November - December 2022

THE LEADING FLORICULTURAL JOURNAL IN THE REGION

FLORICULTURE

Kshs. 400 Tshs. 8,800 S.A Rands 45 USD 6

President Ruto's COP27 Message

His Excellency Dr. William Samoei Ruto

Your Partner for
Inclusive & Sustainable Horticulture

ONE OF THE LEADING MANUFACTURERS AND SUPPLIERS OF VARIOUS TYPES OF GREENHOUSES, PACKHOUSES & ALLIED EQUIPMENTS ALL OVER THE WORLD

At Greenspan, we build winning teams through people participation, mutual respect, professional integrity & honesty.

We are flexible, customer friendly & strive hard to offer tailor made solu for different crops and/or climate.

Our network of agents, own offices & distributors in various countries the globe help us to keep in close contact with our market & custome

Sustainable Horticulture through innovation is our mission and we strive to work towards it.

We dream,
We think,
We innovate,
We build,
We deliver!

GREENSPAN
AGRITECH PVT. LTD

www.greenspan-agritech.com
E-mail: sales@greenspan-agritech.com
Tel:+91-2114-287083 **Fax:**+91-2114-237737
Gat No.207village-parandwadi Taluka- Maval
District-Pune 410506, Maharashtra India

GREENSPAN AGRITECH AFRICA LTD
L.R.No.13961/2, Nakuru-Nairobi Road, Nakuru, Kenya
E-mail:tushar@greenspan-agritech.com Tel:+254-705485648

GET YOUR CROP VALENTINE READY
by improving root health

VELUM® PRIME

/// Velum® Prime protects crops against nematodes from early growth cycle and allows for convenient and safe application during all stages in flowers

/// Rate of application 0.8 – 1 litre per ha (split application 400 – 500 mls, second application 35 days after 1st drench)

PREVICUR® ENERGY

/// Get a head start over downy mildew by applying Previcur Energy. Drench Previcur Energy at least 28 days before rains to manage Downy Mildew resulting to root Density development. Repeat drench after 30days

/// Rate of application 2.5 litres per ha

For more information, please contact
Simon Kihungu 0704 411 315, **Simon Ngucugua** 0704 411 301, **Phillip Kungu** 0715 407 215 **& Maurice Koome** 0704 411 325.

Contents

The Leading Floriculture Magazine

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.

PEST CONTROL FOR
EXPORT QUALITY YIELD

Tracer* 480 SC

NATURALYTE INSECTICIDE

Control of thrips, caterpillars and leaf miners in Ornamentals

Active ingredient:
Spinosad 480g/L

Application Rate:
0.2 L/Ha

WHO Classification: U

CORTEVA™ agriscience

Visit us at **corteva.com** CortevaEAF

Editorial

Dear Partners

As 2022 draws to a close I want to take the opportunity to look back on a year that turned out much differently than anyone could have imagined. While it was certainly challenging in many ways, it also showed how strong we are as a sector – even in the toughest of times.

We can take pride in the fact that just before the world had recovered from the pandemic, Russia-Ukraine war crisis began. We started experiencing energy crisis, financial crisis and lastly we had the elections.

The reliability of the service we provide and the quality of the content we offer defines us. We rose to the challenge. Our Magazines and platforms passed the test, and we proved as an organization to be both robust and extremely flexible in the face of change.

I want to thank you all for the readership and the commitment you've shown over the past year.

I hope that when you're celebrating the holidays with friends and family that you look back on the year with the same sense of accomplishment that we all should feel.

I wish you and your families all a happy holiday season.

Masila Kanyingi
Editor

FLORINEWS

Publishers of Floriculture Magazine

P.O.BOX 79396 - 00200, Nairobi.
Tel: 020-2440909 • Cell 0732-558172,
Fax: 020-2244892
Email: info@floriculture.co.ke
Website: www.florinews.com

Floriculture Team

FUNGICIDE

Disarm® 480 SC

Fluoxastrobin 480g/l

FUNGICIDE FOR CONTROL OF POWDERY MILDEW ON ROSES

The System That Puts You in Control

- A new standard in powdery mildew control
- Rapid and excellent disease control
- A broad spectrum of activity
- Low application rates

UPL OpenAg™

UPL Kenya @KenyaUpl upl_kenya

Ruto's stinging message at COP27

President William Ruto attended the annual conference as the chair of the Committee of African Heads of State and Government on Climate Change, and as President of Kenya. He delivered a statement on behalf of African Heads of State and Government on Climate Change, and Kenya at UN's 27th Conference of the Parties on Climate Change, known as COP27, on Monday evening.

"We come together for the 27th annual climate meeting, 30 years after the adoption of the UN Framework Convention on Climate Change in 1992, 25 years since we adopted the Kyoto Protocol in 1997, and 7 years following yet another historic milestone: the Paris Agreement, adopted in 2015.

When the Convention was adopted in 1992, global emissions were approximately 27 gigatons annually. This has risen to about 40 gigatons, while carbon dioxide accumulation in the atmosphere has also steadily increased. For the past eight consecutive years, documented by the U.N to be the hottest years in recorded history, each new year has been hotter than the previous year.

The whole world is reeling from the staggering impact of climate change. The spread, scale and requency of disasters like hurricanes, typhoons, wild fires and heat waves, melting sea ice and glaciers, droughts and desertification, floods and rising sea levels, in numerous regions of all continents, indicate that humanity is confronting unprecedented devastation on a global scale.

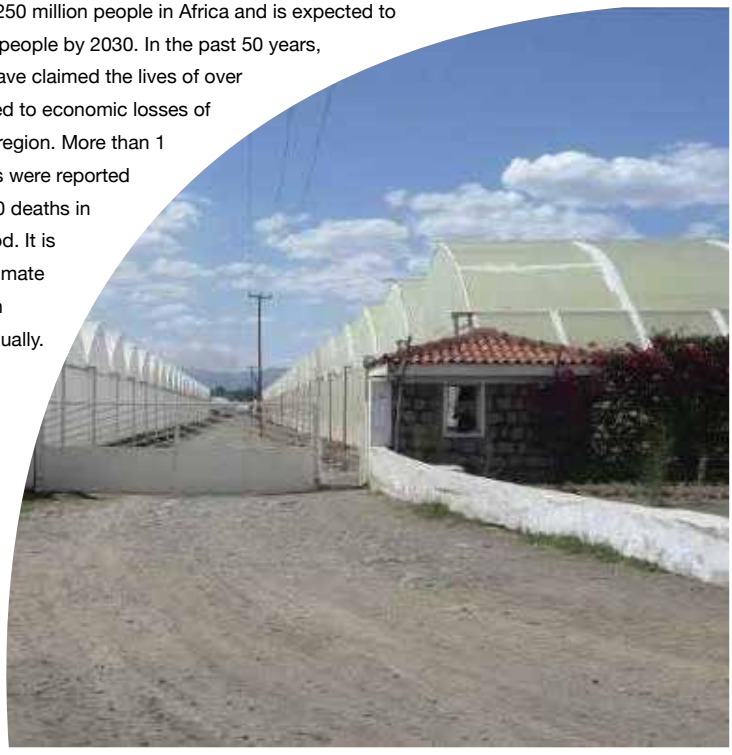
The State of Climate in Africa report lays it bare. High water stress is estimated to affect about 250 million people in Africa and is expected to displace up to 700 million people by 2030. In the past 50 years, drought-related hazards have claimed the lives of over half a million people and led to economic losses of over 70 billion USD in the region. More than 1 000 flood-related disasters were reported involving more than 20,000 deaths in Africa alone over this period. It is estimated that by 2050, climate impacts could cost African nations USD 50 billion annually.

The Horn of Africa region, including Kenya is experiencing the worst drought in 40 years. Two consecutive years without rain have visited misery on millions of people. 2.5 million livestock have died in Kenya this year alone causing economic losses of more than USD 1.5 billion.

Two days ago, we went to distribute food relief to 4.3 million affected Kenyans in an emergency programme that has forced us to re-allocate funds budgeted for education and health. The trade-offs we are forced to make between indispensable public goods is evidence that climate change is directly threatening our people's lives, health and future.

Moreover, due to drought, many children have now dropped out of school. We have been compelled to make school feeding a priority in order to keep children in class.

Kenya's world famous wildlife heritage has not been spared either, and carcasses of elephants, zebras,



wildebeests and many other wild fauna litter our parks. We have had to spend $ 3 million to supply feed and water to wildlife in the last 3 months.

Against this backdrop, the lengthy discussions at COPs, with its stalling, delaying tactics and procrastination that have hampered implementation and delivery, is simply cruel and unjust. We cannot afford to spend more time skirting around the real issues and we must break out of the open-ended, process-focused discussions we are trapped in. Further delay will make us busy spectators as calamity wipes out lives and livelihoods.

As we speak, the pledge made 13 years ago in Copenhagen, committing USD 100 billion annually, remains unfulfilled. Such egregious and unexplained default is a major cause of persisting distrust. Neither is there any sound reason for the continuing pollution.

In stark contrast, Kenya, a country with far less resources than the average developed country, has foregone polluting industrialisation and growth opportunities and intentionally invested in clean, green energy.

It must be recalled that Kenya has tremendous hydrocarbon and coal deposits which would go a long way in fuelling the engines of development. Nevertheless, due to resolute commitment, our electricity grid is 93% green.

This morning we signed a framework agreement for collaboration on the development of sustainable green industries in Kenya with an investor to produce 30 GW of green hydrogen in Kenya.

There exists opportunities in Kenya to produce 20 GW of wind-power, 10 GW of geothermal electricity and being at the equator, considerable amounts of solar energy.

Green energy production opportunities are vast in Kenya and throughout Africa. In the EAC, for example, there exists sufficient hydroelectric potential to produce 100,000 MW and if properly exploited, could generate enough clean energy for the whole continent.

Instead of struggling to power industrialisation using dirty energy, which is costly and is destroying our planet, we want to make a case for developed economies to decarbonise their production by directing industrial investments to Africa and making use of clean energy to manufacture for the world.

COP26 established the Glasgow Dialogue to formulate funding arrangements for measures to prevent, mitigate and remedy loss and damage associated with the adverse impacts of climate change.

Loss and damage is not an abstract topic of endless dialogue: it is our daily experience and the living nightmare of millions of Kenyans and hundreds of millions of Africans. A phenomenon of rising water levels in the Rift Lakes was experienced in Kenya in 2020 and generated a humanitarian crisis. Approximately 75,987 households were displaced in thirteen counties with a total population of 379,935 requiring urgent humanitarian assistance. The affected communities endured disruptions to their livelihoods; losing homes, grazing lands and farming fields while social amenities like schools, health facilities, markets, fish landing and processing facilities, once-thriving hotels, curio shops, resorts and lodges, electricity lines, and water supply and sanitation units, were swallowed by water bodies.

Loss and damage must therefore be addressed

To Page 8

From Page 7

with a level of seriousness which demonstrates fairness, urgency and consideration.

Africa contributes less than 3% of the pollution responsible for climate change, but is most severely impacted by the ensuing crisis.

It is therefore only fair and proper that this conference takes necessary measures to recognise Africa's special needs and circumstances under the Paris Agreement, in line with the convention and relevant decisions adopted by previous COPs.

Beyond the overdue, legitimate and priority concerns of resilience, mitigation, loss and damage, Africa offers unique potential to play an indispensable positive role in the planet's climate future.

Africa's vast tracts of land, deep treasures of diverse natural resources, tremendous untapped renewable energy potential, and a youthful, dynamic and skilled workforce constitute the continents irresistible credentials.

Properly deployed, these assets could be crucial in driving global mitigation efforts, while creating new economic opportunities in the continent.

I am convinced of the need to more comprehensively showcase the opportunities that abound in Africa, such as green energy, smart agriculture, de-carbonised manufacturing, e-mobility and green building, all aimed at the attainment of zero carbon by 2050.

As the coordinator of the Committee of African Heads of State and Government on Climate Change (CAHOSCC), I therefore plan to convene a continental summit focusing on climate action next year. Accordingly, you are all invited to take part in Africa's march to sustainable economic transformation and green growth.

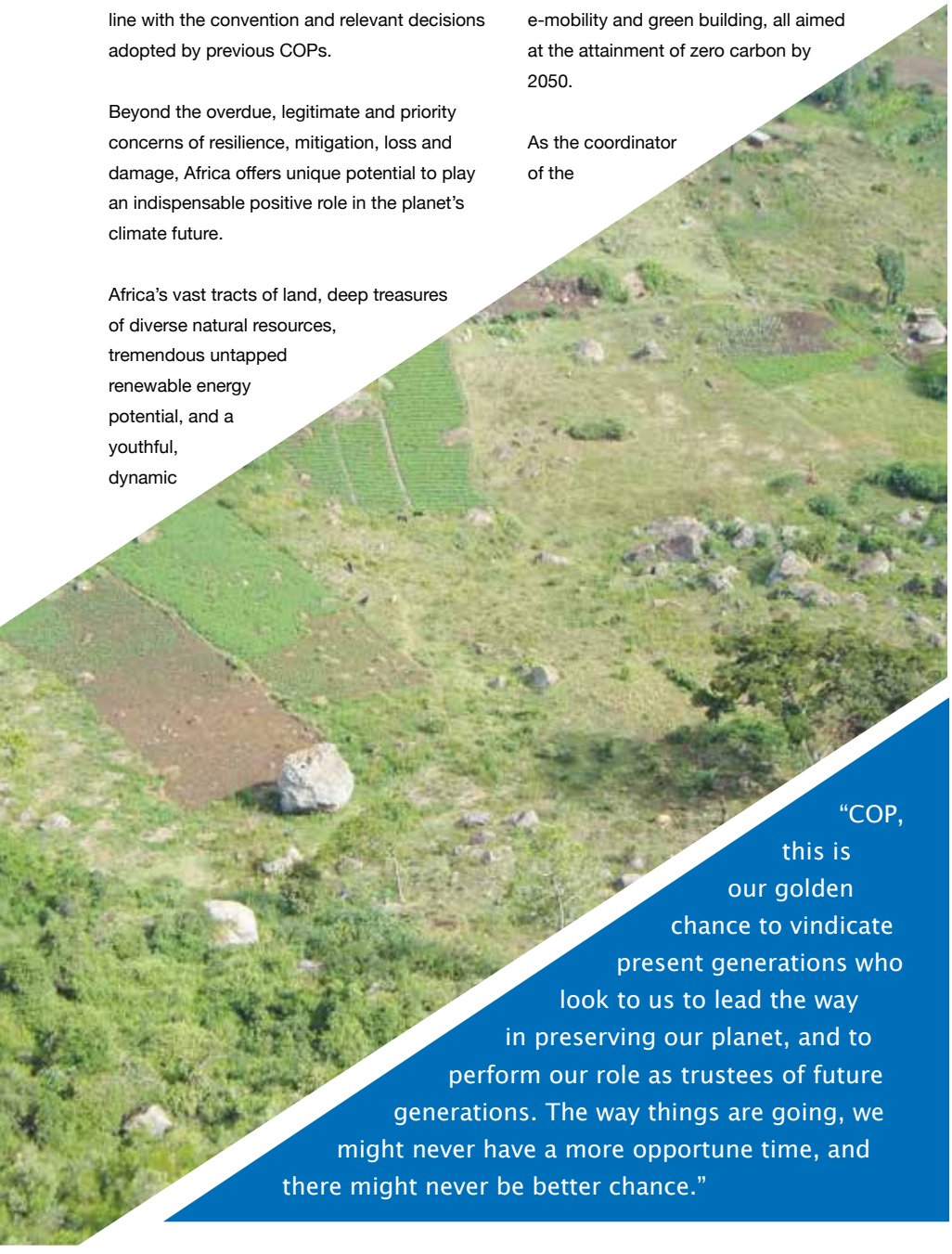
Kenya's next significant export will be carbon credits. This is why we call for simplified, more transparent carbon market systems that directly benefits communities and not just intermediaries.

Back home, I just launched an ambitious project to increase the national tree cover from the current 12.13% to 30% in the next 10 years. We intend to accomplish this by first growing 15 billion trees on approximately 10.6 million hectares of land throughout the country at an estimated cost of USD 5 billion.

In Conclusion, Excellences, Ladies and Gentlemen in the face of impending catastrophe, whose warning signs are already unbearably disastrous, weak action is unwise; no action is dangerous. At this point in the progression of this calamity, we have few choices and little time. Our discourse must focus on delivery, and our conversation must be centred on our commitments and implementation.

I call on every delegate here today to rise to the challenge of this moment, to make difficult but necessary decisions and seize transformative opportunity from the grasp of climate disaster. This means honouring spending commitments for mitigation and adaptation, and mobilising increased financial flows to those affected, especially in Africa.

By keeping our promises, and being bound by our word, we will demonstrate to people across the globe that their leaders are their honest agents and true guarantors.



"COP, this is our golden chance to vindicate present generations who look to us to lead the way in preserving our planet, and to perform our role as trustees of future generations. The way things are going, we might never have a more opportune time, and there might never be better chance."

Application: DISINFECT

Huwa-San ADVANCED WATER HYGIENE

Proven efficacy against biofilm in your irrigation system

New look, same trusted quality

- Superior stability
- No harmful residuals (H_2O_2)
- Advanced water hygiene
- No-rinse surface disinfection
- Oxygen-rich water (O_2)

Lachlan

Huwa-San is distributed by Lachlan Kenya Limited. Contact our distributor for more information on how to acquire the product.
info@lachlanafrica.com » Tel: +254 722 209474 » www.lachlanafrica.com

Horticulture

www.roamtechnology.com

ROAM TECHNOLOGY
scientific by nature

Huwa-San TR-50 (BE-REG-00501) is a registered biocide. Use biocides safely. Before use, read the label and product information.
* Only applicable for products mentioned on the corresponding certificate.

How to Fix a Manganese Deficiency in Plants

Manganese Deficiency: New leaves turn olive green as opposed to naturally green colouration

Plants require nine essential nutrients for growth including manganese. Plants do not need much manganese for health or growth, but this micronutrient is essential. Manganese is extremely important for photosynthesis. The only nutrient more essential for plants than manganese is iron. When there is manganese toxicity or deficiency, the growth of plant tissue is often severely impacted.

Plants require manganese for a variety of biological systems including nitrogen assimilation, respiration and photosynthesis. Manganese is just as important for the growth of pollen tubes, pollen germination, resisting root pathogens and the elongation of root cells. A manganese deficiency in plants often results from soils too rich in organic matter or with high pH levels.

Manganese is critical for synthesizing fatty acids, the regulation of the carbohydrate metabolism and the energy budget. An adequate supply of manganese is required to decrease nitrates within the plants.

Manganese also enhances the growth of the secondary roots and elongates cells to increase plant growth.

How does a Manganese Deficiency Affect the Quality of Your Plant?

A manganese deficiency in plants often results in chlorotic spots around the veins in mid and new leaves due to the negative impact of chloroplast development.

Manganese is critical for the process of photosynthesis or the conversion of sunlight into energy for the plant. Since manganese is unable to move throughout the plant, the symptoms of a deficiency can be seen in new growth.

The quality of the plant is impacted due to negative chlorophyll production resulting in an unnatural coloration of the leaves. New leaves turn olive green as opposed to a naturally bright green coloration. The chlorosis present around the veins results in abnormally dark veins.

What are the Symptoms of a Manganese Deficiency?

The most common manganese deficiency symptoms include:

- Plants turn a pale green
- Decreased growth
- Older and new leaves are affected
- Paleness between leaf veins
- Leaves turn brown then die
- Mottled yellowing in cabbage leaves
- Curled edges on beetroot leaves
- Yellow stripes on corn and onion leaves
- Mottled brown spots

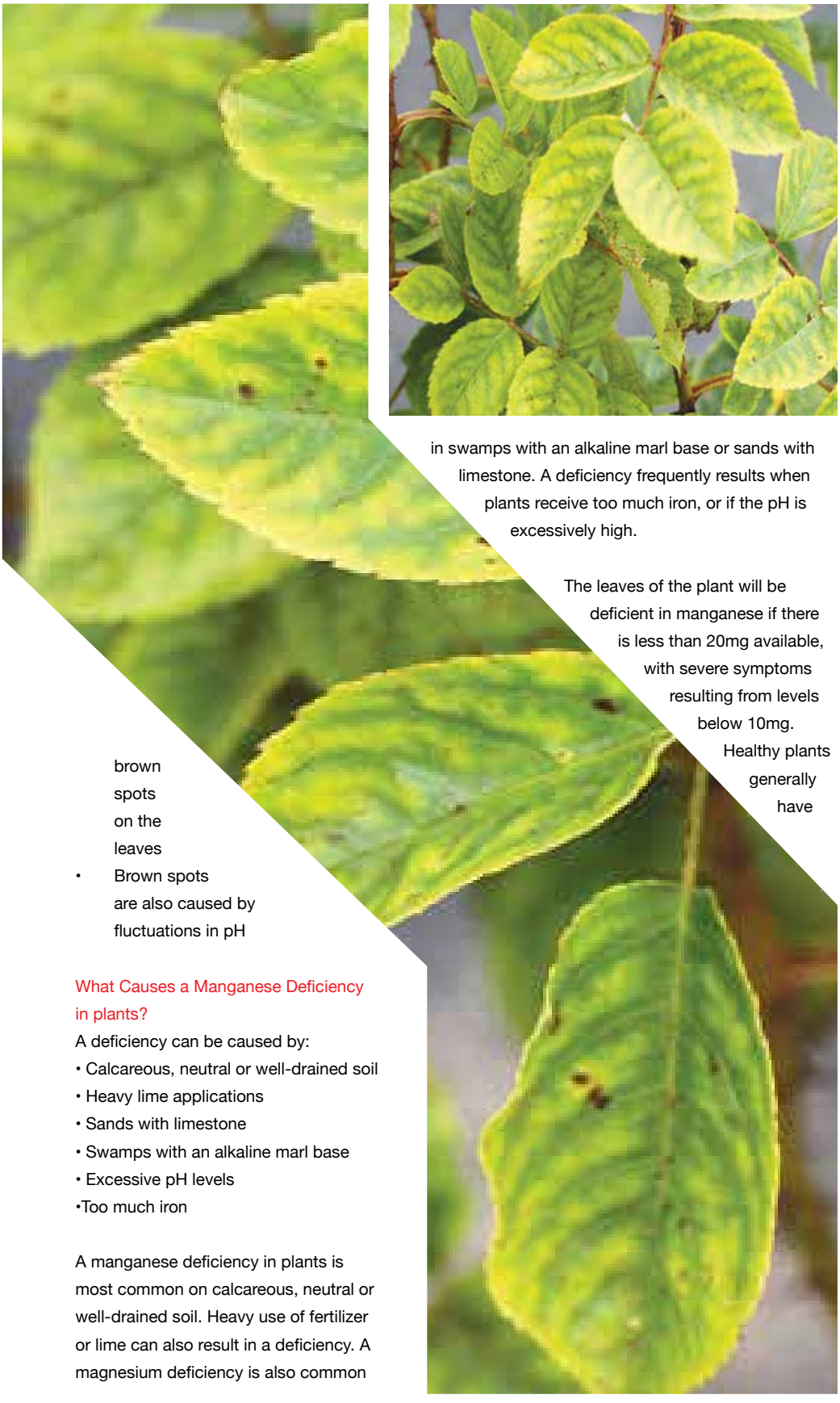
The most common symptoms are decreased growth and pale greens leaves. In many plants, the symptoms are first seen on either the oldest or newest leaves. Although the areas surrounding the veins remain a normal color, the areas in between turn a pale green. As time passes, these areas become even paler, the veins enlarge, and the leaves often turn brown and die.

The leaves on cabbage plants often become mottled and yellow due to interveinal chlorosis. Beetroot leaves become spear-shaped or triangular with curled edges, small dead patches, yellow mottling and a speckled appearance. These distinctive and common symptoms are referred to as speckled yellow. Yellow stripes appear on sweetcorn and onion leaves due to interveinal chlorosis.

The veins on tomato plant leaves stay green, but the areas located between the veins become yellow. As the manganese deficiency worsens, the yellow coloration intensifies causing a pattern like a net appearing on the leaves.

Possible Confusion with Other Symptoms

- The symptoms for manganese and iron deficiencies are similar, leading to confusion
- magnesium deficiency also causes a yellow coloration to appear around the veins
- A calcium deficiency results in similar



brown spots on the leaves

- Brown spots are also caused by fluctuations in pH

What Causes a Manganese Deficiency in plants?

A deficiency can be caused by:

- Calcareous, neutral or well-drained soil
- Heavy lime applications
- Sands with limestone
- Swamps with an alkaline marl base
- Excessive pH levels
- Too much iron

A manganese deficiency in plants is most common on calcareous, neutral or well-drained soil. Heavy use of fertilizer or lime can also result in a deficiency. A magnesium deficiency is also common in swamps with an alkaline marl base or sands with limestone. A deficiency frequently results when plants receive too much iron, or if the pH is excessively high.

The leaves of the plant will be deficient in manganese if there is less than 20mg available, with severe symptoms resulting from levels below 10mg. Healthy plants generally have between 50 and 200 mg of manganese.

How to Fix a Manganese Deficiency in Plants

For effective root absorption of manganese, the pH range should be between 6.0 and 7.0. For plants grown using hydroponics will thrive with a range between 5.5 and 6.5, but for the best absorption the level should remain under 6.0. To treat a manganese deficiency in plants, the system needs to be flushed with nutrients, pH water and manganese.

Once any excess nutrient salts and iron are removed from the system, the roots can effectively absorb the manganese due to the restoration of correct pH levels. Manganese sulphate is effective for the management of a manganese deficiency. If there is limestone in the sand, the swamps are marl-based and alkaline, or heavy lime has been used, manganese sulphate is recommended.

- Make any necessary pH adjustments for plant root absorption of manganese
- Flush the system with nutrients, pH water and manganese
- Use manganese sulphate

How Long Does It Take for a Plant to Recover from a Manganese Deficiency?

Once you have finished treating your plants for a manganese deficiency, there should not be any yellowing leaves or brown spots spreading to the other leaves within about seven days. Once a leaf has been affected by a manganese deficiency, it will most likely not turn green or recover. Pay close attention to the plants to make certain they are recovering properly.

Investing in Women Workers is a Win For the Kenya's Floriculture Sector

By Ufadhili Trust

Kenya's flower sector is one of the country's key foreign exchange earners besides, fruits/vegetables, tea, tourism, and diaspora remittances. The sector is estimated to employ over 500,000 people, with over 100,000 employed directly by flower farms, and indirectly impacts over 2 million livelihoods (Central Bank of Kenya, 2021). The country exports flowers to over 60 destinations globally, with Europe being the largest market.

The Netherlands is one of the most important trade hubs for Kenyan flowers, with about 50 percent of all Kenyan flowers being sold through the Dutch auction markets. Recently, there has been calls from various stakeholders for the sector to invest more in women workers, with over 70 percent of the workers employed directly by the sector being women.

This can be done by initiating innovative and collaborative solutions to advance women's economic resilience in the workplace. Women Win, through its Win-Win Strategies brand, is one of the stakeholders working with the flower sector in Kenya, with the aim to promote gender equality by addressing the various issues that women workers face in the workplace. According to Kimberly Schoenmaker, Programmes Coordinator, Win-Win Strategies (Women Win), investing in women is essential to the success/sustainability of many flower companies.

She notes, "Women workers form the backbone of many sectors, including the flower sector. Their labour and contributions are essential to the success of floriculture companies. It is therefore important that flower farms support women workers to ensure their wellbeing and create sustainable empowerment opportunities for them. When women workers are safe, supported, and empowered, this is not only beneficial for themselves and their communities, but is also likely to lead to greater job satisfaction, greater productivity, and overall beneficial outcomes for the flower farms."

Even though the sector has made progress in addressing some of the challenges women face, more needs to be done. Some of these challenges are; access to healthcare/sexual reproductive health rights, access to fair recruitment and promotion opportunities, career progression, labour rights, participation in decision making, amongst others. To address these ongoing issues, the industry's umbrella body, the Kenya Flower Council (KFC), initiated a number of initiatives and entered into collaboration with stakeholders, particularly women's rights organisations (WROs)/non-governmental organisations (NGOs), to mainstream gender issues.

By partnering with WROs/NGOs, the sector would benefit immensely from the expertise of these organisations on women's rights issues, from both the local and international perspectives. Ambassador Elkanah Odembo is the Acting Executive Director of Ufadhili Trust which is one of the organisations that work actively on improving gender equality within the sector notes that such collaborations make the industry more sustainable by embracing international best practices.

A Collaborative Approach

"Collaboration between flower farms and different stakeholders is critical for not only the wellbeing of the workers, but also for the sustainability of the sector." – notes Odembo. The United Nations Economic and Security Council in 1997, defined gender mainstreaming as; "The process of assessing the implications for

women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels.

It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuate…" – with the ultimate goal being to achieve gender equality.

The KFC, in collaboration with Women Win, is working with a number of WROs/NGOs on gender mainstreaming and women's economic empowerment and resilience initiatives.

These organisations include; The African Women's Development and Communication Network (FEMNET), Haki Mashinani, Workers Rights Watch, Fida Kenya and Ufadhili Trust. Clement Tulezi, the Chief Executive Officer (CEO) of KFC, notes that, over the years, women have continued to be disadvantaged due to some of the prevailing structural barriers, and as such, the industry is working with stakeholders to address the issues.

Tulezi noted, "The area of gender is critical, because about 70 percent of the workforce is women, and therefore, we have to work very closely with civil society organisations as well as to cultivate a lot of partnerships with many organisations. For us, we believe that gender mainstreaming is the way to go, because women have had some disadvantages, which are either cultural, educational and many more."

Lydia Macharia, the human resource manager at the Laurel flower farm, located in Olkalau, Nyandarua county in the greater Naivasha flower growing zone, notes that the farm has invested heavily in areas aimed at improving the wellbeing of their workers, particularly women. This is because flower farms operations are labour intensive and from a business perspective it makes sense to invest more in their workers to enhance productivity.

The company has invested in a number of areas; such as a daycare centre for the working parents as well as providing training opportunities for the workers to expand their knowledge and skills – including knitting, tailoring and catering amongst others. Lydia notes that, eventually, these efforts are going to pay off since more women are willing to work overtime, which will earn them extra income. The workers will also have access to more promotional and employment opportunities within the farm; which is also in line with company's goal of paying a living wage.

At Florensis flower farm, located in Naivasha, Florence Obonyo, the human resource/ sustainability officer notes, that the farm has also done significant work on gender mainstreaming by aligning its operations with the sustainable development goals (SDGs), such as; goal 5 on gender equality, and goal 17 on partnerships for the goals.

The company's open door policy, equal opportunities for all, non-discrimination, and prompt resolution of workers issues, has improved on productivity and satisfaction at work. This has been as a result of the company implementing fully the labour laws and other international best practices.

Salome Odero, from the WRO Haki Mashinani, advises

To Page14

From Page 13

flower farms to ensure that they have gender-inclusive policies in place, and create safe working environments for their women workers. She adds that it is important for women workers to be paid better, at least, the minimum wage to be able to take care of their families.

Further, there is the need encourage them to take up leadership positions, very important for their personal growth and sustainability of the flower farms _ a win-win situation for all parties. Inclusion of women at every level of decision making bridges the gap on inequalities and creates a platform of openness and confidence to highlight/share issues affecting them.

Salome notes, " It is important, for the management to ensure that they have polices in place that have a gender lense, to ensure that women workers are secure, but also they feel that the working environment is all encompassing… this ensures that women are given equal opportunities in terms of recruitment, promotion, self-care, and sexual reproductive care." Since the majority of the women workers occupy the lower cadres in their workplaces, there is the need to encourage, and include them in decision-making positions.

> "The area of gender is critical, because about 70 percent of the workforce is women, and therefore, we have to work very closely with civil society organisations as well as to cultivate a lot of partnerships with many organisations. For us, we believe that gender mainstreaming is the way to go, because women have had some disadvantages, which are either cultural, educational and many more.
>
> **Clement Tulezi"**

This is not only important for their personal growth and sustainability of the flower farms, but also it bridges the gap on inequalities, notes Rachel Kagioya from FEMNET- another WRO working with the flower farms. Rachel advises; "I would like to make a rallying call to every flower farm in Kenya, to ensure that the representation of women in decision making and leadership is equal.

Don't settle for a management team that has only one gender, making decisions on behalf of everybody. A safe, equal, fair, transformative and sustainable workplace is possible; we just need to have the commitment to do it."

Source: Womenwin.org

PROGRESS WITH EVERY DROP

Every cut flower grower aspires to produce quality flowers. However, foliar diseases result in reduced yields, thus, frustrating growers' efforts. Folio Gold® provides the trusted solution for progress. By applying Folio Gold, growers are able to reap immensely from its systemic & protectant properties resulting in optimized efficiency and control of foliar diseases, thus, ensuring both quality and maximum value for cut flower growers.

EVERY FLOWER TELLS A STORY™

Folio Gold®

syngenta

‘Back with a Bang!’ The Naivasha Horticultural Fair 2022

By Mary Mwende Mbithi

Long after the lifting of curfews and lockdowns, the world has reopened to an array of trade fairs, summits and conferences. Among them is the recently held Naivasha Horticultural Fair which is Africa’s biggest Horticultural fair.

It’s been two years since the world was thrust into a health emergency crisis by the infamous Covid-19 pandemic that saw the indefinite closure of all face to face business interactions indefinitely. The world then retreated to a no meet no greet phase that translated to cancellations and postponements of all events that meant to create a physical gathering. Indeed, it was one long phase…! And just like that the Naivasha Horticultural Fair went on mute!

Thumbs up to our scientists and medics and to everyone who played part in surmounting the monstrous pandemic. The country is recovering from the ravages of the Pandemic. It is because of all these efforts that the almost diminished eminence of the horticulture sector has been restored.

The 20th edition of this mega show- ‘The Naivasha Horticultural Fair’- took place on the 16th and 17th day of September, 2022 at the Naivasha Sports club in Naivasha, Nakuru County. The Fair came just in time to restore the glory of horticultural growing in Kenya.

A section of Kenyan horticultural farmers who exclusively talked to the Floriculture Magazine during the fair were happy with not only the come back but also the organisation. They all said they will be coming back in 2024 in a big way.

The fair, which is known to attract audience from all corners of the vast African continent as well as Europe, is an event that showcases products and services from stakeholders in the horticultural industry (primarily flower industry but also car manufacturers, accessories, financial institutions, etc.) It also facilitates exchange of knowledge within the industry.

This year the show was a glam of events which brought together close to 200 exhibitors. Stands and stalls owned by different agrochemicals, breeders and horticultural stakeholders were a buzz with activities. All the sellers were in a dash to establish a rapport with the buyers. Trying to make every minute count. Buyers as well as potential clients were also upbeat trying to fetch the best deals possible.

However, amidst all these, the world continues to grapple with other unprecedented shocks such as climate change and the Russia-Ukraine war. A section of Kenyan horticultural farmers who exclusively talked to the Floriculture Magazine during the fair expressed concerns over the decreasing markets in the EU following the ongoing war between Russia and Ukraine citing a 20 - 25 percent loss of their share since the war started.

Another grower highlighted the issue of over taxation regarding it exorbitant to the Kenyan grower. “We are also perturbed by the several inspection regulations of goods before they are shipped out with some of them being tiresome and strict,” he said.

Addressing the press, on the other hand, Richard Mcgonnell, the Naivasha Horticultural Fair Chairman, also said the Horticulture sector has continued to face various setbacks which are by far affecting production mentioning the inflated prices of fertilizer and chemicals as the key ones since the Russian war began.

“The horticulture sector was at the verge of recovery then suddenly the Russia-Ukraine war broke out resulting to a loss of about 20-25 percent in the EU market share” He also expressed farmers’ concerns over the lofty prices of electricity in comparison to the neighbouring East African countries asking government to assist small-scale farmers on the issue of soil testing which he said to be affecting production in the country.

“Moreover, we are deeply concerned by the overheads in this sector which are pushing growers to closure, meaning job and tax losses for the country,” he said.

All in all, the Horticulture industry remains resilient and continues to flourish defying all odds.

Folio Gold®
537.5 SC

Tell us about Folio Gold®:

Folio Gold® is a systemic and residual fungicide developed and introduced into the East African market in the year 2003 to add to the tools ornamentals growers needed for the control of devastating downy mildew. Folio Gold® has two components and offers preventive, curative, and eradicating activity against fungal pathogens.

How does the Folio Gold® work?

The two active ingredients in Folio Gold® offer growers optimized efficacy, protecting the new shoots against oomycete pathogens. Mefenoxam being a systemic fungicide is rapidly taken up by the green plant part and within 30 minutes it is transported upwards through the xylem and distributed evenly throughout the plant, providing control of fungi from within. Chlorothalonil on the other hand provides a protective film over plant surfaces and inhibits the germination of spores thereby stopping new infections. The ultimate result is improved crop health and the development of a robust crop.

What is the disease profile of Folio Gold®?

Folio Gold® is primarily used against diseases caused by oomycete fungi, such as downy mildew and late blights. Its dual action offers effective and long-lasting control against diseases. Apart from downy mildew of roses, the product has excellent control across other diseases mainly: purple blotch of onions, early and late blight in tomatoes, white rust (albugo candida), hyaloperonospora parasitica which affect mathiola and brassica families, peronospora destructor (downy mildew of onions), pseudoperonospora cubensis, pseudoperonospora humuli, peronospora spinacea and peronospora viciae. At the recommended rate for downy mildew control, Folio Gold® will provide preventative control against botrytis.

With the development and trends in the flower industry how fit is the Folio Gold® in an IPM set up?

Effective IPM programs entail a total change of mindset which can occasionally can be difficult. For better implementation of IPM growers need to be cognizant of the 3-M (Motivation, Monitoring, and Methodology) of an IPM system. The issue that growers need to address is the willingness to change and adopt the most suitable pest control method at any point without jeopardizing production and quality. Aligned with the tripod pillars of IPM Folio Gold® has favorable safety profile and is compatible with most of the beneficial bugs.

Why use Folio Gold® and how can it be positioned on a crop program?

Retailers and consumers are concerned about physical residues on the leaves of flowers. Being an SC formulation Folio Gold® doesn't leave as much physical residues on the leaves and offers a robust and effective tool for downy mildew management. This is very necessary as downy mildew incidences coincide with periods of high production and continuous harvesting. Application of Folio Gold®, therefore, offers growers a solution that is effective and at the same time with less visible residues on the foliage.

Are there other crops apart from roses on which Folio Gold® is used?

Folio Gold® label indicates that it's used across other horticulture crops as well. In roses and other ornamental crops, it's used to control downy mildew; purple blotch on onions; early and late blight in tomatoes.

When is the right time to apply for Folio Gold®?

Begin applications when conditions are favorable for disease development, but before symptoms appear, and continue at 10–14-day intervals depending on disease pressure.

Comment on Folio Gold® tank mixing with other products.

Growers want to achieve optimum results and save time and other resources by tank-mixing pesticides. It's always important to adhere to label recommendations and in the event, one is interested in cocktailing, one should first do their own compatibility and crop tolerance test on the target crop and varieties before wholesome application.

What are the necessary precautions to consider when using Folio Gold®?

For sustainable use and long-term performance, its recommended to alternate Folio Gold® with products having different modes of action such as Revus and Ortiva. Folio Gold® 537.5 SC should be used in accordance with FRAC guidelines for phenyl amide products to maintain long-term effectiveness on downy mildew.

All safety precautions including proper use of Personal Protective Equipment and observance of RE-entry intervals should be observed when using the product. Empty pesticide containers should be disposed off safely according to the label and laid down regulations.

Give us your parting shot.

There is heightened competitiveness in the market space and the cost of production cannot be overlooked. Folio Gold® 537.5 SC is an excellent fit for downy mildew management in any cropping system. It is cost-effective and offers growers value for every penny spent. Folio Gold® provides a strong foundation for the crop to fight against diseases, thus helping the crop to express its full potential.

For more information about Folio Gold and other Syngenta portfolio visit the website using the link below. https://www.syngentaornamentals.co.ke/product/crop-protection/fungicides/folio-gold

How Cold Chain Remote Temperature Monitoring Devices Can Help Your Business Operations

By Witness Omoga

Cold chain monitoring devices are a powerful tool for fleets transporting food, flowers, medicine, or other goods that must be maintained at a certain temperature throughout the shipping process. The devices provide real-time temperature data so you can avoid spoilage or waste in your supply chain. For example, temperature monitoring systems allow fleets to monitor temperatures in transit to ensure proper temperatures are maintained.

What is cold chain temperature monitoring?

Cold chain monitoring devices, also known as temperature data loggers, are wireless sensors that leverage the Internet of Things (IoT) technology to provide real-time temperature data. These temperature data logging devices are commonly placed in reefers, refrigeration units, or cold rooms to help fleet managers, cold chain managers, and customers understand the temperature of various products in real-time. These temperature monitoring devices can be particularly useful for fleets in cold chain management that ship temperature-sensitive products to their customers, including food and beverages.

How does a cold chain temperature monitoring solution work?

A cold chain temperature monitoring solution uses wireless sensors to measure and record real-time temperatures in a remote location, like a reefer, and detect temperature changes. Real-time temperature monitoring alerts can instantly warn you if the temperature has fluctuated below or above a predetermined threshold. And with remote reefer control, you can respond at the moment to mitigate any potential damage. That means if you're hauling cold chain products, a cold chain monitoring system can provide critical temperature measurements that allow you to act before it's too late.

Preventing product spoilage: the importance of an unbroken cold chain

Whether your team stores, distributes or delivers temperature-sensitive products, an unbroken cold chain is critical. It requires precise record-keeping and if something goes wrong, it can lead to rejected loads and unhappy customers. To maintain the highest-quality product, perishable goods must be stored at a certain temperature while in transit.

This can be challenging,

> And even if a product is placed onto a truck at the correct temperature, environmental conditions, power outages, or even an open door can cause temperature exposure.

however, when a change as small as one degree can lead to thousands of dollars in spoiled products. And if you're shipping food, it's important to meet the regulations which state perishable foods must be stored at 5°C or below. If a truck is hauling a variety of items that require different temperature requirements—like poultry and fruit—the risk of a rejected load is even greater. And even if a product is placed onto a truck at the correct temperature, environmental conditions, power outages, or even an open door can cause temperature exposure that leads to a rejected load.

Rejected loads can negatively impact a fleet in several ways:

- Cost: The carrier is often required to compensate the shipper for the value of the spoiled goods through a direct payment or insurance claim.
- Waste: The carrier is often required to dispose of spoiled goods, typically in an environmentally friendly way that can often be costly.
- Inefficiency: The truck might need to be taken to a washout facility, contributing to additional mileage and costs.
- Business: A rejected haul can strain customer relations and complicate future sales.

There are solutions available locally for real-time temperature monitoring systems to keep your cold chain intact.

Many companies have started harnessing the power of IoT technology to monitor reefer truck performance and unlock preventative maintenance capabilities. There are a number of solutions available in the market that can provide monitors and cloud-based software and make it easy to oversee cold chain logistics and collect continuous temperature data for you and your end user.

Whether your fleet has box trucks or refrigerated trailers, the wireless sensors allow trucks to monitor temperature, humidity, and reefer settings in real time. You can configure automatic email alerts to detect temperature ranges, so temperatures can be quickly adjusted if necessary. Additionally, you can set a specified timeframe before a notification is shared, so something like an open door does not automatically trigger an alert.

Robust documentation is also key to proving proper cold chain management. If the recipient doesn't believe that a product was stored at -1°C to 0°C for the entire trip, you need to be able to refute this claim and defend your driver. Likewise, you'll need this information on hand if the relevant authorities come to check your paperwork.

Because the remote sensors provide continuous real-time temperature monitoring and historical records, you'll always have the documentation to quickly resolve any temperature validation issues.

Witness Omoga is the Head of Technology at Impulse Computer Solutions Ltd.

CHRYSAL CARES

Fresh flowers by sea

Chrysal Sea Freight Service

CHRYSAL

Fresh flowers by sea

Chrysal Sea Freight Service

is a unique post-harvest service concept that keeps flowers fresh and controls Botrytis during sea freight and long storage. Gives farms, bouquetmakers and importers the opportunity to use sea freight over air freight, with a significant decrease in carbon-footprint in logistics. Moreover, with the long storage concept, clients can improve on their rejection rate of cut flowers to the market and time the market better. This reduces overload and supports a more efficient supply chain.

- Helps keep flower fresh during sea freight.
- Reduces CO2-footprint by up to 92% versus air freight.
- Controls Botrytis & ethylene.
- Keeps colours fresh.
- Data monitoring and reporting by Chrysal technical team.

Test

Vase life test: untreated roses vs. treated for Sea Freight Service. The treated roses have no Botrytis, have kept their colour or even deepened it, opened uniformly and have a longer vase life.

For more information and availability go to www.chrysal.com

CHRYSAL

Maersk offers a truly end-to-end service in that they offer packing, transportation, customs services, and visibility through their Captain Peter product

Flowers by Sea
Maersk's Voage of Hope

Maersk has been offering the option of sending flowers by sea from Kenya to Europe for some time now, but it is only recently that this service has been refined and actively promoted. " After years of developing and testing, we have proven that we are now able to deliver a viable 'Ocean Product' for flowers that works," says Carl Lorenz, Managing Director, Eastern Africa area, at Maersk. On top of their ocean product, they now also offer an end-to-end service and recently started to consolidate cargo.

Why Ocean Agriculture

According to Lorenz, there are two main advantages. "Firstly cost, ocean freight is typically 40% cheaper than air freight. Secondly, there is the environmental aspect. Ocean freight is 70-80% more environmentally friendly (studies are still being concluded to determine more precisely how much) than air freight. And when then talking about shipping flowers by ocean from Kenya, Maersk has something that is proven and really works; spoilage rates for ocean shipments on our vessels this year, for example, are around 2-3%, which is similar to air freight. So, having the sea as a more cost-effective means to get flowers to market makes Kenya more competitive as a flower-growing hub."

"A viable ocean product for flowers"

"Over the past years, we have developed this muscle on the back of the avocadoes that we ship to Europe, which are also reliable and transit time-sensitive perishable cargo. We now have an ocean product that works for flowers, and that is the backbone."

In addition to the ocean product, Maersk offers a truly end-to-end service in that they offer packing, transportation, customs services, and visibility through their Captain Peter product. "This allows customers to track location, temperature, humidity, and atmospheric levels of their containers."

What's new is that Maersk now offers a 'less than a container load' (LCL) product, where they consolidate around a dozen shippers' cargo into one container. "Not all shippers can fill an entire container every week, so the LCL product makes absolute sense for boutique exporters. We manage the packing ourselves to ensure all cargo is cooled together. We rolled out this service for flowers over the last two months, and so far, we have achieved great success, Lorenz explains.

Future for ocean freight

Lorenz expects the demand for shipping flowers by sea to grow from year to year and quite exponentially for Maersk. "This is for two reasons, firstly, we now have a product that works and makes sense for our customers, and secondly, because right now, we are only scratching the surface. To put this into perspective, if we were to convert all the flower exports to ocean containers, the market would be around 500 or 40'equivalent units (FFE) per week. So far this year, we've shipped less than two weeks' worth of flower shipments by sea, so there is a lot of room for growth. Air freight will still play a major role, but the ocean has all the ground to make up. Additionally, with our new LCL service, we will attract the interest of more flower exporters."

Dispel any myths about shipping flowers by ocean

Lorenz was one of the panelists at the Flowers by Sea Conference that took place just prior to the IFTF Trade fair in Vijfhuizen, the Netherlands. During this conference, he and the other panelists took questions from the audience, aiming to dispel any myths about shipping flowers by sea, highlighted the benefits and talked about how Maersk had something that is proven and really works.

International Floriculture Trade Fair (IFTF)

Lorenz and his team took detailed discussions with their customers on the benefits of the ocean during the IFTF 2022. "This will hopefully drive an increased uptake of flowers by sea, which will be good for our customers, good for the environment, good for us, and good for Kenya", says one of the audience members.

We manage the packing ourselves to ensure all cargo is cooled together. We rolled out this service for flowers over the last two months, and so far, we have achieved great success, Lorenz explains.

Christopher Kulei - Managing Director, Sian Flowers Group of Farms, one of the farms that is shipping quantities of their flowers via sea.

This allows customers to track location, temperature, humidity, and atmospheric levels of their containers."

Chrysal with sustainable innovations at the IFTF and Trade Fair

This year, sustainability played a central role at the IFTF in Vijfhuizen and Trade Fair in Aalsmeer. At Chrysal, sustainability is an integral part of who we are and how we work. We believe in a zero-impact flower industry and are committed to achieving this goal with our partners, so that future generations can also enjoy sustainable flowers. At this year's fairs we will be placing the spotlight on two new sustainable innovations . Firstly our Chrysal Sea Freight Service, nominated for a Greenovation award. A unique post-harvest service concept that keeps flowers fresh and controls Botrytis during sea freight and long storage reducing the carbon footprint of transport by as much as 92%. Secondly, Arrive Alive® Eco an eco-friendly and innovative flower packaging that keeps the condition of cut flowers fresh during transport.

Chrysal Sea Freight Service

The future of transporting flowers is sea freight. Sea freight reduces the carbon footprint by as much as 92% compared to air freight, but comes with many challenges. It is time-consuming and flowers come under a lot of pressure. With these challenges in mind, Chrysal has spent more than a decade developing the Chrysal Sea Freight Service. It is a total solution and a unique post-harvest service concept that keeps flowers fresh and controls Botrytis during sea freight and long storage. Not only are the flowers treated with our Rose Dip and anti-ethylene treatment, they are also monitored by Chrysal Technical Assistants throughout the chain from harvesting through to shipping and receiving in Europe to help ensure the roses are well received after being at sea for more than 3 weeks. The service considerably reduces flower wastage and rejection rate and allows the sharing of vital data with all parties involved throughout the transport phase.

Prior to the IFTF and the Trade Fair, the Flowers by Sea conference took place. Chrysal was proud sponsor of the conference and our sea freight specialist Niels van Doorn took a seat on the panel.

Greenovation Award

This year, the ceremony of the Greenovation Award again took place on November 9th at the Trade Fair Aalsmeer. The Greenovation Award is given to a sustainable product or concept by Royal Flora Holland. We are proud to announce that our unique Chrysal Sea Freight Concept had been nominated for an award.

Arrive Alive® Eco

Online sales of flowers have grown tremendously. Consumers going to online and mobile shopping and with a simple click, a beautiful arrangement is delivered to their homes. However, it is essential to keep your flowers fresh during delivery. Chrysal introduces a sustainable solution: Arrive Alive® Eco, an eco-friendly and innovative flower packaging that preserves the condition of cut flowers during transport. The wrap and bag are made from renewable resources and industrially compostable. The wrap is made of natural materials and corn-based PLA. The bag is made of industrial compostable biopolymer and TUV Austria and OK Compost certified. Arrive Alive® Eco keeps flowers fresh and reduces water consumption and flower waste in the flower chain.

Sustainability

The IPCC reports are very clear; we all need to step up our efforts to have a sustainable future. This is why sustainability is an integral part of who we are and how we work. We want to be a truly sustainable company and inspire the entire industry. We believe in a zero impact flower industry and are committed to achieving this goal with our partners, so that future generations can also enjoy fresh sustainable flowers. We have big ambitions and want to help everyone in the flower industry. Check our website chrysalcares.com how we can help you achieve your sustainability ambitions.

Check our sustainability video; https://youtu.be/njiR-ql_HAE

Chrysal International

Sustainability has never been more relevant than today. Sustainability is at the very heart of our company, since 1929. Whether you grow, transport, sell, or simply enjoy the beauty of flowers in your own home, Chrysal offers sustainable solutions to keep them fresh longer. We strongly feel we have a responsibility towards generations to come. As a global market leader in flower food, we want to contribute to make the world more beautiful for everyone. Our ambition is to set the standard for a flower industry with zero impact.

CHRYSAL

KORDES ROSES

East Africa

How is the Flower Industry Impacting the Planet?

Flowers are a symbolic gift that is purchased and gifted across the world to commemorate and commiserate, there are, however, several environmental impacts associated with mass-produced flowers.

The scale of the flower industry

The global flower production industry (the floricultural industry) is worth approximately €64.5 billion and is typically limited to socioeconomically developed countries such as the US and European countries.

The UK and the USA represent a large market for cut flowers. In Europe, the annual consumption exceeded €2.5 billion. Between 2011 and 2015 and the annual import of roses (the most popular flour in the continent) increased from €161bn to €182bn, comprising ~25% of all imported flowers sold.

The majority of imported flowers are sourced from the Netherlands, but increasingly flowers are grown in and imported from, less economically developed countries such as Kenya and Ethiopia, due to favorable climatic conditions that facilitate year-round production, and cheaper labor costs.

Kenya and Ethiopia are among the top producer countries which include Ecuador and Sri Lanka. The largest single producer of cut flowers globally, however, is Colombia, which exported an estimated 660 million flowers in 2020. China is also an up-and-coming producer.

The demand for flowers is year-round and follows a rapid and episodic pattern which is responsible for the large environmental footprint the industry generates. Flowers must get to the end-consumer between three and five days after being harvested; there is a large economic consequence associated with not doing so, with flowers losing 15% of their value per additional day in transit.

Carbon emissions associated with the flower industry

For producers based in the northern hemisphere, large energy inputs are required for the intensive farming of fresh flowers, fueled by consumer demand. Countries such as the Netherlands must grow their flowers in greenhouses due to the cold climate and year-round cloud cover. Greenhouses are typically heated using non-renewable carbon sources and release large amounts of carbon dioxide. Beyond production, the carbon dioxide output is exacerbated by transportation and storage processes. The carbon footprint is also not associated with increased travel distances; a study comparing the carbon footprint of flowers exported from the Netherlands as compared to Kenya demonstrated that more carbon emissions were associated with the Netherland-sourced flowers.

This discrepancy is attributed to the higher carbon cost associated with the production phase in the Netherlands. Overall, the Netherlands generates a 6-fold greater carbon emission for roses compared with Kenya.

Pesticides use and the environmental impact associated with the flower industry

Flowers are not subject to the same regulatory

conditions imposed on growers of edible crops. As such, pesticide use is much higher for flower production; the combination of pesticides used to sustain rapid and abundant growth results in local environmental issues. This excessive use of pesticides, as well as herbicides, results in their entry into local soil, and subsequent soil leaching into groundwater promotes eutrophication.

The dominant environmental consequences of eutrophication includes; increased suspended particles (due to widespread macroalgal blooming), decreased water clarity and quality, and increased precipitation frequency that leads to the destruction of benthic habitat (habitats located at the lowest level of a body of water) by shading of vegetation underneath.

An additional effect of pesticide use is a sharp decline in species such as honey and resin beans as well as other pollinators. Due to the proximity with flowering plants, several pollinators a vulnerable to chronic exposure to complex mixtures of pesticides. Due to the contamination of pollen, neonicotinoids, a highly potent pesticide, have been found in ~75% of honey samples collect worldwide.

Pesticides also reduce the biodiversity of agricultural landscapes, and this form of crop management has detrimental outcomes on farming practices long-term, as the lack of biodiversity directly affects soil resilience.

Water-intensive demands of the flower industry

Flowers have a high water demand; the water footprint of one rose flower is estimated to be 7–13 liters. Associated with the energy-demanding export of flowers is additional water export. This has detrimental effects in countries such as Kenya, in which declines in local lake levels can be attributed to commercial farming in the local geography.

In Kenya, the water export from the Lake Naivasha Basin was 16 mm3 /year between 1996-2005. This lake serves as an essential water source for many flower farms in Kenya owing to its position at high altitude and high sunshine availability alongside serving as an abundant source of water. In addition, the lake is associated with the deterioration of the lake's biodiversity due to changes in pH associated with pesticide use as well as falling water levels.

Floriculture accounts for 45% of virtual water exports from Kenya which augments the strain on Kenya, and other water-poor countries. This strain is felt by the population and additional causes unfair water distribution among industries.

In addition to environmental impacts, there are several ethical considerations to consider. While floriculture provides a source of income for many natives in less economically developed countries, the workforce is poor, less educated relative to peers in more economically developed countries owing to the lack of infrastructure and predominantly female.

Consequently, exploitation threatens and often results in very low pay, dangerous working environments, and repressed trade unions. Ill-effects are also felt in developed countries; in the Netherlands, the extensive pesticide use threatens the health of workers.

Flowers have an invariably harmful effect on the environment. While there is an unmet need for sustainable and carbon-neutral floricultural practices, there are more environmentally friendly options available to consumers.

Purchasing flowers with certifications such as Fairtrade, Florverde, or ETI ensure certain baseline standards have been adhered to. Moreover, organically grown flowers circumvent pesticide use and sustainable brands offer recyclable or plastic-free alternatives for packaging.

Still, more sustainable forms of flowers are the potted variety; long-lasting potted plants purchased from traders with traceable origins – preferably from a local floricultural exporter or home-grown. Finally, flowers can be replaced by other gifts from small, independent, local sellers.

Brussels Airport presents Flower, Perishable Logistics Africa conferences

"Kenyan capital city Nairobi will once again host the popular Flower and Perishable Logistics Africa conferences this year on November 23 and 24. While Flower Logistics Africa (FLA) will roll out its fifth edition on November 23 at the city's Radisson Blu Hotel, Perishable Logistics Africa (PLA) will have its fourth edition on the next day at the same venue.

The two-day shipper-centric event, organized by Logistics Update Africa, a STAT Media Group publication, is being held after a gap of three years because of Covid and intermittent lockdowns imposed by different countries to contain the spread of the Coronavirus.

The two-day conference has a mix of keynotes, panel discussions, and special presentations on Africa's flower and perishables export and logistics against the backdrop of the devastating impact Covid had on farmers and growers. The deliberations, featuring stakeholders from across the value chain, will share insights from lessons learned from the pandemic and how the industry is now better prepared.

This year, Brussels Airport, one of the most important centres of economic growth in Belgium and a key air cargo gateway to Europe, presents the two-day conference.

2019 Conference File Picture

"This conference is a great opportunity to better understand and connect with origin markets which is the main driver in the flower and fresh trade. As an airport, we want to fulfill our critical role as an entry point to the best of our abilities and therefore sharing information and having the right network is key. As a presenting partner we have the opportunity to contribute to the conference in the best way possible," said Samuel Quintelier, Cargo Business Development Manager, Brussels Airport Company.

Commenting on the importance of perishable commodities as an air cargo product for the airport Quintelier said: "Currently perishables in a whole already represents more than 20 percent of total volumes handled and to grow this further within the environment we are, our belief is to excel in service and quality for these products. For example, we are currently reviewing our airside flows and processes as well as the necessary investments for the coming decades and we are determined to create the ideal environment for fresh and flowers."

Brussels Airport will lead a 90-minute session on the first day discussing and debating the opportunities in digitization, creating transparency in the phytosanitary and operational processes, and building collaboration with different stakeholders. Can airport community collaboration eliminate weak links, resort in a more efficient fresh corridor with digitization as the ultra-enabler? The panel discussion, part of this session, will be moderated by Johan Leunen, Senior Business & Network Development Manager Cargo at Brussels Airport Company.

FLA and PLA events have attracted huge participation over the last five editions and this year is no exception. The organizers are promising the conference to be fresh, cool, and fruitful for every participant who is looking for knowledge and network. Other confirmed partners supporting the two-day conference are Kenya Airports Authority (KAA), Saudia Cargo, Astral Aviation, Frankfurt Airport, Liege Airport, and Perishable Center Frankfurt.

The industry association Kenya Flower Council (KFC) continues to be our industry partner for FLA since its first edition in 2016. Fresh Produce Exporters Association of Kenya (FPEAK), Fresh Produce Consortium of Kenya (FPCK), and Avocado Society of Kenya have extended their support for PLA.

The conferences will act as a global networking platform for regional and international service providers involved in the cold chain, logistics and packaging solutions, shippers, producers, and transport providers to connect the gap between the supply chain and logistics business.


Fresh
by sea


UNION FLEURS


MEILLAND


AQUILA


DeRuiter
creating flower


Ercolano
GROUP


Subati


MAERSK


CREDIBLE BLOOMS


Innovation in Sea Freight

Mr. Clement Tulezi,
CEO - Kenya Flower Council

Kenya's flower industry keeps thriving

Over the last decade, Kenya's flower exports have increased a lot. From exporting close to 15,000 tons in 2010 to 200,000 tons a year in 2022. This is explained by Clement Tulezi, CEO of Kenya Flower Council, in a video published on the Twitter page of Kenya Export Promotion and Branding Agency.

He also stressed that Kenya is one of the top 4 producers and exporters of cut flowers and that they have held that position for a long time. "Every day, we are growing, both in terms of revenue and in terms of volumes."

Kenya is known for their roses. Almost 75% of their flowers are roses. And as they, due to the climate conditions, can be produced both at low and high altitudes, enables them to produce a large range of small and large-headed roses, in turn offering a large range.

Kenyan Airport Set to Increase Fresh Produce Exports

Uasin Gishu County partnered with Eldoret International Airport to promote the export of fresh agricultural produce through the underutilized airport. Governor Jonathan Bii toured the airport to assess the facilities. He said there was great potential to increase the production of crops, including fruits, vegetables, and flowers, for export through the airport. The facility, which is over 25 years old, has been mainly receiving imports while exporting minimal produce to the international market.

According to Airport manager Walter Agong, the runway would be extended by 500 meters so that it can accommodate large cargo planes.

Governor Bii said: "It is clear that we have what it takes to champion for exports of our produce to the international market. What is only required is empowerment and education of our farmers on the best agricultural practices to package the best from our county."

He added that the region has favorable climatic conditions that give impetus for the production of avocados, green beans, and corn, among other produce that is marketable abroad.

"We will work to ensure cargo planes that land at the airport carry back goods and produce from our farmers. This shall be made possible through engagements and understanding the required standards for exports," Bii said.

Kenyan Fresh Produce Sector Count Losses.

The local horticulture industry lost over Sh500 million in terms of value of fresh produce awaiting export to various destinations following Kenya Airways (KQ) pilots' KALPA members strike.

Agriculture Cabinet Secretary Franklin Mithika Linturi confirmed that local horticulture producers and traders were counting losses with over 100 metric tonnes of fresh produce going to waste.

Horticulture depends on KQ

Speaking at a meeting organised by French based inspection and accreditation firm - Bureau Veritas and Fresh Produce Consortium of Kenya (FPCK), Mr. Linturi said that out of the incurred loss, 75 per cent comprised of cut flowers, while 25 per cent of the loss came from raw meat.

The pressure was however eased by other airlines like KLM, Ethiopian Airline, Egypt and Air France whose services were not interrupted by the strike.

The government should call other local and international private players to invest in air cargo business to ensure smooth export of fresh produce.

As part of measures to cushion the economy, Linturi said the government will invest heavily in ensuring food safety in the local market is achieved. The CS said the same will be achieved through National Government and County Governments, and private sector establishing key infrastructure.

"For example, successive governments have invested in construction of a fresh produce market fitted with modern technologies especially cooling systems to guarantee produce longevity," he stated.

The CS added that the 2016 developed Kenyan Standard dubbed KS 1758 is part of a bigger strategy to promote food safety in the country.

Even though there is low uptake of the standards by producers, farmers, supermarkets , groceries, county markets, consolidators, pack houses and exporters, preference on safe food is picking up compared to some years ago. Application of the KS1758 I&II will enhance the quality and safety of our products hence leading to increased trade in the domestic and international markets," Mr. Linturi added.

FPCK chief executive officer Okisegere Ojepat called on the government to use all the labour relations mechanisms available to avert future strikes for the sake of the local economy.

Use labour laws

He said losses were recorded after transit cargo of fresh produce for export went stale at the airports during the standoff.

"We have lost over Sh500 million as local fresh producers through the strike. Producers and traders using KQ to lift their cargo to various export destinations suffered greatly," said Ojepat.

Horticultural Crops Directorate Benjamin Tito said even though major international airlines that equally airlift local horticulture produce to various export endpoints were not affected by the strike, industry value chains that use KQ are concerned.

Principal Secretary of livestock Harry Kimtai confirmed that the ministry in conjunction with agriculture stakeholders has formulated the Food Policy and Food Safety Bill as part of the strategy to enhance food safety locally.

The documents he said has passed through the necessary stakeholder participation and soon will be submitted to the cabinet for further perusal. "We have already prepared a cabinet memo which will be presented to the cabinet soon so that the documents can be approved and then subjected to other authorities scrutiny," said Kimtai.

"Why the policy and bill… we have been having silos and independent agencies regulating food within their own jurisdiction and this has been affecting the country in terms of not working in a coordinated manner. Thus prompting us to develop the policy and bill," he added.

Insecticide Resistance Management

Resistance may be defined as 'a heritable change in the sensitivity of a pest population that is reflected in the repeated failure of a product to achieve the expected level of control when used according to the label recommendation for that pest species'. Cross-resistance occurs when resistance to one insecticide confers resistance to another insecticide, even where the insect has not been exposed to the latter product. Clearly, because pest insect populations are usually large in size and they breed quickly, there is always a risk that insecticide resistance may evolve, especially when insecticides are misused or over-used.

Background

Following the introduction of synthetic organic insecticides in the 1940's, such as DDT, it was not long before the first cases of resistance were detected and by 1947, resistance to DDT was confirmed in houseflies. Thereafter, with every new insecticide introduction, cyclodienes, organophosphates, carbamates, formamidines, pyrethroids, Bacillus thuringiensis, spinosyns andneonicotinoids, cases of resistance appeared some 2 to 20 years after their introduction in a number of key pest species. This phenomenon has been described as the 'pesticide treadmill', and the sequence is familiar. As a result of continued applications over time the pest evolves resistance to the insecticide and the resistant strain becomes increasingly difficult to control at the labeled rate and frequency. This in turn has often led to more frequent applications of the insecticide. The intensity of the resistance and the frequency of insecticide-resistant individuals in the population both increase still further and problems of control continue to worsen as yet more product is applied. Eventually users switch to another pesticide if one is available. The genetics of the heritable resistance traits and the intensive repeated application of pesticides, together are responsible for the rapid build-up of resistance in most insects and mites.

Development

Natural selection by an insecticide allows some initially very rare, naturally occurring, pre-adapted insects with resistance genes to survive and pass the resistance trait on to their offspring. Through continued application of insecticides with the same MoA, selection for the resistant individuals continues so the proportion of resistant insects in the population increases, while susceptible individuals are eliminated by the insecticide. Under permanent selection pressure, resistant insects outnumber susceptible ones and the insecticide is no longer effective. The speed with which resistance develops depends on several factors, including how fast the insects reproduce, the migration and host range of the pest, the availability of nearby susceptible populations, the persistence and specificity of the crop protection product, and the rate, timing and number of applications made. Resistance increases fastest in situations such as greenhouses, where insects or mites reproduce quickly, there is little or no immigration of susceptible individuals and the user may spray frequently.

Mr. Billy Annan,
Interim Leader Africa

Mechanisms

There are a number of ways insects can become resistant to insecticidal crop protection and public health products:

Metabolic resistance: Resistant insects may detoxify or destroy the toxin faster than susceptible insects, or quickly rid their bodies of the toxic molecules. Metabolic resistance is the most common mechanism and often presents the greatest challenge. Insects use their internal enzyme systems to break down insecticides. Resistant strains may possess higher levels or more efficient forms of these enzymes. In addition to being more efficient, these enzyme systems also may have a broad spectrum of activity (i.e., they can degrade many different insecticides).

Target-site resistance: The target site where the insecticide acts in the insect may be genetically modified to prevent the insecticide binding or interacting at its site of action thereby reducing or eliminating the pesticidal effect of the insecticide.

Penetration resistance: Resistant insects may absorb the toxin more slowly than susceptible insects. Penetration resistance occurs when the insect's outer cuticle develops barriers which can slow absorption of the chemicals into their bodies. This can protect insects from a wide range of insecticides. Penetration resistance is frequently present along with other forms of resistance, and reduced penetration intensifies the effects of those other mechanisms.

Behavioural resistance: Resistant insects may detect or recognize a danger and avoid the toxin. This mechanism of resistance has been reported for several classes of insecticides, including organochlorines, organophosphates, carbamates and pyrethroids. Insects may simply stop feeding if they come across certain insecticides, or leave the area where spraying occurred (for instance, they may move to the underside of a sprayed leaf, move deeper in the crop canopy or fly away from the target area).

An Integrated Approach to IRM

The most effective strategy to combat

insecticide resistance is to do everything possible to prevent it occurring in the first place. To this end, crop specialists recommend IRM programs as one part of a larger IPM approach covering three basic components: monitoring pest complexes in the field for changes in population density, focusing on economic injury levels and integrating multiple control strategies.

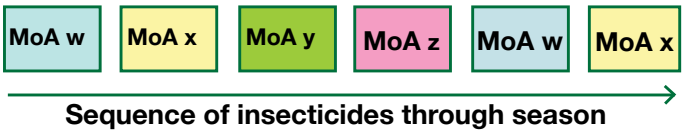
Economic Thesholds: Insecticides should be used only if insects are numerous enough to cause economic losses that exceed the cost of the insecticide plus application, or where there is a threat to public health. Exceptions are in-furrow, at-planting or seed treatments for early season pests that from experience it is known usually reach damaging levels annually. Farmers are always encouraged to consult their local advisors about economic thresholds of target pests in their areas.

Integrated Control Strategies: Incorporate as many different control strategies as possible including the use of synthetic insecticides, biological insecticides, beneficial insects (predators/parasites), cultural practices, transgenic plants (where allowed), crop rotation, pest-resistant crop varieties and chemical attractants or deterrents.

Applications of insecticide must be timed correctly, targeting the most vulnerable life stage of the insect pest. The use of spray rates and application intervals recommended by the manufacturer and in compliance with local agricultural extension regulations is essential.

It is important to mix and apply insecticides carefully. As resistance increases, the margin for error in terms of insecticide dose, timing, coverage, etc., assumes even greater importance. Recommendations from manufacturers and local advisors should be followed.

A key element of effective resistance management is the use of alternations, rotations, or sequences of different insecticide MoA classes. Users should avoid selecting for resistance or cross-resistance by repeated use within the crop cycle, or year after year, of the same insecticide or related products in the same MoA class.



It is important to consider the impact of pesticides on beneficial insects, and use products at labeled rates and spray intervals to minimize undesired effects on parasitoids and predators.

Preserve susceptible genes. Some programs try to preserve susceptible individuals within the target population by providing a refuge or haven for susceptible insects, such as unsprayed areas within treated fields, adjacent refuge fields, or attractive habitats within a treated field that facilitate immigration. These susceptible individuals may out-compete and interbreed with resistant individuals, diluting the impact of any resistance that may have developed in the population.

Consider crop residue options. Destroying crop residues can deprive insects of food and overwintering sites. This cultural practice will kill pesticide-resistant pests (as well as susceptible ones) and prevent them from producing resistant offspring for the next season. However, farmers should review their soil conservation requirements before removing residues.

IRAC Africa

IRAC Africa is the newest IRAC regional group. It was formed in early 2022 and has held three successful groups meetings on February 22, June 27 and October 25 this year in virtual calls led by the IRAC Vice-Chair and the Outreach Group leader, Billy Annan. Billy is the lead founder of the group and is also the interim leader until the substantive officers are elected.

The Africa Team consists of the following companies and representatives: ADAMA (2 representatives), BASF (11), Bayer (2), Belchim/Certis (2), Corteva (2), FMC (5) and Syngenta (3), and Billy Annan from FMC and IRAC International as ex-officio member. The company representatives attend the near quarterly meetings where objectives and plans are discussed. We would also like to add representations from UPL, and the Japanese companies in IRAC.

At the meeting in June 2022, a group consisting of Amr Moussa (BASF), Franck Parfait Krah (Bayer), Jeanne de Waal (Corteva), Marlene Van Rooyen (Corteva), Noreddine Elaasri (FMC) signed up as a coordinators and charter leaders to represent their companies, with support from Billy Annan and Eric Andersen (FMC), Nick Storer (Corteva), and Juergen Langewald (BASF).

The group has been mandated to propose, discuss, prioritize and publish key arthropod and nematicide resistance projects in the Africa region. Among the projects to be proposed are: (1) Spodoptera frugiperda (FAW) on corn in West and Central Africa, as well as in in South Africa where FAW seems to be outcompeting vs. Busseola; (2) Bemisia tabaci resistance against neonicotinoid products in West Africa and the Maghreb region; (3) Helicoverpa armigera resistance against pyrethroids in cotton in West Africa; (4) Monitoring of aphids, Tuta absoluta, Thrips populations in the Maghreb, Thrips in South Africa, Ceratitis capitata on Mango in West Africa, and on citrus in North.

Great Britain is the partner Country of IPM ESSEN 2023

British horticulture will be the focus of the world's leading trade fair for four days

The official partner country of the coming IPM ESSEN is Great Britain. From 24 to 27 January 2023, the Kingdom will be the focus of the world's leading trade fair for horticulture. Companies from the exhibition sectors of plants, technology and equipment will come to Messe Essen to present themselves and their products "made in the UK" on a British pavilion. The International Horticultural Forum will provide insights into current developments in the green sector in Great Britain. The CHA - Commercial Horticultural Association will be in charge of the preparations and activities surrounding the partner country appearance, supported by the British Department for International Trade (DIT) and the British Embassy.

"The CHA is proud to be working with the organisers of IPM ESSEN in representing Great British Horticulture there in 2023. As the partner country for this important international show we are promoting the expertise, diversity and innovative technology that Great Britain can bring to the world and commercial horticulture. We look forward to a very busy show and showcasing what Britain does best, thank you for the opportunity," says Pat Flynn, Trade Association Manager CHA.

The different climates allow the island nation to produce a wide range of horticultural products. Many new plants will be travelling to Essen: Whetman Plants International is launching two compact, fragrant, bee-friendly and drought-tolerant Choisya at IPM ESSEN: Choisya x dewitteana 'Little Bee' PBR and Choisya x dewitteana 'Little Honey Bee' PBR. New compact clematis cultivars from the Raymond J. Evison programme such as 'The Duchess of Cornwall Evipo118', 'Tsukiko™ Evipo110', 'Ravel™ Evipo122', 'Issey™ Evipo081' and 'Poseidon™ Evipo113' will be shown by Guernsey Clematis Nursery. The exhibitor Fairweather's Nurseries from the southern English county of Hampshire specialises in growing Agapanthus. The assortment comprises more than 50 varieties and will be presented at IPM ESSEN 2023. In addition to plants, trade visitors can also expect innovations in the field of technology and equipment: from environmentally friendly and growth-promoting reusable pots from Caledonian Trees and cost-effective LED lighting solutions especially for horticulture from INDO Lighting to customisable labels, packaging and sales materials from PPC Labels and sustainably produced gardening supplies from Tyne Moulds & Machinery.

Supporting programme under the British flag

Andrea Hölker, Project Manager of IPM ESSEN: "We are very pleased that Great Britain will be the partner country of the next IPM ESSEN and will put its horticulture in the focus. As the world's leading trade fair, we are thus making a valuable contribution to better networking within the international green sector."

The German-English International Horticultural Forum on 26 January 2023 at 2 p.m., for example, offers an opportunity for this. Presentations by British and German experts will shed light on current industry topics. Visitors will gain a detailed insight into British horticulture and have the opportunity to talk directly to the speakers. Panelists include Raymond J. Evison of Guernsey Clematis Nursery, Patrick Fairweather of Fairweather's Nurseries and Matt Appleby, editor of Horticulture Week, the UK's leading horticultural magazine.

Official visits to the UK pavilion are planned as part of the partner country presentation. On the first day of the fair, it will be a stop on the opening tour with industry representatives from business and politics. The CHA will also invite a delegation of British growers to IPM ESSEN 2023. Entertainment typical of the country will also be provided, including live British music.

www.rosen-tantau.com

The Cargolite concept is spreading its wings

Cargolite®, the innovative packaging concept for fresh-cut flowers, which has gained quite a lot of popularity in Kenya, is now going international. From January 2022, it is also fully available to Ecuadorian growers and will soon be available in Colombia as well.

Cargolite XL

Proven resilience to crushing, an increased pack rate, and inherent stacking ability with lower shipping costs are only some of the benefits that turn the Cargolite concept into a winning system and make it the optimized solution for the ever-increasing shipping costs and lack of air space, explains John Kowarsky, Cargolite's CEO. "The situation regarding airfreight space has become more pressing for the farms and customers. It seems that airlines are reducing the availability of flights, and therefore it has become more important today to find ways to increase the amount of flowers in the space available, and this is what we do at Cargolite: we make it all more efficient and cost-effective."

How it's done?

Every Cargolite box has a patented skeleton. The skeleton, consisting

XL Kraft packing Ecuador

of two frames made of plastic or carton, reinforces the structure of the box. This way, the load of the cartons above is supported by the frames and not by the carton walls or the flowers. The frames are designed to withhold a weight of up to 1000Kg. “In short, the packing materials now weigh considerably less than what is being used today!”

XL Ecuadorian packing

“In other words,” says Amnon Zamir, R&D manager for Cargolite, “the boxes do not crush, so we do not need the heavy wrapping around the bunches to protect them. Removing the wrapping, such as “SFK” in Kenya and “Lamina and separators” in Ecuador, and replacing them with softer alternatives allows for more space in the carton. This way, we can pack more flowers and save on airfreight by packing more stems in the volume of the box, and the farms, we can also save on packaging materials. This way, both the AWB payer and the farm save a lot.”

Fully available in Ecuador

In 2021, the Cargolite concept was extensively tried in Ecuador, and since January 2022, it is fully commercial and available to local farms and international clients buying in Ecuador.

The first client to adapt the system in Ecuador was Agrotropic, a Swiss buyer who also uses the Cargolite boxes for exports from Kenya. Agrotropic were able to considerably reduce their airfreight cost, and furthermore, the farms were themselves able to save up to 1,5 cents per stem on packaging materials. This was achieved without compromising the quality of the flowers. Recently a go-down was set up in Tabacundo, Ecuador, which supplies farms between Cayambe and Cotopaxi areas. Cargolite also teamed up with the High Control Group to monitor and assure the quality of initiation, trials, and shipments from Ecuador. Amnon, who has just returned from Ecuador, said: “After Expo Flores in Quito last month, we visited a lot of farms, and there has been a great interest in the concept. After a few farm visits, the general reaction from the farm managers to the potential savings was one of shock, surprise, and disbelief! The Pack rates grew by 9%-30%, and now, it is up to us to follow up and show them how it works.”

Sea freight pallets loaded

Sea freight

The lack of air space and the rising costs are pushing exporters to consider the sea freight option with growing interest. Colombian and Ecuadorian exporters have been using sea freight to export to the US, but for the Kenyan flower industry, it is still a challenge, especially because of the four weeks it takes ships to cross the distance to Europe. Kuehne and Nagel, and Maersk have been shipping full containers for over a year now, but the main hurdle remains keeping the right temperature of the flowers steady during the whole journey.

Since June this year, Cargolite has been participating in the sea shipment trials, “The results look very promising,” says Kowarsky, “The temperatures in the Cargolite boxes stayed stable because

To Page 40

Sea Freight

From Page 39

of the inherent ventilation in the Cargolite system. The frames of the sea freight box are external, so when the boxes are placed next to each other on the skid, a space is formed between the boxes that allow for the airflow to circulate from the bottom upwards, this way each box in the container is exposed to airflow from its four sides and keeps the temperature stable during the whole trip. So far, we have been exporting our sea freight boxes successfully to Holland and the UK, where our boxes are tested for a large supermarket chain. In Holland, the unpackers confirmed that there was no acute difference between the flowers sent in Cargolite boxes and the same flowers arriving by air."

Partnership with FlowerWatch

To further improve our performance in sea freight, adds kowarsky, Cargolite has now partnered with FlowerWatch, and together with leading parties in the industry, we are working towards an efficient and sustainable supply chain. "FlowerWatch is also very much involved with other primary stakeholders in Kenya, and together, these partnerships will enable better results when shipping cut flowers in reefers.

Expanding markets and increase range

When looking at the future, there are a lot of plans in the pipeline. Within the year, Cargolite is looking to start supplying growers in Colombia. However, changes in the Cargolite carton seems to be required. "The growers are concerned about the size of the carton. Currently, we use quite large cartons, but some markets require smaller selling units." This was also required when opening the market to exporters from South Africa, said Amnon. "We are always aware while developing new items to adapt our products to the needs of the markets. We will present the smaller cartons at our booth in IFTF (D1- 38)."

Improved logistics at JKIA

Cargolite has also recently opened a newly built go down in cooperation with Signion in the cargo village at JKIA. "It is very convenient, says Martin Kabaka, Cargolite sales manager in Kenya, now after offloading boxes of flowers at the forwarders, the growers can send their trucks to pick up Cargolite packaging materials at the airport instead of trading the congested roads of Nairobi's industrial area. It saves a lot of time, and everything runs more efficiently".

Cargolite go down at JKIA

Shared booth with Afrex at IFTF

Cargolite displayied their concept at IFTF 2022 from November 9-11 in Vijfhuizen, the Netherlands.

FLOWER & VEGETABLE FARMS IN KENYA

FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
AAA- Flowers-Simba	Roses	Rumuruti	Anil	0758349471	anil@aaagrowers.co.ke
AAA- Flowers -Chui Farm	Roses	Timau	Phanuel Ochunga	07522506026	fanuel.ochunga@aaagrowers.co.ke
AAA-Simba Farm	Roses	Rumuruti	Anil	0758349471	anil@aaagrowers.co.ke
Across Agriculture Ltd	Herbs	-	Emily Chepkemoi	0729080186	chep28@gmail.com
Africalla Kenya Ltd	Cuttings	Eldoret	Meindert	-	meindert@africalla.com
Africa Blooms	Roses	Salgaa	Ramnath Sarbande	0798190511	ramnath.sarbande@xflora.net
Afriscan Kenya Ltd	Hypericum	Naivasha	Charles Mwangi	-	-
Agriflora (K) Ltd		Nakuru, Njoro	Charles Mulemba	0721311279	cmulemba@sianflowers.co.ke
Aquila Development Co	Roses	Naivasha	Prashant Takate	0799356002	gm@aquilaflowers.com
Baraka Roses/ Mumi Flora	Roses	Ngorika	Simon Blinco	0723234927	simon@barakaroses.com
Batian Flowers	Roses	Nanyuki	Rakesh	0724631299	
Beautyline	Flowers	Naivasha	Peter Gathiaka	0721392559	peter@beautyli.com
Big Flowers	Roses	Timau	Gideon Waweru	0721178974	gideon@fontana.co.ke
Bigot Flowers	Flowers	Naivasha	Kakasaheb Jagtap	0722205271	jagtap.kt@bigotflowers.co.ke
Bila Shaka Flowers	Roses	Naivasha	Joost Zuurbier	0722204489	bilashaka.flowers@zuurbier.com
Black Petals	Roses	Limuru	Nirzar Jundre	0722848560	nj@blackpetals.co.ke
Bliss Flora Ltd	Roses	Njoro	Appachu Sachin	0789101060	appachu7@yahoo.com
Bloom Valley	Roses	Salgaa	Ramnath Sarbande	0798190511	ramnath.sarbande@xflora.net
Blooming Dale Roses Kenya Ltd	Roses	Nanyuki	Sunil	0718991182	info@bloomingdaleroses.com
Blooming Africa	-	Gilgil	Bert	0722204309	bert@blooming-innovations.com
Buds and Blooms	Roses	Nakuru	Shivaji Wagh	0720895911	shivaniket@yahoo.com
Carzan (K) Ltd KS	Summer flowers	Salgaa	Stanley Rotich	0721931710	stanley.rotich@marginpar.biz
Carzan (K) Ltd ST	Hypericum, solidago	Sobea	Thaddeus Adung'o	0716019094	thaddeus.adung'o@marginpar.biz
Carzan - Molo	Carnations	Molo	Charles Chelule	0728784081	charles.chelule@marginpar.biz
Charm Flowers	Flowers	Athiriver	Ashok Patel	020 352583	ashki@charnflowers.com
Chestnut	Vegetables	Naromoru	Gabriel Kiai	-	gabriel.kiai@aaagrowers.co.ke
Colour Crops	Hypericum	Nanyuki	Kennedy Wanyama	0716389472	colourcrops@tmu.com
Colour crops	Summer Flowers-	Bahati	Patrick Kipkurui	0727806184	bahati@colourcrops.com
Colour crops	Flowers	Naivasha	Geoffrey Mwaura	0722200972	nva@colourcrops.com
Credible Blooms	Flowers	Rumuruti	Eliud Njenga	0722382859	eliud@pigeonblooms.com
Dale Flora	Roses	Mogotio	Ajay Sutar	0711102266	ajay.sutar24@gmail.com
Desire Flowers	Flowers	Isinya	Rajat Chaohan	0724264653	rajatchaohan@hotmail.com
De ruiters	Breeder Roses	Naivasha	Fred Okinda	0722579204	Fred.okinda@deruiter.com
Double Dutch	Cuttings	-	Pharis Wainaina	0728207661	
Dummen Orange	Flowers Breeders	Naivasha	Bart Engels	0759069896	b.engels@dummenorange.com
Eco Roses	Roses	Salgaa	Madhukar Bhalerao	0799555440	Mbhalerao.eco@btfgroup.com
Elbur flora- kimman	Roses	Nakuru	Daniel Moge	0721734104	kimmanexp@gmail.com
Enkasiti Thika	Flowers	Thika	Tambe Sabaji	0734740202	enkasiti@gmail.com
Equinox	Flowers	Nanyuki	Harry Kruger	0707266956	harry@equinoxflowers.com
Everest Flowers Ltd	Flowers	Mt. Kenya	Victor Kibore	0700416334	-
Everflora Ltd.	Flowers	Thika	Ghanshyam Dusang	0721638005	manager1@everflora.co.ke
Evergreen Crops		Nairobi	Arun Singh	0721941009	arun@evergreencrops.com
Exotic Peninah	Roses/ Carnations	Athiriver	Dan	0734626942	dan@exoticfields.com
Fairy Flowers	Flowers	Limuru	Sylivester	0753444237	sylvesterkahoro@yahoo.com
Fairy Flowers	cutings	Limuru	Kennedy Kamau	0712204894	kenreal07@gmail.com
Fides Kenya Ltd	Cuttings	Embu	Bernard Marindany	0726 366 752	B.Marindany@DummenOrange.com
Finlays- Lemotit	Flowers	Kericho	Japhet Langat	0722 863527	japhet.Langat@finlays.co.ke
Fontana Ltd - Akina farm	Roses	Njoro	Mahendra Patil	0798254199	mahendra@fontana.co.ke
Fontana Ltd - Ayana Farm	Roses	Mau Narok	Osman	0712933710	osman@fontana.co.ke
Flamingo Horticulture Farm	Flowers	Naivasha	Peter Mwangi	0722204505	peter.mwangi@flamingo.net
Flamingo -Kingfisher Farm	Flowers	Naivasha	Elijah Getiro	0722873539	elijah.getiro@dudutech.com
Flamingo - Osprey		Naivasha	Jacob Wanyonyi	0722773560	jacob.wanyonyi@flamingo.net
Flamingo -Siraji Farm	Carnations, Roses	Nanyuki	Peris Muturi	0729050116	Peris.Ndegwa@flamingo.net
Flamingo -Ibis	summer, vegetables	Nanyuki	Margaret Mumbi	-	-
Flamingo Flora	Roses	Njoro	Sam Nyoro	0721993857	s.ivor@flamingoflora.co.ke
Flora ola	Roses	Solai-Nakuru	Lucas Choi	0721832710	lucas.choi@floraola.co.ke
Flora Delight	Summer flowers	Kiambu/ Limuru	Marco	0710802065	marcovansandijk@yahoo.com
Florensis Ltd	Cuttings	Naivasha	Simon Mwangi	0721519470	simon.mwangi@florensis.com
Florenza Ltd	Roses	Solai	Yogeesh	0737453768	farm.florenza@megaspingroup.com

FLOWER & VEGETABLE FARMS IN KENYA

FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
Fresh Gold Flowers Ltd	Flowers	Mt. Kenya	John Karimi	0721622294	karimi@freshgolgkenya.co.ke
Gatoka Roses	Roses	Thika	Herman Njuguna	0728 854 844	info@gatokaflowers.com
Golden Tulip	Roses	Olkalao	Umesh Choudhery	0739729658	umesh.gftl@btfgroup.com
Groove	Flowers	Naivasha	John Ngoni	0724448601	groovekenya@gmail.com
Hanna Roses Ltd	Roses	Thika	Kadlag Palaji	0723149968	kadlag.paraji@hannaroses.com
Harvest Ltd	Roses	Murungaru	Julius Oloo	0721465853	oloo@harvestflowers.com
Harvest Ltd	Roses	Athiriver	Julius Oloo	0721465853	oloo@harvestflowers.com
Harvest Ltd	Roses	Olkalou	Julius Oloo	0721465853	oloo@harvestflowers.com
Heritage Flowers Ltd	Roses	Rumuruti	Sailesh Kumar	0722203750	hfl.srk@gmail.com
Highland plantations	Cuttings & Herbs	Olkalau			production@highlandplants.co.ke
Imani Flowers	Summer Flowers	Kabarak, Nakuru	Raphael Otieno	0792302466	raphael@imaniflowers.co.ke
Interplant Roses	Roses	Naivasha	Gavin Mourittzen	0733220333	info@interplantea.co.ke
Isinya	Flowers	Isinya	Rajesh	-	pm@isinyaroses.com
Karen Roses	Flowers	Nairobi	Peter Mutinda	0723353414	pmutinda@karenroses.com
Kariki Ltd- Thika	Flowers	Thika	Miriam	0720674307	kariki.production@kariki.biz
Kariki Ltd - Nanyuki	Eryngiums	Nanyuki	Richard Fernandes	062-31023/6	bondet.production@karik.biz
Kariki Ltd - Naivasha	Summer	Naivasha	Esau Onyango	0728606878	hamwe.production@kariki.biz
Kariki Ltd - Molo	Fowers	Molo	James Oluoch	0716333717	jame.oluoch@kariki.biz
Kenflora Limited		Kiambu/ Limuru	Abdul Aleem	0722311468	info@kenfloraa.com
Kentalya	Cuttings	Naivasha	Lynette	0733549773	lynette@kentalya.com
Kikwetu Flowers	Roses	Mt. Kenya	Rathan	0787266007	
Kisima Farm Ltd	Roses	Timau	Craig Oulton	0722205828	craig@kisima.co.ke
Kreative	Roses- Breeders	Naivasha	Bas Smit	0733607755	info@kordes-ea.com
Kongoni River Farm - Gorge Farm	Roses	Naivasha	Anand Patil	0728608785	anand.patil@vegpro-group.com
Kongoni River Farm - Liki River	Flowers	Nanyuki	Madhav Lengare	0722202342	madhav@vegpro-group.com
Kongoni River Farm - Star Flowers	Roses	Naivasha	Jagtap Shahaji	0792547633	japtag@vegpro-group.com
Kongoni River Farm - Kongoni	Flowers	Timau	Kadam	0721274413	--
Kongoni River Farm -Bemack	Flowers	Timau	Balasaheb Ingwale	0717181102	balasaheb@vegpro-group.com
Kongoni River Farm - Galaxy	Roses	Naivasha	Chandrakant Bachche	0724639898	chandrakant.bachche@vegpro-group.com
Kongoni River Farm- Longonot	Roses	Naivasha	Ravi Sathe	0715173603	ravi.sathe@vegpro-group.com
Lamorna Ltd	Roses	Naivasha	Mureithi	0722238474	admin@lamornaflowers.com
Lathy Flora & Fairy	-	Kiambu	John Mbaoni	0753888126	info@lathyflora.com
Lauren International	Flowers	Thika	Dilip	0720796629	laurenflowers@accesskenya.co.ke
Laurel Investment	Roses	Olkalou	Ravindra Palshikar	0740569286	ravi.lil@btfgroup.com
Livewire	Hypericum	Naivasha	Esau Onyango	0728606878	management@livewire.co.ke
Lolomarik	Roses	Nanyuki	Topper Murry	0715 727991	topper@lolomarik.com
Lobelia	Roses	Timau	Ken Mwiti	0722475785	info@lobelia.co.ke
Maridadi Flowers	Flowers	Naivasha	Jack Kneppers	0733333289	jack@maridadiflowers.com
Maua Agritech	Flowers	Isinya	Kori	115355251	kori@mauaagritech.com
Mau Flora	Roses	Nakuru, Turi	Manju	0748254171	manju@mauflora.co.ke
Milenium Growers	Summer Flowers	-	Sushant Wankara	0731316000	sushant@marvelgreens.com
Molo Greens	Solidago, carnations	-			
Mt. Elgon Orchards	Roses	Tran Nzoia	Bob Anderson	0735329395,	bob@mtelgon.com
Mt. Kenya Alstromeria	Alstromeria	Meru	Miriam	0716162671	miriam@mountkenyaalstromerialtd
Mzuurie Group	Roses		Andrew Wambua	0724256592	awambua@moloriverroses.co.ke
Mzuurie Flowers - Maji Mazuri	Roses	Moi's Bridge, Eldoret	Mark Juma	0727471034	mjuma@majimazuri.co.ke
Mzuurie Flowers - Molo River Roses	Flowers	Kilelwa	Paula Koros	072241436	pkoross@moloriverroses.co.ke
Mzuurie Flowers - Winchester Farm	Roses	Karen		-	-
Mzuurie Flowers - Winchester Farm	Flowers	Bahati	Joseph Kasoso	0725696509	jkasoso@winchester.co.ke
Nini Farms	Roses	Naivasha	Vijay Bhosale	0702662297	vijay.bhosale@herburgroses.nl
Nirp East Africa	Roses	Naivasha	Danielle Spinks	0702685581	danielles@nirpinternational.com
Ol Njorowa	Roses	Naivasha	Charles Kinyanjui	0723986467	mbegu@olnjorowa.com
Oserian-Bohemian	Flowers	Nakuru	Chakravarthi Yashmith	0786143515	chakra.kuppusamy@oserian.com
Panda Flowers	Roses	Naivasha	-	-	gm@pandaflowers.co.ke
Panocol International	Roses	Eldoret	Mr. Paul Wekesa	0722748298	paul.wekesa@panocal.co.ke
Penta	Flowers	Thika	Tom Ochieng	0723904006	tom@pentaflowers.co.ke
Pendekeza	Roses	Nanyuki	James Kiiru	0708124381	tambuzi.sales@tambuzi.co.ke
PJ Dave Flowers	Flowers	Isinya	Pravin Yadav	0708920202	gm@pidave.com

FLOWER & VEGETABLE FARMS IN KENYA

FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
Pj Dave	Roses	Timau	Ashok Everlyn Ladkat	0702000341	fmrisingsun@pjdave.com
PJ Flora	Roses	Isinya	Santos Kulkarni	0738990521	santosh@pjdaveflora.com
Plantech Kenya Ltd	Propagators	Naivasha	Idan Salvy	0702187105	idan@plantechkenya.com
Porini Flowers	Roses	Molo	Shakti Vanjimuthu	0739676998	shakti@poriniflowers.com
Primarosa Flowers Ltd	Roses	Ol njororok, Nyandarua	Peter G. Njagi	0723575461	opm@primarosaflowers.com
Rain Forest Farmlands Ltd	Roses	Naivasha	Boniface Kiama	0722780811	bkiama@fleurafrica.com
Ravine Roses Flowers	Flowers	Eldama Ravin	Peter Kamuren	0722205657	pkamuren@karenroses.com
Redland Roses	Flowers	Thika	Aldric Spindler	0733609795	aldric@redlandsroses.co.ke
Redwing Flowers	Flowers	Nakuru	Simon Sayer	0722227278	sayer@redwingltd.co.ke
Rift Valley Roses (K) Ltd	Flowers	Naivasha	Peterson Muchiri	0721216026	fm@riftvalleyroses.co.ke
Rimi Flora Ltd	Hypericum	Njoro	Richard Mutua	0722357678	richard@rimiflora.com
Riverdale Blooms Ltd	Flowers	Thika	Antony Mutugi	0202095901	rdale@swiftkenya.com
Roseto	Roses	Salgaa	Aravindra Hirario	07417791483	gm.roseto@megaspingroup.com
Sandpro Growers	Gypsophylla	Meru	Elly Okech	0727580266	elly.okech@sandprogrowers.com
Savannah international	Geranium	Naivasha	Ignatius lukulu	0728424902	i.lukulu@savanna-international.com
Selecta Kenya		Thika	Robert Khamala	0727 467 464	r.khamala@selectakenya.com
Sojanmi Spring Fields	Roses	Njoro	Senthil	0791184851	senthil.adhikesavan@bidcoafrica.com
Sunripe Farm		Naivasha	Antony	0711827785	naivasha@sunripe.co.ke
Schreus	Roses	Naivasha	Haiko Backer	-	-
Shades Horticulture	Flowers	Isinya	Ashutosh Mishra	0722972018	info@shadeshorticulture.com
Shalima Group (k) Ltd	Flowers	Nairobi	Natarajan	0738 999149	natarajan@eaga.co.ke
Shalimar Shalimar	Flowers	Naivasha	Dinkar Wandhekar	0702418174	dinkar@eaga.co.ke
Shalimar- Kabuku Farm	Flowers	Thika	Mohan Raj	0724265777	kabukufm@eaga.co.ke
shalimar- Mahee Farm	Roses	Olkalou	Natarajan	0738999149	natarajan@eaga.co.ke
Shalimar- Mwanzi Farm	Flowers	Rumuruti	Ram	0797185821	mwanziflowersfm@eaga.co.ke
Sian Flowers - Maasai Flowers	Flowers	Isinya	Nancy Kurgat	0720780322	nkurgat@sianflowers.co.ke
Sian Flowers - Agriflora (K) Ltd	Roses	Nakuru	Charles Mulemba	-	cmulemba@sianroses.co.ke
Sian Flowers - Equator Roses	Roses	Eldoret	Nehemiah Kangogo	0725848910	nkangogo@sianflowers.co.ke
Sierra flora	Roses	Njoro	Oppaso Bandgar	720070053	farm.sierra@megaspingroup.com
Simbi Roses	Roses	Thika	Karue Jefferson	0733771652	simbi@sansora.co.ke
Sirgoek Flowers	Flowers	Eldoret	Andrew Keittany	0725 946429	sirgoek@africaonline.co.ke
Solai Milmet/Tindress	Flowers	Solai, Nakuru	Vinoj J. Kumar	0737801646	solairoses@gmail.com
Sololo Agriculture	-	Eldoret	Andrew Tubei	0722728364	atubei@sianflowers.co.ke
Subati Flowers	Roses	Subukia	Naren Patel	0712 584124	naren@subatiflowers.com
Subati Flowers	Roses	Naivasha	Naren Patel	0712 584124	naren@subatiflowers.com
Subati Flowers (Suera)	Roses	Nyandarua	George Kimathi	0724622638	gkbuuri@gmail.com
Sunfloritech-Blue Sky	Gypsophilla	Naivasha	Patel Sushant	0725622333	info@blueskykenya.com
Sunfloritech -Tulaga	Roses	Naivasha	A Duzai Rajan	0794572232	farmmgr.tulaga@btfgroup.com
Stockman rozen	Roses	Naivasha	Julius Muchiri	0722200890	julius@srk.co.ke
Syngenta Flowers - Kenya Cuttings	Flowers	Thika	Kavosi Philip	0721225540	philip.munyoki@syngenta.com
Syngenta Flowers - Pollen	Flowers	Thika	Joseph Ayieko	0733552500	joseph.ayieko@syngenta.com
Tambuzi	Roses	Nanyuki	Benard Maina	0721860080	tambuzi.sales@tambuzi.co.ke
Terrasol	Cuttings	Limuru	Benard Adwarh	0753444230	adwarh@terrasolkenya.com
Timaflor Ltd	Flowers	Nanyuki	Simon van de Berg	0724443262	info@timaflor.com
Transebel	Flowers	Thika	David Muchiri	0724646810	davidmuchiri@transebel.co.ke
Uhuru Flowers	Flowers	Nanyuki	Ivan Freeman	0713889574	ivan@uhuruflowers.co.ke
Utee Estate	Chrysanthemums	Nairobi	Appaso Mane	0737 513 844	mane.uel@btfgroup.com
United Selections	Roses -Breeder	Ngata, Nakuru	Jeroen Van Marrewijk	700176556	jvanmarrewijk@united-selections.com
V.D.Berg Roses	Flowers	Naivasha	Johan Remeeus	0721868312	johan@roseskenya.com
Valentine Ltd	Roses	Kiambu/Limuru	Joseph Kariuki	0728 093 379	joseph.kariuki@valentinegrowers.com
Van Kleef Kenya Ltd	Roses	Njoro	Judith Zuurbier		roses@vankleef.nl
WAC International	Breeder	Naivasha	Richard Mc Gonnell	0722810968	richard@wac-international.com
Waridi Ltd	Roses	Athi River	-	-	farmmanager@waridi.com
Wildfire	Roses/summer	Naivasha	Patrick Mbugua	0721639306	patrickmbugua@wildfire-flowers.com
Wilfey	Gypsophila/hypericum	Subukia	Sammy Ndung'u	0720467551	-
Wilmar Agro Ltd	Summer Flowers	Thika	Alice Muiruri	0722 321203	alice.muiruri@wilmar.co.ke
Windsor	Roses	Thika	Pradeep Bodumalla	0736 586 059	farm@windsor-flowers.com
Xpressions Flora	Roses	Njoro	Brijesh Patel	0715469732	brijesh.patel@xflora.net
Zena - Asai Farm	Roses	Eldoret	Japhet Chelal	0721770597	japhet.zenaroses@gmail.com
Zena Roses - Sosiani Farm	Roses	Eldoret	Francis Kariuki	0725444515	fkariuki@zenaroses.com

Practical news from my field visits

On my last visits to Kenya/Tanzania/Ecuador I visited a number farms and as is often the case, certain conditions were common wherever I went, I would like to share some of these practical experiences to help your production.

Water management

Water management is one of the most important basic tools for successful plant growth. I have noticed two problems with many projects:

1. Incorrect pH in the drip water.
2. Applying water by hose pipe with an incorrect pH (too high).

Many farms are using water sources e.g. borehole water, which contains the elements: Ca (Calcium), Mg (Magnesium) and HCO3 (Bi-carbonate). The contribution of the first 2 elements Ca and Mg can be taken into consideration when calculating a new fertilizer recipe.

The HCO3 however, is an element which has a buffering effect on the pH and so on the water. To be in control of the pH of your growing medium, the first step is to be in control of the pH of the water you are applying to the crop.

This could be your drip water but also the water which you apply by hose pipe. By “in control” I mean, that you apply water with a pH of 5.5-5.8. To achieve this you need a certain amount of acid to reduce the level of HCO3 in your water to about 31 ppm (0.5 mmol/l) HCO3.

On the practical side I know that most farms use only a C-tank to acidify the HCO3 from the water. When the amount of acid that you have to use is not that high, this system will work properly. But when the amount of acid is getting too high, this will not work resulting in pH fluctuations in the fertigation unit so you will not get the correct pH out of the dripper as set at the unit. This means you are applying a high pH to the growing medium (soil), which finally results in a high pH in the soil, with a negative effect on plant growth.

What’s happening

HCO3- + H+ ==> CO2 + H2O (Alkali + Acid = Carbon di-Oxide + Water)

For a complete reaction between the HCO3 and the H+, the CO2 (which is a result of the reaction) has to be released from the water. When this reaction takes place in a closed system, as in the pipes which are feeding the green houses, it doesn’t have time to fully react. This will result in the problems I have already mentioned.

To avoid the problems that lead to the lack of control of the desired pH, it is recommended to pre-acidify the water. This means that you acidify the water until the correct pH before you mix the water with the fertilizers in your system. The function of the C-tank will now be to fine tune the pH to the correct level.

To pre-acidify the water you can use a so called “day-tank”. This is a tank with water storage capacity sufficient for the whole farm for 1 day. In this tank you can apply the required amount of acid in advance and let it stay for a night so that it has time to react.

This water you can use for both, drip and hose pipe water application. The result is that you are now in control of your water application, which is the first step towards control of the pH in your growing medium.

Reducing diseases in your crop

Since the wet season is upon us, it’s important to pay attention to some preventative action that you can take to reduce the risk of running into plant diseases.

In the first place you can make the plant (cells) stronger by applying some extra Calcium or even better: apply Silicon.

Both have the same effect of strengthening the cells but an extra advantage of Silicon is that it creates a kind of wax layer on top of the leaves which protects the plants from disease threat. You can apply Silicon in 2 ways: through the A/B tank system or by a foliar application. Good results can be achieved in the roses with a doses of 1,0 to 1,5 mmol/l.

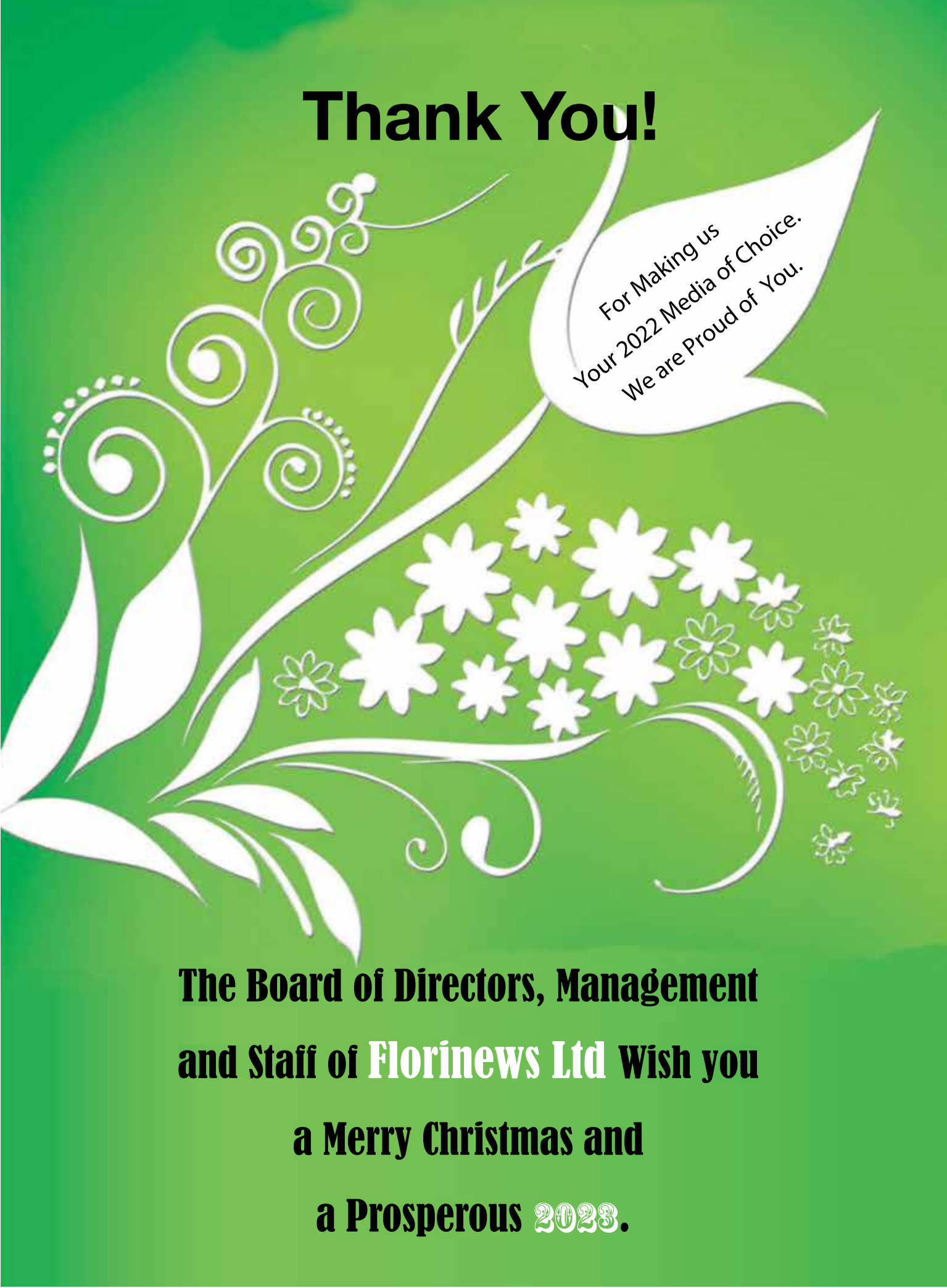
Another way to reduce plant diseases is using circulation fans. With these fans you can create air circulation in your crop, with this moving air your crop will dry quicker. Especially in the morning this will help reduce the disease challenge.

Optimizing your fertilization for Valentine

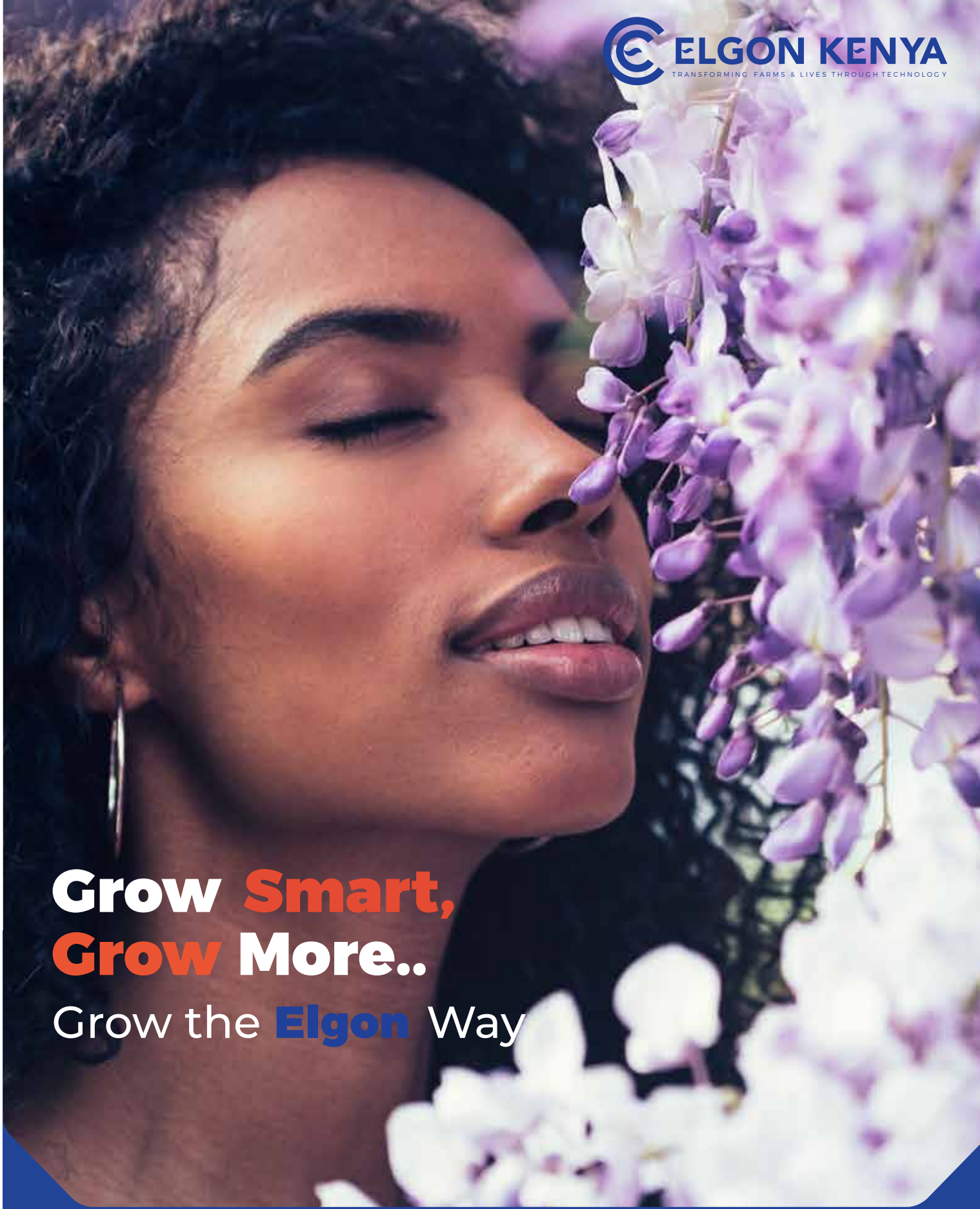
A lot of farms have done a pinch for the Valentine for next year. This sometimes includes more than 50% of the crop. Because of this the growing stage of a crop changes from continuous production (growing and flowering)- into a crop which is mainly in a starting phase. Because of the pinch also the root system will be affected and roots will die off. In this situation, it’s important that you adjust your feeding regime.

You can do this by yourself but you can also ask us to make these adjustments in your feeding regime. A rose crop in a starting phase (the first 4 weeks) needs extra Calcium and Nitrate. Besides this, extra Phosphate should be applied to activate root development. With these adjustments your crop will get the correct feeding regime for a good start to the final flush for the Valentine.

Thank You!



The Board of Directors, Management and Staff of Florinews Ltd Wish you a Merry Christmas and a Prosperous 2023.



ELGON KENYA
TRANSFORMING FARMS & LIVES THROUGH TECHNOLOGY

East Gate Road Off Mombasa Road
P.O BOX 46826 - 00100 Nairobi, Kenya
Tel: +254 733 699992 , +254 722 203089
info@elgonkenya.com www.elgonkenya.com

Elgon Kenya limited
@elgonkenya