# FLORICULTURE

Kshs, 350

Tshs. 3,500

S.A. Rands 35

USD 6





# ELGON KENYA LIMITED

# Packaging Product Range

# Plain & Printed Labels



Plain & Printed Polythene Bags



Plastic Sheeting



Plain & Printed Strapping Rolls



# Packaging with a difference

East Gate Road, Off Mombasa Road P.O. Box 46826 - 00100, Nairobi, Kenya.

Tel: (020) 6534410 Fax: (020) 6534807. E-mail: info@elgonkenya.com Website: www.elgonkenya.com

Plain & Printed Flower Sleeves



Crate & Bucket











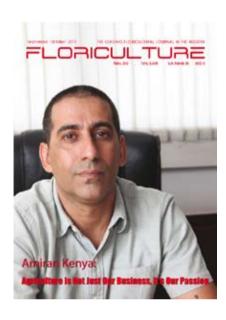
If you love life you will love Luna



Bayer CropScience is proud to present you with an outstanding new fungicide whose unparalleled efficacy on powedry mildew and botrytis leads to:

- · Improved produce quality
- · Longer vase-life
- · Outstanding disease control
- · Increased marketability





# Inside

- 8. KCB NHFair 2015 Building Better Lives!
- 14. Imarisha Naivasha Launch
- 16. Small-Scale Flower Farming
- 18. Amiran Kenya: Agriculture Is Our Passion.
- 26. Cut Flowers Out
- 34. Thrips Management
- 40. Increasing demand for Printed SFKs
- 46. Vermicompost Technology
- 50. Briefs

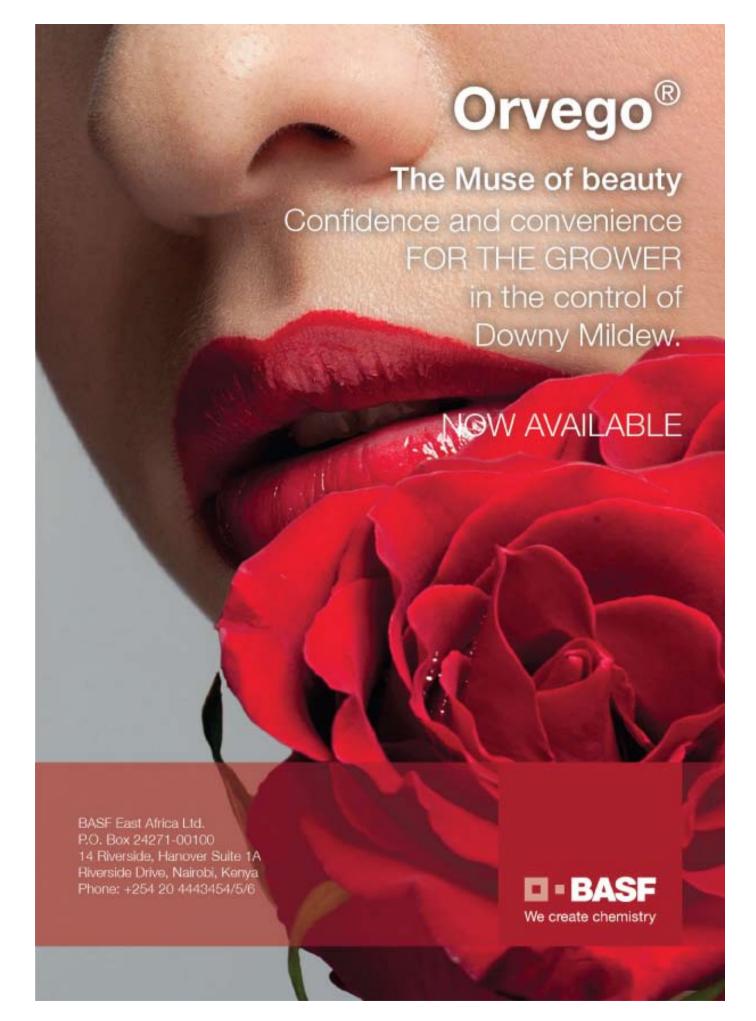
62. A Flower a Day

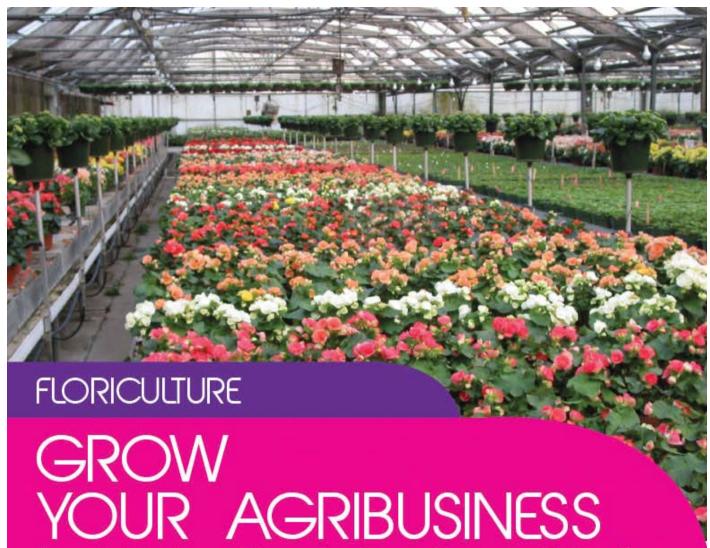
Cover photo courtesy of Amiran Kenya Ltd

# The Leading Floriculture Magazine

Contributions to Floriculture are welcome. Although every effort will be made to return manuscripts and photographs, these are submitted at owners' risk. Opinion expressed by contributors are not necessarily the views of Floriculture.

All rights reserved. Reproduction in whole or in part without written permission of the publishers is strictly prohibited. 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, research offices and suppliers of agricultural inputs in Kenya.





Thermopak, the leading manufacturers and suppliers of a wide range of quality disposable plastics which include seed trays and propagation trays. Our products promote faster rooting, plant growth and development. Our planting seed & propagation trays are easy to clean, sterilize, recyclable, tough and durable.

# BENEFITS OF OUR PROPAGATION POTS AND TRAYS

- Increase yields up to 80 to 90%
- · Disease free crop
- No soil required to grow
- · Save cost on seeds
- Save water
- Higher germination rate

- Greater plant uniformity
- · Better plant quality
- · Sustainable water & nutrient consumption
- · Precision growing





# Quality Packaging for Quality Customers

Funzi Road, Industrial Area P.O. Box 18896 - 00500 Nairobi, Kenya.

Wireless: +254-020-217612/2

Cell: +254 722 207787 +254 733 207787

Email: sales@thermopakkenya.com www.thermopakkenya.com

Manufacturers Of Quality Disposable Plastic Packaging

# **Editorial**

et me begin by saying thank you to all who've travelled, with me all through.

You all read *Floriculture* for a reason. It's humbling, but in my heart I know you don't read it to pass time, you read it because you believe in it. In the face of despair, you believe there can be hope. In the face of a business politics, you believe we can be one sector.

That's the journey we're on today. But let me tell you how I joined the journey. As most of you know, I am not an agriculturalist. I joined the sector slightly over a decade and half ago. I was a young man then, I knew no one in floriculture, was without money or family connections. But a group of managers showed faith in me. And I accepted the challenge, sight unseen, motivated then by a single, simple, powerful idea – that I might play a small part in communication.

So recently I met Mr. Thomas Fredrick Ochieng, the man who showed a lot of faith in me. We had not spoken for long and as we chatted off the cuff, I remembered the other great names; Victor Juma, Charles Njuki, Anampiu Kithinji, Gervasio Kirigia, Francis Karanja and Wilfred Munyao. These men had a dream. A dream for the flower sector. A dream that most of you celebrate today. A tool of communication for the industry. A Floriculture Magazine.

The sector today prides itself of four direct magazines, numerous digital magazines not to mention the many indirect and the two foreign. These men's vision to opening up the sector is so near yet too far. Growers are yet to live these ideals. Why should you laugh at your colleague when Downy Mildew is wiping his crop? How will you benefit by shutting a market you cannot satisfy? Don't be mean, share with your colleagues. This was the vision of these great me. An industry that shares knowledge and experience. Why continue with the old adage on graves and the great knowledge buried there. Let's talk



Just remember this. An artist, however faithful to his personal vision of reality, becomes the last champion of the individual mind and sensibility against an intrusive society and an officious state. The great artist is thus a solitary figure. He has a lover's quarrel with the world. In pursuing his perceptions of reality, he must often sail against the currents of his time. This is not a popular role. If he is much honoured in his lifetime, it is because a good many prefer to ignore his darker truths. Yet in retrospect, we see how the artist's fidelity has strengthened the fibre of our growing life.

So can we stop this hide-and seek game and share our knowledge and experience. Let's talk.

Masila Kanyingi



# Publishers of Floriculture Magazine

P.O.BOX 79396 - 00200 Nairobi.

Tel: 020-2440909 • Cell 0732-558172, Fax: 020-2244892

Email: info@floriculture.com Website: www.florinews.com

# Floriculture Team

### **Editor**

Masila Kanyingi

### **Editorial Assistant**

Cornelius Mueke

### Contributors

James Cocker Flora Nanjala Imarisha Naivasha Flowerweb

Africair Purity Kabuba

Patrick Koome Agrichem Africa Ltd

# **Photographers**

Jairus Ndani

# **Graphic Designer**

Evelyne Ndiema

# Marketing

Beatrice Kariuki Benard Muendo Wilbur Njemah

### **Editorial Consultants**

Tom Ochieng - Penta Flowers

Victor Juma - Syngenta EA Ltd Anampiu Kithinji - Dow Agroscience

Joseph Murungi - Consultant

Charles Njuki - Finlays Kenya Ltd

Francis Karanja - BASF

Daniel Kisongwo - Consultant

Richard Gitonga - Arysta LifeScience

Maurice Koome - Bayer Cropscience

Anthony Songoro - Bayer Cropscience

# Plant Doc



# Thrips !!! Beware

 $T^{\text{hrips are minute, slender insects, usually only a few millimetres long with piercing-sucking-mouthparts and the ability to cause direct damage to flowers making it unmarketable for export.}$ 

Thrips have piercing-sucking mouthparts. They use a needle-like structure to puncture plant tissue and a second tube-like structure which is placed into the hole through which plant sap is extracted, subsequently causing direct damage to the crop.

In Flowers there are mainly two types of Thrip species that attack Roses, Carnations and other flowers. The western flower thrips (*Franklieniela occidentalis*) and Thrips tabaci also known as Onion thrip. These thrip species mainly feed on both leaves and flower petals with the majority of their damage to roses occurring throughout the growing period of the flowers. Their feeding may result in distorted buds that open only partially or abort prematurely. Feeding on petals may result in petals streaked with silvery-white or brown as well as petals with browning edges. White and light-colored rose blossoms appear to be particularly attractive to thrips. Young leaves may be distorted and flecked with yellow as a result of thrips feeding.

Not all species of thrips necessarily cause direct damage to crops. Some species are considered to be predators as they feed on other thrips and other insects such as mites, others are known to help with pollination and some species even feed on fungal spores. Unfortunately, several of these species are also known to be plant-feeders and cause economic damage.

Thrips are difficult to control. Always use an integrated program that combines the use of good cultural practices, natural enemies, and the most effective IPM-friendly available.



# Controlling Nematodes the natural way

Neem (Mwarobaini) based nematicide & insecticide



Available in 100ml, 1 litre & 5 litres

READ THE LABEL CAREFULLY BEFORE USING

The Farmer's Environmental Friend

📘 @organixke 🦷 Organixkenya



# **KCB**

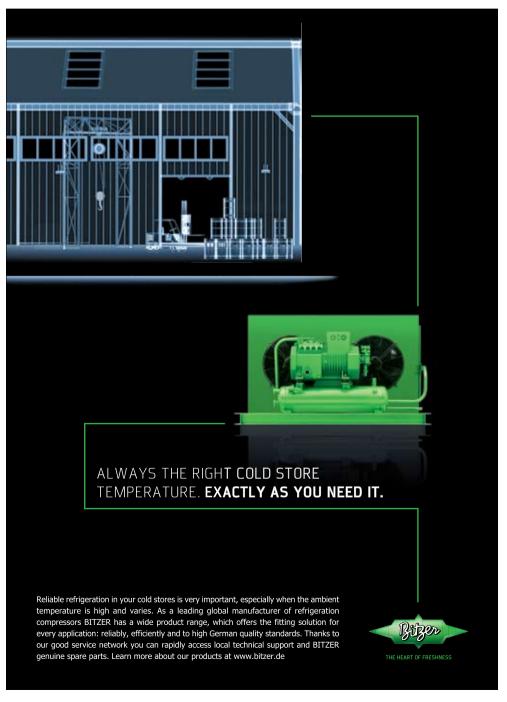
# Naivasha Horticultural Fair 2015 Building Better Lives!



It's yet another season for horticulture stakeholders and its affiliates to come together and give back to the society.

he KCB Naivasha Horticultural Fair will be 13 years old this year. Starting from humble beginnings in 2002, the Naivasha Horticultural Fair has grown to be one of the biggest Horticultural Shows in Africa. From an initially purely horticultural perspective the NHFAIR is branching out into the whole agricultural sector. Every year the number of stands and the number of visitors increases, from 60 stands in 2002 to over 200 stands in 2015.

The relaxed atmosphere and spacious venue attracts the crème de la crème of the agricultural sector. Many exhibitors take the opportunity to launch new products and innovations at the NHFAIR, so as a visitor you have a one-stop venue that gets you in contact with all your suppliers, and you are also kept informed on all the new market trends – very important in a fast evolving business. Decision makers from both sides of the industry attend, and a lot of business is concluded. There is ample parking, loads of space, a great food hall



## From Page 9

and a children's entertainment area. So not only can visitors catch up on business, they can combine it with a family day out.

The NHFAIR is run by a small organising committee that operates on an entirely voluntary basis. The Exhibitors and visitors are proud to know that 100% of their donations go to good causes. Every year more and more funds are raised for charity and are dispersed through the NHFAIR Trust. The NHFAIR partners with other donors in order to increase the effective value of donations and to raise the awareness of its projects.

Long term donor partners include The Naivasha Rotary and NTM. The NHFAIR Trust concentrates on poverty alleviation and improving the lives of woman and children according to their motto 'Building better lives'. NHFAIR supports the

following major Charities;- Naivasha Safe House (abused women and children), the Naivasha Children's Shelter (giving kids a chance), NACOHAG (HIV and AIDS and family health), Karagita Maternity Hospital and the Naivasha General Hospital Maternity Wing (reduction of maternal and infant mortality during childbirth), United Disabled Persons of Naivasha, KSPCA, and Rotary.

NHFAIR has funded emergency life saving services through the Aga Khan Trust, sponsored educational support and continue to supply desks, chairs, water tanks, trees, and sanitation blocks to many schools. Over the years millions of shillings have been raised and wisely spent, making a massive difference to people's lives. Most Charities will be represented at the NHFAIR so visitors and exhibitors can see

exactly where their money goes, and how much it helps.

In 2011 the NHFAIR launched its most ambitious project yet ADOPT A VILLAGE. The NHFAIR has undertaken to sponsor a whole village, including schools, a clinic, a borehole, power.

What makes the NHFAIR such a success? People and Support: the tremendous support and professionalism of its sponsors, exhibitors and visitors makes it the success it is today.

Location is important. The NHFAIR has always been based in the grounds of Naivasha Sports Club, with beautiful surroundings and plenty of space. Naivasha is a major horticultural zone, and

To page 12



# EAST AFRICAN PACKAGING INDUSTRIES LIMITED

HEAD OFFICE NAIROBI Kitui Road,off Kampala Road PO Box 30146, Nairobi 00100, Kenya, Tel: 3955000/3955600 Fax: 3955500/3955601/3955468 Web: www.eapl.co.ke Email: sales@eapl.co.ke MOMBASA OFFICE Corner Voi St. and Shimanzi Road PO Box 90442, Mombasa 80100, Kenya. Tel: 2225157/2225158/2225527/6 Fax: 2227551

Web: www.eapl.co.ke Email: sales@msaeapl.co.ke



Freshly packed, Freshly delivered





# The Right Carton

makes a world of **Difference**. Whether you pack Tea for the export market or export Horliculture, you can rely on our high-quality packaging solutions to ensure that your produce gets to the market in the same state it left the factory-fresh.

# East African Fackaging Industries Ltd

Nairobi (cartoni) Tet: +254 (0) 20 395 5600 fax +254 (0) 20 395 5601 email: sales@eapi.ca.ke Mombasa (paper sacks) Tel: +254 (0) 41 222 5157/8 fax: +254 (0) 41 222 7551 email: sales@maaeapi.co.ke Web www.eapi.ca.ke









# News Flash

EAPI Limited has come up with an innovative packaging solution for export market. The solution is meant to save exporter millions of shillings in freight. This new shipper is simply light, strong and cost effective. Light is the right way to go and EAPI is the natural supplier of choice to deliver this USP. At EAPI we guarantee value for money.

E.A.P.I Better By Design



# From Page 10

host to many of the Rose Breeders Showcases and farms, it is close to Nairobi and the International Airport, and there are lots of great places to stay and wonderful things to do there.

# Naivasha Horticultural Fair Support HIV-AIDS Campaign.

NH Faiar supports a thriving local Nongovernmental organization that is committed to serve the NAIVASHA and especially KARAGITA area so that the community access affordable and quality health care services.

The fair has donated benches for the waiting bay and constructed a fume chamber for the LAB enabling NACOHAG screen TB cases. They have also funded the purchasing of a centrifuge for the LAB, a HB machine, an AUTOCLAVE for sterilization, a set for IUCD insertions (family planning)

In addition to the purchases, they supported the clinic by paying 6 months' rent in 2009 when the clinic started and supported the clinic to put up a sign post. They also supported a clinical officer to attend ophthalmology (eye care training) at St. Mary's hospital for six months.

Through this support the clinic has grown from strength to strength and is able to offer quality services to the beneficiary community. As a result of the partnership with NHFAIR they have been accredited by NHIF and are able to serve an even larger population.

"The NGO is very grateful for the commendable work that NHFAIR continues to do in the community and for the fact that unlike other donors; NHFAIR supports grass root. organizations who would otherwise find it difficult to operate.

Though not entirely, NH Fair has enabled NACOHAG work amongst the populations in and around the town as well as in the various farms engaged in the production of flowers.

### Generosity.

The generousity of a myriad of people and organisations mean that operating costs are kept low. Many give up their time to make sure that NHFAIR runs smoothly



"Many exhibitors take the opportunity to launch new products and innovations at the NHFAIR, so as a visitor you have a one-stop venue that gets you in contact with all your suppliers, and you are also kept informed on all the new market trends - very important in a fast evolving business."

# FERRILENE What does FERRILENE do?



FERRILENE is the most effective prevention and cure for iron deficiency.

FERRILENE formulation ensures fast and total solubility, preventing lime-induced chlorosis.

FERRILENE provides plants with iron even in soils with extreme pH.

# Why choose FERRILENE?



- Allows good availability of iron in every soil.
- Prevents and cures effectively iron deficiency symptoms in fruit and leaves.
- Improving the plant's natural physiology, increases the quality of flowers, fruits and leafy vegetables.
- It is natural, safe and has a long-lasting and fast effect.

Distributed by Elgon Kenya Ltd.



# Imarisha Naivasha Launches

# Environmental Awareness Programme Targeting School Children

n environmental awareness and cleanup project, targeting school children and communities living around Lake Naivasha, has been launched courtesy of Imarisha Naivasha and the Elsamere Centre for Education in Sustainability.

Dubbed the "Lake Naivasha Basin Schools Environmental Outreach and Cleanup Programme", the one year project seeks to impart knowledge and skills on environmental protection and solid waste management among children and local communities through sponsored cleanups of shopping centres and residential areas within the Basin.

"Young minds are very impressionable and that is why it is important for us to reach out to them with the message of environmental protection because they are the future custodians of the environment," Susan, an Education Officer at Elsamere, Said

The theme of the project is "clean environment, healthy lives."

The organizers chose Kamere village as a launching pad for the project. The event attracted hundreds of participants including learners from four different schools, representatives from Non Governmental Organizations, government agencies, private businesses, local authorities and

community based organizations.

Over 200 pupils drawn from Sher Academy,
Sher Moi School, Maua primary school and
Mvuke primary schools attended the event
which was funded by Imarisha. KenGen and

Finlays donated trucks which were used to transport the collected waste.

Various stakeholders like KenGen, Elsamere, NEMA, Finlays and Kwa-Muhia Environmental Group were ably represented. Kongoni Assistant County Commissioner, Mr. John Victor Opondo and Hells Gate location Assistant Chief represented the Nakuru County Government.

The Naivasha sub-county environment officer Mr. Sammy Ngigi was also in attendance.

Speaking during the event, Mr. Opondo pledged his support to the project, saying that it would benefit the community and commended Imarisha Naivasha and Elsamere for their great work as sponsors.

"We know Imarisha has done a good job in Kwa Muhia and seeing them here is therefore reassuring. Kamere will now be a different place free of uncollected garbage thanks to this project. We would like to see this replicated in other villages as well," he said.

# SPECIALISED FIBREGLASS LTD.





The best "insulated bodies in town"

# he best "bodies" in town..







Tail lifts for Pallet work.



Hold bars with stainless steel side and wall plates.



East Africa's
First truck
And trailer
Insulated/
refrigerated
body over
56ft long.

P.O. Box 78201, Nairobi 00507, Kenya, East Africa Phone: +254 (020) 2669524/2108640
Cell Phone: 0721 444735 / 0733 915196 / 0739 579907 / 0726 169411 Fax: +254 (020) 2695647
E-mail: sfglass@africaonline.co.ke Web: www.specialisedfibreglass.com

# Small-Scale Flower Farming Thriving In Kenya

farmina in the country was not given much emphasis in the past but this is changing gradually as farmers from various parts of the country continue to embrace this practice supported by players in the industry. A recent visit to Kinangop area of Nyandarua County revealed that small-scale farmers have embraced flower farming and are reaping cash out of the venture.



Farmers who in the past preferred to grow traditional food crops are now moving towards summer flower production which they say is far much better in terms of income. The farmers have come together to form groups and through the help of agents they have been able to sell their flowers through the auction in the European market.

One such group, Multigrow Investments, with a total of 86 members drawn from Nyandarua, Nakuru, Kiambu, Nyeri and Murang'a counties has been cashing in from small-scale flower farming. According to Multigrow chairman Mr. Peter Murimi, the farmers sought the assistance of agents who are well versed with the market to help in marketing their products.

"We have engaged the services of agents who assist us in marketing our products through the auction in Europe. The proceeds from the sales are them divided among the farmers as per the number of the flower stems," says Murimi.

They grow varieties such as eryngium,

mobidique, allium, claspedia, mollucella, scabiosa, agapanthus, ornis, lilies among other summer flowers mostly used as fillers. Mr. Murimi said that the Blue Agapanthus has been doing exceptionally well due to its high demand on the European market.

The farmers are trained on how to take care of the plants, harvest and package them.

Mr. Murimi says that another successful variety, Claspedia, gets high demand during Mother's Day celebrations and also to make winter bouquets. The small headed yellow flower also has a shelf life of one month and fetches an average of 0.7 Euro cents which translates to about Kshs.7 per stem. For Claspedia, a farmer harvests a 100 stems per square metre per year.

The flower which takes about 5 months from the time of planting to harvest is not affected by diseases, a factor that Mr. Murimi says is a great advantage since controlling diseases in open fields is very challenging. Another Multigrow Investments member, Mr. Peter Kinyanjui who grows Blue Agapanthus on a 1 acre piece of land says that he has no reason to look back and regret why he abandoned

subsistence farming.
Mr. Kinyanjui however
notes that due to the fact
that they are grown in
open fields, the flowers
are susceptible to various
climatic changes. For
instance, frost which
at times hit most parts
of the country severely
affect open field flowers.

The effects of the frost are expected to reflect in the harvest season which is at its peak from March to May. During a good season, an acre of Blue Agapanthus produces approximately 1.000 stems. The farmers

usually have three season of between

March-May, July-August and NovemberDecember.

Other challenges facing small scale flower farming includes high cost of inputs, and transportation. Mr. Murimi says that this at times results to quality compromise. He calls on the government to help the smsll scale farmers access vehicles equipped with coolers to retain the quality during transportation to the airport.

KFC Chief Executive Mrs. Jane Ngige says the Council has been supportive to the farmers especially in providing trainings on good flower production practices.

The Council also audited some small-scale groups in Kinangop and Kipipiri in Nyandarua County which revealed that the main challenge facing the growers is failure to keep records on the performance of their flowers. Mrs. Ngige reiterates that KFC is committed to help the small scale farmers, which she says has been positively contributing to poverty alleviation and youth empowerment as envisaged in the country's Vision 2030 Blueprint.

# PACKAGING MATERIALS LTD

P.O. Box 39901 Nairobi, Kenya Mob: 0722-524 934 / 0722-377 877 E-mail: pacmat2002@gmail.com

# **Locally Fabricated**

**Defoliating Machine** 

Strapping Machine





# **Fully Automatic Carton Stitching Machine**



We are also the supphers of













Gloves

We are proud to be your Suppliers of PPEs



# Amiran Kenya:

Agriculture Is Not Just Our Business, It's Our Passion.



Aviv explains the product catalogue to a farmer during the launch of the company's training center in Meru.

Aviv Levi is the Managing Director, Amiran Kenya Ltd, the leading agricultural solution provider in Kenya that has played a role in positioning its clients as major suppliers of floriculture and horticultural produce in the local market, Europe and the rest of the world. The company has done this by ensuring that farmers in Kenya have access to world class innovations ranging from chemicals, fertilizers, seeds, modern irrigation systems, high quality greenhouse models, plastics and covers in addition to services such as training and agro-support.

Since his arrival to Amiran, Aviv and his team have worked tirelessly to better position the company as the market leader in almost all agricultural crop sectors, as well as leading in the introduction of new innovations and services all geared towards uplifting its clientele.

# What is your personal agricultural back ground?

When I first arrived in Kenya, I joined Soloplant, Amiran Kenya's sister company as the Head of Production. Later, I took the role of the General Manager of the company. My team and I worked hard to position the company in the floriculture industry as a market leader in seedling propagation. Prior to this, I worked for Hishtil, one of the leading vegetable seedling companies in Israel.

I have always had a passion for agriculture as far back as I can remember, there is something about taking care of a crop from seedling stage to harvest; it brings me an amazing sense of satisfaction and accomplishment. I enjoy visiting our clients at the farm to ensure their crops are well taken care of.

# How long have you been in Kenya?

I have been in Kenya since 2003 when I first joined Soloplant. I must admit, I have loved being here ever since.

# What do you think is the role of the private sector to the development of the Agricultural Sector?

In my view private sector is the driving force behind the development of the agriculture sector. off course this is done working hand in hand with the Government, through the various ministries, and with the donor and NGO communities. But, it is the private sector, driven by a commercial interest, that is charged with constantly upgrading the level of inputs, technological innovations and service available to the farmers, who are the end user and it is they who deserve to be empowered with only the best,

# What are some of the things Amiran has contributed to the agricultural sector?

Incepted during the year of Kenya's independence in 1663, Amiran is humbled to have grown with the country, being part of the great strides and milestones that Kenya's agricultural industry has been through.

Amiran's biggest contribution to the Kenyan agricultural sector has been the agricultural and technical knowhow coupled with top of the line technology and products that it has continually brought into the country over the years with its array of firsts in bringing Agricultural innovations that have been unsuccessfully imitated by its competitors.

In the late 1980's Amiran brought consultants from Israel to advise the future flower growers of Kenya on the adoption of large scale greenhouses, which today are part of Kenya's heritage as they symbolize Kenya's position as the leading floriculture producer in the world. Continuing with this 'hands on' approach, Amiran helped to build the first flower farms in Kenya, complete with greenhouses and advanced irrigation systems at the time and has since erected 90 percent, 2700 hectares of the 3000 hectares of greenhouses in Kenya. Continuously growing its investment in Kenya, Amiran's involvement in the agriculture sector grew as it diversified into agro chemicals and fertilizers responding to the ever present needs of the growers.

We are proud to have been a trusted partner to our clients in the floriculture and horticulture industries since the very beginning. Amiran is also a home for small scale farmers and we are happy that we have reached a point where all farmers, large and small, look to us when they need reliable advice.

# You have partnered with several organizations in this agribusiness journey, who are they, and their importance?

Our main goal as a company is to ensure our farmers enjoy world class agricultural innovations that make farming an enjoyable and rewarding experience. To do this we have sought out partnerships with world renowned leaders in the sector such as; Netafim Israel, Ginegar Plastics Israel, Hazera seeds, Haifa chemicals and ADAMA among other world leaders in the field.

Most of our partners are leading innovators in their fields, have been around for years and have researched and studied the world's agricultural, together with them we have bridged the gap so that Kenyan growers enjoy cutting edge ago-technology.

Our local partners; NGOs, donor Groups, Government Bodies, County Governments, Learning Institutions, Finance Organizations and many more, have been a great base and support system to modern technology taking root at different levels. We hope to get other partners on board as more needs to be done for the agricultural sector, this can only happen when different organizations join hands for a better good.

# How do you see Amiran contributing to the future of the sector?

Through the years in the agricultural field, we learnt that that our goal as service providers is to offer our clients with solutions to their day to day needs. Through research, networking and trials we seek to find solutions that ensure Kenyan growers have an enjoyable farming experience, top notch harvest and that their produce is kept fresh until it gets to the end user.



Aviv at the IFTEX 2015

To further increase the quality and quantity of agricultural production, Amiran will continue to offer growers sensing technology to make farms more 'intelligent' and more connected through the so-called 'precision agriculture' also known as 'smart farming'.

Our foremost aim is to use the means at our disposal to empower the farmers we work with and the sector as a whole to become sustainable and profitable.

# What legacy do you want to leave behind in agribusiness sector?

90% of all Kenyans practice agriculture in one way or another, whether in large scale for export, small scale to commercialize and for subsistence or just a little garden for fun. Our biggest goal is to tap into all these level of farmers by understanding their needs and providing them with top quality products, which empower them to succeed, our goal now and for the future remains the success of the farmers.



# HANUEL GREEN HOUSE 9.6M SPAN



Fast installation of the structures which are installed together with the covering, saving the grower time and meeting targets/schedule of supply of his produce.

Due to changes on weather conditions time to time, the structure is more reinforced with an arch of 8.4m and 4.3m thus making it more resistant.

- New system of gutters bending inside to minimize leakage during the rainy season.
- New approach for water collection.
- Minimized overflow and splashing



# **Business and Leaisure**

Naivasha is more than Flowers. it is the most accessible, and popular of the fresh water lakes of the Great Rift Valley.

abbed in colours of pink as far as the eye could see, the lakeshore throbbed to the squawking and croaking of a multitude of feeding birds. On the shore other animals grazed among troops of foraging baboons. Although Lake Naivasha is a haven for activities of all sorts, it's the flower growing that has earned it its fame.

Dubbed the world's 'greatest bird spectacle' by renowned ornithologist Roger Peterson, one always expects a great sighting on his first visit - and for sure you will not be disappointed. The moment is, frankly, overwhelming. From the shore, plains of grass reach into forests of fever trees that hug the ridges.

### More than Flowers

When Bayer Cropscience sent an email requesting me to attend a launch in one of the Naivasha hotels, I immediately called the Sales Representative for confirmation. "Naivasha is more than Flowers", Mr. Kihungu said. "Yes I know, it is the most accessible, and popular of the fresh water lakes of the Great Rift Valley. It has an

occasional splash of white indicated a small group of pelicans part of the wider variety of birds.

On the drive you can see variety of animals on the open grasslands. A glimpse of a twitching ear can reveal a pride of lions lying in the shade of a small tree. A special sighting at Naivasha is the Hells Gate and the park is a sanctuary for rare geographical features. It also boasts of the Olkaria geothermal power generating plant". "I think you have never had enough time to appreciate the area, come for the launch and you may learn a new term Agrotourism," he concluded.

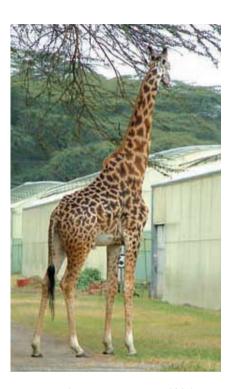
# One by One

All roads conjoined the well kept mini road to the Hotel. One by one they arrived, some on foot, others aboard boda bodas and most by small cars. Fourteen hours on the dot, the conference room was full all awaiting the launch. By the count, we had no less than 150 growers and this prompted me to ask one of the growers, "where are all these people from?" My name is Paul Mwangi, farm manager, Finlays Hamerkop and next to me is Mr. Chandu of Longonot Horticulture, and like the rest we come from Naivasha."

I later learned that the area surrounding the town is known for its vast agricultural potential with numerous small farms and also vast agricultural enterprises.

### Largest Flower Growing Area

Believe it or not, Naivasha is the largest floricultural growing region in the country. Starting from the epicentre of the town, new state of the art, multi- billion greenhouses cannot escape from your eyes. The new



structures, decorate areas around Moi North Lake, Moi South Lake, Flower Business Park, Naivasha-Nakuru Rd. and Naivasha- Engineer Rd. The nature of the ornamental projects varies from new projects to expansions of the old farms. Some of the farms have already been established in other regions of Kenya.

# Why Naivasha?

The crown jewel of Kenya's flower growing was Naivasha, then came Athi River and Eldoret. Suddenly all eyes turned on Mt. Kenya. Naivasha, despite been older than the rest, it continued attracting investors as the Kenya's epicentre of the floriculture sector. For long, any discussion on flower growing in Naivasha centred on Oserian and Sulmac (Now Finlays). Then slowly crept other farms in Moi South lake. The rest as they say is history.

To Page 24



### From Page 22

Today, Naivasha is the largest growing area in Kenya. Most of the indigenous farms are expanding wholesomely. Companies like Vegpro group boasts of more than one farm cutting across the region. Flower business park has continued to expand with new farms mushrooming daily and older ones refurbished. Daily new greenhouses are erected. So, what is this secret that investors have found out on Naivasha?

# Despite Big Head Long Stems

Intermediate roses are the majority in Kenyan production but T-hybrids roses are on the rise especially on altitudes of 2,200 metres or higher where the climate is suitable for these varieties. As most extension of greenhouses is taking place on the higher altitude, Nakuru became a definite choice. Growers are now moving to quality big headed and long stemmed flowers. It does not need a rocket scientist to know that, you can only achieve these in Nakuru, which is 2400 metres compared to Naivasha's 1800 metres. But all said, growers have maintained faith with Naivasha.

## Proximity to the Airport

However, one can argue that for long, growers in Nakuru and Mt. Kenya region have got Big Head Long Stems, slightly superior quality depending on market. True, growers ran towards Mt. Kenya and for long, the region has been producing the exclusive quality. But the Mt. Kenya area performs poorly in proximity to the Jomo Kenyatta International Airport. Hence this makes it expensive in terms of logistics and service accessibility. Farmers are business people and to maximize their profits, their eyes remained in Naivasha.

# Availability of Land and Labour

The limits regarding the extension of the production are vast. Unlike other places, Naivasha is not crowded and investors can easily acquire hectares of land. Additionally, the labour force is easily available. In theory, it is easier to get more workers from the rural expansions and avoid unnecessary housing of workers. This ensures growers



"

Naivasha is the largest floricultural growing region in the country. Starting from the epicentre of the town, new state of the art, multi- billion greenhouses cannot escape from your eyes.

"

will not perturb the existing ecosystems.

# Cordial relationship with the surrounding communities

Regarding the people who live around the farm, a grower says, "our aim is to be beneficial to them, we don't want to be predominant or disturb their social lives."

Unlike other areas, they do not need to fight for the minimal resources available. "We have plenty of water," he adds. In addition, most farms repair the feeder roads in the area; provide learning materials, health care facilities, clean drinking water, tree seedlings etc. This has ensured their cordial relationship with the community.

## Taking care of environment

Besides the communities, most farms don't want their farms to be a concern factor for the environment. Keeping the high trees around the fields and greenhouses is one visible way of putting this into practice. "Eventually we want to become carbon dioxide neutral, in which we also include the emission from the airfreight, says the grower. For this reason, he has not disturbed the high natural trees surrounding

the farm. "We are also looking at planting more trees", he adds.

### No Spilling of waste

Also for the sake of environment most companies have series of ponds dug in the middle of the farms. "These wetlands are for cleaning waste water from the pack house and the canteen in a natural way. The process takes about 30 days after which the water flows into the reservoir, and later used for irrigation in the greenhouses.

To communicate all these measures regarding social and environmental standards and also remain self critical, the grower points at a number of standard certification most companies have achieved both locally and internationally. Some of the certification standards include GlobalGap, Kenya Flower Council silver and Gold Code of Practice, Fairtrade, MPS, Tescos Nurture, Fair Flowers Fair Plants among others.

### Conclusion

With the special approach towards farming, where efficiency, reducing costs or increasing returns seem to be on the top of the target list for investors, there is one big question remaining. Will Naivasha continue to be the choice of investment for most flower growers?

"Yes", says Mr. Kinuthia Mbugua the first Governor for Nakuru County in the 2013 general elections. "Otherwise, the influx would have stopped already. We are providing the best business atmosphere for flower growers. The costs are very low, we have plenty of resources, there is labour availability and the infrastructure is improving. Moreover, the quality is the best. This obviously influences the profits. Getting the highest profit and enjoying what they do, is the goal of every investor, what will stop them from Naivasha?" he asks.

Nakuru is now a must go zone for all suppliers to the floriculture sector. Lest you forget, you will also enjoy watching the flamingos; call it mixing business and pleasure or agro tourism.



# Arysta LifeScience is proud to offer Kenyan farmers:

- Value added solutions for crop protection and yield enhancement.
- High quality products manufactured in our ISO 9001 accredited plants in Europe, North America, Latin America, Asia and Africa.
- A complete portfolio with locally customized crop spray programmes.

© 2015 Ayriyi Liteliolosia Nerva

# French Label has to Save Floriculture Sector.

he French minister of agriculture, Stéphane Le Foll, launched the label "Fleurs de France" with the brand Rungis. By way of highlighting the French origin of cut flowers, it is hoped that the ailing sector will get a boost.

In France, 85% of the cut flowers sold come from abroad, while a much larger section of consumers want to buy French products. The sector has shrunk considerably in the last few years. Every year, 4% of the French horticultural businesses are disappearing, "I don't know whether this will really save the sector, but change and awareness are important," said the French minister at the launch of the brand Fleur de France, a quality label for French cut flowers." In this way, we can add value to a French product. It's necessary." The label needs to stand not only for better quality, but also a shorter logistic route and therefore for a longer vase life.

In addition to the Fleurs de
France label, two other labels
for French flowers and plants
have been launched. Plante Bleu
represents plants from a socially
and environmentally certified
nursery and Label Rouge is an
existing certification for products of
exceptional quality.

# How to Enter the German Market?

market and one of the biggest markest for flowers, but according to Rupert Fey of Beyond-Flora, a company that assists growers to enter German speaking markets, it is a difficult market to enter. "The Germans have a distinctive taste and above all, buying regional products is becoming increasingly popular," he says.

ermany is an important

## Regional products

Like many other countries, the demand for regional produce is increasing. The slow foods movement trend, a locally grown movement that strives to preserve traditional and regional cuisine, is now also being adapted in the ornamental sector in Germany. "Currently, several labels, like 'ich bin von hier' and 'Nordfreun.de' are being used to show customers that the products are regionally grown," says Fey. "Besides that, it is also being stimulated by the government and the public; according to them it is better to spend your money in the neighbourhood."

# "Story telling"

Due to increasing demand for local products, it becomes more difficult for other countries to enter the German market. According to Fey, when marketing your product on this market, "story telling" is very important. "Customers want to know where the product comes from, how the product is bred and grown etc. This means that it is not wise to describe the large size of your greenhouse that grows many varieties and distributes all over the world. This will only irritate and confuse the customer," says Fey. This also counts for the buyers you sell to. "Of course they need to know some background information of the company, but this will not work out in the long-run. Then, the story, a good and

real story, is again important. It creates trust and trust is something the German buyers value."

"Besides that, Germany is one of the biggest market for flowers and is still a country of "cheap-prices", but this road is a dead-end and more and more buyers and consumers realize that now. They look for quality, innovative products and "something new or trendy", says Fey.

# Know the language and taste

So when telling a story, the language is very important. "Some growers, for example, think they can speak the German language, but many labels are full of misspellings, wrong words or words that are not in use anymore." Besides that, growers may assume that the buyers and customers share a similar culture, so also taste.

According to Fey, this is a misinterpretation. "The taste of the Germans is different than that of the Dutch for example. The Dutch prefer bright and a broad collection of different colors. The Germans, in contrast, prefer more traditional colors and the retailers prefer a narrow collection of products to choose from," says Fey.

### Assisting growers

For this reason, Fey started Beyond-Flora a couple of years ago. "I used to work as a buyer for several years and I noticed these differences and the difficulties some growers or exporters have to deal with when entering German speaking countries. For this reason I started up Beyond Flora. With our Team of three we give advice in marketing, use of a strategy and communication. If a buyer says: Yes I can trust this product, grower or exporter, our job is done, at least for a while," concludes Fey.



# EXCELLENT FIT IN PROGRAMS

Fighting the battle against yield-robbing aphids, mealybugs and whiteflies in IPM programs is easy with Chess\*.

Chess is fast acting, long lasting and highly selective against predatory mites (IOBC rating: harmless).

To get maximum yields and quality, stay ahead of the yield-robbing insects with a timely application of Chess.



syngenta.

# IPM ESSEN Will Extend the Portfolio of Messe Essen

The world's leading fair IPM ESSEN has developed a new concept which is unique in the market: hortivation by IPM ESSEN. The innovative trade fair format will show how horticulture can profit from societal trends such as communication, fashion and lifestyle and can implement them in all-encompassing solutions for the point of sale. hortivation by IPM ESSEN will go to the starting line for the first time at Messe Kalkar in June 2016 - in the immediate vicinity of the producing horticultural businesses.



Star chefs, fashion designers and modern urban gardeners are trailblazers when it is a question of establishing trends. hortivation by IPM ESSEN will look beyond the boundaries of the green sector and will rethink sales promotion. "hortivation will have the aim of bringing gardeners, traders and consumers closer together. It will present how the green sector can learn from the trends such as communication, fashion, cuisine and lifestyle and can exploit the currents directly for itself. hortivation in the early summer will be an additional range of information on offer with the focus on marketing and thus an ideal supplement to IPM ESSEN at the beginning of the year," explained Oliver P. Kuhrt, CEO of Messe Essen GmbH. The partners of the new fair are Landesverband Gartenbau Rheinland e. V. ("Rhineland State Horticultural Association"), Landesverband Gartenbau Westfalen-Lippe e. V. ("Westphalia-Lippe State Horticultural Association") as well as BGI - Verband des Deutschen Blumen- Groß- und Importhandels e. V. ("Association of the German Flower Wholesale and Import Trade").

# **Rwanda:** New Initiative to Improve Horticulture Exports Unveiled

A new initiative aimed at boosting horticulture production, quality and exports has been launched by the National Agricultural Export Board (NAEB) and sector stakeholders. The Rwanda Horticulture Working Group also seeks to attract more private investments into horticulture industry, as well as stimulate dialogue among stakeholders, George William Kayonga, the NAEB chief executive officer, said.

According to Kayonga, the group will provide a platform to promote more public-private sector partnerships in the sector to help expand the country's horticultural sector. The initiative is also expected to play a key role in provision of advisory services, especially on best agricultural practices, post harvest handling of fresh produce, and marketing.

"This collaborative organisational structure will enhance dialogue and help find ways on how to make the sector more productive and ensure quality along the value chain, which is key to sustainable development of horticulture industry," Kayonga said.

According to the National Export Strategy, the horticulture industry is expected to fetch more than \$129 million per year by 2018, from current \$10 million. Wilhelmine Bora, the chairperson of Professional Horticulture Farmers Association in Rwanda, said empowering the private sector to effectively and efficiently engage in the volatile horticulture export market should be given top priority.

"It is, therefore, important that the new platform also focuses on capacity building to enhance the skills of smallholder producers of export crops," Bora said, noting that high interest rates on bank loans was also crippling the industry's growth.

### Cold chain

Currently, there are only four horticulture collection centres across the country, and one cold room at Kigali International Airport.

NAEB says it is currently trying to transform a warehouse at its head offices into a horticulture pack-house, where exporters can sort and package produce before it is exported.

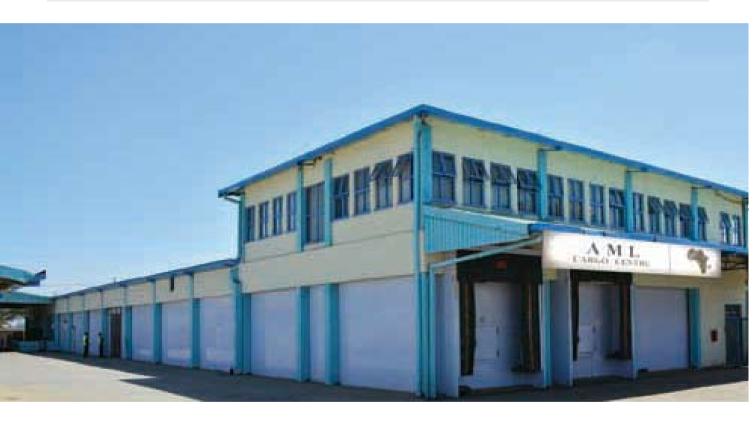


Africair Management & Logistics Ltd was established, in October 2005, in a bid to provide Clearing & forwarding services. We are an energetic and passionate service focused company that maintains neutrality within the Market.

# This is a fantastic year for us, as we celebrate:

- 10 years of operations
- The set-up & settling into our own Cargo premises
- The acquiring of Regulated Agent Status (by Kenya Civil Aviation Authority)
- Attaining EU "RA3" Aviation Security Certification

Our newly acquired AML Cargo Centre comprises of Warehouse & Cold storage capacity, in excess of 1200m2, enabling us to offer timely and efficient services to our customers 24/7.



Africair Management & Logistics Ltd
• Reliabe • Affordable

We work with most Major carriers into & out of Nairobi, such as, AF-KLM-Martinair, Emirates, Etihad, Qatar Airways, SAUDIA Cargo, Swissair, Turkish Airlines and our National Carrier KQ. We also work very closely & complement the efforts of the Ground Handling & Transit warehouses, such as, Swissport Cargo Centre, Siginon Freight, Africa Flight Services & NBO-KQ Cargo Centre.

By combining our export and import traffic, we have been able to obtain a high volume contract base that enables us to form strong partnerships with various service providers in order to offer you the best services and pricing. We have a dedicated customer support system so that your only responsibility is to advise us of your order. We will keep you up-to-date every step of the way with detailed reports informing you of the status of your equipment the entire time.

# We Offer the Following Services:

# Freight Forwarding

# Air Freight

We provide comprehensive airfreight export solutions for horticultural, high value & dry products on both passenger flights & charter freighters.

# Sea Freight

We also provide Sea freight solutions for our clients, out of the port of Mombasa.

# Road Freight

We offer fast, reliable, cost-effective road transport solutions.



# **Cool Storage**

Our cold storage Warehouse exceeds 1,200m2, ideal for the storage of flowers, vegetables & pharma. In addition, we have a reefer truck to ensure that cool-chain integrity is maintained during transit between your & our facility and thereafter between our facility & that of the Airline.



# **Screening**

We have three X-Ray machines, which can screen all types of cargo so that the cool-chain integrity is maintained from receiving to dispatch is well maintained.





# Warehousing

Our warehouse is strategically located within JKIA Cargo Village and in reach of the major cargo handling facilities. Our premises are under 24-hour CCTV coverage.



# **Customs Clearance**

Our employees are trained and dedicated to navigate the complicated customs processes for both imports and exports and for all types of cargo (such as, perishables, pharmaceuticals and dry cargo).

# We Provide Air Freight Services into all Continents:

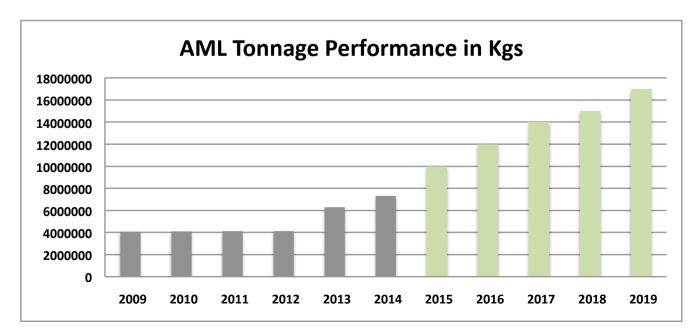
- Africa
- Asia & the Middle East
- Australia & the Far East
- Europe
- North & South America

To these destinations, we deliver perishables, pharmaceuticals and dry cargo.



SO NIO

Save on our Services and Grow with Us



# The AML Team & our Structure



**Guy Mertens**Managing Director



Imtiaz Dada
Business Development Director



**Andrew Owiti** General Manager



John Odada Sales Manager



Amos Oyier
Operations Manager



Dorothy Adega
HR & Administration
Manager

Our key personnel have more than a Hundred years of combined experience attained in the Airline cargo industry, Cool Chain Logistics, Warehousing, Imports & Exports.

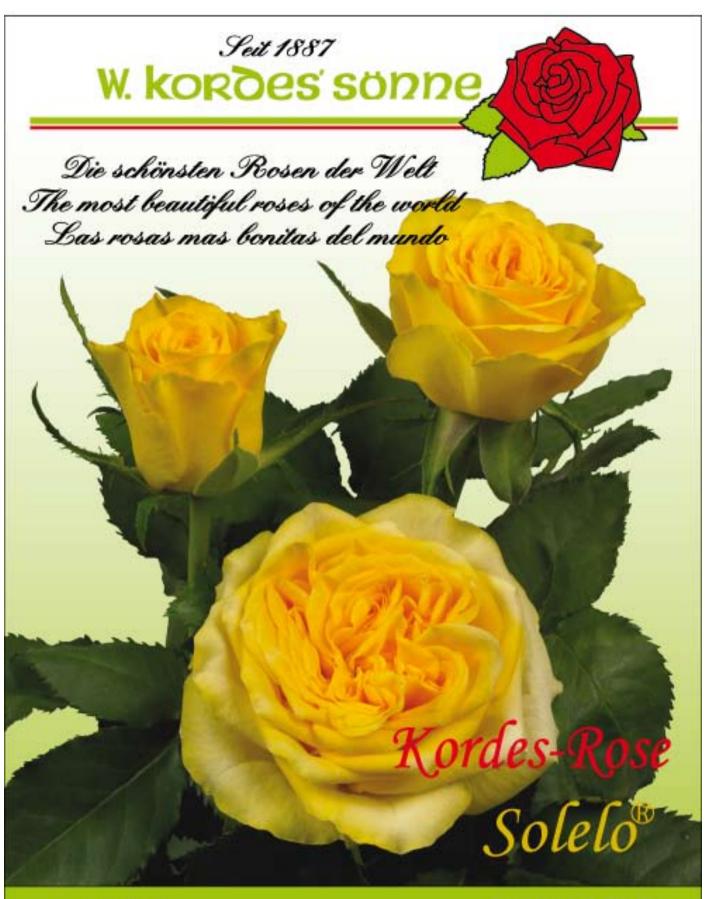
# Now unveiling our flower division:



Company Name: Africair Management & Logistics Limited
Address: AML Cargo Centre, 1st Freight Lane
Jomo Kenyatta International Airport
P.O. Box 19224-00501Nairobi, Kenya
Telephone: +254-20-682 7536/7

Telephone: +254-20-682 7536/7 Fax: +254-20-682 7538

E-mail: management@africair.aero



# W. KORDES SÖHNE

novembrace of D-2006 Spanneshoop, Germany Phone: +49 4121 46700 Fisc: +69 4121 64745 Wernet Info./www.Kordes-Rosen.com Ernell Kordes-Rosengb-olike.de

### KORDES ROSES EAST AFRICA LTD.

PO-Box 24561, 02512 Kerys 1et 254-025-2593455, 2004005. Cellytore: 254-0731-363641, 0722-200643 Fax: 025-2595-466 BANFORLKENYA Ornat anti-Stundiencess-es.com

# A Sustainable Thrips Management Strategy in Ornamentals

The warm months of the year starting this September are reckoning. Rose growers across the country are already arming themselves to combat the almost imminent upsurge of thrips in their crops. This is because in spite of great advances in insectpest control strategies in horticultural systems, thrips still remains to be one of the most challenging pest to control across the world. In Kenya, Rose growers have witnessed increasing difficulty in controlling the most common and problematic thrips species in Roses, the Western flower thrips (Frankliniellaoccidentalis). Historically, thrips management in crop production systems relied heavily on the use of chemical pesticides (insecticides) that are usually foliar applied. No grower wants to wake up one morning only to find their most valuable varieties have succumbed to a thrips attack at the peak season. Yet this is a reality most growers have to contend with now. In high-value horticultural and ornamental crops, the perceived risks of insect damage have often encouraged growers to make intensive insecticide applications. This of course has come at a steep price, as widespread resistance of thrips to most classes of insecticides including but not limited to, Carbamates, Organophosphates and Pyrethroids used for its management, has been reported.

This high propensity of thrips in developing insecticide resistance has been attributed to its biological attributes. Indeed, thrips have proven notoriously difficult to control owing to their small sizes, high rates of reproduction and cryptic (hiding) habits. A female thrips can produce up to 250 eggs during its life cycle. This quickly leads to great numbers of thrips infesting individual plants. An infestation of thrips may begin through insects being introduced into the greenhouse along with planting material and later in the season, adult thrips may fly from outside a process that is commonly referred as thrips influx. Thrips influx is very common in farms located in areas where crops such as Wheat which are good alternative hosts to thrips are grown. Growers also have to be aware of *resident thrips* which are basically thrips populations which thrive in the greenhouse in spite of regular chemical sprays. The fact is that some stages of the thrips are not susceptible to insecticide application and as a result continues to multiply and increase. These include the eggs which are laid in the leaf tissue and pupal stages which shelter under soil and debris. The spread of thrips can be both active (flight) and/or a passive process (floating on air currents).

# An Integrated Management Approach: Most Sustainable Tool in Thrips Management

As highlighted earlier, insecticide resistance is just one the issues growers have to contend with in control of thrips. Increasingly, growers are facing more stringent market demands with mounting

pressure to reduce the number of molecules and observe maximum residue levels (MRLs) on their produce. This turn of events has of course cast growers in an unenviable situation. The reality is that no single control measure can effectively manage thrips population and this calls for an emphasis on an integrated management approach. In order to counter insecticide resistance in the western flower thrips, several insecticide resistance management (IRM) programs have been developed around the world. The core objective of IRM programs is to maximize the life-span of efficacy for insecticides. Research has shown that successful IRM programs rely on non-insecticidal tactics, such as biological and cultural controls and host plant resistance to reduce population pressures. Also of importance is the rotation among insecticides of different mode of action classes, resistance monitoring, sampling to determine the need for insecticide applications and education to assure proper implementation. Growers need to adopt a proactive rather than a reactive approach in implementation of IRM programs in order to maximize their chances of success. The focus should be on more judicious insecticide use, and this can be accomplished with the development of well-founded economic thresholds.

# The Role of Bio-control Agents

One of the main challenges in the use of insecticides as highlighted earlier is the fact that resident thrips population are always present as some stages of the thrips are not susceptible to insecticide application, specifically eggs and pupae. In addition, the risk of influx thrips from outside can catch a grower off-guard leading to surprise losses. To get rid of thrips eggs it's advisable to use cultural methods such as knocking down damaged & open flowers. Koppert has also recently introduced ENTONEM based on the juvenile stage of the beneficial nematode Steinernema feltiae. ENTONEM tackles the pupal stages of thrips which shelter under soil and debris. It is important to ensure high moisture for a number of days to enhance efficacy of the product. The soil dwelling predatory mite MACRO-MITE (Macrochelesrobustulus) can also be applied on growing media to target thrips pupae. Besides, it also feed on eggs, larvae and pupae of sciarid flies (Sciaridae), preferring smaller larvae.

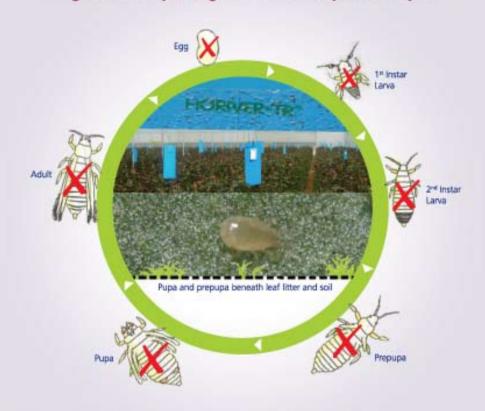
Predatory mites remain one of the most promising biological control agents for the control of thrips in roses. The generalist predator *Amblyseiusswirskii* such as SWIRSKI-MITE from Koppert predates, reproduces and develops on first larval instar of thrips. Additionally, it also predates on eggs and initial larvae of both greenhouse whitefly and tobacco whitefly; and is also known to feed on the younger phases of spider mites. *Amblyseiuscucumerisis* sometimes used to control thrips particularly in vegetable crops that produce a lot of pollen as an alternative food source; otherwise

### Did you know

a female Thrips can produce up to 250 eggs during its lifetime?\*

Take charge of your crop now!

# Our integrated management system targets every stage of the thrips life cycle



Talk to Koppert, we can customize a special program:

- Reduce your Thrips sprays by up-to 75%!
- Break Thrips resistance to pesticides
- Achieve minimal flower rejects
- Increase market compliance







Koppert Biological Systems (K) Ltd. Tel: +254 20 4453780; +254 731 202191 WWW.KOPPERT.COM | Email: info@koppert.co.ke



### From Page 34

it not advisable for use in ornamental crops such as Roses. Amblyseiusswirskiiis a better option as it develops much more quickly than A.cucumeris if the prey is available. In the near future, Koppert Kenya will introduce LIMONICA (Amblydromaluslimonicus) an even more superior predator than Amblyseiusswirskii which predates on both first and second larval instar stages of thrips.



Fig 1: Amblyseiusswirskii: Exhibits superior predation of thrips larvae

### Role of Mechanical Methods

Although predatory mites will only target the larval stages of thrips, it is important to note that both adult and larval stages contribute to plant damage. A holistic IPM strategy for thrips management should combine predatory mites and mass trapping of the adult thrips with blue sticky traps which have an adhesive on both sides to traps insects that land on it. The traps are not only a key preventive strategy as they trap any adults before they breed, but they also take care of influx thrips before it is too late. Western flower thrips in particular has good sensitivity to UV, green-yellow and blue colour while Onion Thrips (Thrips tabaci) is attracted to both blue and yellow colour. However, it is important to note that the wavelength of colour that a trap emits is key to its efficiency to attract thrips, so the trap must be of high quality. In greenhouses roses, mass trapping of thrips has been achieved by setting up blue sticky traps such as HORIVER-TR from Koppert at a rate of at least 1 card per 10m2 (1000 cards per Hectare). The cards are suspended 30 cm or less above the crop and are distributed evenly throughout the greenhouse. The use of Kairomones (thrips attractant - both males & females) in combination with sticky cards, lures thrips out of their hiding places (e.g. tightly closed plant parts like floral buds and unopened flowers) toward the sticky traps. Growers who combine sticky cards with Kairomones such as LUREM-TR from Koppert have reported that the sticky cards captured 43% more thrips compared to those without.



Fig 2: Use of sticky cards with a Kairomone(thrips attractant) to trap adult thrips in a greenhouse.

Growers who have successfully adopted mass trapping of thrips with sticky traps have reported that thrips control has become much easier. They have been able to reduce their thrips sprays by up-to 50%, even during the warm season when thrips pressure is high. The combination of the beneficial nematode *Steinernema feltiae* and soil dwelling predatory mite MACRO-MITE (*Macrochelesrobustulus*) to tackle the pupal stages of thrips, predatory mite such as *Amblyseiusswirskii* to deal with the larvae stages of thrips and blue sticky cards to trap the adult population drastically reduce the need for frequent insecticide sprays. Most important, growers can expect reduced flower stem losses due to thrips damage and enjoy better returns and increased market access.

### By Purity Kabuba& Patrick Koome



# Towards a Healthy Plant

"symptom" is the combined external and iA "symptom" is the combined external and internal reactions or alterations of a plant in response to it being unhealthy. Such conditions can be initiated by either biotic (living) or abiotic (non-living) causes. Since symptoms are the plant's response to some "stress", there are many commonalities in response to differing causes. For example, root discoloration from white to brown or black can be the result of root pathogens, nutritional problems, or a symptom of other physical production problems. Determining the cause requires investigating the suite of symptoms and other clues (i.e. water quality, spray history, nutrient analysis, etc.) before proper corrective action can be taken.

Herein, the suite of visual symptoms related to specific nutritional deficiencies for geranium are described. While useful as a starting point to diagnosing production problems, keep in mind that multiple nutritional disorders often occur simultaneously.

#### Why do plants need Nitrogen?

Protein is essential for all living organisms, and is required for growth and development. Nitrogen is one of the main elements in protein. Nitrogen is also a component of nucleic acid, DNA, RNA, genes, chromosomes, enzymes, chlorophyll, secondary metabolites (alkaloids), and amino acids. Nitrogen accounts for about 1 to 6 % of plant dry matter, depending on the species.

### Nitrogen deficiency

Nitrogen deficiency slows down the growth and development of plants. The plants appear stunted with light green lower leaves, while the upper leaves remain green. With prolonged N deficiency, yellowing (chlorosis) of older or lower leaves occurs. This is followed by leaf tip death and leaf margins developing a brown discoloration (necrosis). In some instances the leaves fall off. The plant stems become woody.

#### Why do plants need Phosphorous?

Phosphorus provides energy in the form of ATP and NADPH for plant metabolism (photosynthesis and respiration). Additionally, it is a component of DNA, RNA, nucleotides and cell membrane.

#### Phosphorous deficiency

Initially, plants appear darker green with reduced growth affecting the leaf size and stem thickness. As the deficiency continues, the older, lower leaves develop irregular spots of brown to dark brown dead tissue. In some plants, reddish to purple pigmentation may appear on the under or upper surface of leaf margins, lower leaves, and stems. Eventually, leaf death of older leaves may occur. In most cases, lack of phosphorus delays flowering in plants.

#### Why do plants need Potassium?

Unlike nitrogen and phosphorus, potassium is not a component of plant organic matter. Potassium is important for movement of sugars, starch formation, pH stabilization, drought tolerance, cell turgor, enzyme activation, and regulation of stomata opening and closing.

#### Potassium deficiency

The leaves of potassium deficient plants are small and dark green. The plants have short internodes resulting in compact plant appearance. These symptoms are followed by a sudden development of irregular necrotic tissues along the leaf margins and tips of lower, older leaves and eventually covering whole leaves, making the leaves appear scorched. Also, leaves curl downwards.

### Why do plants need Calcium?

Calcium is required for cell wall structure and cellular signalling. Calcium is important in cell division, cell expansion, building of cell walls, stomatal regulation, and cold tolerance.

#### Calcium deficiency

Unlike other nutrients, lack of calcium

generally affects the growing points and young leaves of the plants. The young leaves are often twisted or wrinkled. The growth is reduced with tiny black spots appearing around the mid-leaf area of young leaves and on the tips of very young leaves. In some cases, these black spots appear on the growing points. Abortion of flowers or flower buds is common if calcium is unavailable during flowering. During fruiting, lack of calcium can result in fruit cracking, water soaked tissues or blossom end rot (tomato).

#### Why do plants need magnesium?

Magnesium is a core component of chlorophyll (pigment of photosynthesis). Magnesium is also important in enzyme and cofactor reactions. It is involved in the metabolism and movement of carbohydrates and stabilizing cell membranes.

### magnesium deficiency

Normally magnesium deficiency symptoms appear in lower, older leaves with chlorosis of greenish yellow to yellowish green developing along the leaf margins and tips, which progresses inward between the leaf veins. As the deficiency prolongs, necrosis develops between the veins and the leaves curl downwards. Eventually, leaf and plant death may occur if the magnesium deficiency continues.

### Why do plants need sulfur?

Sulfur is essential in protein synthesis since it is a constituent of some essential amino acids such as cystine and methionine. Sulfur is also involved in plant photosynthesis and respiration.

### Sulfur deficiency

Initially, uniform chlorosis of light greenish yellow pigmentation develops anywhere between the young and mature leaves, but rarely on lower, older leaves. As the symptoms advance, uniform chlorosis spreads to the rest of the leaf area.

# Florismart launches new website and real-time flower platform

TOn the 1st of September, Florismart, the first online flower market, launched a brand new website and flower buying platform. Florismart is rapidly growing ever since they developed the concept two years ago. The next step in the process was creating a new website that suits the brand Florismart, and a platform, which has infinitely more comparing tools to help customers find the best products, and the best prices.

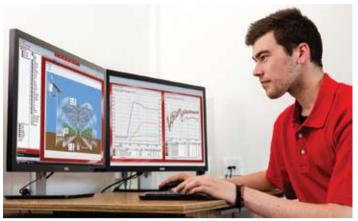
Steve France, Founder and MD about the company's rapid growth, and need for change: "Since we launched earlier this year, everyday I meet people who can't believe Florismart didn't exist before. An online flower market for florists with multiple exporters and wholesalers in one place seems so obvious in our digital age. And our growth is extraordinary, already 1000 florists registered in 6 months. It is as if the market was waiting for Florismart to happen."

Bert Buis, Director of Operations about the new platform: "Everyday thousands of flowers are sold on the Dutch flower auctions that florists can't have access to, because their wholesaler can't buy everything. With florists having to differentiate themselves from each other access to largest variety of stock is essential to their success. The bigger the stock the more attractive you are; Florismart, a real time flower platform, is the ultimate solution. Florismart manages the logistics and so florists really can spread their order over many different suppliers, and we'll collect and ship. With the launch we are adding in 6 new exporters, giving florists even more choice."

These developments will add value for Florismarts' customers in the following ways:

- They will be able to learn, receive valuable market information, and get inspired by means of the new and improved online magazine, FloriMag
- The web shop will provide the customers with enhanced search filters, which will give them the opportunity to compare prices, quality and suppliers.

## Hoogendoorn introduces new feature in process computer: customized alarms



Hoogendoorn introduced a new flexible alarm module for process computers that customers can program according to their wishes. Growers now have the option to choose certain periods.

e.g. during day time or only in case of certain set point deviations. In addition, the alarm module can capture additional calculations, including the difference between calculated and measured values of multiple aspirator boxes.

Standardized alarms notify growers during night time, weekends and holidays, even when immediate action is not necessary. The new Custom Alarm module of Hoogendoorn allows growers to set their own alarms, periods and conditions for their process computer. Also, alarm notifications are even more accurate thanks to additional calculations in the iSii software.

### Alarm notifications at set times

In case an external alarm is given at night on the UV sterilizer, an installer needs to be called to fix failures. However, during night time installers aren't available to solve issues. With the Hoogendoorn Custom Alarm growers can switch off alarms during night time and activate these in the morning at preferred times. Besides this, alarms can be postponed. This way, growers will only be notified when deviations last for a certain period and not in case of small fluctuations.

### Variable alarm limitations per period

The alarm module provides the possibility to actively inform growers on different limitations in multiple periods. For instance, this is important for growers that use weight scales and use set points conditions to the slab weight during different time frames. The conditions for the slab weight during day time (saturation) differ from the slab weight at night (sintering). When the slab weight is incorrect, the grower receives an alarm on his phone. This means he doesn't need to consult his graphs all the time.

#### Additional alarm calculations

The use of multiple aspirator boxes at larger greenhouse sections provides insight into the difference of climate conditions, necessary to control heating and ventilation. The new alarm module allows growers to activate an alarm when the difference of measured values among multiple aspirator boxes is too large. For example, an alarm is activated in case the values for greenhouse temperature deviate from a set point over a period of 15 minutes.

### Free alarm module with new iSii or update

Growers will only be alerted at self chosen deviations in set points, for example during fluctuations that exceed 10% or more or 2 °C or more. Detailed alarm notifications are send to a pc, tablet or smart phone. The Custom Alarm is included in a new iSii computer. Current users can obtain the alarm module for free with the latest update.

# SUPERIOR PERFORMANCE

Downy mildew reduces the marketable yield of cut-flowers. Ridomil Gold\* is the trusted and reliable solution against downy mildew in all seasons.

### HIGHLY EFECTIVE AGAINST DOWNY MILDEW IN ROSES





syngenta.

### Increasing Demand for QUALITY SFK



Most growers show a lot of enthusiasm when choosing cartons, sleeves or even refrigerated containers. However, little attention is generally given when choosing SFK, yet they are the first line of protection for the flowers. This has resulted in growers losing many stems which should have turned into revenue. This was revealed by research carried out recently by this periodical.

In Kenya, there is a wide range of SFK available to growers and exporters from different suppliers. However, the reasons for selecting a specific type of SFK is not always clear. Pack rates and cost efficiency seem to be prevailing motives according to our research. The outcome, however, is not always what would be best for the flowers.

#### **Growers Demands**

Speaking to different pack house and production managers, they all agree that, you must use SFK while exporting flowers. They also agree that quality was the main determinant factor while choosing the right SFK. However, very few seemed to understand the different characteristics of SFK to establish whether they are getting the right quality in the first place.

To be correctly designed, SFK should have suitable dimensions; means of ventilating; securing and cushioning the product; and any other necessary protective features. To understand the right choice of an SFK, we asked, what do flowers undergo in the cold chain? The study showed flowers undergo serious mechanical, physical and chemical stresses.

#### Characteristics of a Good SFK.

The cumulative nature of these stresses on the product have repercussions on the package durability. A number of factors namely heat, cold, humidity (water vapour in the air), dampness (water in a liquid state) and desiccation (lack of water or humidity) must be considered before one purchases the right SFK. The long series of road, air and sometimes sea or rail transport connections, involving handling before and after each phase, and often with intermediate stages of warehousing or cold storage should also be considered.

The SFK is the first foreign contact the flower has so it should be able to absorb humidity released from respiration of flowers, maintain shape and form of the flowers and ensure wrapping works as a protective agency from pressures.

Kenyan rose growers are increasingly supplying their flowers directly to the customers, hence the demand for quality SFKs in Kenya is on the rise.

This matter has been investigated deeply by Mr Parit Shah of Silpack Industries Limited, and the following two elements have emerged as pre-requisites for good quality SFK:

- · Correct choice of paper
- High performance adhesive

Having established the benchmark for the right quality of ingredients, Silpack went further to develop the SFK further to make it perform better in the cold chain and be used as a marketing platform.

Moisture Defensive SFK

Silpack acknowledges that vase life is fundamental to the grower and believes that the industry has exciting times ahead. SFK is now available, enhanced with a moisture defensive coating to ensure the rigidity and robustness of the SFK during long transit. Instead of using water repellent additives in the traditional method, which has proved to



be detrimental as it allowed moisture to remain in contact with the petals, Silpack has an innovative method of adding this technology, which is food grade, to the SFK without affecting the flowers.

### **Printed SFK**

Further innovation has been achieved in printing the SFK in full colour and allowing it to be used as a marketing platform for growers who are increasingly finding their products being sent to the end users in the same packaging that left the farm. Brand sensitivity is increasing and this is another value added service Silpack has brought to the market.

#### Conclusion

Growers need to differentiate between the various materials used in manufacturing of SFK. In the Kenyan market, E-flute is the smallest pitch with B-flute average and C-Flute with the highest pitch. Secondly, use of virgin paper will behave far better than recycled paper.

Finally, the right grammage of paper used results in better SFK performance. However, growers must be careful of some cheaper recycled material SFK in the market as they are vulnerable to moisture due to their composition.

Before purchasing SFK, growers must put into consideration their markets as they determine the strength. They must also ensure the SFK has undergone control tests for short term needs and field tests for long term needs. The impact on the product and the freight costs should also be put into consideration.

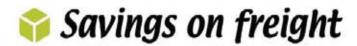
Silpack created a paradigm shift in the sector through the SoliQ Air brand of boxes which are specifically designed for the floriculture industry. These cartons were the first purpose built cartons that gave superior performance and weight savings to its users.

Silpack now extends that understanding and innovation to SFK. The SFK is designed and manufactured in Kenya with the printing done at their Likoni Rd facility.

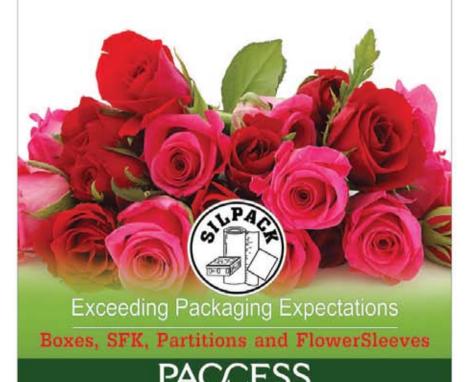








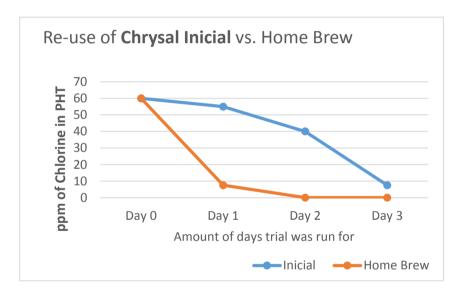




### Chrysal 'Has' the Solution - Chrysal Inicial

**Rehydration** for flowers is essential! **Chrysal** has come up with a "**First Drink**" solution for every Rose. With **Chrysal Inicial**, you will be assured that your Roses get the cleanest, purest post-harvest water treatment a flower needs. With its simple mixing formulation, flocculating capability and slow release chlorine **Chrysal Inicial** is the thirst-quencher for all flowers.

We all know that water management can be difficult, however with **Chrysal Inicial** it doesn't have to be. You can re-use **Inicial** for up to 3 days, allowing for water saving, without having to worry if your flowers are being hydrated enough. It cleans, regulates pH and keeps bacteria at bay all at the same time, ensuring that your Roses get the best possible uptake of water within the first hours of Harvest. The results speak for themselves – see the graph below which shows how the slow releasing chlorine of **Inicial** allows to keep you PHT **free of Bacteria** while saving water usage at the same time.



### **Detailed Analysis:**

Day 0 – This was the first day that the flowers were harvested. They were placed into a bucket of fresh Chrysal Inicial. From the greenhouse they were taken to the Packhouse for precooling. After a period of 4 hours the flowers were removed from the bucket and graded, The Chrysal Inicial bucket was then returned to the cold store overnight. This allowed the Chrysal Inicial PHT to cool down over night before being re-used the next day.

Day 1 – this is the second use of **Chrysal Inicial**. With a similar protocol to Day 0, the bucket of Inicial was removed from the overnight cold store and taken to the Greenhouse. Flowers were placed in this bucket and transported to the Packhouse for precooling. After 4 hours the flowers were removed from the bucket for grading, and the bucket itself was returned to the cold store overnight.

Day 2 – this is the third use of Chrysal Inicial. Again following the same protocol as Day 0 and Day 1, the bucket was removed from the overnight cold store, where it was taken to the Greenhouse. Flowers were placed in the pre-cooled PHT of Chrysal Inicial and then brought to the pack house. At this point the bucket, which had now been used for a total of 3 Harvests and over 3 days, would be discarded and a Fresh batch of Chrysal Inicial would be used for another 3 days.

# CHRYSAL INICIAL



- · Water pre-conditioning product for Rose and Summer flowers with an instant effect
- To be used in greenhouse and at intake
- · Continuous stable ready-to-use solution during the entirety of the greenhouse treatment time
- Available in 6 kg and 20 kg buckets

**Chrysal Africa** 

### That's the beauty of Chrysal



P.O. Box 78219, 00507 Nairobi, Kenya, No. 7 Sunflag Industrial Park, Off Mombasa Rd, Mulolongo, T: +254 (0)20 8082517/8, info@chrysal.co.ke



# Crop Production and Development in the Agriculture Sector

AFRICA LIMITED® in Kenya as an agrochemical company has been providing safe, affordable and modern state-of-the art crop protection products and agro-inputs services to farmers.

AGRICHEM AFRICA LIMITED® devotes itself into providing new, creative and ecofriendly solutions when it comes to crop care and farming development. Our wide range of products for crop production and protection are authenticated with the bylaws in crop produce by the Government of Kenyan under the Pest Control Products Act.

Over the years as an agrochemical company based in Kenya with associate regional corporate industries in Tanzania and Ethiopia, we are able to satisfy a regional based market demand of our products and services. We are convinced that providing access to improved farming systems is one of the backbones of any developing economy of a given country both social-economically, health wise as well as environmentally and the entire African region as a whole.

With its advanced and vastly accessible location at Winsford Industrial Park, Nairobi, Kenya, AGRICHEM AFRICA LIMITED® has been able to attract and open up a great channel of innovative business operations to both our suppliers and clients at large. Being a licensed Agent and Distributor of agrochemicals under PCPB (Pest Control Products Board), a member of AAK (Agrochemical Association of Kenya) and UBA (United Business Association) Kenya, we as an agrochemical company are able to ensure top of the chain standards and total crop care products supply.

We deal with distribution and supply of F1 Hybrid Seeds, Insecticides, Fungicides,



Herbicides and Foliar Fertilizers to Floriculture and Horticulture sector in the African market as a whole. The company was founded under the concept of innovation considering the developing market of Agriculture in Kenya and African regions. Our aims are to provide the best agrochemicals which are environmental friendly and cost effective. With our skilled man power, dedicated and committed staff members; the company has introduced many revolutionary agrochemical products in African markets. Our research and production team is constantly in contact with our suppliers and manufacturer of agrochemicals worldwide.

As a company, AGRICHEM AFRICA LIMITED® has a wide experience of more than a decade in agrochemicals trade, thus having immense knowledge of the African market better and therefore we are always in the process to give something better to farmers. Apart from selling agrochemicals the company also provides technical support and guidance to the farmers and growers to help them get the right products and methods to increase their productivity. We are not just stopping our responsibility after selling the products, but

also have professional staff members who constantly keep visiting the farmers so as to understand their challenges and suggest to them the right solutions. The story of success of the company can be viewed from its huge number of satisfied customers in both Floriculture and Horticultural sectors. With our wide and well equipped logistic infrastructure, we are delivering products to the door of our distributors and commercial customers countrywide.

As we believe success is not an accident but it's a process, and it requires efforts and loyalty. Being a business organization we are as other companies and more so remarkably different from the rest as we keep contact with our customers to ensure that their needs and demands are addressed to make way to real opportunities by effective response to customer satisfaction.

The company's operations ethics in crop production and development in the Agriculture sector is believed to lead towards our society and nations development. Being a responsible organization we believe in partnership and growth together.

www.agrichemafrica.com

### AGRICHEM AFRICA LIMITED® IS A REPUTABLE SUPPLIER TO FLORICULTURE FARMS FOR INSECTICIDES, PESTICIDES AND FOLIAR FERTILIZERS RANGE



### FLORICULTURE PRODUCTS RANGE

WATER SOLUBLE POWDER SYSTEMIC, CONTACT AND STOMACH INSECTICIDE FOR THE ACETAMIPRID 200G/KG ACEPRID 205P® CONTROL OF APHIDS THRIPS AND WHITEFLIES IN ROSES

A SYSTEMATIC FUNGICIDE WITH A PROTECTIVE AND CURATIVE ACTION AGAINST FOSETYL-ALUMINIUM 800G/KG FONIUM 80WG\*

DOWNEY MILDEW IN ROSES

A SYSTEMIC THAT INTERFERES WITH THE METABOLISM OF ECDYSONE WHICH IS AN EMULSIFIABLE CONCENTRATE CONTAINING 3000PPM AZADIRACHTIN THAT ACTS AS AN AZADIRACHTIN 3000PPM FORTUNE AZA 0.3FC®

INSECT GROWTH REGULATOR AND DOES NOT CONTROL ADULT INSECTS. HOWEVER, IS

ALSO EFFECTIVE AS A REPELLENT TOWARDS, SOME ADULT SPECIES

APPLIED IN THE SOIL AND ABSORBED BY THE ROOTS AND TRANSLOCATED VIA XYLEM PHOSPHOROUS 28% + POTASSIUM AND PHILDEM VESSELS THROUGHOUT HE PLANT, IN CASE OF FOLIAR APPLICATION IT IS **IGNITE®** 

33% OF PHOSPHOROUS ACID TRANSLOCATED THROUGH THE XYLEM AND PHILOEMVESSELS TOP ALL PARTS OF THE

PLANT

BIOCHEMISTRY ACTS AS AN INSECT JUVENILE HORMONE ANALOGUE THAT INHIBITS PROFEN 10.8EC® PYRIPROXYFEN 108G/L INSECT MATURATION PROCESSES, IT'S AN INSECT GROWTH REGULATOR, SUPPRESSOR OF

EMBRYOGENESIS, INHIBITOR OF METAMORPHOSIS AND INHIBITOR OF REPRODUCTION

A PROTECTIVE FUNGICIDE FOR CONTROL OF BOTRYTIS IN ROSES WHICH BELONGS TO THE CHEMICAL FAMILY OF THE ANILINOPYRIMIDINES. ITS TRANSLAMINAR ACTIVITY AND PYRIMEC 40WG\* PYRIMETHANIL 400G/KG

ITS INTERESTING VAPOUR-ACTIVITY GIVE AN EXCELLENT PROTECTION TO THE TREATED

FOLIAR SURFACE

CONTAINS AZOXYSTROBIN, A BROAD SPECTRUM FUNGICIDE FROM THE STROBILURIN GROUP IT HAS A SYSTEMIC, TRANSLAMINAR AND PROTECTANT PROPERTIES. IT INHIBITS FUNGAL RESPIRATION, RUSTOP 250SC SHOWS GOOD CROP SAFETY, DISEASE CONTROL RUSTOP 250SC® AZOXYSTROBIN 250G/L

AND MAINTENANCE OF GREEN LEAF AREA WHICH RESULT IN SIGNIFICANTLY YIELD BENEFITS, BEST USED AS A PROTECTIVE TREATMENT OR DURING EARLY STAGES OF DISEASE.

ESTABLISHMENT

CHLORIDE CHANNEL OF NERVOUS SYSTEM OF INSECTS TO HINDER CHLORIDE SWORD 2005C® FIPRONYL 200G/L METABOLISM OF Y-AMINOBUTYRIC ACID OF PESTICIDE. IT HAS NO CROSS RESISTANCE

WITH DIMETHRIN, ORGANOPHOSPHORUS AND CARBAMATE, IT HAS GOOD CONTROL

FIPRONIL IS A BROAD-SPECTRUM PHENYL PYRAZOLE INSECTICIDE ACTING ON THE

AGAINST THRIPS ON BOSES

### GREENHOUSE IMPORTED POLYTHENE (FILM) SHEETING, SILAGE MULCH AND DAM LINERS

FOR ALL CLIMATES, LUMINOUS TRANSMISSIBILITY AS WELL AS THERMICITY ARE OF VITAL IMPORTANCE, ALL REGIONS REQUIRE EARLY HARVEST AND HIGH YIELD CROPS COMPARED WITH OPEN AIR CROPS, FILM DURABILITY IS ANOTHER IMPORTANT FACTOR TO BE CONSIDERED WHEN CHOOSING GREENHOUSE COVERING THE COST OF REPLACEMENT MATERIAL AND LAROUR ARE OTHER FACTORS TO CONSIDER

GREENHOUSE IMPORTED POLYTHENE SHEETING ARE MANUFACTURED BY SOLPLAST, S.A. AGRICULTURAL PLASTICS - SPAIN

Your Partner in Agriculture

# Kenyan Flower Farm Embrace Vermicompost Technology



Rising cost of farm inputs in the country has seen some leading flower farms in the country rethink other innovative ways of cutting chemical based fertilizers cost in a sustainable and environmentally friendly way.

A leading rose grower in Kenya, has embraced a relatively new but simple system to operate composting technology known as Vermicomposting. This refers to the production of plant nutrient rich excreta of earthworms and decomposed matter.

Earthworms play a vital role in plant growth and it is quite possible to effect quick change over for sustainable agriculture by harnessing the brand new vermicompost technology to the soil. This vermicompost have enzymes, secretions of earthworms which stimulate growth and yield of crops and even develop resistance in crops receiving this spray. Also known as vermiwash, worm compost, vermicast, worm castings, worm humus or worm manure, vermicompost is similar to plain compost, except that it uses worms in addition to microbes and bacteria to turn organic waste into a nutrient-rich fertilizer.

The technology has gone a long way in reducing the cost of fertilizers needed for the growth of a healthy flower. It has also proved completely safe to plants and easy to produce.

Explaining how vermicompost is prepared the grower said the farm acquires cow dung from the neighbouring community at a low cost.

The dung is then put in barrels and red earthworms rarely found in soil are introduced. The barrel is usually completely open on one side with a hole on the bottom end to accommodate a vertical limb of a 'T' jointed tube in a way that about half to one inch of the tube projects into the barrel.

To one end of the horizontal limb is attached a tap while the other end is kept closed. This serves as an emergency opening to clean the 'T' jointed tube if it gets clogged. A container to collect the liquid compost is placed on the open end of the tube in which the vermicompost is collected in form of liquid.

### How vermicomposting work

After procuring a container and setting it up the worms are fed on the cow dung after which they secrete it. Water is poured into these barrels to wash the excreta which are then collected inside a container placed on the open tap beneath the barrels. Earthworm has efficiency to consume all types of organic rich waste material including vegetable waste, industrial and other organic waste.

In addition to increased nutrient levels, worm castings contain millions of microbes which help break down nutrients already present in the soil into plant available forms.

As the worms deposit their castings, their mucous is a beneficial component absent from compost produced by hot or cold composting. The mucous component slows the release of nutrients

preventing them from washing away with the first watering. Worm compost is usually too rich for use alone as a seed starter. It is useful as a top dressing and as an addition to potting mixes at a rate of one part castings to 4 parts mix.

Unlike compost, which can work its magic in a pile in your backyard, vermicompost requires a bit more structure to work, usually in the form of a bin. Bins can be made out just about anything, but they require drainage and air flow to be built in, so things like Styrofoam (very insulating, and may release toxins into the worms' environment) and metal (too conductive of heat and cold) are generally less desirable, and plastic requires more drainage than wood and can't absorb moisture. The design of a bin usually depends on where you want to store the bin and how they wish to feed the worms.

#### Vermicomposting tips

In warm climates, keep the bin in the shade or away from midday direct sun just like compost, it should stay moist. Quantities of cow dung or whatever waste material you are using to make the compost, added depends on the size of the worm population; at first, feed the worms approximately one-half their body weight in kitchen scraps a day at most.

That is, if you have one pound of worms, feed them about 1/2 pounds of kitchen scraps each day. When they become more established, you can feed them closer to their entire body weight, though it's best to wait to add new food until the old food has been processed by the worms.

### Waste that can be used for vermicomposting

Agricultural waste; Agricultural fields: stubble waste, husk, straw, and farmyard manure. Others include stems, leaf matter, fruit rind, pulp and stubble. But be careful while handling an all-citric waste.

Animal waste include; dung, urine and biogas slurry

*Urban solid waste:* Kitchen waste from household and restaurants, waste from market yards and places of worship, and sludge from sewage treatment plants.

Agro industries: Food processing units: Peel, rind and unused pulp of fruits and vegetables, fine bagasse, press mud and seed husk, stems, leaves and flowers after extraction of oil.



Environmentally intelligent farming



### Make Employees Better at Their Jobs

f course there is no reason to give employees a voice if you aren't willing to listen, so if you decide to try something like "CEO For a Day" (and why wouldn't you?), respond. You've been there.

You've stared at a blank document as you struggled to come up with incredible words of wisdom that will inspire and motivate your employees.

So has your neighbour, CEO of a fast growing ornamental growing company, which has over three farms nationally is one of the largest in the world. "I was sitting in front of my computer, trying to come up with something I could tell all these smart people in my company that would help them do their job better," He says, "and I realized that what I really should be doing is asking them what I should do."

#### Make them CEO

The ground rules were simple: Yesterday you were a regional manager. Today you're the CEO. What would you do to make the company better? He says many of the answers related to the person's job, but some related to broader issues.

And regardless of the answer, employees were able to indirectly express their emotions out without offending anyone. "Overall I loved the feedback," He says, "but it was also depressing because a number of people said, 'I would do whatever I could to bring back the family atmosphere we used to have in the company.'

Those responses made me feel like such a fraud. Every day I was talking about how our business is a family and about really knowing our employees.... and that's not how employees in the field felt.

"We have farms in three different locations and people across the country," he continued. "It was hard for all of our employees to feel like they are part of the family. I hadn't recognized that.

I still saw us as a mom and dad, but they saw us as a giant bureaucratic company. So I immediately changed my mind set from growing the company to fixing who we are." Keep in mind He is used to listening to employees.

His parents started the company, and they put him through a rigorous training process that required him to work in more than 10 positions throughout the company–from customer service to sales to propagation and production, spraying and scouting, harvesting and post harvest handling, delivery truck driver to accounting.

"Everyone asks me if that was hard," he says. "I thought it was easy. I didn't have anything to hide and treated the task at hand as the task at hand instead of dwelling on what I would do next. I just stepped into every job and worked hard.

I learned a lot, but I also earned the respect of our employees... something I didn't realize I was doing until it was done." At age 30, He took over the company reins from his father. Since then revenue has grown.

### Get Rid of What Makes Them Unhappy

"By getting to know our employees and their jobs," He says, "I could eliminate things that made them unhappy and kept them from doing a better job. Sometimes it's not spreadsheets—it's company morale."

Feedback also convinced him to open satellite departments so the company could recruit better talent. "Most of our new hires were commuting from up to an hour a day," he says.

"To have someone outside my normal circle tell me we needed to go where the talent is was huge."

Of course there is no reason to give employees a voice if you aren't willing to listen, so if you decide to try something like "CEO For a Day" (and why wouldn't you?), respond.

Tell each employee what you think about their ideas and input. Be as open and honest as possible. Provide a thoughtful response: yes or no, and most importantly why.

"My secret to success is to be the same person at work that I am when am having a great day with your best friend," He says. "You listen to your friends, right? So listen to your employees.

"Then just be that person, each and every day. If you are brave, honest, forthcoming, and transparent you don't have to try to be a leader. You can be yourself."

"Tell each employee what you think about their ideas and input. Be as open and honest as possible. Provide a thoughtful response: yes or no, and most importantly why."



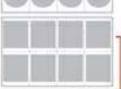
Introducing a new product, in keeping with better efficiency and output on the farm.

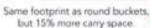
Features of the Flower Bucket include:

- Strong hand grip on two opposite sides
- · Side stoppers to prevent tight stacking
- · UV Stabilised thus withstanding the harmful effects of the sun
- · Fill level graduation on the inside for accurate water levels
- Ideal design for flower transportation and storage
- · Same footprint as round buckets
- · Carries more stems than other buckets (approx. 15% more)
- · Saves storage space lost using other buckets
- · Available in various colours and specific colours for special orders
- · Available with personalised names with a minimum order
- · One year guarantee

















\*FPSafrica

### SANPAC Africa limited

+254 (0)722 201 338, (0)733 201 338,

(0)756 201 338

+254 (0)20 211 2100/1/2/3

Email: sansales@sanpac.com or fpsmarketing@sanpac.com

P.O. Box 20496, Nairobi, 00200, Kenya

Off Mombasa Road, Next to Nation Media, Nairobi

# BREEDERS

### A Day at Plantas Continental Trial House in Timau



At the begining of July, we headed to the scenic countryside of Timau, an area on the chilly nothern slopes of Mount Kenya. This is where Plantas Continental's trial

house is located; housed within the confines of Uhuru Flowers Ltd at 2,600m altitude. At the trial house, Plantas Continental showcases both new and well established commercial rose varieties; including standard roses and garden roses.

# Dümmen Orange, unveiling the 'City' range of roses

We recently visited the Dümmen Orange flower breeding facility located in Naivasha; for the first time since the unveiling of their new brand values, logo and merger of several well-known corporate brands.

Two main things stood out during our visit. The entire rose assortment from Terra Nigra is now available at Dümmen Orange. Terra Nigra was one among the various companies merged under the Dümmen Orange umbrella.

Dümmen Orange has also introduced a new line dubbed "City Range" which is an assortment comprising of rose varieties ideal for supermarket growers. These rose varieties are

good producers and according to Dümmen Orange East Africa GM Peter Mwangi, the roses are a good choice for growers at 1,500 to 1,900 altitude and this was a good time for the growers to visit and sample. Peter shared with us some important insights on the City Range.



### New Rose Sensual to be introduced soon at Dutch Auction

Sensual is a large rose variety with a white-pink bi colour. The rose has good production and a full



flower. Recently, Sally Roberts and team from Olij Rozen East Africa visited rose grower **Xpressions Flora** Ltd in Nakuru where they were shown the first stems of this new variety by Jan Spek Roses. Sensual is set to be introduced soon through Amor at the Dutch auction.

Jan Spek Rozen is represented by Olij Breeding in East Africa, South-

Africa, Poland and at other European and East European countries.

### **Interplant Spray Roses**

Product Group: Premium Spray Frade name: Royal Porcelina
Denomination: Intervorcrop
VBN Code: 115024
Stem length (cm): 60-80
Vaselife (days): 10-12
Flower production: medium
Colour: cream white
New introduction: yes



All Breeder's Briefs and Photos Courtesy of Flowerweb. For more details visit www.flowerweb.com

# FLOR BRIEFS

# **East African Packaging Industries Ltd Names new Managing Director**

East African Packaging Industries Limited, which supplies cartons and related packaging materials in East Africa, announced that Mr. Nick Barnes has been appointed to succeed Cor Roest as the Managing Director effective August this year.

Mr. Barnes joins the group with a wealth of experience in manufacturing packaging materials. He began his Kenyan career at Allpack Industries Limited as the General Manager then. He later moved to Dilpack Packaging Ltd as a director and still overseeing the day to day running of the company that manufactures flower sleeves.

EAPI is fortunate to have someone as experienced in Packaging as Mr. Barnes with an experienced leadership team in place to support his efforts. The flower sector will also be overjoyed to have Mr. Barnes back.

## Naivasha Growers To Pay Cess

he Nakuru County government has struck a deal with flower farmers over the payment of cess after two years of delay.

Under the agreement with the Lake
Naivasha Growers Group (LNGG), the
flower farmers will be paying 20 cents
for every kilogram of produce harvested
annually. The farmers have also agreed
to clear the two years' debt as the county
moved in to enforce the recently enacted
finance act. This emerged recently when
Nakuru Governor Kinuthia Mbugua received
a Sh10.3 million cheque from the flower
farms for the pending debt.

Mr Mbugua said his government did not



want to overburden the group with more taxes as they were already paying 48 different fees. He said his government was engaging other flower farms to start paying cess to the county to improve service delivery. "We have agreed with the Lake Naivasha Growers Group that it will collect the cess on behalf of the county on quarterly basis from its members," he said.

LNGG Chairman Richard Fox said 22 of the more than 70 flower farms in the county had agreed to pay cess to the county government. Fox said the group would be collecting the cash on behalf of the county government at a premium fee and challenged non-paying farms to comply.

### IFTF World of Flowers: For the Florist of the Future!

'IFTF World of Flowers': a unique three-day event for florists will take place under that name at the IFTF floriculture trade fair in The Netherlands (4-6 November). With its eyes set firmly on the future, World of Flowers will erect the 'Flower Shop of Tomorrow'. Within that framework, solutions will be brought up for various issues which florists find themselves confronted with – now as well as in the near future. The event is being organized by International Florist Organisation Florint, Green Team Consultancy+ and IFTF.

#### The Flower Shop of Tomorrow

The immense challenges that the future will bring are central to the IFTF World of Flowers event. You may think, for example, of the rapidly changing market and the parties that (will) define that market, but also the exponential growth of modern media and digital technology, which demands a lot of the florist. Meanwhile, the consumer and his buying behaviour keep changing as well. How does a florist formulate answers to these complex challenges?

To contribute to solutions to these vital issues, IFTF World of Flowers will present the 'flower shop of tomorrow' for the florist of the future! What does such a flower shop look like? It's a shop where change is embraced, and passion reigns; a shop where the consumer is regularly rediscovered; a place where, in this case, inspiring floral design demonstrations constantly take place, by Dutch top florists like Dini Holtrop, Bert Kuiper and other luminaries.

### Amiran partners with BT9 to introduce Xsense

BT9 Ltd and Amiran Kenya have launched into the Kenyan agricultural industry the Xsense, an end-to-end cold chain management system that ensures all stakeholders in the supply chain have full transparency and control over their perishables anywhere in the world, at any given time.

The new Xsense that is peaking in the market, allows the monitoring of real time and end to end tracking in respect of temperature and relative humidity fluctuations. Xsense proactively monitors, analyzes and disseminates relevant data to supply chain stakeholders and generates recommendations on how to manage products throughout the cold chain, assuring the product's desired environmental conditions from start to end.

"Effective monitoring of temperature, humidity and a host of other variables is crucial to effectively managing the produce cold chain. BT9's tracking products assists growers, shippers and retailers to ensure the produce arrive to customers in the freshest state possible", states Omry Karplus Amiran Kenya, Post Harvest Manager.

Automated analytics generated in the Xsense system, in tandem with the firm's research and consulting services provide users the tools to identify chronic cold chain problems. They then can take corrective actions to reduce waste and improve quality, overall performance, and profitability, and deliver food and pharmaceuticals in optimal condition.

"We created the Xsense system in response to the agricultural industry's lack of real-time and early warning capabilities for consumable perishables", said Israel Ben-Tzur, Chief Executive Officer of BT9. "Xsense goes far beyond conventional data logger products by providing detailed analytics and expert consulting to enable all stakeholders in the cold supply chain to better understand, track and mitigate the risks associated with breaches of temperature and relative humidity", he adds.

Temperature management can have different impacts on the optimal nature of a product in each industry sector. In each sector, BT9 experts look at the variations in the cold chain and give specific recommendations to the impact of temperature data in regard to health, quality, and viability of products at all steps in the process. The system gives context and recommendations of what to do with information generated in the cold supply chain process.

Amiran partners with BT9 to introduce XsenseR- the real time cold chain information system

BT9 Ltd and Amiran Kenya have launched into the Kenyan agricultural industry the Xsense, an end-to-end cold chain management system that ensures all stakeholders in the supply chain have full transparency and control over their perishables anywhere in the world, at any given time.

The new Xsense that is peaking in the market, allows the monitoring of real time and end to end tracking in respect of temperature and relative humidity fluctuations. Xsense proactively monitors, analyzes and disseminates relevant data to supply chain stakeholders and generates recommendations on how to manage products throughout the cold chain, assuring the product's desired environmental conditions from start to end.

"Effective monitoring of temperature, humidity and a host of other variables is crucial to effectively managing the produce cold chain. BT9's tracking products assists growers, shippers and retailers to ensure the produce arrive to customers in the freshest state possible", states Omry Karplus Amiran Kenya, Post Harvest Manager.

Automated analytics generated in the Xsense system, in tandem with the firm's research and consulting services provide users the tools to identify chronic cold chain problems. They then can take corrective actions to reduce waste and improve quality, overall performance, and profitability, and deliver food and pharmaceuticals in optimal condition.

"We created the Xsense system in response to the agricultural industry's lack of real-time and early warning capabilities for consumable perishables", said Israel Ben-Tzur, Chief Executive Officer of BT9. "Xsense goes far beyond conventional data logger products by providing detailed analytics and expert consulting to enable all stakeholders in the cold supply chain to better understand, track and mitigate the risks associated with breaches of temperature and relative humidity", he adds.

Temperature management can have different impacts on the optimal nature of a product in each industry sector. In each sector, BT9 experts look at the variations in the cold chain and give specific recommendations to the impact of temperature data in regard to health, quality, and viability of products at all steps in the process. The system gives context and recommendations of what to do with information generated in the cold supply chain process.

### Where you can apply the Xsense system

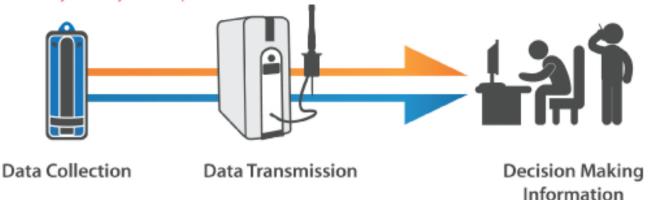
- Fresh Produce
- Meat and Seafood
- Dairy Industry
- Logistics
- Pharmaceuticals

### The 3 main models of the system

- End-to-End (Shipment)
- Facility Monitoring
- Last Mile (Domestic distribution Field to Pack-House monitoring)

### R- the real time cold chain information system

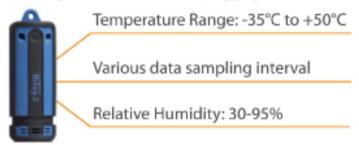
Xsense- System Layout Complete end-to-end cold chain information



Continuous wireless data transmission and profiling temperature fluctuations throughout the supply chain guiding improvement and accountabilities in all parts of supply chain.

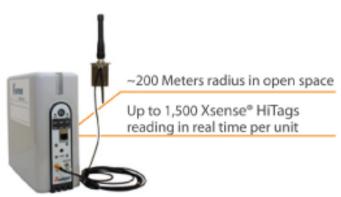
### Data Collection

Disposable wireless RF sensor tags (Xsense HiTags) collect perishable's temperature and relative humidity (RH) data from within cartons, pallets and trailers enabling real time data history logging.



### Data Transmission

The Xsense communication units (CU's) relay all the data collected by the Xsense HiTags along with GPS location data to the Xsense information center either in real time or off line as required. The Cu's can be installed in fields, production facilities, complete monitoring converges to each and every facility or location.



Fixed- CU's permanent installed in warehouses Vehicle mounted- CU's permanent installation in trucks

Portable- CU's are placed in trucks as transient devices to be retrieved by end of each transit cycle.

### Decision Making Information



The Xsense information system offers real time and post shipment data viewing and control of perishables risks via cellular and or internet access, 27/7- Anytime, anywhere.

Real time alerts and corrective action





GPS producte location and status map



The product offers a holistic approach to cold chain management. It proactively monitors, analyzes, and disseminates relevant data and then supplements it with recommendations on how to manage products based on collected information, assuring viability of the products desired environmental conditions from start to finish.



# **Partners of Floriculture**



























Dow AgroSciences





















Floriculture encourages the pursuit of joint activities in areas of mutual interest with national and international societies, companies and organizations. Agreements have been reached between Floriculture, leading growers and suppliers and trade associations. This unique partnership includes a complimentary copy for each member of the registered associations. Floriculture is proud to announce the cooperation with the above corporates.



FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
AAA- Flowers		Nakuru	Banerjee	0704788852	banerjee@aaagrowers.co.ke
AAA Growers	Vegetables/Flowers	Nairobi	Musa Sando	0787866022	sando@aaagrowers.co.ke
AAA-Chestnut		Narumoru	Kiai/Sando	0722944030	sando@aaagrowers.co.ke
AAA-Growers		Nakuru	Moses Sando	0787866022	sando@aaagrowers.co.ke
AAA-Hippo		Thika	Steve	0721778736	julius@aaagrowers.co.ke
AAA-Roses		Rumuruti	Julius Ruto	0720330039	turiagronomy@aaagrowers.co.ke
Acacia Farm-Sunripe		Naivasha	Antony	0711827785	naivasha@sunripe.co.ke
Africala		Limuru	Rob	0721-837968	sales@africalla.com
African Blooms	Roses	Nakuru	Samir Chandorkar	0735384552	samir.chandorkar@xflora.net
Afriscan Kenya Ltd	Hypericum	Naivasha	Reuben Kanyi	0723920237	
Agriflora Ltd	Flowers	Nakuru	Clement Kipngetich		cngetich@sianroses.co.ke
Akina Farm	Roses	Nakuru	Arfhan	0722728441	arfhan@fontana.co.ke
Alani Gardens	Roses	Nakuru	Judith Zuurbier	0722 364 943	alani@alani-gardens.com
Altitude Flowers	Flowers	Nakuru	Dominic Koech	0723684277	
Aquila Development Co	Roses	Naivasha	Prakash Shinde	0710791746	pm@aquilaflowers.com
Ayana Farm	Roses	Nakuru	Gideon Maina	0721178974	gideon@fontana.co.ke
Bamboo Farm-Sunripe		Nakuru	Reuben	0723920237	•
Balaji	Roses	Olkalou	BalasahebIngawae	0735593016	balasaheb.ingawale4@gmail.com
Baraka Farm	Roses	Nakuru	Lucy	0720554106	lucy@barakaroses.com
Batian Flowers	Roses	Nanyuki	Dirk Looj	0720102237	dirk@batianflowers.com
Beautyline	Flowers	Naivasha	Peter Gathiaka	0722676925	peter@beautyli.com
Bigot Flowers	Flowers	Naivasha	Kakasaheb Jagtap	0722205271	jagtap.kt@bigotflowers.co.ke
Bila Shaka Flowers	Roses	Naivasha	Joost Zuurbier	0722204489	bilashaka.flowers@zuurbier.com
Bondent	Eryngiums	Nanyuki	Richard Fernandes	062-31023/6	bondent.production@karik.biz
Black Petals	,g	Limuru	Nirzar Jundre	0722848560	nj@blackpetals.co.ke
Blissflora Ltd	Roses	Nakuru	Apachu Sachin	0789101060	appachu7@yahoo.com
Blue Sky		Naivasha	Mike	0720005294	info@blueskykenya.com
Blooming Dale Roses Kenya Ltd	Flowers	Nanyuki	Sunil	0718991182	info@bloomingdaleroses.com
Buds and Blooms		Nakuru	Shivaji	0720895911	shivaniket@yahoo.com
Carnation Plants	Roses	Athiriver	Ami Ř.	0733626941	amir@exoticfields.com
Carzan Kipipiri	Flowers	Naivasha	Nicholas	0721844367	kipipiri.production@carzankenya.com
Carzan Kipipiri	Flowers	Naivasha	Justus Metto	0722755396	gm@carzankenya.com
Carzan Rongai	Flowers	Nakuru	Francis	0720890920	rongai.production@carzankenya.com
Carzan Rongai		Nakuru	Paul M.	0711838689	rongai.production@carzankenya.com
Charm Flowers	Flowers	Athiriver	Ashok Patel	020 352583	ashki@wananchi.com
Colour Crops	Hypericum	Nanyuki	Vincent	0721652231	colourcrops@tmu.com
Colour crops	Flowers	Nakuru	Maina	0722578684	bahati@colourcrops.com
Colour crops Naivasha	Flowers	Naivasha	Geoffrey Mwaura	0722200972	nva@colourcrops.com
Countrywide Connections		Nanyuki	Peterson Thuita	0724786004	bondet.production@kariki.biz
Delemere Pivot		Naivasha	Daniel Ondiek	0720395963	daniel.ondiek@vegpro-group.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	Naivasha	James Opiyo	0723516172	Opiyojames160@gmail.com
Duro Farms (Rain Forest land)	Roses	Naivasha	Julius Kigamba	0723665509	jkigamba@fleurafrica.com
Elbur flora	Roses	Nakuru	Daniel Moge		
Enkasiti Thika	Flowers	Thika	Tambe	0734256798	enkasiti@gmail.com
Equator Roses	Flowers	Eldoret	Charles Mulemba	0721311279	cmulemba@sianroses.co.ke
Equinox	Flowers	Nanyuki	Tom Lawrence	0722312577T	tom@equinoxflowers.com
Everflora Ltd.		Thika	-	0735873798	everflora@dmblgroup.com
Fairy Flowers	Flowers	Limuru	Sylivester	0753444237	sylvesterkahoro@yahoo.com
Fides Kenya Ltd	Cuttings	Embu	Francis Mwangi	068-30776	·
Finlays Flamingo Farm	Flowers	Naivasha	Peter Mwangi	0722204505	peter.mwangi@finlays.net
Finlays- IbiS Farm	Flowers	Nanyuki	Purity Thigira	0722279176	purity.thigira@finlays.net
Finlays Kingfisher Farm	Flowers	Naivasha	Charles Njuki	0724391288	charles.njuki@finlays.net
Finlays Kingfisher Farm	Flowers	Naivasha	Jacob Wanyonyi	0722773560	jacob.wanyonyi@finlays.net
Finlays Ibis Farm	Vegetables	Nanyuki	Augustine Mwebia	0721447430	augustine.mwebia@finlays.net
Finlays-Siraji Farm	Carnations, Roses	Nanyuki	John Magara/Peris	0729050116	peris.ndegwa@finlays.net
Finlays -Kericho	Flowers	Kericho	Elijah Getiro	0722873539	elijah.getiro@finlays.co.ke
,					, , , , ,



FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
Finlays -Tarakwet	Flowers	Kericho	Japheth Langat	0722863527	japhet.langat@finlays.co.ke
Finlays Chemirel	Flowers	Kericho	Aggrey Simiyu	0722601639	aggrey.simiyu@finlays.co.ke
Finlays- Lemotit	Flowers	Kericho	Richard Siele	0721486313	richard.siele@finlays.co.ke
Flamingo flora	Roses	Njoro	Sam Nyoro	0721993857	s.ivor@flamingoflora.co.ke
Flora ola	Roses, Hypericum	Solai-Nakuru	Wafula	08382972	floraolaltd@gmail.com
Flora Delight		Kiambu/ Limuru	Marco	0710802065	marcovansandijk@yahoo.com
Florensis Ltd	Cuttings	Naivasha	Anne Marie		annemarie@florensis.co.ke
Florenza	Roses	Nakuru	Yogesh	0715817369	
Fontana Ltd-Salgaa		Nakuru	Kimani	0733605219	production@fontana.co.ke
Fontana Ltd		Nakuru	Girrish Appana	0726089555	production@fontana.co.ke
Fox Ton Agri		Naivasha	Jim Fox	0722204816	jim@foxtonagri.com
Fpeak		Thika	Mutiso/Titus	0711214396	anthonymutiso@gmail.com
Frigoken K Ltd	Vegetables	Nairobi	Nicholas Kahiga	0722797547	nicholas.kahiga@frigoken.com
Gatoka Roses	Roses	Thika	Chris	0723408471	gatoka@swiftkenya.com
Gladioli Ltd		Naivasha	Pieriguichi / Claudia	0722206939	torres.palau@yahoo.com
Golden Tulip	Roses	Nakuru	Ravi	0723159076	ravi@bth.co.ke
Golden Tulip ( Laurel Inter.)	Roses	Nakuru	Ashok	0738359459	ashok@btl.co.ke
Gorge Farm		Naivasha	Patrick Mulumu	0722498267	pmulumu@vegpro-group.com
Groove	Flowers	Naivasha	John Ngoni	0724448601	grovekenya@gmail.com
Hamwe	Hypericum	Naivasha	Peter Kamwaro	0721758644	hamwe.fm@kariki.biz
Hamwe- Molo	Fowers	Nakuru	JosephJuma	0725643942	production.fm@kudenga.co.ke
Harvest / Manjo Plants	Roses	Naivasha	Phanuel Ochunga	0722506026	phanuel.ochunga@gmail.com
Harvest Ltd	Roses	Athiriver	Mr. Farai Madziva	0722-849329	farai@harvestflowers.com
Highland plantations	Cuttings & Herbs	Olkalou	Amos Mwaura	0726726392	production@highlandplants.co.ke
Imani Flowers	Flowers	Nakuru	Moses	0722977214	1 - 3 1
Indu Farm		Naivasha	Wesley Koech	0715546908	
Indu -Olerai Farm		Nakuru	Everline Debonga	0723383160	everlyne.adhiambo@indu-farm.com
Interplant Roses	Roses	Naivasha	Gavin Mourittzen	0733220333	info@interplantea.co.ke
lsinya	Flowers	Isinya	Pradeep	0736586059	pm@isinyaroses.com
Jatflora		Naivasha	James Oketch	0724418541	jatflora@gmail.com
Jesse AGA		Mweiga	Thuranira	0754444630	davidt@eaga.co.ke
Karen Roses	Flowers	Nairobi	Peter Mutinda	0723353414	pmutinda@karenroses.com
Kariki Ltd.		Thika	Samwel Kamau	0723721748	production@kariki.co.ke
Karuturi	Flowers	Naivasha	Rob		rob.paul@twigaroses.co.ke
Twiga Flowers	Flowers	Naivasha	pius Kimani	0721747623	pius.kimani@gmail.com
Kenflora Limited		Kiambu/ Limuru	Abdul Aleem	0722311468	info@kenfloraa.com
Kentalya		Naivasha	Linnet	0733549773	lynette@kentalya.com
Kenya Cuttings	Flowers	Ruiru	James Ouma	0725217284	john.odhiambo@syngenta.com
Kenya Cuttings	Flowers	Thika	Kavosi Philip	0721225540	philip.munyoki@syngenta.com
Kenya Pollen Flowers	Flowers	Thika	Joseph Ayieko	0733552500	joseph.ayieko@syngenta.com
KHE		Nanyuki	Elijah Mutiso	0722254757	mutiso@khekenya.com
Kisima Farm	Roses	Timau	Martin Dyer	0722593911	martin@kisima.co.ke
Kongoni River Farm-Gorge Farm	Roses	Naivasha	Anand Patil	0728608785	anand.patil@vegpro-group.com
Korongo Farm		Naivasha	Macharia	0721387216	
Kreative	Roses	Naivasha	Bas Smit	0722 200643	info@kordesroses.com
Lamorna Ltd	Roses	Naivasha	Mureithi	0722238474	admin@lamornaflowers.com
Lathyflora	110505	Limuru	Mbauni John	0721798710	mbaunij@yahoo.com
Lauren International	Flowers	Thika	Chris Ogutu/Carlos	0722783598	laurenflowers@accesskenya.co.ke
Lex International	Roses	Naivasha	Steve Outram	0733 609863	steve@lex-ea.com
Liki River	Flowers	Nanyuki	Madhav Lengare	0722202342	madhav@vegpro-group.com
Liki River	Flowers	Nanyuki	Nitin	0700000342	nitin.golam@vegpro-group.com
Livewire	Hypericum	Naivasha	Esau Onyango	0728606878	management@livewire.co.ke
Lobelia Ltd/ Sunland	Roses	Timau	Peter Viljoen	0721632877	info@lobelia.co.ke
Lolomarik	Roses	Nanyuki	Topper Murry	0721032077	topper@lolomarik.com
Loldia Farm	noses	Naivasha	Gary/Rotich	0713727331	topper@ioioinuint.com
Longonot Horticulture		Naivasha	Chandu	0724639898	chandrakant.bache@vegpro-group.com
-					
-	Flowers				
Muasurrowers	TIOWCIS	ізпіуа	Allulew lubel	0122120304	atabel@aldHU3C3.CU.NC
Longonot Horticulture Longonot Horticulture Maasai Flowers	Flowers	Naivasha Naivasha Isinya	Patrick Mulumu Andrew Tubei	0722498267 0722728364	patrick.mulumu@vegpro-grou atubei@sianroses.co.ke



FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
Magana	Roses	Nairobi	Lukas	0788695625	farmmanager@maganaflowers.com
Mahee	Roses	Nakuru	Senthil Bharathi	0789777145	maheefm@eaga.co.ke
Mahee Wilham	Vegetables	Nakuru	Missire	0754444629	maheevegfm@eaga.co.ke
Maji Mazuri Roses	Flowers	Eldoret	Wilfred Munyao	0725848912	wmunyao@majimazuri.co.ke
Maridadi Flowers	Flowers	Naivasha	Jack Kneppers	0733333289	jack@maridadiflowers.com
Maua Agritech	Flowers	Isinya	Madan Chavan	0738669799	production@mauaagritech.com
Mauflora	Roses	Nakuru	Mahesh	0787765684	mahesh@mauflora.co.ke
Milmet/Tindress Farms	Flowers	Nakuru	Pravin	070770001	pravinyadav.29@gmail.com
Molo River Roses	Flowers	Nakuru	A. Wambua	0724256592	awambua@moloriverroses.co.ke
Mwanzi Farm	Roses	Rumuruti	Peter Wekesa	0723027208	awambaag molomenoses.co.ke
Mt Elgon Flowers	Roses	Eldoret	Bob Anderson	0735329395,	bob@mtelgon.com
Mweiga Blooms	Flowers	Nanyuki	Stewart/ Mburu	0733523355,	mweigablooms@wananchi.com
New holland - Laurel Investment	Roses	Nakuru	Ashok	0721074333	mweigabiooms@wananem.com
Nini Farms	Roses	Naivasha	Menjo / Philip	0730533433	production@niniltd.com
		Naivasha		0720611023	·
Nirp East Africa	Roses		Danielle Spinks		danielles@nirpinternational.com
Ol Njorowa	Roses	Naivasha	Charles Kinyanjui	0723986467	mbegufarm@iconnect.co.ke
Olij Kenya Ltd	Roses	Naivasha	Sally Nicholas	0737888028	v.bhosale@olijkenya.com
Oserian	Flowers	Naivasha	Musyoka Stephen	0722888377	stephen.musyoka@oserian.com
Panda Flowers	Roses	Naivasha	Chakra	0786143515	chakra@pandaflowers.co.ke
Panocol International	Roses	Eldoret	Mr. Paul Wekesa	0722748298	paul.wekesa@panocal.co.ke
Penta	Flowers	Thika	Tom Ochieng	0723904006	tom@wananchi.com
Preesman	Roses	Nakuru	Benard Ndungu	0721630887	
Pj Dave	Flowers	Isinya	Simiyu	0723500049	pjdavetimau@pjdaveepz.com
Pj Flora	Flowers	Isinya	Palani Muthiah	0752607651	muthiah.palani1971@gmail.com
Pj Thande Farm		Kiambu/Limuru	Elizabeth Thande	0722380358	elizabeth@wetfarm.co.ke
Plantation Plants	Cuttings	Naivasha	William Momanyi	050 20 20282	pplants@kenyaweb.com
Porini Ltd	Flowers	Nakuru	Pitambar Ghahre	0726774955	porini@isinyaroses.com
PP Flora	Roses	Nakuru	Robert /Prakash	0718045200	ppflora2010@gmail.com
Primarosa	Flowers	Athi RiVer	Dilip Barge	0731000404	dilip@primarosaflowers.com
Primarosa	Roses	Nakuru	Kadam	0721274413	kadam@zuri.co.ke
Racemes Ltd		Naivasha	Bonny	0721938109	bonny@kenyaweb.com
Ravine Roses Flowers	Flowers	Nakuru	Peter Kamuren	0722205657	pkamuren@karenroses.com
Redland Roses		Thika	Aldric Spindler	0733603572	aldric@redlandsroses.co.ke
Redwing Flowers	Flowers	Nakuru	Simon Sayer	0722227278	sayer@redwingltd.co.ke
Rift Valley Flowers Ltd	Flowers	Naivasha	Peterson Muchuri	0721216026	fm@riftvalleyroses.co.ke
Rimiflora Ltd	Howers	NaivaSha	Richard / Stephen	0721210020	richard@rimiflora.com
Riverdale Blooms Ltd		Thika	Antony Mutugi	0202095901	rdale@swiftkenya.com
Roseto	Roses	Nakuru	Airtony Mutugi	0202073701	qm.roseto@megaspingroup.com
Rozzika Gardens —Kamuta Farm	noses	Naivasha	Mbuthia	0721849045	jwachiram@yahoo.com
Savannah international	Geranium	Naivasha	Ignatius lukulu	0728424902	i.lukulu@savanna-international.com
Selecta Kenya	Geranium	Thika	Alnoch Ludwig	0738572456	l.allnoch@selectakenya.com
Soljanmi	Fourers			0787787544	•
Schreus	Fowers Roses	Njoro Naivasha	Kirani Nangare	0/0//0/344	kiran.nangare@xflora.net
Shades Horticulture			Pradeep	0722072010	info Osho dosho uti sultura som
	Flowers	lsinya Naissa da a	Mishra	0722972018	info@shadeshorticulture.com
Shalimar Flowers	Flowers	Naivasha	Anabarasan	0733604890	anbarasan@eaga.co.ke
Sierra flowers Ltd	Flowers	Nakuru	Sherif	0787243952	farm.sierra@megaspingroup.com
Simbi Roses	-	Thika	Karue	067 44292	simbi@sansora.co.ke
Sirgoek Flowers	Flowers	Eldoret	Andrew Keitany	0715 946429	sirgeok@africaonline.co.ke
Solai Milmet/Tindress	Flowers	Nakuru	Ravindra	0788761964	tindressmilmet@gmail.com
Star Flowers Flowers	Flowers	Naivasha	Dinkar	0789487429	dinkar@vegpro-group.com
Subati Flowers	Flowers	Nakuru	Naren Patel	0712 584124	naren@subatiflowers.com
Subati Flowers	Flowers	Naivasha	Naren Patel	0712 584124	naren@subatiflowers.com
Suera Flowers Ltd	Flowers	Nakuru	George Buuri	0724622638	gbuuri@suerafarm.sgc.co.ke
Sun buds	Hypericum Gypsophilla, Army	Naivasha	Reuben Kanyi	0723920237	kanyireuben@gmail.com
Sunland Timau Flair	Roses	Timau	Peter Viljoen	0723383736	info@lobelia.co.ke
Stockman rozen	Roses	Naivasha	Julius muchiri	0708220408	julius@srk.co.ke
Tambuzi	Roses	Nanyuki	Paul Salim	0722 716158	paul.salim@tambuzi.co.ke



FARM NAME	PRODUCT	LOCATION	CONTACT PERSON	TELEPHONE	E-MAIL
Terra nigra	Breeder1ha	Naivasha	Peter van der meer		petervandermeer@terranigra.com
Timaflor Ltd	Flowers	Nanyuki	Simon van de Berg	0724443262	info@timaflor.com
Transebel		Thika	David Muchiri	0724646810	davidmuchiri@transebel.co.ke
Tropiflora		Kiambu/Limuru	Niraj		tropiflora@africaonline.co.ke
Tulaga	Roses	Naivasha	Steve Alai	0722659280	tulagaflower@africaonline.co.ke
Tk Farm		Nakuru	Gichuki	0721499043	davidgichuki20@yahoo.com
Uhuru Flowers	Flowers	Nanyuki	Ivan Freeman	0713889574	ivan@uhuruflowers.co.ke]
V.D.Berg Roses	Flowers	Naivasha	Johan Remeeus	0721868312	
Valentine Ltd		Kiambu/Limuru	Maera Simon	0721583501	simon.maera@valentinegrowers.com
Van Kleef Ltd	Roses	Nakuru	Judith Zuurbier	0722 364 943	judith@vankleef.nl
Vegpro K Ltd Vegetables		Nanyuki	John Kirunja	0729555499	john.kirunja@vegpro-group.com
Vegpro K Ltd	Vegetables	Nairobi	Judy Matheka	0721245173	jmatheka@vegpro-group.com
Vegpro K Ltd	Vegetables	Nanyuki	John Nduru	0722202341	jnduru@vegpro-group.com
WAC International	Breeder	Naivasha	Richard Mc Gonnell	0722810968	richard@wac-international.com
Waridi Ltd		Athiriver	P. D.Kadlag	0724-407889	kadlag@waridifarm.com
Wildfire	Flowers	Naivasha	Boniface Kiama	0722780811	roses@wildfire-flowers.com
Wilmer	Summer Flowers	Thika	Wilfred M.Kamami	0733714191	kamami@wilmar.co.ke
Winchester Farm	Flowers	Nairobi	Raphael Mulinge	0725848909	rmulinge@sianroses.co.ke
Windsor		Thika	Vikash	073705070	vikash@windsor-flowers.com
Xpression Flora		Nakuru	Mangesh Rosam	0720519397	mangesh.rasam@xflora.net
Zena	Roses	Thika	Arun Mishra	020 2328970	sales@zenaroses.co.ke
Zena Asai Farm	Roses	Eldoret	Laban Koima	0722554119	koima@zenaroses.co.ke
Zena Roses - Sosiani	Roses	Eldoret	Sylvester Saruni	0722635325	saruni@zenaroses.co.ke

### **FLOWER FARMS IN UGANDA**

ТҮРЕ	FARM NAME	CONTACT PERSON	LOCATION	PHONE NUMBERS	E-MAIL
Roses	Rosebud	Ravi Kumar	Wakiso	0752 711 781	ravi.kumar@rosebudlimited.com
Roses	Maiye Estates	Premal	Kikwenda wakiso		premal@maiye.co.ug
Roses	Jambo flowers	Patrick Mutoro	Nakawuka Sisia Wakiso	(254) 726549791	pmutoro80@yahoo.co.uk
Roses	Pearl Flowers	Raghbir Sandhu	Ntemagalo Wakiso	0772 72 55 67	pearl@utlonline.co.ug
Roses	Aurum flowers	Kunal Lodhia Shiva	Bulega, Katabi Wakiso	0752 733 578	kunal@ucil.biz
Roses	X-pressions	Ali Droiya	Katabi Wakiso	0712 787788	xpressions@utlonline.co.ug
Roses	Eruma roses	Kazibwe Lawrence	Mukono	0776 049987	kazibwe@erumaroses.com
Roses	Uga rose	Grace Mugisha	Katabi Wakiso	0772 452 425	ugarose@infocom.co.ug
Roses	Kajjansi	K.K rai	Kitende Wakiso	0752 722 128	kkrai@kajjansi-roses.com
Roses	Uganda Hortech	M.D hedge	Lugazi Mukono	0703 666 301	mdhedge@mehtagroup.com
Roses	Melissa Flowers	Tobby Maddison	Katabi Wakiso	0755 722 262	toby.maddison@melisa-flowers.com
Chrysanthemums	Fiduga	Jacques Schrier	Kiringente , Mpingi	0772 765 555	j.scherier@fiduga.com
Chrysanthemums	Royal Van Zanten	Jabber Abdul	Namaiba Mukono	0759 330 350	j.Abdul@royalvanzanten.com
Impatiens, poinsetia	Wagagai	Olav Boenders	lwaka Bufulu Wakiso	0712 727377	olav@wagagai.com
Chrysanthemums	xclussive cuttings	Peter Benders	Gayaza- Zirobwe rd	0757 777 700	pbenders@xclussiveuganda.com

### **FLOWER FARMS IN TANZANIA**

ТҮРЕ	FARM NAME	CONTACT PERSON	LOCATION	PHONE NUMBERS	E-MAIL
Roses	Kili flora	Jerome Bruins	Arusha	255 27-25536 33	jbruins@habari.co.tz
Roses	Mt. Meru	Heikki Niskala	Arusha	255 27 2553385	office@mtmount-meru-flowers.com
Roses	Tengeru Flowers	Mark Ngalo Arusha	Tanzania	255 27 255 3834	teflo@africaonline.co.tz
Roses	Hortanzi	Mr Micheal Owen	Arusha	255 784 200 827	hortanziagm@cybernet.co.tz
Roses	La fleur de Afrique	Greysom Mrema	Arusha	0784 363 570	fda@ars.bol.co.tz
Hypericums	Kilimanjaro flair	Greg Emmanuel	Arusha	255 784 392 716	greg@kilimanjaroflair.com
Crysenthemums	Multi flower Ltd	Tjerk Scheltema	Arusha	255 27 250 1990	tjerk@arushacutting.com
Crysenthemums	Fides	Greg Emmanuel	Arusha	255 27 255 3148	fides@habari.co.tz
Crysenthemums	Dekker Bruins	Lucas Gerit	Arusha	255 27 255 3138	info@tfl.co.tz
Crysenthemums	Arusha cuttings	Tjerk Scheltema	Arusha	255 27 250 1990	tjerk@arushacutting.com



### FLOWER FARMS IN ETHIOPIA

TYPE	FARM NAME	CONTACT PERSON	LOCATION	PHONE NUMBERS	E-MAIL
Roses	Linsen flowers	Peter Linsen	Holeta		Elinsenroset@ethionet.et
Roses	Karuturi Farm/Ethiopia meadows	Peter Pardoen	Holeta	0922 750602	Peter.Pardoen@karuturi.com
Roses	Alliance flowers	Navale	Holeta		navele@nehainternational.com
Roses	Ethio dream Rishi	Holeta	Ethiopia	011 23 72335	holeta@jittuhorticulture.com
Roses	Holeta Roses Navale	Holeta	Ethiopia		navale@nehainternational.com
Roses	Arsi Agricultural Mecahanization		Holeta		arsiflower@ethionet.et
Roses	Supra Flowers	Kaka Shinde	Holeta	0911 353187	kakashind@rediffmail.com
Roses	Agriflora	M. Asokan	Holeta	0922 397760	flowers@ethionet.et
Roses	KAF Flowers	Baker Elkadi	Holeta	251 913 202 460	baker-elkadi@yahoo.com
Roses	Rose Ethiopia	Betemarian Kiflu	Holeta	0911 91 22 81	betemariankiflu@yahoo.com
Roses	Ethio- Agricerft	Alazar	Holeta	0910 922 312	alazar@yahoo.com
Roses	Flowerama	Admin manager	Holeta	0912, 9311 81	flowerama@ethionet.et,
Roses	Dire flowers	Seifu Bededa	Holeta	251-11-5156888	dhf@ethionet.et
Roses	Addisfloracom P.L.C	Kitema Mihret	Holeta	0912 264190	tasfaw@addisflora.com
Roses	Joe flowers	Mihrtu Tafare	Holeta	0911 370519	miheretuta@yahoo.com
Roses	Enyi- Ethio	Teshale	Sebata	0911 464629	enyi@ethionet.et
Roses	Lafto Roses	Andrew Wanjala	Sebata	0911 404029	irrigation@laftorose.com
Roses	Eden Roses	Vibhav Agarwal	Sebata	0930 011228	vaibhavaggarwal1@hotmail.com
Roses		Roshen	Sebata	0930 011228	roshanmuthappa811@gmail.com
	Ethio-passion Golden Rose	Mr. Sunil	Sebata	0911311711	Toshaninuthappao i T@ginan.com
Roses		MII. SUIIII	Sebata	0 911 50 21 47	bnf2etf@ethionet.et
Roses	E.T Highlands	Ahanat Filetu			_
Roses	Dire flowers 2	Abenet Fiktu	Sebata	0911 149 329	abifiktu@yahoo.com
Roses	Sharon Flowers	M 1 1 T 6	Sebata	0012 426625	saronfarm@ethionet.et
Roses	Zagwe roses	Melaku Terefe	Sebata	0912 426635	zagweflora@yahoo.com
Roses	Selam Flowers	Etsegenet Shitaye	Sebata	0913 198440	etstgshita@yahoo.com
Roses	Joy Tech	mulugeta Meles	Debra Zyeit	0911 302804	mulugeta@joytechplc.com
Roses	Dugda floroliculture	sayalfe Adane	Debra Zyeit	0911 50 48 93	general@dugdaflora.com.et
Roses	Minaye flowers	Eyob Kabebe	Debra Zyeit	011-3728667/8/9	minayefarm@ethionet.et
Roses	Bukito Flowers	Anteneh Tesfaye	Debra Zyeit	0911 615571	
Roses	oilij	Bas Van der lee	Debra Zyeit	0911 507 307	b.vanderlee@oilijethiopia.com
Roses	Yassin Flowers	Tesfaye Gidissa	Debra zyeit	0911 89 78 56	kemevision@yahoo.com
Roses	Z. K Flowers	Abebe Mamo	Debra zyeit	0911 52 65 29	abemic/2006@yahoo.com
Roses	Friendship flowers	Alemayehu	Debra zyeit	(251)91 130 49 67	friendship.flowers@yahoo.com
oses	Evergreen farm	Hiwot	Debra zyeit	0912 18 5065	Hiwot.Ayaneh@yahoo.com
Roses	Rainbow colours	Tadessa Kelbessa	Debra zyeit	0911 389 729	rainfarm@yahoo.com
Roses	Sher	Ramesh Patil	Ziway	0912 131940	rnpatilpune@yahoo.com
Roses	Braam farm	Ben Braam	Ziway	0920 7462 70	braam.roses@hotmail.com
Roses	Sher- Koka farm	Alemitu Biru	Ziway	0912 09 78 24	
Roses	Ziway Roses	Ermiyas Solomon	Ziway	0921 094373	ermiasziwayroses@yahoo.com
Roses	Herbug	Hubb	Ziway		hubb@herburgroses.nil
Roses	AQ	Wim	Ziway		wimjr@aqroses.com
Hypericum	Margin par	Hayo Hamster	Holeta	251 911 505 845	marginpar@ethionet.et
Gypsophila	Tal Flowers	Mr. Uri	Sebata		uridago@walla.co.il
Hydragiums	Ewf Flowers	Humphrey	Sebata	0920 35 1931	production-manager@Ewf-flowers.
pelargoniums	Red fox	Michel Zevenbergen	Ziway	0911 49 00 23	m.zevenberge@ethiopia.redfox.de
Hypericum	Abssinia flowers	Sendafa			ggh_link@ethionet.et
Geraniums	Ethiopia cuttings	Scott Morahan	Koka		scott.moharan@syngenta.com
Budding plants	Florensis Ethiopia	Netsanet Tadasse	Koka		flrensis@ethionet.et
Crysenthemums	Maranque	Mark Drissen	Merjetu	(251) 22 1190750,	md@maranqueplants.com
•	Freesia Ethiopia	Ronald Vijvrberg	Sebata	(251) 115 156259,	freesia@ethionet.et
Freesia & Statice		וועוומוט אוועווטרייי			

### A Flower a Day Livens the Live of All

I clearly remember the advice given to me when I was toying with the idea of becoming a scribe. "Don't take up journalism as your career if your sole aim of life is to make money. In scribing you only earn a name but not money," my mentor told me. He Quoted Somerset Maughan and said, "Money is the sixth sense without which we cannot enjoy the other five to the full! Even allowing for the sort of ostentatious life, anything in excess is just adding zeros to one's bank balance and gloating over bloated bank statements every month.

And not him alone but even the country's education system took me far from scribing. And the gods of the highest education ensured I land into UON ( University of Nowhere) to format me into a tax collector. My own father supported them and cursed the gods' of scribes quoting Jesus, he said. "Woe unto you scribes................

After a year of locking myself in a room to cook figures, I sneaked into one of the late Wahome Mutahi's (My Mentor) comedy shows and our worlds met again and this time he ensured I turned into a scribe.

My own Dad, despite being a long term English teacher could not hear of it and he swore never to accept it.

Despite the lack of a consensus, I continued depreciating fingers. But one day I heard a flowerly call telling me to leave newsroom to the world of flowers. He confided to one officerless and Wilfred Munyao of sian Roses. He also secretly gave the same message to a one Tom Ochieng of Penta Roses.

So as I celebrate eighteen years as a flower scribe, and fifteen years after the launch of *Floriculture Magazine*, I have never earned a great name like colleagues in newsroom nor have I added a lot of zeros in my bank balance like most tax collectors but I have enjoyed my call. No wonder I have turned into a flower consultant.

Just a quick glimpse into my diary; it is early evening and a fellow scribe calls, "Hi, Mr. Maua, I picked a fight with my wife, I need some flowers to appease her, what is the best in such a situation?" After a cheeky laughter I recommend, "go for red roses, a sign of true love. If you were on the wrong side you need some daffodils which signify respect and joy". Before long, a young dude taking his girlfriend for a date calls. Straight away I recommend tulips for passion and love; dressed with orchards which stand for rear beauty for she is a real catch.

Early the following morning, I'm back to my office. I open my mail and a friend's wife is inviting me for his son's circumcision graduation party. But as usual she drops a line, which are the best flowers for the occasion? "Go for lilies a sign of happiness and hyacinth for

playing joy', I recommend without hesitating. Next mail is a doctor friend who wants to ask his girlfriend for marriage. "Daktari you need a red rose which signifies true love", I answer.

As I settle for the day's schedule, my MP calls, the president is visiting his constituency and he wants the best bouquet for him. Though I contested against him last elections and he beat me through some stolen votes, I advice him, "Mheshimiwa, you need a bouquet of roses with pink indicating happiness, white for the calm of the country, orange for passion and yellow for joy".

Immediately after the MPs call, the secretary informs me of a waiting visitor. It is Annie, a long time friend and an accountant with a leading audit firm. After the normal nitty gritties, I ask, "and what brings you to my office?" Without mincing words, she says, "there is a guy I have fallen for but it seems he is slow to notice, I know flowers can communicate, what flowers do I give him tonight when we meet?" You need a tiger lily which states I dare you to love me. You can add some calla lilies, for maiden, modestly or beauty. After a long day of consultancy I walk home with pale pink roses for my daughter in remembrance of God's grace to us.

Annie called me around midnight. "This guy bought some orchids and daffodils what did he mean?" she asked. After a long laughter, I answered; "Orchids show love and beauty, it seems the guy is falling to you". Daffodils meant you are the only one," I said. I could hear her sob and what happened next is for all to guess.

The following day a top executive and a college mate gave one of the best speeches I have ever heard in life. On my visit to him I carried Irises. He was amazed and asked what does this mean? Irises say, your friendship means so much to me, your eloquence, faith and wisdom is excellent. "So, what do I take to my wife tonight," he asked," Well...... some Red tulips a declaration of love and some variegated tulips for beautiful eyes. If you need to surprise her get some yellow ones which means, are you truly my love?" I summarized.

Later in the day I dropped by to see officerless with me was some pale pink roses. "Good old boy what does this mean," she asked. "Pale pink means grace. It is by grace I received your call into the world of flowers, it was never meant for me", I answered. She pulled out some Pink Roses for thankfulness as we all laughed. "And what should I give to her," a colleague and a fellow scribe asked. "Yellow for friendship, coral desires and rich modesty" I answered.

Back home my wife had bought some orange roses, which said, "lam fascinated by your love and innocence."

My call has never enriched me or put my name into the world of Oprah Winfrey. However, I will never regret the call Munyao and Ochieng confirmed to me. For a flower a day livens the live of all.



For more information please contact the registration holder: Dow Chemical East Africa Ltd. • 14 Riverside, Off Riverside Drive, Cavendish Block, Suite 1B • P.O. Box 2170-00806, Nairobi, Kenya • Tei +254 20 421 3000 • Fax +254 20 421 3030 • www.dowagro.com
Lachian Kenya Limited: Tei + 254 20 2073912 • Fax + 254 20 2060260 • Mobile + 254 722 522749 • P.O. Box 49470, Nairobi, 00100, Kenya

ALWAYS USE ACCORDING TO LABEL RECOMMENDATIONS • Tracer\*\* 480SC contains spinosed (Caution) | Reg. No. PCPB(CR)0353 • Runner\*\* 240SC contains methoxyfenozide (Caution) | Reg. No. PCPB(CR)0487 • Delegate\*\* 250WG contains spinetoram (Caution) | Reg. No. PCPB(CR)1207

Tracer\*\*, Runner\*\* and Delegate\*\* are registered trademarks of Dow AgroSciences LLC



**Dow AgroSciences** 

Solutions for the Growing World





#### Devider inthine. Openin Chamers

 Unknown cross resistance to Cyflufenamich pathogens that have developed reduced sensitivity to other fungicides.

### Process the European Heart medius or these Production

Better Powdery Mildew control for better yields

## NOVEL BENEFITS WITH CYFLAMID

 Excellent Curative and long lasting protectant activity (Active on all strain of Powdery Mildew including strains resistant to DMIs, Strobilurins, Morpholines & Benzimidazoles)

### Conservable Society

- Residual Activity, Vapour Action, Curative Activity & Penetrative Action
- Both primary & secondary infections control

#### DOM Compatible

- Cyflamid is in the new group U6 for Fungicides Resistance Management
- Safe for Predatory Mites and Beneficial Organisms (Less Adverse effect on Bees)

Use Plant Protection Product Safely, always read the label and product information before use.



Old Airport North Rd. | P.O.Box 30327 - 00100 Nairobi, Kenya Tel: 0719 095000 | fert@amirankenya.com | www.amirankenya.com