelling, our flowers still have a guaranteed vase life of 7 days to consumers."

EU-wide survey provides a first estimate of the brutal impact of COVID-19 on the European Flower & Live Plants sector



The COVID-19 pandemic has heavily impacted and disrupted the EU Flower and Live Plants sector and market since early March 2020. In an unprecedented exercise, the four organisations representing the various segments of the sector in the EU (UNION FLEURS, ENA, AREFLH and COPA-COGECA), have joined forces and mobilised their member organisations across EU Member States to collect structured inputs in order to measure the exact impact of COVID-19 on the sector during the peak of the crisis in March and April 2020. A total of 33 contributions from 17 EU countries were received during the month of May.

This unique Survey Report provides a first measurement of the actual economic impact of COVID-19 on the EU flower & live plants sector at large. Losses reported for the sector across the EU reached an estimated total of 4.12 billion EUR in March and April 2020 in 17 EU countries across the 4 sub-sectors cut flowers, pot plants, bulbs and nursery stock, accounting for close to 10% of the annual total EU market value. This first estimate clearly demonstrates the brutal impact that the pandemic and lockdown measures implemented across the EU have had on the sector during the peak of the Spring season. These losses will never be recovered and will have to be absorbed by the thousands of companies of the flower & live plants sector in the EU. Coupled with the lack of a uniform and coordinated response so far by national governments

across the EU, this further reinforces the need for a more meaningful and direct EU financial support to the sector.

The 4 organisations have brought this strong message to the European Commission's DG AGRICULTURE during a meeting with the Deputy Director General last week. Building on the key takeaways from the Survey Report, the sector representatives stressed how the absence so far of financial support at EU level has not ensured the best conditions for the viability of production and market structures across the EU going forward.

“As the market situation is overall far from being yet normalised despite a re-start of activities in most EU countries since May, perspectives remain uncertain for the sector across the EU. A coordinated

financial support at EU level continues to be actively called for, also to preserve the integrity of the EU Single Market and secure a fair operating environment across the EU without risking any distortions of competition on the market” urged the sector representatives.

The European Commission, despite clearly acknowledging that the EU flower & live plants sector has been the agricultural sector most impacted by the COVID-19 crisis, encouraged the sector to seek support via national level from the forthcoming Next Generation EU fund of 750 billion EUR - arguing that the EU agricultural budget itself cannot be mobilised to provide direct support to this sector or any other agricultural sectors.

Sector representatives also highlighted the need for a dedicated budget for the promotion of flowers and live plants under the EU Promotion scheme and called for investing in better sector statistics at EU level on production, trade and consumption to build a more refined collective intelligence of the sector. A stocktaking meeting has been agreed with the European Commission for the end of the year to review the situation of the sector with the full year 2020 in perspective.

Floral care and handling is all about keeping cool!

Summer is around the corner, and it will most likely be another record-breaking one. On those blazing hot summer days, you are doing everything possible to stay cool, aren't you? Well, flowers require the same!

When the heat rises, flowers will – just like people – rapidly start to increase their respiration.

The need for water intake greatly increases, to maintain the right temperature and not dry out.

The best treatment for cut flowers is to maintain a constant temperature and avoid extreme heat, cold or drafts. If the temperature does spike, check the water levels and if condensation has developed on the inside of sleeves. Remove sleeves with condensation immediately, to prevent botrytis and other dangers.

Advancements in cold chain management

Adherence to correct temperatures and proper cold chain management are two of the easiest procedures to follow. Test results consistently prove it's well worth the time and effort.

In the floral industry of 2020, cut flowers are often transported over great distances to ensure that products are available to retailers. Because a majority of cut flowers in Europe are imported from other countries, it's vital to adhere to proper care and handling procedures. Product quality depends on it.

Fortunately, advancements in temperature technology and cold chain management allow most imported blooms to arrive

vibrantly nowadays. Good vase life can be guaranteed in a way that was impossible a mere decade ago.

Extending the life of flowers

The cold chain is arguably the most crucial link in the treatment process of flowers, which starts immediately post-harvest. It should remain consistent throughout the flowers' journey, from farm to transporter to wholesaler, and all the way to the flower shop.

The main factor in this cold chain process is to continually maintain a cool temperature of between 1 to 3 degrees Celsius.

As soon as flowers are picked in the field, the cold chain starts. The post-harvest process means hydrating and treating blooms in a refrigerated room to remove field heat, before they are categorised, bunched and sleeved.

As they leave the farm, the flowers stay cooled. Nowadays, just about all trucks transporting flowers include refrigeration. Even the process of loading them onto the plane is now temperature-controlled. And once the air freight lands, it's immediately placed in a refrigerated hall at the airport, where customs officials inspect it. Afterwards, it's back into a refrigerated truck and sent onwards. Consistency is Key

Although many different people contribute to the journey flowers take, it's imperative to ensure that their temperature doesn't vary too much throughout the transportation process.

Avoiding too much fluctuation is so essential because flowers can quickly become stressed when temperatures rise

and lower repeatedly. This can cause them to produce ethylene and develop condensation inside the packaging.

Relative humidity also plays a role as water in the air can hurt a flower's shelf life. Flowers in transit will lose water, resulting in what's known as "water stress," which can lead to bent necks and wilting. Relative humidity should be approximately 75-85 percent – anything higher is hazardous.

Cold storage in the shop

Flowers should be placed in cold storage as soon as they arrive in shop – at a temperature equal to what they travelled in.

Only when you are ready to sell them, take them out!

For grocery floral businesses, staff should try to keep flowers separate from produce. Although both need to go through a similar process of cooling, flowers can be easily damaged by the ethylene gas produced by ripening fruit.

Some people still think that temperature control is no longer as important as when the flowers were in transit, but this is a grave mistake. If you want to provide the best quality flowers that keep customers coming back, never forget the essential steps of care and handling:

Best Practices

Sanitation – The importance of cleanliness is underestimated. Studies have shown that dirty buckets can reduce the vase life of a rose by up to 20%. Make sure that everything – buckets, cutters,

coolers, benches, and so on – is cleaned with an approved disinfectant cleaner.

Hydrate – For best results when processing dry pack or re-processing flowers, cut and dip in an instant hydrating treatment to jump-start hydration and ensure free-flowing stems. This is a must for roses and Gerberas to help prevent bent necks.

Nourish – After a long journey, flowers need to be nourished and fed. Using a flower food solution will provide flowers with what they need to thrive.

Protect – Use a professional finishing spray to refresh, hydrate and protect your flowers. Quick and easy to apply, this is a final step before your arrangements go out the door. A simple fine-mist spray is all it takes to maximise customer satisfaction and extend the enjoyment of receiving flowers.

Customer care – As a florist, you are the flower expert. So offer customers lots of advice on the steps to follow at home. Educate them about placing flowers in direct sunlight, drafty places, or near heating and cooling vents. Remind them to change the flower-food solution every three days. And always provide enough flower food with every purchase and delivery.



“As soon as flowers are picked in the field, the cold chain starts. The post-harvest process means hydrating and treating blooms in a refrigerated room to remove field heat, before they are categorised, bunched and sleeved.”

Interplant Roses B.V. and Kolster B.V. strengthen their partnership in East Africa

Not wanting to waste any time, Kolster B.V. and Interplant Roses B.V. have already made a big step to strengthening their partnership in East Africa by adding more crops to their basket!

Interplant Roses will now represent Kolster in both indoor and outdoor crops, these will now include:

- Hydrangeas
- Scented roses
- Achillea
- Delphinium
- Ranunculus
- Eryngium
- Photinia
- Kniphofia
- Clematis
- Phlox

This bold but positive move during these testing times, shows just how committed both companies are to the cut flower industry. By broadening its basket of products and taking advantage of its already extensive network, Interplant Roses hopes to create a winning formula for all Kolster's existing clients as well as future clients.

Both parties are very excited about this new partnership!

Kenyan French beans undergo strict Checks in EU market from May 27

Effective May end, French beans from Kenya destined for the European Union were subjected to more stringent checks revealed Hosea Machuki, the chief executive of Fresh Produce Exporters Association of Kenya (FPEAK).

"FPEAK would like to bring to your attention that following a meeting of the European Commission held recently and subsequent publication in the official journal of the EU, Kenyan beans will be subjected to a 10 percent frequency of identity and physical checks," he said in a letter to members.

Machuki said that the decision by EU was due to high frequency of non-compliance of the Kenyan beans with the relevant requirements provided.



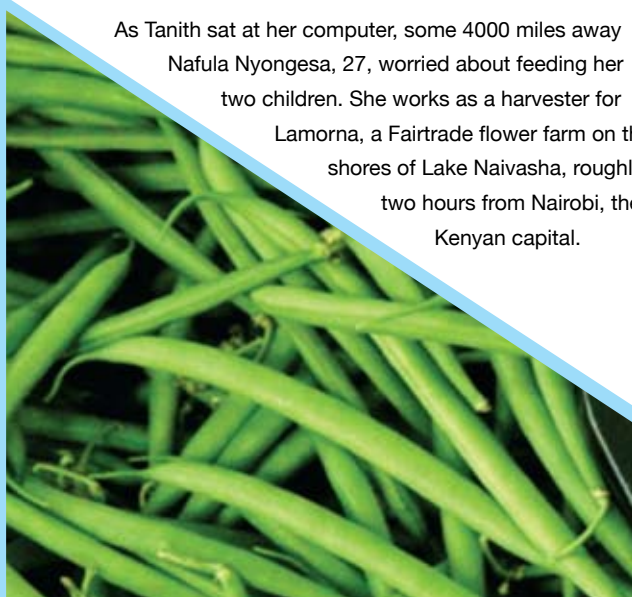
How the crisis affects both ends of the supply chain

Famed for its vibrant roses, carnations and summer flowers, Kenya is one of the biggest flower exporters in the world. So with global transport networks at a halt, UK florists like Tanith Fix-James have been left to trade on limited supply. But what of the over 70,000 flower workers in Kenya whose livelihoods are being threatened? Louise Donovan investigates.

In 2018, the UK market alone was worth £1.3billion—the majority of it coming from Kenyan flower farms after being auctioned in the Netherlands. Tanith orders half her stock from Safari Garden, a grower collective in Kenya offering mixed boxes via online market Florismart (the other half is from auctions).

While flowers often can feel like a luxury, behind them lies an intricate supply-chain of farmers, workers, wholesalers, aeroplanes, florists and supermarkets—and one that has been uniquely altered by the Covid-19 pandemic.

As Tanith sat at her computer, some 4000 miles away Nafula Nyongesa, 27, worried about feeding her two children. She works as a harvester for Lamorna, a Fairtrade flower farm on the shores of Lake Naivasha, roughly two hours from Nairobi, the Kenyan capital.





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Overview Global Avocado Market

Avocado prices are slowly dropping on the European market. In general, prices are expected to fall sharply in July and August compared to previous months. This is due to the fact that some countries continue to buy smaller volumes than usual because the coronavirus is still having a huge impact. For example, part of the food service in the US is not yet back to its old level. Peru, the world's largest producer, is therefore selling more volumes on the European market. Other production countries and regions are Mexico, Colombia, California, South Africa, Kenya, Tanzania and Uganda. Peru has a strong presence in both China and India. South African companies are currently also sourcing Peruvian avocados to supplement their own volumes, as they've had smaller home-grown volumes than expected. In China, imports are still on the rise; Colombia is perceived as a nice addition to fill the gap between the Chilean and Peruvian seasons. People are also increasingly working on their own production.

Belgium: *Low prices for the Hass; Greenskins at their usual price*

There is currently a great supply of Hass avocados, as different countries are in production, says a Belgian trader. The demand is at a fairly normal level. As a result, prices for the Hass are quite low and don't differ much from those of the greenskins. The greenskins are currently imported from Peru and South Africa and the supply is normal.

The Netherlands: *Large supply of avocados, popularity still on the rise*

The European avocado market

is currently well supplied. Importers say that there is sufficient supply from Peru and Kenya. There is also a good supply of greenskins from South Africa. These are particularly popular in Eastern Europe, Baltic countries, Italy and Greece. Due to the crop's growing popularity, more and more production areas are being introduced. Kenya, for example, continues to increase its market share, but Tanzania is also shaping up as a potential avocado exporting country, according to an importer. The good thing is that the popularity of avocados is also increasingly strong. June has been named Avocado Month by the World Avocado Organization, resulting in promotions at various supermarket chains worldwide. The number of avocado exporting countries is also on the rise. For their part, Peruvian, Chilean and also African exporters are increasingly focusing on the Chinese market. There is a lot of potential in China, first of all thanks to its huge population, but also because avocados are still virtually unknown there."

Germany: *Slight oversupply leads to pressure on prices*

Because of the coronavirus, there have been

shifts in the flow of avocado trade. The catering segment fell back sharply, while retail sales notably increased. The avocado market appears to have survived the crisis well and sales have remained virtually stable across the board. However, the limited supply led to significant price increases between April and May. Now the market has returned to somewhat calmer waters, according to an importer.

Despite a somewhat difficult start, things are now going well for the Peruvian supply. Instead of the smaller fruits that were dominant until recently, the most common size now is the 16+. "These combine well with South African goods, which tend to be a bit smaller, which means that there is now balance in the supply," says a trader. Prices have hit a very low level due to some slight oversupply and considerable pressure on prices. "We expect the situation to stabilize again in the coming weeks."



France: Consumption is lagging somewhat despite price pressure on the market

There are large stocks of avocados on the French market due to the import of Peruvian avocados, which have been arriving on the European market in large quantities in recent weeks. As a result, prices have fallen sharply. Despite promotions in supermarkets, consumption in France is lagging somewhat. After all, during the country's lockdown, the prices of avocados were expensive, but now that the fruit is cheaper again, the French still prefer other options. This means that there are now a lot of avocados available on, for example, the Rungis fresh market.

United Kingdom: Low prices due to large volumes from Peru

Large volumes of Peruvian avocados are now

arriving on the European market. In week 23, 400 reefers were arriving each week, but this figure has now increased to 600 per week. Due to the large volumes, the market is under pressure and prices are low. This situation is expected to persist for the next 2 to 3 weeks. Northern Peru is currently still in production with smaller sizes. As the harvest moves to the south of the country, larger sizes will follow. The demand on the British market is strong due to the good weather and promotions from retailers. There are also some volumes from South Africa and Kenya available.

Spain: Successful season for Spanish avocados, despite large volumes and the coronavirus

The Spanish avocado season came to a close in May with large volumes. It has also been an on-year this season. Despite the large volumes (around 80,000 tons) and the coronavirus, the demand for the smallest sizes remained high until the end of the season. Due to the high demand, the season ended earlier with high prices. Growers, traders and retailers consider this Spanish season a great success.

The 2020/2021 campaign will kick off in September with the green varieties and will continue with Hass from the end of October . An off year is

expected for the new season, which means that the harvest will be significantly lower. Therefore, Spanish traders and exporters will complement their avocado supply with the production from other countries. Eligible suppliers are Chile and Mexico. Spanish importers are currently getting their avocados from Peru. The volumes from this country have flooded the European market and caused a price drop from early June. According to a Spanish exporter, Europe can normally absorb 10 million kilos of avocados per week, but from early June, 13 to 14 million kilos of avocados have entered the European market.

Italy: Despite the lockdown, sales have continued to increase

Avocado prices are slowly falling on the European market and this also applies to Italy. A slight but steady decline is also expected for the coming months. "The marketing of avocados is growing every year," says a trader in the wholesale market of Milan. "Even during the toughest days of the lockdown, the avocado supply on the market continued to increase significantly. From March 1 to May 31, the volumes grew by 40% compared to the same period last year. The average price on the wholesale market is € 10 / 4kg (imports from South Africa and Peru). Compared to the global trade, production in Italy is a niche. Prices are therefore higher than those of imported avocados (almost double). The most common varieties are the Hass, Fuerte and Ettinger and the new season starts in Sicily in October.

South Africa: Export figures revised downwards

Avocado exports were initially estimated at 18.5 million 4 kilo boxes, but that estimate has been revised downwards



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to 16 million boxes. There are two reasons for this. Firstly, greenskin avocado exports to Europe declined at the start of the season due to the continent's lockdown. Inland transport from European ports such as Rotterdam to Eastern Europe (a market where many greenskins are shipped) was also hurdled by the lockdown.

The second reason is that the avocados are smaller in size due to the dry weather and heat in the country.

This year, several large multinationals in the avocado industry have had to supplement their avocado volumes with fruit from other producing regions, such as Peru.

Two thirds of the current export season have already been completed.

Supermarket sales have been going well. From week 21, Peruvian avocados became increasingly present on the European market. The industry is also keeping an eye on consumer behavior, trying to find out whether they prefer avocados that are left to ripen at home or ready-to-eat avocados. In the domestic market, the food service is slowly picking up again, which is giving a boost to the demand for avocados. The average domestic market price is now € 0.62 / kg (ZAR 12.21) and there is an upward trend.

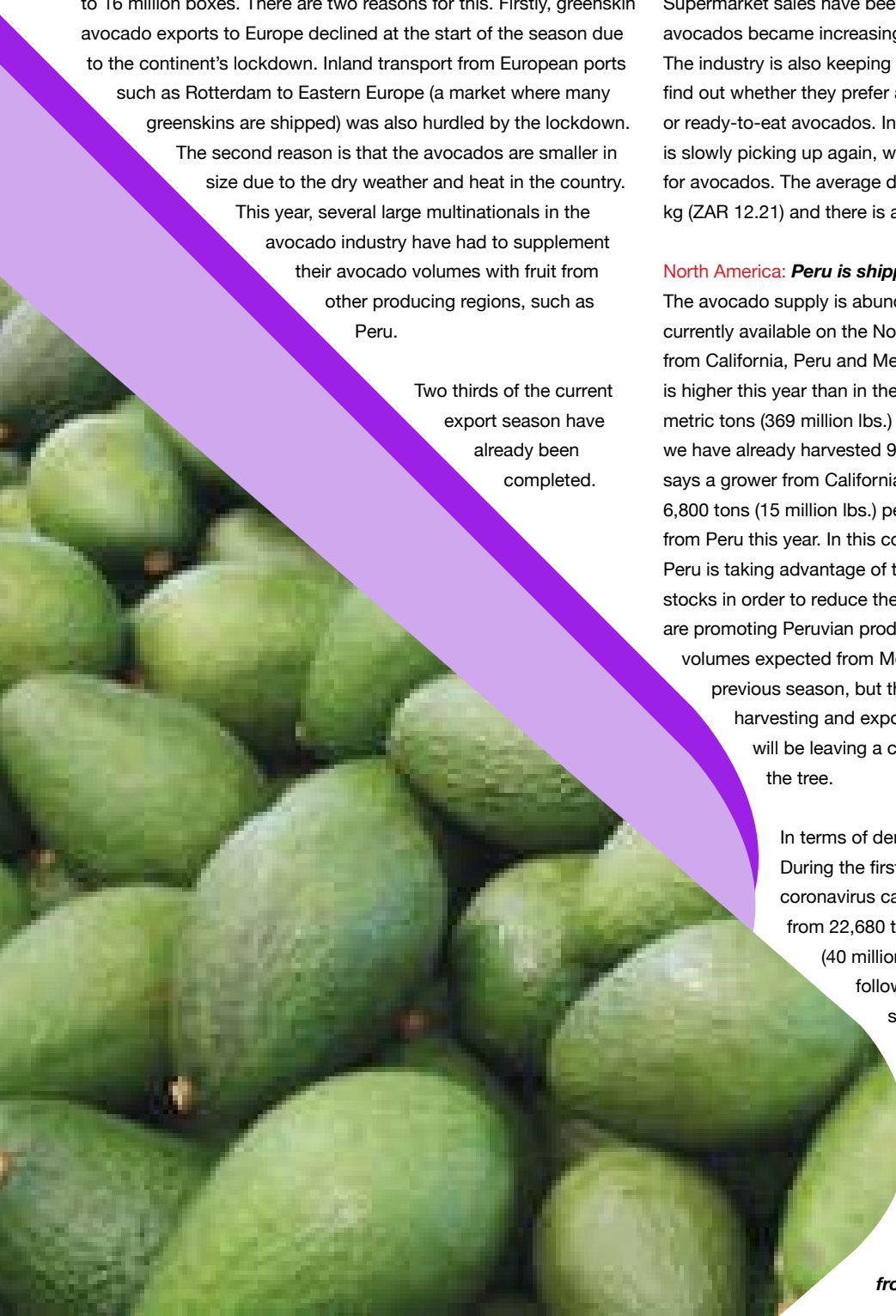
North America: Peru is shipping more avocados to the US

The avocado supply is abundant, to say the least. The avocados currently available on the North American market come mostly from California, Peru and Mexico. The expected yield in California is higher this year than in the 2019 season. "We have 167,375 metric tons (369 million lbs.) of avocados this year, from which we have already harvested 92,986 metric tons (205 million lbs.)," says a grower from California. "We expect to be able to harvest 6,800 tons (15 million lbs.) per week. More avocados are coming from Peru this year. In this country, too, stocks are abundant, and Peru is taking advantage of the fact that Mexico is trying to limit its stocks in order to reduce the price pressure. Many more retailers are promoting Peruvian produce in supermarkets this year. The volumes expected from Mexico are also greater than in the previous season, but the country has only one week left of harvesting and exporting to the US. After that, the country will be leaving a considerable amount of avocados on the tree.

In terms of demand, prices are currently still stable. During the first four weeks of the lockdown, the coronavirus caused sales to the market to drop from 22,680 tons (50 million lbs.) to 18,144 tons (40 million lbs.) per week. In the weeks that followed, the retail was able to absorb the sales intended for the food service.

The latter is currently back to 50% of the original demand for avocados; however, in the coming weeks, more market pressure is expected with the arrival of fruit from Peru and California.

Mexico: Jalisco faces competition from Peru



While Michoacán mainly exports to the US, the growers in Jalisco focus on Canada, Europe and Asia. The season in Jalisco has a short break between March and April, when there is a lower production. The new season started a little later this year, at the end of May instead of mid-May, and the growers are facing difficult market conditions due to the large volumes being shipped from Peru to the same destinations.

Peru: Production continues to increase

The Peruvian season started at the end of April. Peru's core strategy is to expand its production and gain a larger share of the world market, especially in North America and Europe. Large volumes are expected to be exported to the US from mid-June to October. The production continues to grow and at least 90,718 tons of avocados are expected to be shipped to that destination this season.

Colombia: High season to start in September

Colombia is currently in the off-season, with a low production. Growers are preparing for the start of the high season in September. Colombia is working hard to expand in the global market. For the exporters, the impact of the coronavirus on the avocado market is not yet too bad when it comes to the demand and prices.

India: New Zealand and Peru are the main import countries

Avocados have been doing well on the Indian market lately. Peru's first shipment by sea is expected to arrive soon. Thanks to a new E-commerce sales platform, avocado sales are on the rise on the Indian market. Both prices and the supply are currently stable.

Peru and New Zealand are the two main suppliers on the Indian market. Both countries have a good market share in India, depending on the season. The packaging, degree of ripeness and prices are very different for both origins; consequently, even when both countries are on the market at the same time, they appeal to different kinds of consumers.



China: Avocados from Colombia and the US for the first time this year

The import volume is smaller this year compared to the previous one. This is mainly due to the fact that many avocados are not properly processed due to a lower quality and this has an impact on sales in the local markets. At the moment, most avocados come from Peru and those volumes will increase from mid-July. China also expects the first avocados from California and Colombia this year. The first container from Colombia is expected to arrive on June 29. The importer expects this to be a nice addition to fill the gap between the Chilean and Peruvian seasons. The same importer also planted Hass avocados in Yunnan for the first time this year, which is the first step towards domestic avocado production in China.

Australia: Stable stocks, but a lower supply in the summer

Avocados Australia expects the supply to remain stable in the coming months; however, when the summer harvest arrives, the volumes are expected to be reduced, as growers in the south have few avocados on the trees. The industry continues to promote the fruit's consumption at home as sales to the food service have dried up, despite most Australian states having already introduced less strict measures.

Botrytis: Think About Where You Are

Botrytis is one of the most damaging pathogens with stems, leaves, flowers, fruit and seedlings all being potential victims. Many growers are familiar with the symptoms of Botrytis, but for some, the first encounter with this pathogen results in severe plants losses therefore early detection and control are vital if the disease is to be prevented from rapidly spreading through a crop.

Botrytis symptoms

Plants can be attacked at any stage of growth, from tiny seedlings to large, mature plants, but new succulent growth, freshly injured tissues and ageing or dead foliage are favoured by this disease. Botrytis first appears as lesions on leaves and stems which quickly produce a characteristic grey/brown furry spore development which resembles a pile of ash - hence the name 'grey or ash mould'. As the disease progresses the lesions continue to grow and encircle stems and leaf petioles and eventually cause plant collapse. Fungal spores can also develop on flower petals, particularly under growing conditions where condensation has been forming and humidity levels are high.

Post-harvest rots can often be attributed to Botrytis infection as well, especially when increased humidity in storage promotes the germinating of spores present on the surface of the cut foliage. These rots appear as large water soaked areas often covered with grey mould termed '*conidiophores*'.

Fungal life cycle

Botrytis is a disease associated with humid conditions, which are required for successful spore germination and temperatures around 15°C- 23°C, although it can thrive in cooler conditions. Spores germinate faster as the relative humidity approaches 100% and germination is most rapid where free water is present on the plant foliage such as that produced by condensation.

Once spores germinate on the plant they enter the host tissue and form mycelium, which invades the intercellular spaces within the plant tissue. This *mycelium* then forms *conidiophores*, which emerge through the infected tissue and release *conidia* into the air. If infected stems and foliage are not removed from the growing area, they become a source of *conidia*, which develop on lesions and rapidly infect healthy crops when conditions are suitable. High temperature and dry conditions eliminate the survival spores from one crop to the next.

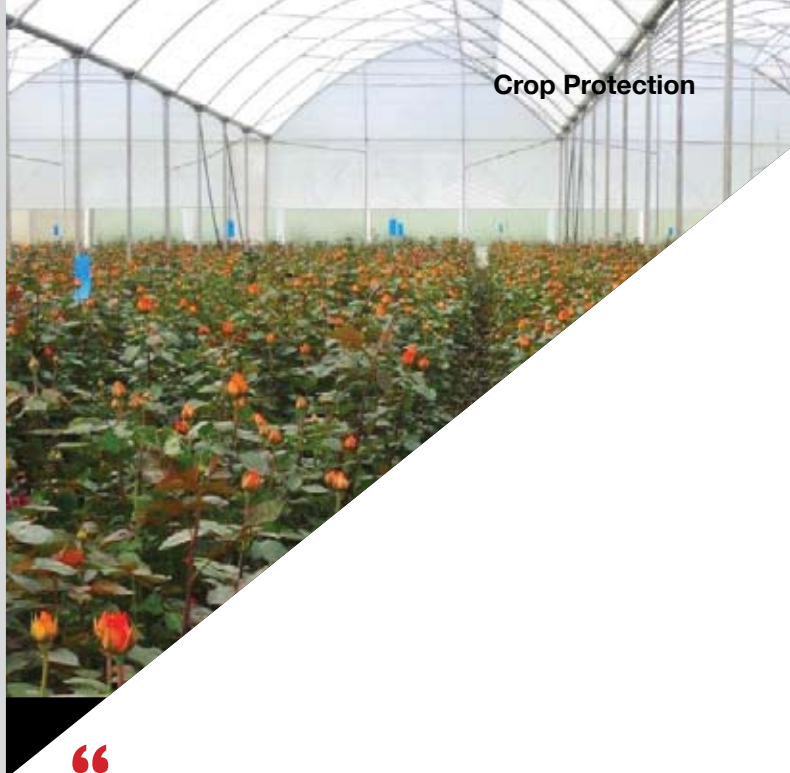
Spores are released from infected crops when the crop is disturbed as in pruning or harvesting and these spores readily infect more plants through open cuts on the stems. Spores are not only produced in large numbers on lesions on the plant, but also on plant debris left in the growing area and in piles of discard plant material outside of the plants environment. These can provide a source of re-infection and so diseased plant material needs to be

disposed off carefully to prevent further outbreaks. Spores are easily spread in air and by splashing of water, and infection can occur rapidly.

Plant stress, which results in overly vigorous or spindly plants, causes the crop to become more susceptible to infection. This stress may be in the form of over or under watering, heat, light or tissue damage. There are other factors which also influence the development of this disease, maximum sporulation takes place at wave lengths less than 345nm - and excess nitrogen fertilization can make plants more susceptible to the fungi by changing the size and wall structure of the plants. Calcium and silica enrichment of the plant tissue has been shown to reduce the susceptibility to Botrytis infection by strengthening the cell walls against initial attack by the fungus.

Crop management for Botrytis control

Environmental control of Botrytis is crucial to the management of Botrytis and is based on increasing temperature and reducing relative humidity levels to create an environment, which is not conducive to spore development and germination. Heating and venting of humid air, allowing drier air to enter the crop environment on a continual basis is important for Botrytis prevention. If warm humid air is allowed to cool in the crop overnight, condensation forms, providing the ideal conditions for spore germination of Botrytis.



“ Environmental control of Botrytis is crucial to the management of Botrytis and is based on increasing temperature and reducing relative humidity levels to create an environment, which is not conducive to spore development and germination. ”

Crop pruning and harvesting should be carried out at separate times as spores released from infected plants during pruning will easily infect cuts or open surfaces exposed during harvesting. If some time elapses between the two operations, callus tissue can form over cut or open surfaces protecting the plant from spore germination and infection.

Control of Botrytis - chemical and microbial

While there are some fungicides still effective for Botrytis control, much resistance has developed to many chemical products and their use is becoming limited. However, early control can still be achieved in some situations. Where persistent Botrytis attacks are common, the various chemical groups should be alternated to restrict the build up of resistance by the pathogen to the fungicide used. There has

been some success with the use of various botanical extracts for limiting and preventing Botrytis damage - certain citrus extracts appear to be a promising control agent although many are still under evaluation.

These days, perhaps one of the most effective controls against Botrytis is the use of biological control agents. Many natural bacterial and fungal antagonists can suppress Botrytis through competition. In some research carried out in New Zealand a few years ago, it was found that a number of fungi are antagonistic to Botrytis and will prevent the infection of fresh wounds on the plant.

Two of the most effective types are *Trichoderma* and *Cladosporium*, which have now been developed into a number of commercially available products for

pathogen control. The methods by which these fungi appear to work involve a complex interaction with the pathogen. The antagonist organism competes with the pathogen for nutrients and sites for spore germination. Also, some of the antagonists produce compounds that inhibit the germination of the pathogen's spores.

Control of Botrytis in the growing environment can be a continual battle under certain conditions, but control is possible with a combination of humidity reduction, prevention of condensation, good hygiene and chemical/microbial control agents. Just as with all other pests and disease problems, monitoring the crop for the first signs of infection is vital, as is providing the conditions, which restrict or prevent the pathogen attacking in the first place.



CIOPORA Elects President and New Board in its First Electronic Elections

In the association's first electronic elections, CIOPORA members confirm Steven Hutton, Ball FloraPlant/Star Roses & Plants (USA), as CIOPORA President, elect CIOPORA Board 2020 – 2023 with member representatives from seven countries, including two first-time electees.

Hamburg, June 11 – CIOPORA held its first electronic President and Board elections by secret ballot as a part of the virtual Annual General Meeting (AGM) 2020 on June 3-5. The new CIOPORA Board is comprised of ten individuals from breeding and licensing companies active in a broad range of horticultural cultivars:

- Steven Hutton Ball FloraPlant/Star Roses & Plants, USA – President
- Wendy Cashmore, Trajectory 762 Ltd./IPPartners, New Zealand – Co-Vice-President
- Dr Jan de Riek, ILVO Plant, Belgium – Co-Vice-President
- Dominique Thévenon, AIGN., France – Treasurer
- Michael Carriere, PhD, UC Davis Innovation Access, USA
- Bruno Etavard, Meilland International, France
- Maarten Leune, Royalty Administration International, The Netherlands
- Dean Rule, Conectiflor S.A./E.G. Hill, Ecuador
- Ingrid Slangen, Selecta one, Germany
- Peter van der Weijden, Florist Holland

and HilverdaKooij, The Netherlands.

Andrea Mansuino, NIRP International S.A. (Italy), participates in the Board automatically as the CIOPORA immediate Past-President (2011 – 2017).

Steven Hutton has been reelected by the overwhelming majority for the second three-year term as CIOPORA President. Since his election at the AGM 2017 in Toronto, the third-generation nurseryman and the past President & CEO of the Conard-Pyle Company/Star Roses & Plants has been successfully working on expanding CIOPORA's outreach, with a focus on the US, and representing breeders' interests worldwide. Thanking CIOPORA members for their trust, Steven said: "Being President of CIOPORA is a culmination of the work I have done most of my professional life, bringing new plants to the world's gardens and making sure they have robust Intellectual Property (IP) protection."

The first-time Board electees, Ingrid Slangen, Head of IP & Legal Affairs at Selecta one (Germany), and Michael Carriere, PhD, Assistant Director at UC

Davis Innovation Access (USA), bring years of experience in IP for plant innovations to their new positions. Ingrid Slangen has been chairing the CIOPORA Crop Section Cut Flowers since 2012 and has recently assumed the position of the CIOPORA's representative at the EU/CPVO. Michael Carriere has been representing UC Davis Innovation Access at CIOPORA since 2006 and brings the perspective of a world-leading public breeding institution to the table.

Along with inaugurating the new Board, CIOPORA says farewell to three outgoing Board members. After years of contributing to CIOPORA's work, Rafi Karniel, Grapa Varieties Ltd. (Israel), the CIOPORA past President Lars Henriksen, Floripartner A/S (Denmark), and the CIOPORA immediate past Co-Vice President Per Klemm, Selecta one (Germany), decided not to run for the reelection due to other professional commitments. CIOPORA thanks the outgoing Board members for years of service and thousands of pro bono hours put towards the breeder community's goals.

Cryptex®: A Cutting Edge Granulovirus Technology for the Suppression of False Codling Moth.

A little creature has been the cause of much destruction in the ornamental and horticultural industry recently. This fuss is all about the False Codling Moth (FCM – *Thaumatotibia leucotreta*). Three years ago, False Codling Moth was classified by Europe as a quarantine pest and member countries were recommended to regulate its presence. So, what is going on? Are we looking at a serious threat to the ornamental and horticultural sector?

No. Not at all, thanks to Madumbi Kenya Limited. Farmers preparing their spray programs can now include *Cryptex*® a cutting edge granulovirus technology for the suppression of False Codling Moth (FCM).

Why Choose *Cryptex*®

Speaking to *Floriculture Magazine*, Mr. Stephen Musyoka, General Manager, Madumbi Kenya said, 'Flower growers are today looking for innovative solutions and that is what we are offering. *Cryptex*® is a South African isolated granulovirus strain, manufactured in Switzerland by world renowned virus specialists, Andermatt Biocontrol.

Cryptex® achieves highly effective FCM population reduction and damage control when applied as recommended. It has a very specific target range, a unique mode of action and a user-friendly SC formulation. *Cryptex*® is non-toxic, has no MRL requirements and no with-holding period'.

Growers who have used *Cryptex*® are in agreement, the solution has proven and consistent efficacy against FCM on flowers and horticultural products. They described it as an effective granulovirus product and one of the best tools currently available to reduce target pest populations.

Cryptex® will not affect any beneficial organisms and is harmless to bees. The mode-of-action of virus products differs from chemical insecticides, making *Cryptex*® ideal for use in IPM and resistance management programs.

Mr. Musyoka confirmed that this advanced formulation allows for versatile application options with no feeding stimulant (molasses) needed. Its lipophilic characteristics ensure excellent adhesion and rain fastness once it has dried off after application. *Cryptex*® can be tank mixed with most agricultural products provided pH is correctly managed (i.e. pH of tank solution should be between 5 and 8). The product has excellent shelf life; min. 24 months at 4 °C, and longer if kept at –18 °C. It is suitable for organic and

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Mr. Stephen Musyoka
General Manager
Madumbi Kenya



New Product

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conventional agriculture and can be applied during the harvesting period.

How does *Cryptex*® work?

Cryptex®, a *Thaumatotibia leucotreta* Granulovirus is produced by Andermatt Biocontrol, Switzerland - leading virus



producers globally, with more than 30 years' experience in the commercial pest control industry.

Cryptex® contains encapsulated virus particles, which are applied just after peaks in FCM flights. It has to be ingested by FCM larvae to be effective. Once ingested the alkaline conditions in the FCM midgut dissolves the protective capsule, activating the virus particle which infects and replicates itself in the cells lining the midgut and resulting in death. Buffering of the spray mix (pH 5 to 8) is extremely important as very alkaline or acidic conditions could dissolve the protective capsule in the spray tank and decrease the virus particle's tolerance to environmental conditions, as well as overall efficacy.

The Madumbi 'team of experts' highlight 5 reasons why *Cryptex*® should be included in your growing program this season

1. 'Backed by Science, Loved by Nature' –

Cryptex® has been extensively researched and proven to achieve consistent efficacy against FCM on a variety of crops

2. An integrated strategy against FCM increases overall efficacy and manages resistance. The inclusion of biological products such as *Cryptex*® in IPM programs is becoming ever more important

3. *Cryptex*® is a quality product with no impact on beneficial organisms

4. *Cryptex*® is easy to use! *Cryptex*® can be added to tank mixtures and has been proven to be just as effective without additional adjuvants or feeding stimulants (no molasses!)

5. Application at the right time ensures best

possible population reduction



Conclusion

In summary, growers are fortunate to have access to an arsenal of potential products to reduce FCM pressure through the season. From pheromones and sterile

moths for mating disruption to virus products, entomopathogenic fungi and traditional pesticides; the choice can be overwhelming. The truth is, there is no one silver bullet when it comes to successful FCM management.

An integrated approach that combines the benefits of all these products, as well as cultural practices, is important, if not essential to managing populations for years to come. Mating disruption is the traditional early season approach to reduce egg laying and thereby reduce subsequent pest population thresholds.

As described above, the virus product is also recommended early in the season. This often begs the question, why is it necessary to use both early on? The virus as a result is pushed later in the season to crisis manage populations and this is not the ideal approach. No one product or method can be considered to be 100% effective. Moths that miss the effects of mating disruption still lay eggs in the orchard, the resulting larvae, if not appropriately controlled go on to cause damage and if not managed add to the second and third generations of the season. A virus application timed 7-10 days after the 1st moth peak with mating disruption gives you the best opportunity to limit damage and manage later season damage and population explosion.

Following a holistic approach through the rest of the season with orchard sanitation, further *Cryptex*® applications incorporating insecticides and bioinsecticides like Eco-Bb towards the end of the season creates a holistic approach that keeps FCM thresholds low, manages resistance and leaves little to no residues.

Cryptex® contains *Cryptophlebia / Thaumatotibia leucotreta* Granulovirus (CrieGV). Reg. No. PCPB(CR)1969. Madumbi Kenya Ltd, Two Lakes Business Park, Naivasha. Contact Stephen Musyoka, Tel. +254 722 888 377, Email: stephen® madumbi.co.ke.

Cryptex[®]

Reg No. PCPB(CR)1969

Cutting edge granulovirus technology for the suppression of False Codling Moth (FCM – *Thaumatotibia leucotreta*) on Ornamentals and Horticultural Crops.



Backed by Science. Loved by Nature.

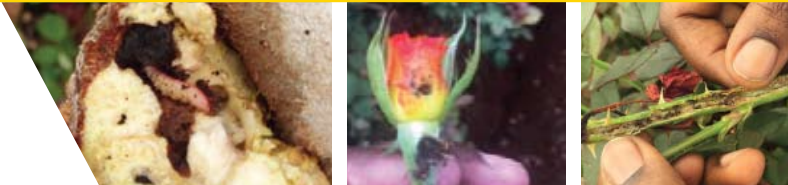
NATURAL EFFICACY THAT IS RELIABLE

Madumbi aims to change the way food is grown. We believe all people should have access to healthy, nutritious food, free of chemical residues.

Madumbi continues to develop quality biological solutions. Solutions which support growers in building bio-active soils, maximising soil and plant health, and providing proven pest management solutions which have minimal impact on the environment – and everyone in it.

Join us in leading this change.

www.madumbi.co.za | +254 722 888 377 | stephen@madumbi.co.ke





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LEPIDOPTERA PESTS AND THRIPS

BENEFITS

- ★ Excellent environmental profile
- ★ Spinosad TC is approved for use in organic agriculture.
- ★ Low toxicity to people and other mammals.
- ★ Highly effective against pests difficult to control.
- ★ Safe to most common beneficial organisms.
- ★ Unique mode of Action: IRAC Group 5.
- ★ IPM Compatible.

NB:

**Produced by fermentation of naturally occurring bacteria.
(*Saccharopolyspora Spinosa*)**



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