

Farming Sustainably



Happy Valentine



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- Reduces ethylene-induced flower, bud and leaf drop
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- Ready to use at time of shipping
- Non-toxic and environmentally friendly



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in a convenient sachet

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Ethylene Damage of Flowers Attributes to Upwards of 30% Flower Loss

Flower industry experts estimate as much as 30% of all flower loss is a direct result of ethylene damage, due to either internal or external sources of exposure. Ethylene, an internal gaseous plant hormone, profoundly influences the growth and development of plants. It acts at trace levels throughout the life of the plant by accelerating wilting, regulating the opening of flowers, and the abscission (or shedding) of leaves and flower petals. Ethylene is produced from essentially all parts of higher plants, including leaves, stems, roots, flowers, fruits, tubers, and seedlings. Its production can also be induced by a variety of external aspects such as mechanical bruising or environmental stresses. Flooding, drought, chilling, wounding, and pathogen attack can induce ethylene formation in the plant. Ethylene produced from external sources such as other flowers, banana-ripening rooms in supermarket distribution warehouses, propane heaters, forklift fumes, bacteria, and even cigarette smoke also can have devastating effects on flowers when exposed.

Cut flower plant responses to ethylene:

- Stimulates leaf and flower biological aging, called "senescence"
- Inhibits stem and shoot growth
- Induces leaf, bud and flower shedding, commonly known as "abscission"
- Stimulates epinasty where the leaf petiole grows out, leaf hangs down and curls into itself
- Induces a rise in respiration in some flowers which causes a release of additional ethylene. This can be the one bad flower in a flower box spoiling the rest phenomenon, affecting the neighboring flowers
- Affects geotropism, the turning or growth movement of the flower stem in response to gravity
- Inhibits stomatal, or pore, closing found in the leaf and stem epidermis that is used for gas exchange, stimulating flower aging



Rose - Flower Aging
Untreated for Ethylene



Rose - Treated for Ethylene



Orchid - Flower Drop
Untreated for Ethylene



Orchid - Treated for Ethylene



Carnation - Inward Rolling of Petals
Untreated for Ethylene



Carnation - Treated for Ethylene

Ethylene will shorten the shelf life of cut flowers and potted plants by accelerating floral senescence and abscission. Flowers and plants that are subjected to stress during shipping, handling, or storage produce ethylene causing a

significant reduction in floral display. Some examples of flower types which are more affected by ethylene damage include rose, orchid, carnation, alstroemeria, stock, delphinium, phlox, and freesia.

Ethylene can cause significant economic losses for florists, markets, suppliers, and growers. Floralife has long been involved in developing ways to inhibit ethylene production in flowers to keep flowers fresher longer, through the commercialized innovation of EthylBloc™ Technology. By inhibiting ethylene sensitivity, flowers don't respond to ethylene produced internally or from external sources, far increasing the quality, freshness, and profits of flowers overall.



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Select Breeding MD Micheal de Geus kisses the Queen of Africa raised by Oserian. Page 20

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|| HORTISPOT ||

HortiNews intends to focus on sustainability in the sector over the next two or more issues. We invite industrial players to take the opportunity to showcase how they have adjusted production in line with this trend



Growing sustainability

As we celebrate Valentine Day, it is now clear that it can no longer be business as usual as far as agricultural production, in general, and horticulture, in particular, are concerned.

Yes, the world has more mouths to feed now and many others are on their way. This creates the necessity to raise production which, consequently, requires putting more land and resources into use. But it is not possible, neither is it desirable, for humanity to continue depleting the resources in a manner that will jeopardise the survival of future generations will.

This is a call on humanity to perfectly organize all its activities in a way that can guarantee that current production does not hamper the ability of the land to produce more and over a long time to come. By extension, it is incumbent on all of us to come up with production models that allow for the use of lesser resources. This is more imminent now than at any other time in the history of humanity especially because of climate change, population increase, loss of habitats that give us water, fresh air and other environmental services and goods.

Of particular concern are the changes in climate that have led to unpredictable weather patterns, increasing variability of rainfall, rise in incidences of pest and disease epidemics as well as increase in the frequency and severity of adverse weather conditions characterized by droughts and floods. The net effects of all this is that it is no longer possible to determine, with 100% accuracy, whether crops planted at the onset of the rainy period will be translated into harvests so necessary for keeping everyone fed. We cannot say that those who have invested in irrigation are any better because of dwindling volumes in rivers, streams, ground aquifers and fresh water lakes.

At the same time, although it is not possible to totally eradicate the use of chemicals in agriculture, it is increasingly becoming clear that over-emphasis on chemical-based farming is not the panacea. Besides the fact that pests keep on enhancing their in-built ability to withstand chemicals, there is a growing desire for lessening the chemical load that find itself embedded in human bodies, water resources and in other natural systems. This is the main reason why well-developed regional trade regimes, such as the European Union, have been leveling a number of measures aimed at lessening, to the barest minimum, the amount of chemicals lodged on foodstuffs emanating from their trading partners.

Further, it is now very clear that the interests of the workers, the consumer and communities surrounding horticulture farms must be taken into consideration by firms. Lastly, the market is becoming increasingly edgy over production that is not done in a sustainable manner. For instance, leading supermarkets in Europe now say that they will only be sourcing products from firms that do so sustainably

With all these considerations, the horticultural sector has increasingly made welcome moves to align itself to the trend. Among the moves the sector has made include self-regulation, reducing its carbon footprint, shift to the integrated pest management schemes and biological control of pests as well as making the interests of consumers, staff and local communities part of its business practices.

We at *HortiNews* welcome this trend. We are proud to encourage it by covering the sustainability practices undertaken by firms such as Oserian Development Company Ltd and other firms that have made tremendous progress in this regard. *HortiNews* intends to focus on sustainability over the next several issues. In this regard, we invite other industrial players to take the opportunity to showcase their sustainable approaches to clients and our general readership.

We also present to the reader a number of other stories which are not only worth reading, but also contain information that can be used by everyone in the value chain.

Lastly, we wish everyone a memorable Valentine Day.


Catherine Riungu


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*“Think sustainability
Think Real IPM”*



Sustaining the business?

By DR HENRY WAINWRIGHT

The word “Sustain” has a very simple meaning. If you ‘sustain’ something, you continue with it or maintain it for a period of time. Therefore, a sustainable horticultural business is that which can be maintained. Within horticulture, there are three components of sustainability. The first is economic profitability; for a business to be sustained, it needs to make a profit so that it can pay the wages, run and maintain the activities and invest for the future. These functions ensure that the business will be there tomorrow.

Horticulture also uses a range of resources. These include land, water, air and biodiversity. Damaging them impairs the ability of business to function and continue. A healthy environment is the second component that is needed to ensure a horticultural business can continue to function. The third and last component is the people. No business can survive without people, whether they are harvesters, pack-house graders, field supervisors, drivers or managers. Therefore, to achieve harmony and staff satisfaction, social and economic equity is required.

Government Contribution

Sustainability is achieved in numerous ways. Governments create legislation that governs all its three components – they pass laws. Governments encourage and incentivise the business sector that creates employment, promotes investment but also taxes the businesses that subsequently provides resources and facilities for the community.

Governments establish authorities like NEMA, whose purpose it is to protect the environment while the Pest Control Products Board (PCPB) regulates the approval and use of pesticides which in turn protects both the environment and the workers. KEPHIS also has a role to protect our environment such as evaluating the risk of introducing non-indigenous species into the Kenya environment. Finally, government has a raft of labour laws from minimum



wages, housing allowances and health and safety to ensure that workers are treated fairly and equitably. Basically, governments set the minimum standards that businesses should operate under.

Private Voluntary Standards

Most actors in the horticultural industry operate at a much higher standard of practices than required by the law. This has been developed over some years through the implementation of private standards developed by the customer, (e.g. a European supermarket) and adopted by the business.

There are many of these standards, such as GLOPBALGAP, Fairtrade, MPS, KenyaGAP, as well as individual customer standards. Though demanding, they have been a major contributor to improving the sustainability of the horticultural industry.

Interestingly, Aldi, a European supermarket chain recently stated; “sustainable products should become a matter of course for retailers and consumers. The floral and plant purchasing policy is another commitment to our holistic sustainability strategy.” It also said that “together with our suppliers, we wish to ensure the cultivation of flowers and plants that preserves both the environment and takes into account the health of workers. Our customers should be able to trace the origin of their flowers transparently,”

Horticulture is one of the most intensive users of resources and inputs. Similarly, horticulture has one of the highest outputs per unit area of any class of agricultural business. There have been numerous ways of measuring the impact of the business activities on the environment including Environmental Impacts Assessments, Life Cycle Assessments, Environmental Footprints, to name but a few. As a consequence, the industry has recognised that here is a need to measure the impact of its activities and to be a guardian over the environment, the land and people; to ensure that they are all here today and tomorrow.

Safer Cleaner Technologies.

Increased sustainability has partly been achieved through the adoption of safer and cleaner technologies. This includes water recycling, water conservation and storage, waste water treatment (wetlands), composting green waste, improved cultural practices that reduce negative impacts on the environment and farm staff, minimising air pollution (waste burning restrictions), plastic waste collection and recycling.

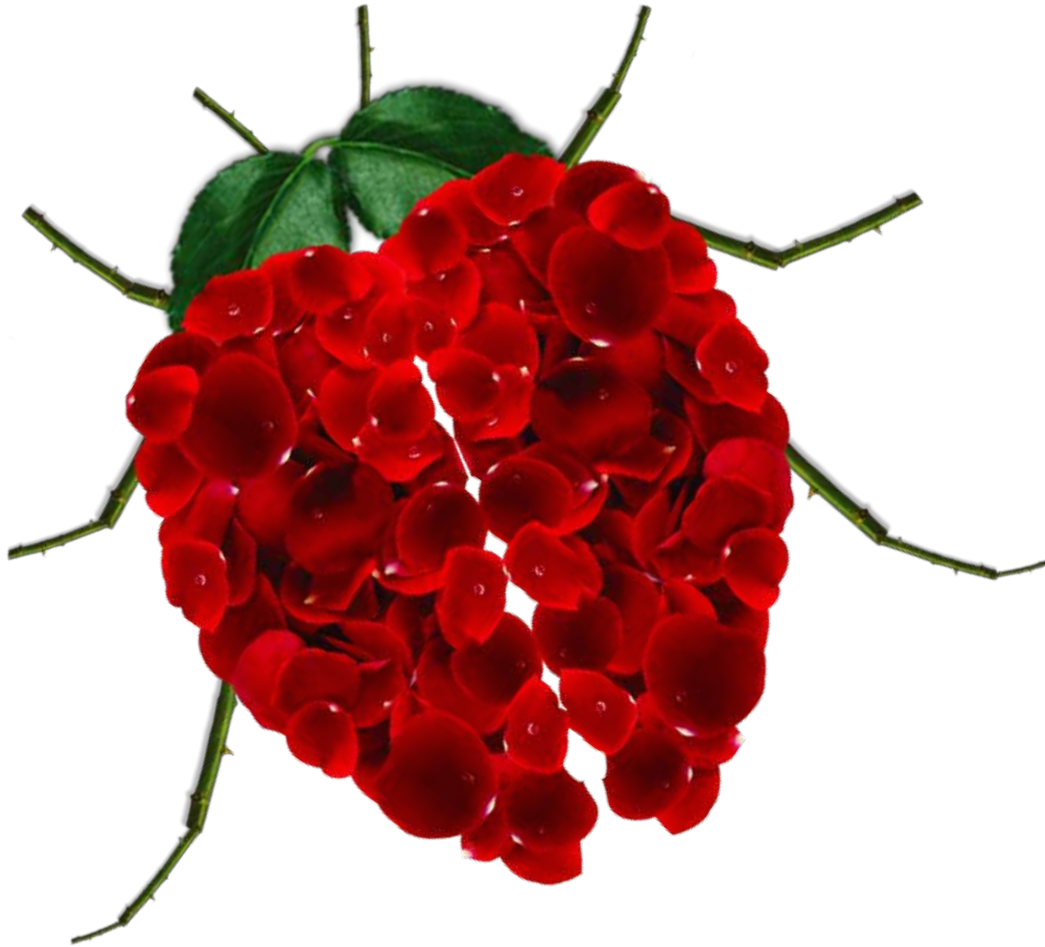
Over the last 10-15 years, the horticultural industry in Kenya has made great strides in the reduction in pesticide use. The toxicity of products used has been reduced, the quantities applied have declined and the Integrated Pest Management (IPM) adopted besides increase in the use of biological control as an alternative to pesticides. This has only been possible because they are available, are affordable and they work!

Everyone has benefitted, including the staff on the farms handling the crops, the environment, the customer as well as the crop itself. Kenya should be proud that the horticultural industry is a world leader in sustainable practices because of innovative and responsible farming.

Dr Henry Wainwright is the General Manager, Real IPM.

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We welcome views and perspectives from industry experts. info@hortinews.co.ke



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Flowering into a greener future: Oserian's Sustainable Practices

Oserian Development Corporation has come up with a raft of measures over the years aimed at sustaining quality production into the future without compromising on natural systems or its responsibility to workers, suppliers and the local communities



Oserian uses sheep to 'mow' grass instead of fuel lawn mower reducing the company's carbon emissions

By CATHERINE RIUNGU

In an attempt to strengthen access to international markets, players in the flower sector travelled to Europe in November 2014 to appreciate firsthand the increasing demands to produce flowers in a more sustainable manner.

Four years down the line, the reality is that growers are now facing a more stringent global market that is growing increasingly concerned over unsustainable practices. This became apparent last December when a number of European supermarkets stated that they will be putting more emphasis on sustainable sourcing. There is also an increasing focus on the type of pesticides and their respective impact on the environment.

Oserian Development Corporation, being sensitive to the need to adopt a balanced approach, has come up with a raft of measures over the years aimed at sustaining quality production into the future without compromising on natural systems or its responsibility to workers, suppliers and the local communities.

As one of the largest exporters of cut roses to the European Union, Oserian has adopted a "champions by nature" approach to flower growing. The company utilizes the integrated pest management (IPM) system, hydroponics to reduce water and fertilizer consumption. The company has the world's largest geothermal heating project for maintaining temperature

in its greenhouses and for provision of carbon dioxide (CO₂) needed by the plants.

The Company has adjusted its production system to address the ongoing changes in European Union's environmental legislation which has increased pressure on agricultural production from EU's trade partners. "We're seeing developments in legislation on pesticides and bee-friendly products," says Mr. Hamish Ker, Oserian's Technical Director. He adds that the EU market currently measures maximum residue limits (MRL) of pesticides on vegetables and fruit imports but that there will be an increasing emphasis on cut flowers in the future with further restrictions on the range and type of products approved for

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competitive and to get better results. “Yes, we have to invest in training on how to use these unique systems, but once you have that capacity, you find that nature’s solutions are more sustainable from all perspectives. To all intents and purposes, what you’re doing is creating a balanced ecosystem on the farm.”

Driven by an ambition to attain CO2 neutrality, Oserian joined hands with Cranfield University in a 2007 study that compared its CO2 emission with what emanates from flower companies in the Northern Hemisphere. The latter use fossil fuels to heat their greenhouses and to provide light. “The researchers found out that production in Northern Hemisphere greenhouses resulted in 5.8 times more CO2 emissions than our production in Kenya, including air freight,” says Ker. He adds that the company now plans to ascertain how subsequent improvements have led to further reduction of its CO2 footprint in a study to be commissioned later this year.

To further reduce its carbon footprint, the company has imported seven electric vehicles from the Netherlands. “We have used them to convert our trucks from fossil fuel to electric vehicles, which we can power from our geothermal plant,” says Mr. Ker. “The project has been a great success and as a result we have ordered a further eight electric tugs and we plan to convert 100% of our fleet to electric in the near future.”

“Green business is good business,” says Ker who adds that the company hopes to save on the \$400,000 it uses on diesel each year.

Flower for life

Oserian’s ‘Flori 4 Life’ campaign talks volumes about its approaches. “We have created four lines: Flowers 4 Water, Flowers 4 Farming, Flowers 4 Education, and Flowers 4 Nature, says Ker. He adds that the concept allows the company to put a tag on its products telling its various stories.



One of the geothermal-powered electric vehicles used for transporting flowers from Oserian’s greenhouses to the packhouse reducing carbon footprint

“One tag might talk about putting water into the community; another might talk of building schools. This will allow us to keep our clients updated on a monthly basis on what we’re doing... when you’re giving someone flowers, it’s an emotional gift, and we believe that if we can tell the living story behind our flowers, it adds even more value to the gift.”

In addition, the company has embraced a more environmentally-friendly transportation process. It has adopted a unique concept for packing flowers developed by a Nairobi-based company, Cargolite. The latter’s cardboards are strengthened with plastic skeleton. “This means a lighter box, which saves on air freight, cardboard, and results in reduced impact on the environment.” Ker adds that by using the new packaging system, Oserian can potentially save up to \$8,000 for every one million stems transported to Europe.

Support to farmers & herders

Further, the company has been supporting local farmers to develop clean seed and in soil analysis. “Our sister company, Stokman, has developed clean seed banana planting materials and potatoes in its labs,” Ker

says that the company also helps local farmers by doing soil analysis, “so that they can understand the imbalances and can apply the right fertilizers and other corrective measures.”

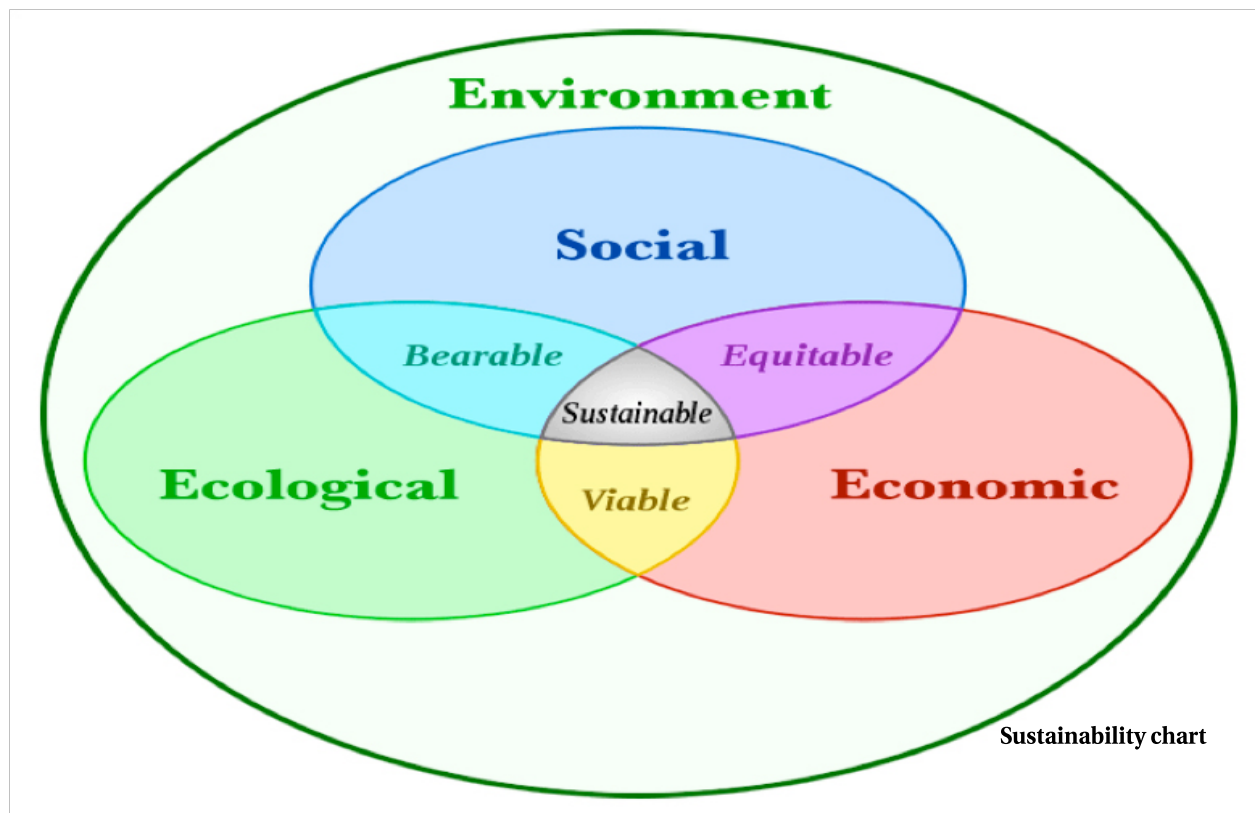
Related to this is that Oserian has been providing high-breed sheep to local herders. “We have sheep on the farm to keep the grass short around the greenhouses, which reduces the insects and the diseases.” Ker says that the company imported a pedigree breed of sheep from South Africa called the Dorper, which it crossed with the local Maasai breed. “We set aside some of the ram lambs every year and donate them to the community, to help improve their flocks.”

For the local women, the company supports a bracelet project, in which the local women make beaded bracelets that are put on its bouquets to generate a premium. This creates some income for the women.

The company’s sustainable approaches are hinged on its motto of ‘Better each day’. Ker says the company’s management team is challenged to “be better each day, to see what they can develop and improve, to drive out waste, and to improve performance and quality. “We also try to think about what makes

Sustainability in the flower industry

European Importers are pushing for their suppliers to be able to demonstrate sustainable policies and practices. The pressure is on



By RUTH VAUGHAN

In order to continue to be economically sustainable, one must comply with the market demands and trends or find a new market.

From a horticultural point of view, we must look at our farming practices and monitor and adjust them in order to make sure that we maintain or improve the soil and the environment, and not degrade it. Not only does this comply with the market demands but also comes with economic and social gain. A fertile soil is a productive soil, and clean water is cheaper and better to use.

At the onset of any farming project, one should do a feasibility study on the farm including soil mapping, soil depth, soil type, contours, climate, soil and water testing. A good farm

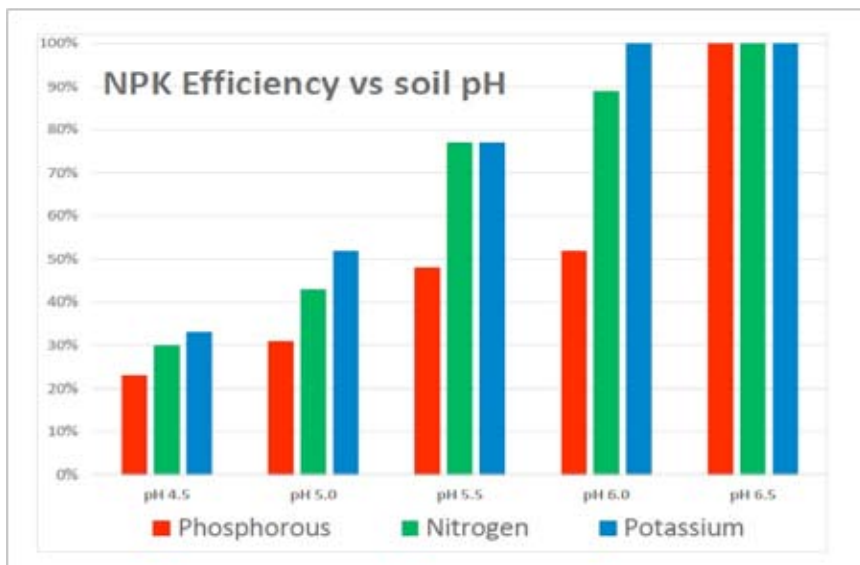
design with proper flow diagrams is essential for a well-run farm. Farms that pop up with-out planning are a nightmare to run and tend to end up as chaotic mess.

For flowers grown in the soil, one should take a complete soil analysis before preparing the land and planting, in order that the correct soil correction products (i.e. lime, gypsum, phosphorous, organic matter) can be added into the soil and mixed in at depth in order to balance the soil EC / pH and soil structure and to maximize on fertilizer efficiency by the plants and minimize on pest control products. Fertilizer and pesticide is monitored in most audits and over-use gains negative marks and reduced market access. Check and treat for soil

diseases and nematodes before planting. These can be treated with a break crop of radish or with soil solarization before planting.

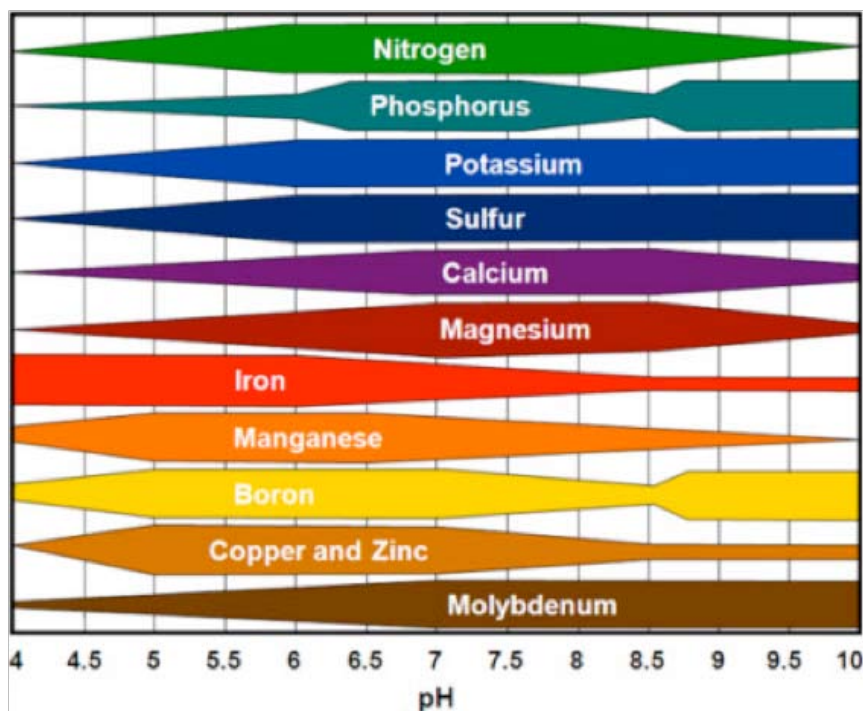
Soil pH should be adjusted to be as close to pH 6.5 as possible. pH has a big impact on the efficiency of the major fertilizers:- nitrogen, potassium and phosphorous, that you apply. If, for example, your soil is working on a pH of 4.5, you would have to apply 4X more P, 3X more N and about 3X more K to get the same production. That's going to cost a lot of extra money and attract a lot unsustainability points, not to mention the lost stems. NPK applied at the wrong soil pH gets locked up in the soil causing structural problems & lock up of other nutrients, or released into the environment.

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pH vs NPK efficiency

Adjusting the soil pH to 6.5 has the additional benefit of making all the other nutrients more available as seen in the pH availability chart.



Nutrient availability vs pH

With all this in mind, it shouldn't be hard to convince you to do a soil test to adjust the pH, the cost of the soil test and the lime will be paid back many times over in reduced fertilizer

use and better production.

While you have a growing crop in the field, I would recommend quarterly irrigation water analysis and 1:2 soil extract analysis in

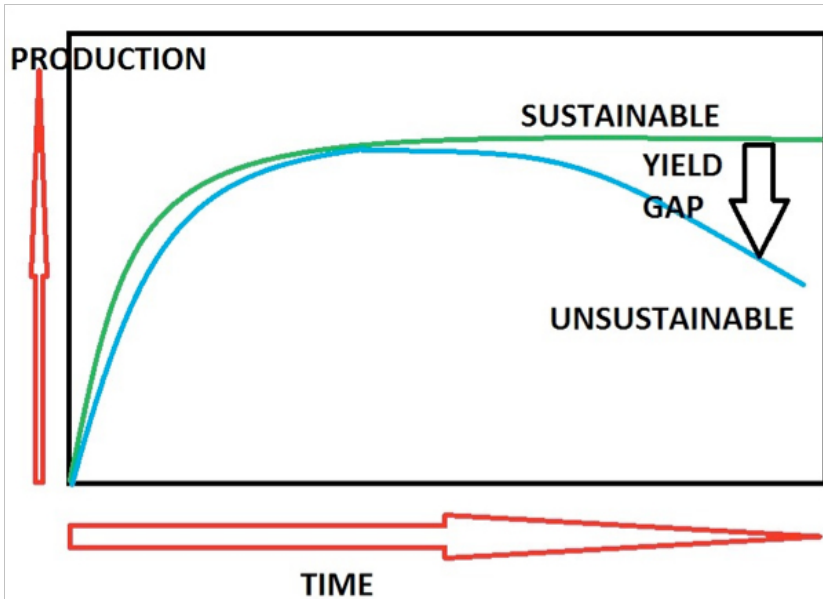
order to fine-tune the fertilizer application according to the soil requirements and the water quality. For the best results, this should be backed up by a leaf analysis to identify any minor nutrient deficiencies that can be quickly and cheaply rectified. This ensures that you put in a 'maintenance' level of fertilizers – just what the crop needs for optimum growth and no extra. Nematodes lurk under the soil, can't be seen, and can also reduce fertilizer efficiency and plant growth. They need to be monitored.

Production over time is a favorite graph of mine and is a common scenario on most farms. There is the initial honeymoon period or beginners' luck when farming is done on virgin soil. During this period, all goes well and the plants are pumping, until, fingers crossed, the crop reaches maturity and maximum production. Then over time, production starts reducing until after a while it declines so much it becomes unsustainable and the crop is removed and replanted at vast expenses. The yield gap is environmentally / economically and socially unsustainable resulting in less farm-gate returns on income for higher inputs.

In order to maintain the sustainable production period as long as possible, it is important to monitor the soil annually with a soil health check. At the very least, this should be a complete soil analysis / nematode analysis / root inspection.

CropNuts offers a full professional Soil Health Audit, so you can concentrate on core business. Soil Health Audits re-adjust the calcium, pH and organic matter in soil, and identify any pathogenic or physical production limiting barriers that can be addressed to maintain peak production. Fertigation programs can be adjusted to ensure that there is no build up of excess nutrients in the soil (an environmental no-no!). A common problem is phosphate and potassium build up in the soils – this affects production & soil structure and

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anywhere. This allows proper planning on the timing and amount of irrigation required for maximum root activity and production, and optimum water use. Aquacheck is very accurate, incredibly useful and a little bit expensive. But then, we have already ascertained that water is precious! Soil water probes generally pay for themselves in a few weeks from savings in fertilizer, pesticides, water and pumping costs, and give a tangible demonstration of water conservation and sustainable farming practices to the market.

Excess water application is all too common. The soil surface can look dry, but be flooded below. Plants can wilt not just from too little water, but from too much water, no oxygen in the root zone, potassium or copper deficiencies, nematode damage or root pathogens. The normal reaction to wilting plants is to irrigate. Excess water leaches and as it moves through the soil it acts just like the venturi in a fertigation dosing unit, sucking all the fertilizers out of the root zone, causing low EC's and hungry plants. A waste of water, a waste of money and an environmental hazard.

Grow with science, grow sustainability, monitor and be able demonstrate your sustainable farming!

For more information on Soil Health Audits and Aquacheck Soil Moisture Probes please contact: support@cropnuts.com.

Flower Production over time (increased sustainability means reducing the yield gap!)

locks up other nutrients e.g. zinc and copper.

Annual Soil Health checks will keep your yield gaps to a minimum = maximizing your production and the number of years a crop can stay in the field, and minimizing fertilizer use and fertilizer waste. Soil Health Monitoring and Reporting demonstrates a commitment to sustainable horticulture.

Cape Town is running out of water. Lake Naivasha almost dried up in 2007. Water is life, money, flowers, jobs, fish, tourism etc. Water is a shared and precious resource. All sustainability revolves around how

water is used. While it is important to carefully control fertilizer use and treat and monitor effluent to NEMA standards, the most important thing is to use water responsibly and to be able to demonstrate responsible water use to the market.

There are a number of soil moisture probes that you can use to take the guess work out of irrigation. We have tried and tested many. We supply Aquacheck Soil Moisture probes. These are your eyes under the soil and continuously monitor moisture levels and temperatures every 10 cm down to 60-120, giving real time soil moisture curve, that can be accessed



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Clement Tulezi picks the baton from Jane Ngige; speaks sustainability

Kenya Flower Council's new boss, Clement Tulezi has expressed interest in fostering sustainable practices in the flower industry. In an interview with Bob Koigi, he details how he intends to breathe new life and strategy to the Council, positioning the brand Kenya flower in the international arena and growing more markets through collaboration with government. Tulezi takes charge of the umbrella grower's and exporters' body, at a time when the country's flower industry is celebrating major achievements including sustainable growing practices, access to the US market with the introduction of direct flights and self-regulation.



Jane Ngige, former Kenya Flower Council CEO, now heading Kenya Horticultural Council



Congratulations on your appointment Mr. Tulezi. Tell us about your background

Thank you. I have over 23 years working in media and communication. I started off as a radio journalist predominantly covering health and development for both local and international media before moving into advertising and later to non-profit institutions. Later, I ventured into peace keeping and conflict resolution working with the United Nations. I have been involved in conflict mediation across Africa, from West Africa, Somalia and Sudan. One of my last assignments was ensuring a smooth power transition in Liberia from former President Ellen Johnson Sirleaf to George Weah. It was a great moment for the country and continent and a great win for democracy. Academically, I have an undergraduate degree in Communication Studies,

a Post graduate diploma in Mass Communication and Public Relations and a Masters Degree in Project Management. I am also a certified international mediator.

Interesting! From Communications and Media, to regional peacekeeping, conflict resolution and now to trade.

When I was in communications, much of what I used to do was to put in place systems and strategies that championed the interests of the clients while driving the industry. It worked perfectly when I moved to mediation, my communication skills came in handy because part of what I was tasked with was to foster understanding of the parties to the dispute, which could only happen if you encouraged dialogue and communication. When the Kenya Flower Council (KFC) was looking for someone to fill the CEO's position, they wanted someone with requisite

CHANGE OF GUARD

communication and marketing skills and who could position the industry to target audiences both locally and internationally. My diverse background fits the bill.

What do you think of the Kenyan flower industry in terms of competitiveness, its global position, innovation and sustainability?

I am proud of the great milestones the industry has made despite the numerous odds it has had to surmount. The Kenyan flower industry is a force to reckon with in the global floriculture sector. It has shaped itself as a unique brand if the number of international buyers expressing interest and the growing volumes we continue to trade in international markets is anything to go by. I am equally impressed at how seriously the industry has taken self-regulation and conformity which has contributed a great deal to restoring and building market confidence. When combined with sustainable practices like green energy initiatives, integrated pest management practices and workers' welfare, these are panaceas for a more vibrant and globally competitive sector. We still have some hiccups across the value chain like the cost of doing business and improving government- sector relations, but we hope to address them as we go along.

The Kenyan industry is a dynamic one, with opportunities and challenges. What is your priority as you take office?

I am happy that I am taking over at a time when the industry has worked tirelessly to build a name, reputation and growth despite the challenges. I would want to build on the strong foundation the sector has already established. I am keen on fostering sustainable practices in line with world's best practices and make KFC a reference institution for championing sustainable flower production the world over. The Kenya flower brand is globally acclaimed for quality and I

want to leverage on that and push that message even more. I still think we have a lot of work to do in marketing. I also look forward to working with all the players to push for more self-regulation and building up on the council's standards that have become international benchmarks.

Where do you see the industry in the next five years?

With the direct access to the US market, the opening up of new and more lucrative markets and the sector's innovative response to the burgeoning and diversified market needs, I am confident that we will grow our global share tremendously within the next few years. The diversification to new markets that have different preferences is offering our members a new lifeline and we want to assist them to capitalize on that.

What legacy are you looking to shape as the man at the helm of one of the most critical sub sectors in the country?

When I took over this job, I knew, like I have in my many mediation interventions, that it is not an ordinary one. Millions of people rely on the flower sector to educate and feed their children and to cater for their needs. Working with the board, the members, other private sector players and the government, I have resolved is to see a conducive environment for investors in the industry that translates to more stable jobs and more income for the country. I know it may sound easy on paper, but I am banking on the dedication of the members and the commitment of the board to make us take the sector to a whole new level because the potential is immense.

KFC is a voluntary member association, boasting of over 100 members. How do you intend to advance their interests?

The investment the members of KFC have made to the sector is immense

and the contribution the sector is making to the economy cannot be gainsaid. As one of the key foreign exchange earners, the flower industry definitely needs attention. Members have complained of tough business environment which has seen earnings dwindle, job losses and in some painful cases closure. We need to change this. One of my intentions is to seriously push for bilateral discussions between government and the sector players on lowering the cost of business, primarily on energy, taxation and transport costs. We are also looking at engaging government more on trade protocols that are favorable to the industry so that we can expand our markets.

You get into office at a defining moment for the industry, with the introduction of direct flights to the USA, Kenya's increasing capture of vital markets and continued positioning at the global floriculture scene. How do you intend to uphold the place of Kenyan flower in the regional and international arena?

It is indeed an exciting moment for the industry and we intend to leverage on the reputation of the brand Kenya flower to market the sector more to the new markets. We already have systems and processes in place that are crucial for a booming industry. Our standards are receiving global thumbs up, our members are sustainably producing flowers and getting global recognition. We only need to build on that.

What is your greatest fear as you begin your tenure?

Well, the flower industry is dynamic, with its set of opportunities and challenges, but most importantly, the Kenya flower sector is resilient. So we are ready to tackle any challenges that might come along the way. More importantly, I am excited to be heading one of the most important sectors of the Kenyan economy at a time when the world recognizes and celebrates the Kenyan flower.

Oserian consolidates its operations



Inside Oserian's packhouse.

By GITAU MUKANUNGA

Driven by the need to enhance efficiency, reduce costs and ward off uncertainties in the market, Kenya's leading flower firm has consolidated its operations bringing together all its three flower farms in a single site.

As a result, the Naivasha-based Oserian Development Company Ltd hopes that the new site it has moved to will smoothen technological development and allow it to grow roses at the highest, most environmentally sustainable standards.

"We've now started consolidating the flower farm into one central hub to make it more efficient and reduce cost," said Hamish Ker, the company's Technical Director.

Oserian's move is informed by raging challenges facing not just flower farming in Africa but other sectors that rely on the European market. The company has adjusted its operation to cushion itself from the effects of Brexit that sent shock waves through the global markets, including those in Africa.

Apparently, Britain's divorce from the European Union added another layer of challenges affecting the economies of Kenyan and other African countries that were already suffering from low commodity prices and lethargic

global demand. This added worries to producers in African countries whose trade arrangements with Britain were negotiated through the EU, meaning that the agreements will eventually cease to apply or will have to be renegotiated afresh when London finally leaves the EU.

Kenya, which constitutes Britain's third largest market in Africa, is expected to witness capital flight after Brexit, leading to falling exports, weakening of the Kenyan shilling and expensive imports. The effects are expected to be worse in the country's cut flower industry for which the EU constitutes over a third of the market with Britain forming the second-largest export market after the Netherlands. The Kenya Flower Council predicted that the country may lose as much as Ksh4 billion each month.

With Brexit, Ker believes that Oserian, like other flower producers, have to grapple with less revenue and increased costs. By consolidating its operations, Oserian has positioned itself in a manner that will cushion it from Brexit and the increasing legislation in the European market. "Brexit has emboldened us as a business...to increase our efficiencies."

The company has not only brought the three farms to a single site but has

also moved its pack house. "We had three farms with wildlife corridors running between them." Ker adds that before Oserian took to growing flowers through hydroponics, it used "a lot of land to get soil and rotate the crops" and that its packhouse was detached from its farms as it was located away, where the company has a geothermal power plant.

By relocating its operations, Oserian has also positioned itself to avoid risk and reap from emerging access to American and Chinese flower markets. "Kenya has been allowed to have direct flights into the United States, so we will be able to have a much more efficient logistic," he says. "We're also seeing a big emerging market in China, where increasing middle income is now purchasing luxury products such as flowers. We think this will have a significant impact in the next five years on the marketing and sales of flowers from East Africa."

Oserian was established in 1969 by Hans Zwager – a Dutch World War II veteran who bought a large cattle ranch on the shores of Lake Naivasha. Initially, Zwager and his wife, June, ran Oserian as a vegetable farm but started growing flowers in 1982. This was when the two started cultivating *Statice*, a flower that was then popular in Europe. Zwagger was instrumental in establishing the East African flower auction which enabled local farms to be selling flowers all year round and bypass the EU's restrictive regulations.

The company has been on a trajectory that has seen it achieve an impressive growth over the last 35 years. Today, Oserian is the largest producer of flowers in Kenya. The company also runs the Oserengoni Wildlife within 18,000 acres of its estate, Chui Lodge and Kiangazi House, Ranch House Bistro that opened its doors in 2014 and La Pieve Farm Shop that sells organic produce.



CAREER OPPORTUNITY

Oserian Development Company Limited wishes to fill the following position within its Postharvest Department.

Head of Division - Packhouse Night shift (1 position)

This position reports to the Head of Postharvest Operations and will perform the following duties amongst other responsibilities:-

- Monitor Packhouse cost per stem and keep them within set limits
- Set and maintain desirable Packhouse efficiencies
- Control and manage waste/reject levels
- Ensure crop natural profile is converted to equivalent sales
- Ensure availability of updated raw material and final product specifications
- Ensure market specified standards are achieved and adherence to policies & procedures
- Maintain compliance with external and internal audits
- Training, coaching, mentoring and motivating employees to enhance performance
- Ensure adherence to health and safety standards .i.e. use of PPE and safe use of working tools
- Develop harvest protocols in conjunction with Production Department
- Liaising with quality assurance team to determine crop postharvest viability
- Ensuring field harvest improvement and conduct research and development of postharvest protocols to determine best options for due care and attention to crop.
- Liaise with all Production sections to ensure product delivered to post harvest meet the quality requirement
- Preparation and control of pack house Budget for all items required in the pack house.

We would like to discuss this position with candidates who must have the following minimum qualifications:-

- Holder of a Bachelor's degree in Agricultural/Horticultural sciences
- Excellent Computer skills especially in Microsoft office applications
- Management/Supervisory training
- Have at least 5 years' experience preferably in post-harvest operations in an FMCG setup
- Must be a team player with initiative and self-disciplined
- Should have Strong organizational skills, able to withstand and work under pressure,
- Independent thinker with good communication skills (both oral and written)
- Ability to establish and maintain excellent mutual beneficial working relationship with Management and workers in other departments
- Should have Strong analytical skills, Independent thinker and with good innovative and communication skills (both oral and written).

Those who meet these qualifications should submit their applications together with detailed CV and supporting documents to the Head of Division - Human Resources by February 20, 2018

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OSERIAN IS AN EQUAL OPPORTUNITY EMPLOYER

The 'queen' was raised at Oserian's geothermal rose project

By **HAMISH KER**

Oserian is extremely proud of her history as the leading pioneer of the flower industry in Kenya. It is therefore most fitting that the company, with her geothermal rose heated project, was identified as the perfect farm to develop the "Queen of Africa" into the Queen of Roses.

As a variety, the "Queen of Africa" required unique growing environment and climate in order to bring out the very best in this rose in terms of head size, balance for optimal air freight as well as the ability to open the flower more so as to appreciate its shape and beauty.

Growing Queen of Africa in our geothermal project has enabled Oserian to grow a premium white rose which is consistent in quality and ideal for the premium floral market. The flower has shifted from a focal flower in the finest bouquets to being the pride



Oserian Technical Director, Hamish Ker, explains how the company utilises geothermal power in its greenhouses

and joy in any brides' wedding days.

Queen of Africa's flat open blossom lends itself perfectly for glittering and colouring so that it can be tailor-made for special events when one wants to add that extra sparkle to their display of roses

or magical touch to a bouquet.

All in all we are confident this rose is set to become the Queen of African roses!

**Hamish Ker is Oserian Technical Director*



FLORI4 LIFE

Our award winning flowers make lives better, create jobs and support a greener planet inspired by the vision of the Zwager family. For more info visit www.oserian.com



FLORI4 NATURE

We sustain nature through our wildlife sanctuary and native vegetation. We raise seedlings for reforestation, use geothermal power to heat greenhouses, apply IPM to reduce chemicals and recycle plastics.



FLORI4 SCHOOLS

Oserian has constructed and furnished two early childhood development centres, two primary schools, a high School for employees and built two community schools.



FLORI4 FARMING

We believe in a hunger-free Kenya. Our Tissue Culture lab produces high value food crops like banana seedlings and seed potato to increase farmers' yields.



FLORI4 WATER

Water is life. Our water management model has been cited by the Water Resource Management Authority as an industry benchmark. Oserian has developed several community water projects.

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Mealybugs are very persistent once they establish in a rose crop

Mealybugs on roses and how to manage them

By VICTOR JUMA

Rose production under greenhouses is currently the largest component of Kenya's cut-flower industry. The flowers are susceptible to attack by a large range of pests and diseases.

Sustainability in the flower industry is increasingly becoming the new norm and is in demand by producers and retailers, as well as by consumers. Probably, as a result of the successful implementation of integrated pest management (IPM) programs against Two-spotted spider mites and the reduced use of broad-spectrum pesticides, secondary pests such as mealybugs, which were generally not a problem for rose growers, emerged. The number of growers with mealybug challenges is growing steadily.

Mealybugs are very persistent once they establish in a rose crop. They are usually thinly or thickly covered with a mealy or cottony wax secretion. The

nymphs and females cause damage to host plants with their piercing mouthparts which they use to suck sap and remove nutrients. As a result, the plants often become stunted, distorted, or yellowed and show reduced vigor. The bugs excrete honeydew, which provides a medium for the growth of black sooty mould fungi. Black sooty mould fungi are detrimental to plants because they cover leaves, thus reducing photosynthesis and inducing plant stress. Sticky and fouled flowers are unmarketable leading to losses in revenues.

There are many mealybug species of economic importance all over the world. Some of the more common species found in greenhouses are the citrus mealybug (*Planococcus citri*) Risso (*Hemiptera pseudococcidae*) and the long-tailed mealybug (*Pseudococcus longispinus*). Their life cycle consists of an egg stage (except for the long-tailed mealybug that gives birth), immature

stages that can move ("crawlers") and adults. The small-winged adult males do not resemble the females and their primary role is to fertilize the female mealybugs. The average number of eggs laid per female is strongly dependent on temperature. Each female lays fewer than 100 eggs at temperatures above 30°C, but can lay over 400 eggs at 18°C. Thus, they have a high reproductive potential and must be controlled before reaching injurious levels.

In rose greenhouses, mealybugs can spread by crawling from plant to plant, clinging to harvesting equipment, and adhering to workers. Early detection of mealybugs can be difficult due to their tendency to hide in protected locations. Effective control of mealybugs should be based on an IPM program, involving monitoring of pest population and the integration of different control methods such as cultural practices, biological control, and insecticide applications.

Monitoring

Monitoring is essential for the successful control of mealybugs as it provides valuable information regarding the pest's density and presence for crop protection managers to select the best and most viable management options. Managers are advised to look for white flecks or cottony residues along the leaf midribs, on leaf or stem axils, on the underside of leaves and near the base of plants. Honeydew, sooty mould and the presence of ants may also be an indication of a mealybug infestation.

Cultural Controls

Cultural methods of control are generally designed to reduce the spread of existing mealybug infestations to plants/greenhouses that are not infested. One should:

- o Inspect incoming propagation materials for signs of mealybugs;
- o Organize and coordinate on-farm movement of workers, tools and machinery;
- o Sterilize harvesting and pruning equipment to reduce contamination;
- o Prune and remove dead branches and leaves to increase the effectiveness of insecticides, predators and parasitoids;
- o Keep greenhouses as weed-free as possible; and,
- o Maintain proper fertility levels for the crop. High nitrogen fertility favours mealybug reproduction.

Biological Controls

Host specific parasitic wasps and general predators are commercially available. It is important to identify the specific mealybug species present in order to select the most appropriate natural enemy. An Australian ladybird beetle, commonly known as the mealybug destroyer (*Cryptolaemus montrouzieri*), is commercially available for use against the citrus mealybug. The beetle can also feed on soft scales and

aphids but prefers mealybugs. The mealybug destroyer only reproduces on mealybugs with egg masses so is not as effective against the long-tailed mealybugs which do not have egg sacs but give birth to live young. So, if the mealybug species does not produce an egg sac, it is not possible for the *C. montrouzieri* adult to reproduce in the rosecrop. However, if *C. montrouzieri* larvae are used instead in the IPM program, lack of egg sacs is not such a problem as the young *C. montrouzieri* larvae attack all mealybug life stages and are effective in hot spots. Ants protect mealybugs from *C. montrouzieri* so should be controlled before releasing these generalist predators. Managers are advised to consult with supplier on recommended release rates.

Other parasitoids such as *Leptomastix dactylopii*, *Anagyrus pseudococci* and *Coccidoxenoides perminutus* are more suitable if the mealybug populations are low and more widely dispersed. It is important to consult with supplier on recommended release rates.

Chemical control



Egyptian Predatory Beetle.

Chemical treatments using synthetic insecticides are still the most widely used tools to cope with mealybug problems in roses. Judicious use of pesticides is generally accepted as an important pest-control tactic in integrated pest management programs.

Various contact and systemic chemicals are available. Contact chemicals are only effective on crawlers. Systemic chemicals are good on nymphs and adults that are feeding.

Timing an insecticide application is important. Two main modes of insecticide application are adopted to control mealybugs: foliage cover spraying for management of above-ground populations and chemigation by application of systemic compounds via the irrigation system, (e.g. drip irrigation).

Neonicotinoids, a group of systemic compounds, (e.g. Actara 25 WG or Thiamethoxam), shows high effectiveness against mealybug nymphs and adults when applied through drip irrigation. It reduces populations and cluster damage and is safe for other non-targeted organisms.

Chess 50 WG (Pymetrozine) is a pyridine azomethine insecticide active against mealybugs and other sucking insects such as aphids and whiteflies. When used for mealybug control, Chess causes nymphs and adults to stop feeding leading to their death.

Because of its specificity for sucking insects, Chess is relatively nontoxic to most natural enemies and fits well in IPM programs. IGRs, such as buprofezin should be used in combination with other insecticides to reduce mealybug populations below the economic threshold.

Using a sticker-spreader increases spray coverage and efficacy. Do not use the same pesticide, or pesticide combination, more than three times in sequence. Treatments may be repeated two or more times at weekly intervals to kill newly hatched mealybugs.

Like most pests, Mealybugs can cause much damage if left unchecked. Regularly inspect your plants, and at the first sign of trouble use the appropriate controls. It is much easier to control a small outbreak than a full blown Mealybug metropolis!



Exit spider mite enters mealybugs!

Growers say at a Real IPM mealybug workshop

By KIBOIWAHOME

Horticulture produce from Kenya has over the years experienced a steady increase in demand both locally and internationally. This has translated to increased revenue and direct and indirect employment along its chain. However the industry is still grappling with its old enemy: pests and diseases, a major threat to the future of this precious industry.

With the strict measures imposed on fresh exports for European market, farmers and exporters options to deal with this menace continues to be limited as increasing number of pesticides and insecticides continue to be red carded. It is worth appreciating that the discovery of biological control agents against pests is bringing relief to both farmers and exporters. "These bio-agents have proven to be the solution and not just an alternative solution"

said Mrs.Louise Labushagne from Real IPM at the mealybug management workshop.

The workshop, organized by Real IPM, brought together farm managers, supervisors and consultants from across the country in one sitting in Naivasha- Enashipai Resort. It also brought experts and researchers from Real IPM who, apart from presenting their findings on the mealybug also led discussions. Mr Lee from Real IPM stated there is need for certain people who are the decision makers in the farms, to be trained. These include farm managers and supervisors who are too busy to attend farm training.

The expectations from the workshop revealed that most participants wanted more information on mealybugs management. For example Duncan from Syngenta Polen enquired "Apart from chemical sprays, I want to know if mealybugs can be totally eliminated."

Molo River Roses: "I want to know more about management of Mealybugs, there is increase even though spraying is done." And from Syngenta: "I am here to learn about chemical resistance of mealybug and biological ways to tackle them."

It was reported mealybugs are hard to get rid of. Mr. Murungi from Tambuzi farm stated, "I have observed from my farm that mealybugs are taking over from spider mites and other insects, that is, when you deal with spider mites mealybugs take over."

The negative effects of mealybug are so severe. Research has shown that it causes 30% loss on production, which is a big blow especially for large scale farmers. By upholding IPM strategies, it is worth noting that the most important of all is 'management'. Farm managers and supervisors should employ proper management tool and ensure regular scouting is done.

Everything's coming up roses for De Ruiter

By GUY KEBBLE

In recent years, De Ruiter has been hard at work on five red and five pink rose varieties for Africa. The group of red rose varieties has been named The "new" Big Five. Some of these are already known in the market because they're in production or being traded already. The varieties; Rhodos, Ever Red and Red Kamala, are already widely known. The Spectre (intermediate) and Cupido (T-Hybrid) are brand new varieties, and are being trialed at some large companies in Africa. The "new" Big 5 will be communicated as a very welcome addition to the complete range for chain partners.

On May 13, De Ruiter won the first prize in the Keukenhof Consumer Award Rose 2017, for the Ever Red variety, which is supplied by chain partner F. Optimal Connection. Earlier this year, De Ruiter already won a professional jury award for Cherry Kheops, a special spray rose with 40-60 rosebuds per branch.

De Ruiter is not only introducing new varieties in the red segment, the company is also active in the pink segment. In addition to the existing variety Pink Rhodos, a mutant of the well-known red variety, Wham, Celeb, Opala and London Eye are also

presented to the market.

In the special shape segment, the Vuvuzela range and X-expression are popular choices, characterized by their bud shape and colour combination. These strong characteristics already yielded De Ruiter the name of 'color breeder'. "We still are," says Örjan Hulshof, Sales and Marketing Manager, "but we're also looking for an all-round supplier of a complete rose assortment for the whole market. Our pay-off is 'creating flower business' for a reason."

De Ruiter wishes everyone a happy & successful Valentines 2018



DeRuiter
creating flower business

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United Selections 2018 picks

By GITAU MUKANUNGA

As part of its efforts to meet the needs of an ever-changing market and boost the portfolio of its products, the Nakuru-based flower breeder, United Selections, has been launching some new rose varieties for the international flower market.

Already, the varieties developed by the company have created keen interest among growers because they have a long shelf life, always meets minimum production figures and are ready for long transportation to the end consumer.

They include Calgary, a bright white variety that is not prone to destruction by bugs. In addition, Calgary has a longer shelf life and hence suitable for long transportation from Kenya to Europe and other regions. Although it is yet to be commercially cultivated, the variety has already created a welcome buzz among growers.

"We have received the first confirmation from commercial planters" said Jelle Posthumus, United Selections Chief Executive. Posthumus adds that the company intends to put the variety up for sale by the end of the year. He gave thumbs up to the variety saying that its production is extremely good and does not show major botrytis issues in the raining season.

Besides Calgary, Red Lion is the other addition to United Selections' impressive portfolio. This is a red rose with a strong red colour, longer stem (i.e. between 70-90 centimetres) and a head size of six centimetres. In addition, the variety has a classical opening which the company believes attract buyers and end consumers.

"Red Lion is our favourite red variety and is already in the market." Posthumus adds that already, three growers – Panda Flowers in Naivasha,



Dr Sally Kosgey, the brains behind United Selections, and Jelle Posthumus, Chief Executive, at the company's premises in Nakuru County

Bliss Flora in Njoro and Zena Roses in Eldoret- have placed orders and is positive that more will similarly do so as the year progresses.

As it developed the two varieties, it is apparent that United Selections was driven by the desire to meet qualities that attract the discerning consumer besides hoping to make better returns. "We are privy to the fact that the market is keen on the length of the stem," said Elvis Musyoka, the Sales Representative. Musyoka told *Hortinews* that the length of the stem is especially attractive in the flower auctions. "The price one gets for a variety (in particular for a red) has a lot to do with the length of the stem."

Over the last seven years, the company has been churning out between 5-6 new varieties each year. "So far, we have produced over 40 varieties," said Posthumus who added that Madam Red, Adalonia, Jumilia Red torch and New Orleans are some of the most attractive varieties. Its new addition,

Red Lion, is strikingly different from other red varieties on offer.

The company has also adhered to the emerging trend in which the sector is increasingly embracing sustainable production practices. In this regard, it has adopted the integrated pest management (IPM) in its Nakuru location. "We are adhering to the general trend in the market by adopting both biological and chemical approaches to address the challenges of pests and diseases," says Musyoka.

With Valentine around the corner, United Selections is also proudly showing off its strength on red varieties. For many years, the company has been focusing on red varieties in their breeding program. Some of these varieties include: Upper Impact, Upper Class, Madam Red, Red Torch, and more recently, Red Lion but also the Cheetah, Gladiator and World Class which underscores its emphasis on breeding the reds.



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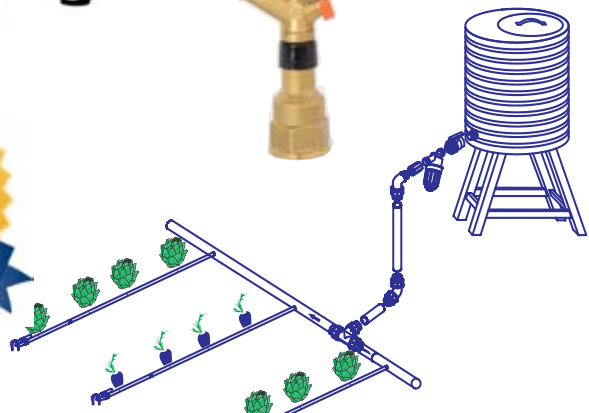


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Undergoing commercial cultivation exclusively by two farms, this is.



Arisha,

A new pink rose with a stem length of 40-70 cm and production level of 140-180 per M2



Eleanor

A high-yielding, big-headed variety with a medium-sized stem.

The select new

PHOTO CREDIT: Allan Muturi

By GATU MBARIA

A Naivasha-based flower breeder has released six new rose varieties that are set to be commercialized this year.

The varieties released by Select Breeding include Sunpalace, Volcano, Arisha, Eleanor, Karma and Hurricane. Sunpalace is a big-headed, long-stemmed yellow rose whose trials are taking place in the Netherlands. Arisha, a new cerise rose, is also on trial. The rest, Eleanor is a high-yielding, big-headed variety with a medium-sized stem. On its part, Karma is a new niche variety with a big head and full opening. Lastly, hurricane is already undergoing commercial cultivation exclusively by two farms.

"We are confident the six varieties will be commercialized," said Michael de Geus.

He says that the company is also involved in trials of many other varieties.



Breeder Dennis de Geus and Managing Director, Michael de Geus, at Select Breeding Show House, Oserian Business Park, Naivasha

According to de Geus, developing the varieties was a long process that took between 5 and 6 years -from pollination up to commercialization. "In between, we were involved in a lot of other tasks such as measuring the length of stems, engaging buyers and growers as well as the market."

Besides the new varieties, Queen of Africa is one of the company's most popular and well known varieties. "This is a high-yielding, medium-stemmed premium variety that does not get botrytis due to the heating system used in Oserian farm," said de Geus. Grown by Oserian and three other farms, the variety is widely used



Karma

A new niche variety with a big head and full opening. It has a bud height of 5-6 cm, stem length of 40-70 cm and produces 160-180 flowers per square-metre



Volcano

These is a hybrid with a bud height of 5-6 cm, stemlength of 40-70 cm and a production rate of 160-170 flowers per square-metre



Sunpalace

big-headed, long-stemmed yellow rose with a stem length of 40-70 centimetres. It has a bud height of 5-6 cm and a production rate of 140-180 per square-metre. Trials are taking place in a commercial farm in Holland.

in homes, weddings, funerals and as bouquets.

According to de Geus, Select Breeding develops varieties that are suitable for farms located at different elevations above the sea level. "Our varieties suit farms in altitudes ranging between 1,600 – 2,000 m; 2,000 m to 2,350 meters and over 2,350 meters above the sea level." However, de Geus cautions that areas perched on same altitude do not necessarily have the same climatic conditions. "Select Breeding therefore breeds flowers suitable for Mount Kenya area, Kiambu-Thika-Nairobi areas and the Naivasha areas but there are varieties that can grow in different climatic conditions."

Controlled Release

"We try to be unique by developing varieties suitable for farms in different areas," de Geus said adding that the company has been working with growers for purposes of having "controlled release" of varieties into the market. "Our varieties are becoming increasingly climate and farm specific."

He was speaking to *Hortnews* during the company's open day held on January 26. Last year, Select Breeding moved to a 3,000 square-

metre facility at the Oserian Business Park where it now tests and displays new varieties.

De Geus explained that before coming up with new varieties, the company identifies the desirable qualities that it seeks to develop, tests the variety in its facility and then ships to Holland where it engages in additional tests. "We then get feedback from the growers." He adds that the uptake of its varieties has become better and that the company tries to replicate climatic Kenyan conditions in Holland, excludes varieties affected by diseases and keeps doing trials to arm its varieties

with enough resistance to withstand diseases. "However, pests also become resistant which forces us to keep selecting."

The ultimate price that a variety fetches in the market is a most important consideration to growers. De Geus says that Select Breeding strives to meet this requirement by coming up with varieties that have big heads combined with higher yield that fetch better prices. He explained that usually, high-yielding varieties that have smaller heads fetch lower prices.

Production level is determined by counting the number of roses in the beds within a green house.



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Kitui-based mango company eyes the international market

If the company capitalizes on the COMESA Certification, it will be able to sell its products across the free-trade area with a population of 390 million

By GATU MBARIA

A Kitui-based mango juice processor, funded by USAID and which is now enjoying support of the County government is eyeing the vast international market for mango products and thereby give the local farming community an opportunity to raise household incomes.

Besides getting a COMESA certification, the Kitui Enterprise Promotion Company Ltd (KEPCL) has also received a Halal Certification from the Middle East.

In addition, KEPCL has been talking with Tanzanian and Ugandan companies in the hope of securing

orders. This bore fruits last year when a Ugandan company ordered a consignment of tree tons of its products. But KEPCL forays into the Ugandan market were not successful owing to prohibitive costs.

“However, we are still talking with the company in the hope of securing a bigger order,” said Mr. Crack Wambua, the KEPCL’s Managing Director.

If the company is able to capitalize on the COMESA Certification, it will be able to sell its products across the free-trade area with a population of 390 million. The 20 member states came together in December 1994.



Charity Ngilu, Kitui Governor present mango juice to a visitor at the Kitui Enterprise Promotion Company Ltd

“All this has been made possible though support from the Kenya Agricultural Value Chains Enterprises (KAVES), a USAID-funded initiative that enables farmer groups to convert their farming activities into profitable enterprises,” said Mr. Arim Ogolla, ES Technical Director, Horticulture.

Mr. Arim added that KAVES has been supporting budding farmers’ companies to engage in value addition, reduce post-harvest losses and increase incomes.

Funding Criteria

According to George Nderitu, a Consultant Engineer at KAVES, USAID pumped Ksh4.2 million in 2016 after ascertaining that the company met the funding criteria. “KAVES does not fund starters...we facilitate those who are already in business but are facing challenges; we come in to assist them to deal with the challenges.” Mr. Nderitu added that before settling on KEPCL and other three processors, KAVES had evaluated 20 different



Charity Ngilu, Kitui Governor visits the Kitui Enterprise Promotion Company Ltd



processors and selected those that had the required number of farmer-members, were in business besides demonstrating that they needed the assistance.

With KAVES support, the company was able to upgrade its production line after it acquired a semi-automatic bottle filler, mango distoner, passion extractor, a rinser for washing bottles and a handling tank with a capacity of 1,000 litres.

“We were able to automate the production line, reduce over-reliance on manual production methods thereby raising the company’s efficiency and quality of its products,” said Mr. Wambua.

Wambua adds that following the assistance, the company’s production efficiency rose by 500% from processing 200 kilos to 1,000 kilos per hour. Besides juice, mango concentrate and mango powder, KEPCL produces dried mango which it mills and combines with sorghum and peanuts to produce healthy flour.

KEPCL is reputed to have superior

quality juice as it has 60% concentrate unlike many of its larger counterparts in Kenya that offer juice at 30% concentrate.

Handling expanded demand

The company is now able to handle an expanded demand especially for juice from the Kitui County Government. Its fortunes were raised greatly last November after Mrs. Charity Ngilu, the Kitui Governor, ordered all her ministries to be securing refreshments from local suppliers.

“The County Government is now our biggest market...since Ngilu’s directive, we have received orders that have so far generated Ksh200,000,” said Mr. Wambua. He added that KEPCL’s fortunes are bound to rise now that schools are in session; “We hope to generate as much as Ksh1 million or more.”

Mrs. Ngilu has planned more good tidings for the company. “The governor also promised a Ksh48 million aseptic packaging equipment that will enable us to shift to tetra-

pak packaging. According to Mr. Nderitu, this will consequently ensure that the company’s products retain colour, texture, natural taste and nutritional value for up to 12 months, without the need for preservatives, refrigeration or sterilizing.

KEPCL is jointly owned by local mango farmers who command 70% of the shares while other shareholders own 30%. The company was initially registered in 2012 as the Kitui Development Centre, an NGO involved in training women on how to add value to mangoes, grafting and harvesting. Initially, it had 800 farmers from nine mango-collection centers. But today, it has 1,237 members after 447 passion farmers joined. Each farmer is required to pay a membership fee of Ksh1, 150.

“We buy mangoes through cooperatives,” said Mr. Wambua who added that KEPCL’s employees are in-charge of collecting and sorting for the right quality of mangoes. The company has ensured a ready mango market for the farmers who are no longer exploited by brokers. “The support from KAVES enabled us to greatly reduce post-harvest losses by 70%,” Wambua avers.

Although the going appears to have greatly changed for the better, the KEPCL is still not out of the woods yet. It has been grappling with technical challenges that hinder it from accessing standards-sensitive markets. At the same time, it is yet to come up with a technique of reducing the mango concentrate in its juices from 60% to 30%.

But KEPCL is working on the challenges; “we are working with the Export Promotion Council (EPC) to help us attain standards so that we can export to other countries,” said Wambua. He added that the Company is also struggling on how to expand its Kenyan market “by seeking out stockists and plans to embark on advertisements and road shows when funds are available.”



Safe Produce for local and regional markets

The partnership with KAVES came in handy as it helped link up the company to farmers from Meru, Bungoma and Trans Nzoia counties on contractual basis

A Kenyan company working in the production of horticultural produce is already marking its territory in the regional markets for its safe products.

Aptly called Safe Produce Solutions Ltd, it was formed in 2014 to address challenges facing the horticultural industry by offering homegrown solutions required by small holder farmers to sell certified food.

“Working with smallholder farmers, the company trades in the production and marketing of an assortment of fresh fruits and vegetables, targeting domestic and regional markets,” says Grace Nyaa, the CEO of the company.

Through collaboration with development partners and efforts

put to streamline the business, the company was able to export approximately 887 MT of its horticultural produce to the regional markets while it sold a further 31,000MT to the domestic markets thereby linking close to 3,000 farmers to both regional and local markets.

“At the start of the company, its sales turnover was about Ksh4.2M annually. However, following the business opportunities and linkages brought about with the collaboration with our partners, the company’s turnover is now about Ksh30 million. It sells mostly to the wholesale markets within the last one year of operations,” says Grace Nyaa.

The partnership between the company and USAID – KAVES helped

increase incomes of smallholder farmers through sales of cabbages, carrots, potatoes and onions to the regional markets especially in Somalia for AMISON troops.

“USAID – KAVES provided technical assistance to the growers by entering into marketing arrangements that required farmers to follow regulations on the usage of chemical and other good agricultural practices to boost their production,” says Grace Nyaa.

Before its breakthrough in exporting its produce to external markets, the company was faced with a number of challenges during its infancy stages including availability of adulterated produce in the market that couldn’t satisfy customers’ expectations, inconsistency in production of their goods and lack of formal structure while dealing with farmers.

The partnership with KAVES came in handy as it helped link up the company to farmers from Meru, Bungoma and Trans Nzoia counties on contractual basis.

“With the support from the KAVES project, the company has mobilized over 10,000 farmers out of whom 6,180 are contracted and empowered through trainings on good agricultural practices (GAP) on cabbages, carrots, potatoes, onion, sweet potatoes, peppers and pumpkins that meets global standards on behalf of the company,” adds Grace Nyaa.

To increase farmers’ productivity and inculcate the culture of farming as a business among them, the company issues certified seeds as capital where they pay 25 percent of the seed cost and 75 percent is retained until harvesting is done.

And on a regular basis, random farm samples from the contracted farmers are taken to accredited laboratory in the country to establish if the produce meets the acceptable pesticide residue levels. This is part of good practices introduced by KAVES which the company has adopted.

It is hoped that Global GAP certification will open up the market for more farmers since most customers from the region are requesting for Global GAP certified products.



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SEEDS OF SUCCESS



Department of Agriculture representatives, Ms. Anne Onyango and Dr. Johnson Irungu, join BASF employees, Dr. Michael Gotsche, Mr. Dirk Hartmann, Mr. Gift Mbaya and Mr. Patrick Ngugi during the launch of the 'Angaza' business model in Nairobi, Kenya.

Angaza; BASF moves to strengthen farmer engagement in new business model

With Angaza (which means “shining a light”), BASF intends to forge closer partnership with more distributors who will be supplying farmers with its products in all key farming regions of the country

By GITAU MUKANUNGA

In an attempt to stamp its footprint in East Africa, BASF has launched a new business model in Kenya that spells out its desire to reach out to more Kenyan farmers by opening up of a new warehouse in Nairobi and appointing more distributors.

The company aims at forging closer ties with more farmers for purposes of understanding and responding to their needs. It also aims at offering farmers crop protection solutions that can enable them make better, informed decisions while promoting growth and sustainability.

Dubbed *Angaza*, whose theme is 'Bringing Light & Sustainability to Farming', the new strategy focuses on what BASF calls “customer centricity”, innovation, operational excellence and sustainability. With the strategy in place, the company plans to give farmers access to sustainable solutions that can help them attain optimum yields in a consistent manner.

“It focuses on the need to address customer needs; it is about technology that can enable farmers to produce more with limited resources and with consistency,” said Patrick Ngugi, Regional Marketing Manager - East

Africa Cluster. Ngugi added that the company’s business shift will enable it to be more agile in the market.

“Our goal is to support farmers by providing access to innovative solutions, services, expertise and technology that will help meet their requirements”, said Gift Mbaya, the Sub Hub Manager — East Africa.

With *Angaza* (which means “shining a light”), BASF intends to forge closer partnership with more distributors who will be supplying farmers with its products in all key farming regions of the country. “Thousands of farmers will have access to crop protection



Ann Onyango, Agriculture Secretary, during the recent launch of BASF's new business model

solutions necessary for improving yields and thereby run successful farming businesses and improve their livelihoods," the company said in a media statement.

It is apparent that BASF has slightly altered its mode of distribution in that it will now be making it possible for the distributors (and not just stockists) to have access farmers. Terming distributors as the "light bringers", the company says that in the initial period, it "shall rely on, and work with," the distributors in Nairobi, Narok, Nakuru, Eldoret, Kitale, Mount Kenya Region and Kericho but plans to engage others across the country in giving farmers valuable information related to crop cultivation. In addition, the company will target growers of other crops besides those in maize and cereals production.

While welcoming BASF's new approach, Ann Onyango, the Agriculture Secretary, called for "evidence-based performance" and the adoption of safe production methods. "Even as we produce, we need to do it safely...which calls for diligence and accountability." She lamented over the many "wars" Kenya has had to fight in order to market her products in the European Union and asked BASF to render a hand.

BASF's new approach is tailor-made to address rising local and regional needs for more products churned out in a sustainable manner. It is meant to also address changes in diets and rising global demand for food that is expected to double in 2050. "We are supporting efforts aimed at increasing production of enough food for the burgeoning world population estimated to reach 9 billion by 2050", Mbaya said.

The company's shift is also informed by trends in global production that now focuses on sustainable production practices. "Today, we have sustainable solutions and support farmers to produce in a safe way," said Michael Gotshe, Vice President-Market Area Africa. "While we are bringing light, we never compromise on safety." He added that the company does not merely focus on chemicals, but also offers biological solutions including biodegradable detergents and plastic.

Evidently, the new strategy is part of BASF's determination to stamp its foothold in the East African region. Its regional sales hub for Eastern Africa was established in Kenya in mid-2011. Located in Nairobi, the hub focuses on agriculture, construction, home & personal care, food ingredients, plastics and coil coatings. The company

moved its Africa wing to Nairobi when it opened new offices at the Pavillion on lower Kabete road. It also set up a warehouse along Mombasa Road near the Jomo Kenyatta International Airport. The company has also expressed its desire to cover all areas in Kenya starting with maize and cereal-growing regions. Besides this, BASF opened a Ksh1.2 billion construction chemicals plant in 2014, which provides construction materials to Kenya and elsewhere in the East African region. It has a presence in nine African countries and over 60 employees based in the continent.

The company produces and sells fungicides, insecticides, herbicides, inoculants (for seed inoculation) and others. It has a presence in Ethiopia, Kenya, Tanzania, Uganda, Rwanda and Burundi and is eyeing the South Sudan market.

BASF's key market segments for agriculture include ornamentals (for flower farmers), coffee, cereals, field crops, sugarcane and public health products. Besides offering farmers with solutions to improve yields, the company produces non-crop solutions that address termite infestations in buildings, rodents, bed bugs, mosquito and rodents that destroy harvested crops.

Croton Bio Char improves microbial life in the Soil

Many growers are reluctant to invest in their soils, and have continued using it with the assumption that it has been there for millennia, and will always be there. Ask any Kenyan about the productivity of the land over the years, and what their grandparents feel and I am certain that most will say that yields and quality have gone down

By TOM LAWRENCE

PHOTOS CREDIT:Radio Lifeline

The advantages of applying Bio Char to agricultural and horticultural soils have been introduced to Kenya, but there has been limited take up of what is evidently a brilliant partial solution to soil improvement.

Many people blame lack of rain or global warming or some other phenomenon for the poor performance of their land. It is common for mankind to blame something that is ephemeral, rather than look inwards and be self-critical. In the case of our soils, we continue to 'rape' them and blame outside factors for our poor crop yields. But when did you last invest anything in your soil? Consider the last time you returned the maize stems to the soil, rather than feeding them to livestock? When was the last time you burnt all the organic matter waste on your farm just as an easy way to get rid of it? When was the last time you invested in your soil rather than throwing on some DAP and hoping for the best?

Soils are a living things! They may have a strong mineral component, but there are plenty of microbes that live there too -good and bad. The rule of nature is that all organisms are opportunistic and will take advantage of a situation. Depleted soils have higher levels of bacterial microbes which generally do little for our crops, whilst fungal microbes generally do much more. We need to shift the balance towards the 'good' microbes (i.e. ones that are beneficial to the plant), and in so doing will limit space available for the 'bad' microbes (the ones we call 'pests' or 'diseases').



The Bio Char provides a haven where microbes can 'retreat' during adverse

In nature, all organisms are opportunistic and will take an opportunity when it comes along. The 'bad' microbes will tend to proliferate in times of stress or imbalance, taking advantage of the situation. What we forget is that if we look after the 'good' microbes, they, in turn, will look after our plants. There is a saying '...grow a good soil, and your plants will grow automatically' and it is very true.

How do we 'grow' a good soil?

Consider a quarry soil, as opposed to one that has been under forestry for years -which one is better for growing? Everybody knows the answer to that!

The reason is that a forest soil has high organic matter, and as a result strong fungal component to it. A good portion of these fungi are mycorrhizal fungi -and mycorrhizal fungi have a symbiotic relationship with the roots of the plants... but the fungus feeds off the organic matter and will give some of those nutrients to the plants through its close contact with the roots. In return the plant will 'feed' the fungus with sugars from photosynthesis... it is a give-and-take relationship and is balanced. If there is imbalance, then it will be a parasitic or semi-parasitic relationship and this is certainly not that.



Farmers are better off using Bio Char in their farms

The ultimate conclusion here is that the more organic matter you have in your soil, the more the fungus has to feed on. And the more it can give to the plant. What is more important is that the mycelial network of the fungus (a 'fungal-root-system') is significantly bigger than the plants' system, so gives access to nutrients in a much larger volume of soil.

So where does Bio Char come in? Aside from its physical properties (water and nutrient retention, improved C.E.C etc.), there is this issue of it providing a haven for microbes. The Bio Char provides a haven where they can 'retreat' during adverse conditions (for example in a drought).

As Eco Fertilisers Kenya we have various trials of Croton BioChar in commercial horticulture. As ever with any soil improvement, the results are not fast. The first trial is coming up

to one year now, and there has been a 10% increase in yield recorded. There are other factors at play here, so it is difficult to attribute this all to the Bio Char, however it is sufficient to say that for now, there has been a positive effect. We also know that the effect of that Bio Char will be seen for the next thousand years, if the 'terra preta' (black earth) created by the Amazonians is anything to go by.

If one considers the investment of the Bio Char now it is expensive. If you consider it an investment over five years, it is actually quite cheap, and if you consider it over the life time of a farm, it is close to nothing, and over 100 years... so is it worth it? In my opinion yes, and my advice is -get investing in your soils, and Bio Char is one of the many solutions to improve that microbial life in your soil.

What Bio Char gives:

- Improved Soil Structure. Soils need a good structure -poor soils have little or no structure
- Improved Soil Aeration. Soils need air as well as water, and charcoal is full of air spaces.
- Improved Water Retention. It does this too -as it can hold water as well... work still needs to be done looking at this as a partial drought mitigation strategy.
- A Haven for Microbes. Because the last of water in a soil will be held in the Bio Char, that it is where the microbes with finally resort to living.
- Improved Nutrient retention. Bio Char absorbs. It can absorb and holds the nutrients. If they are in short supply, you can be sure some will be retained in the Bio Char.



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Winners feted as National



Elgon Kenya Directors, Bimal Kantaria and Baiju Kantaria with Ann Onyango, Agricultural Secretary, during the National farmers' awards 2017 held in Nairobi in February

By BOB KOIGI

The annual National Farmers Award has for the five year in a row recognized men and women pushing the envelope in farming, in a night of glitz, song, dance and celebrations.

Complete with a red carpet to illustrate the value organizers had placed on the scheme, the event that hosted over 1,000 industry players drawn from public and private sector, was a sight to behold.

The surgical precision and attention given to the set up at the venue of the awards, and the delectable cuisine prepared for farmers meant this was no mean feat.

"Every day you toil on your farms, surmounting numerous odds to ensure that our Kenyan population is fed. Tonight, we want you to sit down, relax and enjoy the food you produce. This night is yours and it is such an honour to share it with you," said Elgon Kenya

Director, Bimal Kantaria said while welcoming guests who had traveled from as far as Kisumu and Kwale counties.

Some 24 winners drawn from eight categories were feted. One by one, they walked to the dais with their family and friends, overwhelmed by endless camera clicks as journalists elbowed each other to get a clear shot of the winners and to document the event.

"Five years ago we at Elgon Kenya toyed with the idea of rewarding farmers because we felt that it was the only profession that wasn't getting the attention it deserved. We worked on perfecting it but most importantly, when we sold the idea to our colleagues at the Ministry of Agriculture, they came onboard without hesitation. It has been one of the most rewarding experiences Elgon Kenya has ever engaged in," a visibly elated Mr. Kantaria said to the ululation and clapping from the audience.

The master and mistress of

ceremony crowned the night regaling the audience with agriculture related jokes that left everyone in stitches. The duo, Martin Githinji and Naomi Kamau,



The award scheme has become more competitive as the years go by

Farmers Award @5

celebrated media personalities who have previously hosted agriculture TV shows, reminded the guests that the awards were one of a kind. "You know farmers never see a big deal in anything. They have seen everything. Killing pests that keep resurrecting, some funny fellows trying to cut corners when buying their produce or extended dry spells. Do you realize you have overcome all that to be here? Do you know you are the crème of the region's agriculture sector? Do you? Then why do you look like angry, hungry farmers?" Martin said to the amusement of the audience.

The private sector partners lauded the scheme for transforming the industry creating a revolution that was paying off. "It has been such a huge pleasure co-sponsoring this event for the fifth year in a row and we have seen the value this initiative has added to especially our smallholder crop producers. Such efforts are in line with our company's philosophy of reaching farmers through innovation and partnership for sustainable agriculture. We look forward to longstanding



Agriculture Secretary, Anne Onyango, hands over a trophy to one of the winners

commitment to this cause," said Thomas Korir from BASE.

John Kanyingi, a representative from Bayer concurred; "at a time when millions of our farmers continue farming under extreme conditions, especially occasioned by old and emerging threats, parting them in the back matters now more than ever. That is why we feel honoured to be part of this great project and happier to see the fruits it is bearing."

The government being a key partner of the initiative has through the Ministry of Agriculture committed resources and provided a pool of competent judges who have been moving across counties and sieving through thousands of applications to select the winners.

"This award scheme has become more competitive as the years go by. In our judging process, we spend on average two hours in every farm, trying to check good agricultural practices, environmental conservation and record keeping. As was the case in this and last year's awards, the difference between one winner and the other was so thin that judges had to burnt the midnight oil trying to make the ultimate decision. It all

points to the commitment farmers have placed in being the very best," Simon Michigiri one of the judges said while walking the audience through what judges look for in picking the winners.

The guest of honour, Agriculture Secretary, Anne Onyango, hailed the awards as a classic example of what public-private partnership can achieve while recalling her excitement five years ago when Elgon Kenya team approached her with a partnership proposal.

"I stand before you tonight not just as the chief guest, but as a person who was among the first to hear of the proposal and automatically get hooked to it some five years ago. I knew it had the potential to transform the way we work with our smallholder farmers and what joy to see the tremendous impact it has had within such a short time. Public private partnership is at the heart of our vision 2030 and this is a classic example of how we are making this a reality," she said.

As the curtains came down on the fifth anniversary of the farmers award, winners drawn from over 30 counties took to the floor in a memorable jig, with farmers vowing to convert more members into what promises to be a farming revolution.





Potato farming in East Africa gets much-needed boost

The fortunes of potato farmers in East Africa got a boost last May when BASF and GIZ joined hands to promote potato productivity by addressing the challenges across the value chain.

This will see farmers adopt BASF's crop protection solutions introduced through farmer-field days and business schools. The technologies will help to address potato diseases and especially early and late blight that are a big menace to potato production and which can reduce yields by more than 90% if not checked.

BASF is providing personal protection equipment or professional farmer kits that promote safe use of pesticides. Farmers are taken through training on how to use the products and to appreciate the benefits of timely crop protection. The company is also supporting GIZ by offering technical training to Ward Agricultural extension officers from the ministry of agriculture through a trainer-of-trainers' approach.

This is expected to contribute to the GIZ-ran project called Nutrition-Sensitive Potato Partnership Project that is aimed at enabling farmers to address challenges in potato productivity.

Potato is the second most important food crop after maize. It is grown by about 800,000 small holder farmers in Kenya and contributes greatly to food security, poverty eradication and economic

development. The subsector employs about 2.7 million people and contributes over Ksh50 billion shillings to the Kenyan economy.

However, productivity is only 25% of the potential 40 tons per hectare which has resulted in low earning. Raising productivity is hindered by inappropriate use of inputs, low use of certified seeds, inadequate crop rotation and little on-farm value addition.

However, there is hope that the GIZ project that is directed at promoting nutrition-sensitive potato value chains in East Africa will assist farmers address challenges by utilizing the potential of potato value chains in Kenya and Uganda together with relevant private and public actors.

One of the project's components seeks to impart knowledge on good agricultural practices (GAP) to 12,000 small-scale potato farmers in Nyandarua and Bungoma counties through farmer training and aims at improving farm productivity by 40%.

The International Potato Center (CIP) is also a key partner in the project. The CIP is involved in training seed multipliers and establishing farmer learning or innovation sites in the two counties. Various innovations are demonstrated and farmers trained in the sites. In addition, BASF has provided products for demonstration at the innovation centers; Orvego and Acrobat for blights control, Basagran for weed control and Fastac for the control of cut worms.





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Roses are Red...Violets are Blue

By **HAMISH KER**

As a pioneer of the flower industry in Kenya, Oserian was identified as the perfect farm to develop the “Queen of Africa” into the Queen of Roses in its geothermal rose heated project.

Growing Queen of Africa in its geothermal project has enabled Oserian to grow a premium white rose which is consistent in quality and ideal for the premium floral market. The flower has shifted from a focal flower in the finest bouquets to being the pride and joy in any bride's wedding day.

Queen of Africa's flat open blossom lends itself perfectly for glittering and colouring so that it can be tailor-made for special events when one wants to add that extra sparkle to their display of roses or magical touch to a bouquet.

The “Queen of Africa” required unique growing environment and climate in order to bring out the very best in this rose in terms of head size, balance for optimal air freight as well as the ability to open which enables people to appreciate its shape and beauty.

All in all we are confident this rose is set to become the Queen of African roses!

**Hamish Ker is Oserian Technical Director*



Farmers' Awards



Gala Dinner





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 251-116636750

Email

info@kenyaflowercouncil.org
 info@fpeak.org
 info@taha.or.tz
 info@ethionet.et

Flower Farms in Kenya

Region	Altitude
Lake Naivasha Region	6178ft
Nakuru Region	6070ft
Nairobi Region	5515ft
Athiriver-Kajiado Region	5649ft

Region	Altitude
Mt.Kenya Region	6358-7057 ft
Limuru-Rumuruti-Olkalau Region	6024-7802 ft
Kericho-Kitale-Eldoret Region	6060-6995 ft
Thika-Juja-Kiambu Region	5649 ft

Breeders / Propagaters

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Dummen Orange	Flower Breeder	Mr.Steve Outram	254-733-609863	s.outram@dummenorange.com
Schreurs East Africa Ltd.	Flower Breeder	Mr.Haiko Backer	Tel:+254 203566135	sales@schreurskenya.com
Wac International	Flower Breeder	Mr.Richard Mcgonnell	254-722-810968	richard@wac-international.com
Florensis Hamer	Flower Breeding	Mr. Eddy Verbeek	020 50010	verbeek@florensis.com
Interplant Roses	Flower Breeding	Mr.Gavin Mouritzen	254-729-406668	info@interplantea.co.ke
United Selections	Rose Breeder	Mr.JellePosthumus	254-2-3656135	jposthumus@united-selections.com
Solo Plant Kenya Ltd	Breeding	Tomer Weiss	+254 (0)715 631 373	tomersolo@soloplant.co.ke

1. Lake Naivasha Region

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Florema(k)ltd	Begonia	Mr. perter maina	254-050-2021075	
Carzan flowers	Carnations	Mrs. Carol Manji	254707110030	info@carzankenya.com
Loldia	Cut flowers	Mr. Gary	0721 237936	
Longonot horticulture	Cut flowers	Mr. Shado rai	254-050501473	
Blue sky	Cut flowers	Mr. Mike	0720 005294	info@blueskykenya.com
Indu farm	Cut flowers	Mr. Wesley Koech	0715 546908	
Leekem holding ltd.	Cut flowers	Mrs. Margaret Muthoni	254-720-267004	leekement@gmail.com
Rainforest	Cut flowers	Mr.Fabian Philippart	0716 686998	fphilippart@fleurafrica.com
Savannah flowers	Cut flowers	Mr. Ignaitus lukulu	0728 424902	i.lukulu@savannahinternational.com
Star flowers	Cut flowers	Mr.dinkar	0722 203750	dinkar@vegpro-group.com
Subati	Cut flowers	Mr. Naren Patel	0712 584124	naren@subatiflowers.com
Wildfire flowers	Cut flowers	Mr.patrick mbugua	254-722-204669	office@wildfire-flowers.com
Aquila development company	Cut flowers	Mr.abhay marathe	254-722-205368	info@aquilaflowers.com
Beauty Line	Gypsophila	Mr.Peter Gathiaka	0722 676925	
Hamwe Ltd.	Hypericum	Mr.Adrew Khaemba	Tel: +254722431170	hamwe.production@kariki.biz
Sun Buds	Hypericum	Mr. Paul Kamau	Tel:+254 728339953	sunbudsltd@gmail.com
Oserian Development Company	Rose & Fillers	Mr.Hamish Ker	Tel: +254 722204701	Hamish.ker@oserial.com
Colour Vision Roses Ltd	Rose Breeders	Mr.Peter Vandemeer	254-05050310	petervandemeer@terranigra.com
Rift Valley Roses	Roses	Mr.Peterson Muchiri	254-721216026	
Van Den Berg Roses	Roses	Loek Van Adrichem	+31 6 31 791 898	loek@bergroses.com

Aquilla	Roses	Mr.Yogesh	050 506609	info@aquilaflowers.com
Bigot Flowers	Roses	Mr.Jagtap K	254-722205271	jagtap.kt@bigotflowers.co.ke
Bila Shaka	Roses	Ms. Judith Zuubier	+254(0)72 220 4489	info@zuubier.com
De Ruiters	Roses	Fred Okinda	+254(0)722 579204	fred.okinda@deruiter.com
Finlay's Kingfisher	Roses	Mr. Charles Njuki	Tel: +254-724391288	Charles.njuki@flamingo.net
Galaxy	Roses	Mr. Kiran		kiran@vegpro-group.com
Groove	Roses	Mr.John Ngoni	Tel: 0724448601	groovekenya@gmail.com
Harvest Flowers	Roses	Mr Phanael Ochunga	0722 506026	phanael.ochunga@gmail.com
Karuturi Flowers	Roses	Mr.Sylvester Saruni	Tel: +254 722873560	henry.muller@karuturi.com
Kongoni Farm	Roses	Dinkar	0728 608785	dinkar@vegpro-group.com
Larmona	Roses	Fiona	254 722 564 089	fiona@lamornaflowers.com
Maridadi Flowers Ltd	Roses	Jack Kneppers	07-33333289	jack@maridadiflowers.com
Mbegu Farm	Roses	Mr. David Mousley	Tel:0722 833 122	mbegufarm@iconnect.co.ke
Nini Farm	Roses	Billy	254 723 786 003	billyc@niniltd.com
Shalimar Flowers (K) Ltd	Roses	Export Manager	0722 811832	info@eaga.co.ke
Stockman Rozen	Roses	Mrs. Sarah Tham	0720 603990	info@srk.co.ke
Twiga Roses	Roses	Mr.Pius Kimani	0721 747623	pius.kimani@gmail.com
Panda Flowers	Roses	Charkara	0786 143515	chakra@pandaflowers.co.ke
Finlay's Flamingo	Roses and Fillers	Mr.Peter Mwangi	Tel:+254 722204505	peter.mwangi@flamingo.net
Colour Crops	Summer Flowers			
Esmeralda Breeding	Summer Flowers	Mr.Loui Hooyman	31-297-385444	info@esmeraldabreeding.com
Multgrow Investments	Summer Flowers	Mr.Peter Murimi Mbugua	254-724-977259	peter_murimi@yahoo.com
Kentalya	Cut Flowers	Mrs.Lynette	0733 549773	lynette@kentalya.com

2. Nairobi Region

ORGANISATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Black Tulip Group	Cut Flowers	Mr.Mohan Choudhery	254-722-825429	info@blacktulipflowers.ae
Caly Flora Ltd .	Cut Flowers	Mrs.Catherine Gichungu	254 725456930	info@calyflora.co.ke
Everest Enterprises Ltd.	Cut Flowers	Mr.John Karuga	254-722-720876	jkaruga@everest.co.ke
Flora Delight	Cut Flowers	Mr.Marco Van Sandjik	254-722-384188	info@floradelightkenya.com
Particle Blooms Co. Ltd.	Cut Flowers	Mr.Caleb Amunga	254-704-040101	info@particleblooms.com
Phinna Flowers Ltd.	Cut Flowers	Mrs.Ruth Thuo	254-723-582476	phinnaflowers2014@gmail.com
Redhill Flowers	Cut Flowers	Mr.Isaac Bwire Ombunda	254-702-344047	redhillflowers@yahoo.com
Rose Bunk International	Cut Flowers	Mr.Nahashon Macharia	254-773-754140	nahashon@rosebunkintl.com
Sian Agriflora Ltd	Cut Flowers	Mr.Jos Van Der Venme	254-725-961961	info@sianroses.co.ke
The Flower Hub	Cut Flowers	Mr.Stephen Swainston	254-722-509970	info@theflowerhub.com
Tripple F Agencies	Cut Flowers	Mr.Amos N. Wakiria	254-735-405982	wakiria@fagencies.co.ke
Van Kleef Kenya	Cut Flowers	Mrs.Judith Zuurbier	254-722-364943	judith@vankleef.nl
Winchester Farm	Cut Flowers		254-0722-203630	info@mzurrieflowers.co.ke
Zaina Blooms	Cut Flowers	Mr.Michire Mugo	254-736-080070	zainablooms@gmail.com
Credible Blooms	Roses	Mr.Francis	020 2102019	info@credibleblooms.co.ke
Flamingo Flora	Roses	Sam	254-0721993857	s.ivor@flamingoflora.co.ke
Karen Roses	Roses	Mrs.Juliana Rono	254-722-717187	sales@karenroses.com
Kreative Roses Ltd.	Roses	Mr.Bas Smit	254 733501640	info@kreative-roses.com
Lakshmi Group Ltd.	Roses	Mr. Serghei	254 714551969	serghei.lakshmigroup@gmail.com
Magana Flowers	Roses	Mrs Ann Gitari	254-20-2017651	marketing@maganafloowers.com
Magnate Flowers	Roses	Mrs.Gladys Muthoka	254-722-777051	magnateflowers@gmail.com
Mzurrie Flowers	Roses	Mrs.Irne Njeru	254-722-203630	irene@winchester.co.ke
Shallimar Flowers Ltd	Roses	Mrs.Elizabeth Wahogo	254-738-391832	elizabethw@eaga.co.ke

3.Mt.Kenya Region

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Mount Kenya Alstroemeria	Nanyuki	Cut Flowers	Mr.Edwin Van Der Veen	254-718-240581	info@mountkenyaalstroemeria.co.ke
Bondet	Nanyuki	Erygium	Richard Fernandes		

Kariki Limited	Nanyuki	Hypericum		0722 50 99 19	info@kariki.biz
Live Wire Ltd	Nanyuki	Hypericum And Lilies	Mr.Esau Onyango	0728 606872	info@livewire.co.ke
Finlays Sirimon	Timau	Lilies	Ms.Purity Thigira	0733606411	purity.thigira@finlays.net
Batian Fowers	Timau	Roses	Mr.G.Muriungi/Dirk Looj	0720 102237	dirk@batianflowers.com
Bloomingdale Roses	Timau	Roses	Mr.Sunil Chaudhari	0732 373322	sunil@bloomingdaleroses.com
Bogmack Farm	Timau	Roses	Mr.Anderson	0722 350020	kathendusn@yahoo.com
Equinox	Timau	Roses	Mr. Rod Jones	+254 722 204271	rod.jones@equinoxflowers.com
Fides Kenya Ltd	Embu	Roses	Mr.Francis Mwangi	254-06830776	info@fideskenya.com
Lobelia Farm	Timau	Roses	Mr.,Peter Viljoen	254-06241060	
Lolomarik	Nanyuki	Roses	Mr. Topper Murry	0715 727991	topper@lolomarik.com
Protea Farm	Timau	Roses	Mr.Philip		info@lobelia.co.ke
Sunland Roses	Timau	Roses	Mr.Peter Viljoen	254-702-095696	sales@sunlandroses.com
Tambuzi	Nanyuki	Roses		+254 (0)722 716 158	tambuzi.sales@tambuzi.co.ke
Timaflor Ltd.	Timau	Roses			info@timaflor.nl
Timau Flair	Timau	Roses	MR.Philip Ayiecha	254-723383736	
Uhuru Flowers	Timau	Roses	Mr. Ivan Freeman	Tel:+254722863252	ivan@uhurufowers.co.ke
Vegpro-K Ltd	Timau	Roses	Mr.Vivek Sharma		vivek@vegpro_group.com
Kisima	Timau	Roses and Lilies	Mr.Martin Dyer	+254 (0)722 509 830	info@kisima.co.ke

4. Nakuru Region

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Bliss Flora Ltd.	Nakuru	Cut Flowers.	Mr.Shivaji Wagh	254-720-895911	shivaniket@yahoo.com
Carzan	Rongai.	Cut Flowers.	Francis	254-0720 890920	info@carzankenya.com
Kudenga Flowers	Mau Summit	Cut Flowers.	Mr.Joseph Juma	254-0725 643942	kudenga.fm@kariki.biz
Molo Greens Ltd	Molo North	Cut Flowers.	Mr.Justus Metho	254-722-755396	info@mologreens.com
Molo River Roses	Muserечи	Cut Flowers.	Mr.Alice Mureithi	254-0724 256592	andrewwambua@yahoo.com
Roseto Limited	Rongai	Cut Flowers.	Mr.Yogheesh		farm.florenza@megaspingroup.com
Kariki Limited	Molo	Hypericum		+254 722 50 99 19	info@kariki.biz
Amor	Nakuru	Roses	Mr.Ketan Jerath	254-738-119774	flowers@xflora.net
Baraka Farm	Nakuru	Roses	Lucy	254-0720 554106	lucy@barakaroses.com
Buds&Blooms-Bliss Flora	Nakuru	Roses	Mr.Shivaji	254-0720 895911	shivaniket@yahoo.com
Elbur Flora	Elburgon	Roses	Peter Kairu	254-51343473	eflora@africaonline.co.ke
Fontana Ayana	Nakuru	Roses	Mr.Gideon Maina	254-0721178974	gideon@fontana.co.ke
Fontana-Akina	Nakuru	Roses	Mr.Girish Appana	254 722728441	girish@fontana.co.ke
Kimman Roses Ltd.	Elburgon	Roses	Mr.Daniel Moge Maina	254-721-734104	kimmanexp@gmail.com
Mau Flora	Nakuru	Roses	Mahesh	254-0787 765684	mahesh@mauflora.co.ke
Milmet	Nakuru	Roses	Pravin		pravinyadav.29@gmail.com
Omang-Africa	Nakuru	Roses	Mr.Inder Nain	254 733724029	flowers@xflora.net
Porini	Nakuru	Roses	Mr.Pitambar Ghahre	254-0726 774955	porini@isinyaroses.com
Pp Flora	Nakuru	Roses	Prakash	254-0718 045200	info@fantasy-flora.com
Preesman Kenya	Nakuru	Roses	Michael Kikwai	254-0720574011	kikwai1980@yahoo.com
Ravine Roses	Nakuru	Roses	Mr.Peter Kamuren	254-0722 205657	pkamuren@karenroses.com
Redwings	Kabarak	Roses	Mr.Sayer Simon	254-0722 578684	sayer@redwingtld.co.ke
Subati Flowers	Subukia	Roses	Mrs. Jennifer Sassi	+254 742 144493	jennifer@subatigroup.com
Vankleef	Nakuru	Roses	Judith Zuurbier	254-0722 364943	judith@vankleef.nl
Xpression Flora Ltd.	Njoro	Roses	Mr.Mangesh	Tel: 720519397	info@xflora.net
Sian Agriflora (Sian Roses)	Nakuru	Roses/Lilie	Mr.Jos Van Der Venne	254 722203630	info@sianroses.co.ke
Jatflora	Gilgil	Summer Flowers	James Oketch	254 724418541	jatflora@gmail.com
Morop	Bahati	Summer Flowers	Wesley Tonui	254-0720 983945	
Flora Ola	Solai		Mr.Wafula	Tel: 0708382972	floraolaltd@gmail.com

5. Thika -Juja-Kiambu Region

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Zena Roses	Thika	Carnations,Roses	Mr.Rakesh	Tel: 0724631299	info@zenaroses.com
Selecta Kenya/Kpp	Juja	Cut Flowers	Mr.Wilson Kipketer	020 352557	w.keter@selectakpp.com
Pollen Sygenta Ltd.	Ruiru	Cuttings	Mr Daniel Kisavi	Tel: 733603530	Daniel.kisavi@sygenta.com
Munyu Growers	Thika	Flower Grower & Exporter	Mr.Muthom Ngaru	254-721-956307	munyugrowers@gmail.com

Riverdale Blooms Ltd swiftkenya.com	Thika	Flower Grower & Exporter		Mr.Antony Mutugi	020 2095901	rdale@
Kariki Limited	Thika	Hypericum		+254 722 50 99 19		info@kariki.biz
Transebel Ltd	Thika	Roses	Brian Wahome	+254 722 255322		brianwahome@transebel.co.ke
Enkasiti Flowers	Thika	Roses	Mr.Thambe	Tel:+254 724722039		enkasiti@gmail.com
Gatoka Farm	Thika	Roses	Christopher Gacheru	+254 733 619505		chris@gatokaflowers.com
Penta Flowers Ltd.	Thika	Roses	Mr. Tom Ochieng	Tel:+254 733625297		tom@pentaflowers.co.ke
Simbi Roses Ltd.	Thika	Roses	Ms.Pauline Nyachae	Tel: +254204448230		Pauline@sansora.co.ke
Windsor Ltd	Thika	Roses	Mr.Pardeep	254-0674208		farm@windsor-flowers.com
Ever Flora Ltd.	Juja	Roses	Mr.Khilan Patel	Tel: 0675854406		everflora@dmbgroup.com
Kenflora	Kiambu	Roses	Mr,Aleem Abdul	254-722311468		info@kenflora.com
Valentine Kibubuti	Kiambu	Roses	Mrs. Suzan Maina	Tel:0203542466		info@valentineflowers.com
Red Lands Roses Ltd.	Ruiru	Roses	Mrs.Isabelle Spindler	254-733-600504		gm@redlandsroses.co.ke
Branan Flowers Ltd.	Thika	Roses Growers	Mr.Brian Wahome	254-734-424648		brianwahome@transebel.co.ke

6. Kajiado – Athi-River Region

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Carnation Plants Ltd	Athi River	Carnations	Mr.E.Fieldman	254-2045162	evi@exoticfields.com
Waridi Ltd	Athi River	Roses	Mr.Pd Kadlag	254-724407889	kadlag@waridifarm.com
Harvest Flowers	Athiriver	Roses	Monicah	+254 722294963	salesadmin@harvestflowers.com
Shade Horticulture	Isinya	Cut Flowers	Mr.Ashutosh Mishra	254-0722 792018	
Desire Flora K.Ltd.	Isinya	Roses	Mr.Rajaat Chaohan	Tel: +254 0724264653	rajatchaohan@hotmail.com
Isinya Roses	Isinya	Roses		+254 728 689 000	info@isinyaroses.com
Maua Agritech	Isinya	Roses	Mr.Kori	254-722206318	gm@mauaagritech.com
P.J. Dave	Isinya	Cut Roses	Mr.Ananth Kumar	254-729-405450	marketing@pjdave.com
Maasai Flowers	Kitengela	Roses		+254 714 065 245	
Charm Flowers	Kitengela	Roses	Sales Manager	+254 733 753149	admin@charmflowers.com
Maua Agri Tech Ltd	Kitengela	Cut Flowers		254 0722206318	kori@mauaagritech.com
Rose Plant	Kitengela	Roses	Mr.Atenus		
Sian Maasai Flowers	Kitengela	Roses	Mr.Andrew Tubei	254-722728364	atubei@sianroses.co.ke
Sian Roses	Kitengela	Roses	Mr.Jos Van Der Venne	254-0202170540	info@sianroses.co.ke
Afriscan Kenya Ltd.	Kiserian	Cut Flowers	Mr.Charles Mwangi	254-722-711925	charles.mwangi@afriscan.co.ke
Kordes Roses East Africa Ltd info@kordesroses-ea.com		Masai West Road	Roses	Mr.Christian Meuschke	254-0733 363642
Ngong Roses	Ngong	Roses	Mr. Charles Maina	020 2700660	ngongroses@capstoneonline.co.ke

7.Limuru-Rumuruti-Olkalau Region

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Tropiflora	Limuru	Carnations	Mr. Krasensky	254 0724646810	
Leekem Holdings Ltd	Nyandarua	Cut Flowers	Mrs.Margaret Muthoni	254-0720 267004	leekement@gmail.com
Tegmak Bloom	Nyandarua	Cut Flowers	Mr.Edward Kaguchu	254-722-292242	tegmakbloomsLtd@gmail.com
Highlands Plants	Olkalau	Cut Flowers	Mr. Leonard Kanari	254-0721345829	sales@highlandplants.co.ke
Aaa Roses	Rumuruti	Cut Flowers	Ms.Jennifer Sassi	254-20-4453970	sales@aaagrowers.co.ke
Terrasol	Limuru	Cuttings		254-0722 455996	
Black Petals Ltd.	Limuru	Roses	Mr.Nizra Junder	254-0722848560	nj@blackpetals.co.ke
Elbur Flora	Elburgon	Roses	Peter Kairu	254-51343473	eflora@africaonline.co.ke
Kimman Roses Ltd.	Elburgon	Roses	Mr.Daniel Moge Maina	254-721-734104	kimmanexp@gmail.com
Suera Flowers Limited	Nyahururu	Roses	Mrs.Peris Wanbui Mureithi	254-724-082797	perismureithi@yahoo.com
New Hollands Flowers	Olkalau	Roses	Mr. Francis	254-0700718570	
Golden Tulip	Olkalau	Roses	Umesh	254-0739729658	
Mahee Flowers Ltd	Olkalau	Roses	Vijay Kumar	254-020822025	info@eaga.co.ke
Africa Blooms	Rumuruti	Roses	Samir Chandokrkar	254-0735-384552	
Primarosa Flowers	Nyahururu	Roses	Mr.Vishal Metha	254-734-88223	mvishal@primarosaflores.com
Flora Delight	Limuru	Summer Flowers	Mr.Hosea Andanyi	254-0724373532	hosndai@yahoo.com
Kemaks Blooms Limited	Aberdare Ranges	Summer Flowers	Mr.Peter Gakuna	254-792-705160	kemaksblooms@gmail.com
Hatabor Rainbow Blooms	Limuru	Cut Flowers	Mr.John Ndungu	254-07213850959	

8. Kericho-Eldoret-Kitale

ORGANISATION	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
Maji Mazuri	Eldoret	Roses		+254 722 203631	info@mzurrieflowers.co.ke
Zena-Asai	Eldoret	Roses		+254 722 935 798	info@zenaroses.com
Zena-Sosiani	Eldoret	Roses		+254 722 935 798	sales@zenaroses.co.ke
Equator Flowers	Eldoret	Roses	Mr.Charles	254-0721 311 279	cmutemba@sianroses.co.ke
Sirgoek Flowers	Eldoret	Cut Flowers	Mr.Andrew Kosgey	254-0725 946429	sirgoek@africaonline.co.ke
Finlay Chemirel	Kericho	Roses	Mr.Aggrey Simiyu	254- 0722601639	aggrey.simiyu@finlays.co.ke
Finlay Lemotit	Kericho	Cut Flowers	Mr. Richard Siele	254-0721 486313	richard.siele@finlays.co.ke
Mount Elgon Orchards Ltd	Kitale	Roses	Bob Andersen	254 0735330592	info@mtelgon.com
Panocal International Ltd.	Kitale	Cut Flowers	Mrs.Mercy Njuguna	254-721-637311	mercy.njuguna@panocal.co.ke



Growers In Uganda

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Rosebud	Roses	Wakiso	Ravi Kumar	0752 711781	ravi.kumar@rosebudlimited.com
Maiye Estate	Roses	Kikwenda Wakiso	Premal		premal@maiye.co.ug
Jambo Flowers	Roses	Nakawuka Sisia Wakiso	Patrick Mutoro	(254)726549791	pmutoro80@yahoo.co.uk
Pearl Flowers	Roses	Ntemagalo Wakiso	Raghibir Sandhu	0772 725567	pearl@utlonline.co.ug
Aurum Flowers	Roses	Bulega-Katabi Wakiso		Kunal Lodhia Shiva	0751 733 578 kunal@ucil.biz
Eruma Roses	Roses	Mukono	Kazibwe Lawrence	0776 049987	kazibwe@erumaroses.com
Uga Rose	Roses	Katabi Wakiso	Grace Mugisha	0772 452425	ugarose@infocom.co.ug
Kajjansi	Roses	Kitende Wakiso	K.K Rai	0752 722128	kkrai@kajjansi-roses.com
Uganda Hortech	Roses	Lugazi Mukono	Hedge	0703 666301	mdhedge@mehtagroup.com
Fiduga	Chrysanthemums	Kiringente, Mpingi	Jacques Schrier	0772 762555	j.schrier@fiduga.com
Royal Van Zanten	Chrysanthemums	Namaiba Mukono	Jabber Abdul	0759 330350	j.abdul@royalvanzanten.com
Wagagai	Impatiens-Poinstia	Iwaka Bufulu Wakiso	Olav Boender	0712 727377	olav@wagagai.com
Xclusive Cuttings	Chrysanthemums	Gayaza-Zirobwe Road	Peter Benders	0757 777700	pbenders@xclusiveuganda.com



FLOWER AND VEGETABLES FARMS IN TANZANIA

lower Farms in Tanzania

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Kilifi Flora	Roses	Arusha	Jerome Bruins	255 27-2553633	jbruins@habari.co.tz
Mt. Meru	Roses	Arusha	Tretter	255 27 2553385	office@mtmount-meru-flowers.com
Tengeru Flowers	Roses	Arusha		255 27 2553834	teflo@africaonline.co.tz
Hortanzia	Roses	Arusha	Michael Owen	255 784 200 827	hortanziagm@cybernet.co.tz
Kilimanjaro Flair	Hypericums	Arusha	Greg Emmanuel	255 784 392 716	greg@kilimanjaroflair.com
Multi Flower Ltd	Crysanthemums	Arusha	Tjerk Scheltema	255 27 255 3138	
Fides	Crysanthemums	Arusha	Greg Emmanuel	255 27 255 3148	fides@habari.co.tz
Dekker Bruins	Crysanthemums	Arusha	Lucas Gerit	255 27 255 3138	info@tfl.co.tz
Arusha Cuttings	Crysanthemums	Arusha	Tjerk Scheltema	255 27 250 1990	tjerk@arushacutting.com



ETHIOPIAN HORTICULTURE PRODUCERS EXPORTERS

Flower Growers in Ethiopia

NAME	PRODUCT	LOCATION	CONTACT PERSON	PHONE	EMAIL
Lisen Flowers	Roses	Holeta	Peter Linsen		elinsensose@ethionet.et
Hanja	Roses	Holeta	Holeta		peter.pardoen@karuturi.com
Alliance Flowers	Roses	Holeta	Navale		navele@nehainternational.com
Ethio Dream Rishi	Roses	Holeta	Holeta	011 23 72335	holeta@jittuhorticulture.com
Holeta Roses Navale	Roses	Holeta	Holeta		navele@nehainternational.com
Supra Flowers	Roses	Holeta	Kaka Shinde	0911 353187	kakashind@rediffmail.com
Agriflora	Roses	Holeta	M.Askokan	0922 397760	flowers@ethionet.et
Ethio-Agricert	Roses	Holeta	Alazar	0910 922 312	alazar@yahoo.com
Addis Floracom P.L.O	Roses	Holeta	Kitema Mihret	0912 264190	tasfaw@addisflora.com
Enyi-Ethio	Roses	Sebata	Teshale	0911 464629	enyi@ethionet.et
Lafto Roses	Roses	Sebata	Andrew Wanjala	0922 116184	irrigation@laftorose.com
Eden Roses	Roses	Sebata	Vibhav Agarwal	0930 011228	vaibhavagarwal1@hotmail.com
Ethio-Passion	Roses	Sebata			roshanmuthappa811@gmail.com
Golden Rose	Roses	Sebata	Sunil		
E.T Highlands	Roses	Sebata		0911 502147	bnf2etf@ethionet.et
Sharon Flowers	Roses	Sebata			saronfarm@ethionet.et
Selam Flowers	Roses	Sebata	Etsegenet Shitaye	0913 198440	etsgshita@yahoo.com
Joy Tech	Roses	Debra Zyeit	Mulugeta Meles	0911 302804	mulugeta@joytechplc.com
Dugda Froliculture	Roses	Debra Zyeit	Sayalfe Adane	0911 504893	general@dugdaflora.com.et
Minaye Flowers	Roses	Debra Zyeit	Eyob Kabebe	011-9728667/8/9	minayefarm@ethionet.et
Bukito Flowers	Roses	Debra Zyeit	Anteneh Tesfaye	0911 615571	
Oilij	Roses	Debra Zyeit	Bas Van Der Lee	0911 507307	b.vanderlee@oilijethiopia.com
Yassin Flowers	Roses	Debra Zyeit	Tesfaye Gidisia	0911 897856	kamevision@yahoo.com
Z.K Flowers	Roses	Debra Zyeit	Abebe Mamo	911526529	abemic/2006@yahoo.com
Friendship Flowers	Roses	Debra Zyeit	Edwin	(251) 911304967	friendship.flowers@yahoo.com
Evergreen Farm	Roses	Debra Zyeit	Hiwot	0912 125065	Hiwot.Ayaneh@yahoo.com
Rainbow Colours	Roses	Debra Zyeit	Tedessa Kelbessa	0911 389729	rainfarm@yahoo.com
Sher	Roses	Ziway	Ramesh Patil 0912 131940		braam.roses@hotmail.com
Braam Farm	Roses	Ziway	Ben Braam 0920 746270		
Sher Koka Farm	Roses	Ziway	Alemitu Biru 0912 097824		
Ziway Roses	Roses	Ziway	Ermiyas Solomon	0921 094373	ermiasziwayroses@yahoo.com
Herbug	Roses	Ziway	Hubb	hubb@herburgroses.nl	
Aq	Roses	Ziway	Wim	wimjr@aqroses.com	
Margin Par	Hypericum	Ziway	Hayo Hamster	251 911505845	marginpar@ethionet.et
Tal Flowers	Gypsophila	Ziway	Uri	uridago@walla.co.il	
Ewf Flowers	Hydragium	Ziway	Humphrey 0920 351931	production-manager@ewf-flowers.com	
Red Fox	Pelargoniums	Ziway	Michael Zevenbergen	0911 490023	m.zevenberge@ethiopia.redfox.de
Abssinia Flowers	Hypericum	Ziway	Sendafa	ggh_link@ethionet.et	
Ethiopia Cuttings	Geraniums	Koka	Scoff Morahan		scott.moharan@syngenta.com
Florensis Ethiopia	Buding Plants	Koka	Netsanet Tadasse		flrdnsis@ethionet.et
Maranque	Crysenhemums	Merjetu	Mark Drissen	(251) 221190750	md@maranqueplants.com
Freesia Ethiopia	Freesia And Statice	Sebata	Ronald Vijverberg	(251) 115156259	freesia@ethionet.et
Yelcona	Hypericum	Sebata	Andreas	0921 146930	Andreasndieolens@hotmail.com

Fruit, Herbs and vegetable Fruits In Kenya

COMPANY	LOCATION	PRODUCT	CONTACT PERSON	PHONE	EMAIL
AAA Growers	Nairobi	Horticulture	Mr.Neville Ratemo	020-4453970-4	admin@aaagrowers.co.ke
Belt Cargo Services Export Ltd	Nairobi	French Beans, Babycorn	Mr.J.Muigai	020-4448821	bcs@beltcargo.com
Best Grown Produce(K)Ltd			Mr.Paul Mugai	020-4448821	bestgproduce@yahoo.com
Chirag Kenya Ltd	Nairobi	Spces And Herbs	Sales Team	254-203573000	naturesown@swiftkenya.com
Canken International Ltd	Eldoret	Chillies And Fruits	Mr.Mohamed	020-222736367	canken@cankencargo.com
Darford's Enterprises Ltd	Nairobi	Vegetables	Mr.Abdul	254-206622857	abdulkarim@darfords.co.ke
Delmote Kenya Ltd	Thika	Fruits	Sales Manager	020-672141600	nanasi@freshdelmonte.com
Pj Dave Epz Ltd	Nairobi	Dried Herbs And Roses	Import And Export Manager		020-3542012 pjdavflowers@wananchi.com
Dominion Vegfruits Ltd	Nairobi	Fruits And Vegetables	Mr.John Mairura	020-823002	vegfruits@wananchi.com
East African Growers Ltd	Nairobi	Fruits And Vegetables	Mr.Peeush Mahajan	020-822034/25	peeush@eaga.co.ke, george@eaga.co.ke
Equitorial Nut Processors Ltd	Nairobi	Macadamia Nuts	Sales Managers	020-2030196	gatua@equatorialnut.co.ke
Everest Enterprises Ltd	Nairobi	Fruits And Vegetables	Mr.John Karuga F	020-3542009	smuhoho@everest.co.ke
Fian Green Kenya Ltd	Nairobi	Fruits And Vegetables	Mr.Francis Thuita	020-826157	info@fiangreens.co.ke
Fresh An Juici Ltd	Nairobi	Fresh And Vegetables	Ms.Maleka Akaberali	020-826090	maleka@freshanjuici.co.ke
Fresco Produce Ltd	Nairobi	Vegetables	Mr.Charles Mbugua	254-0722-764395	mbugua@freshproduce.co.ke
Frigoken Ltd	Nairobi	Fruits And Vegetables	Mr.D.Karim	020-2391717	frigoken@africaonline.co.ke
From Eden Ltd	Nairobi	Vegetables	Mr.Zulfikar Jessa	020-8562203	roy@from-eden.com, zul@tilleygroup.com
Global Fresh Ltd	Nairobi	Vegetables And Fruits	R.Chaudhry	020-82749/50	info@globalfresh.co.ke
Green Kenya Organization	Nairobi	Onions And Tomatoes	Charles Butiko	254-723119111	greenkenya28@gmail.com
Greenlands Agro Producers Ltd	Nairobi	Fruits And Vegetables	Mr.G.Murungi	020-827080/1/2	murungim@greenlands.co.ke
Highlands Cannners Ltd	Nairobi	Fruits And Vegetables	Sales Manager	020-8564048	info@highlandcannners.co.ke
Hillside Green Growers Ltd		Fruits And Vegetables	Ms.Eunice Mwongera	020-2397353	eunice@hillsidegreen.com
Homegrown Kenya Ltd	Nairobi	Flowers And Vegetables	Mr.Richard Fox	020-3873800	richard.fox@f-h.biz
Indu Farm Epz Ltd	Nairobi	Vegetables	General Manager	254-20-550215/6	info@indu-farm.com
Jakal Services Ltd	Mombasa	Fruits And Spices	Mr.Bandali	254-7412229435	jakal@ikenya.com
Jungle Macs EPZ Ltd	Thika	Fruits And Vegetables	Sales Manager	020-2451841	info@junglemacadamias.com
Jetlak Foods Ltd	Ruiru	Fruits And Vegetables		254-722754181	mail@jetlak.com
Indu Farm Epz Ltd	Nairobi	Fresh Fruit And Vegetables	Mr.Christian Bernard	020-550215/6/7	info@indu-farm.com
Kakuzi Ltd	Thika	Fruits, Nuts, Tea	Mr.Richard Collins	060-2033012	rcollins@kakuzi.co.ke
KHE (1977)Ltd	Nairobi	Fresh Fruit And Vegetables	Mr.Manu Dhanani	020-2517979	khe@khekenya.com
Kandia Fresh Produce Suppliers Ltd	Nairobi	Fruits And Vegetables	Ms.Lucy Mundia	020-3500866	kandia@swiftkenya.com
Kenya Orchards Ltd	Nairobi	Fruits And Vegetables	Sales Manager	254-2054161	
Keitt Exporters Ltd	Nairobi	Fresh Fruit And Vegetables	Asif Aman	020-822829	asif@keitt.co.ke
Mace Foods Ltd	Eldoret	Vegetables	Sales Manager	254-720391290	info@macefoods.com
Mugama Farmers	Murang'a	Vegetables	Sales Team	254-728-358211	mugamaunion@yahoo.co.uk
Makindu Growers And Packers Ltd	Nairobi	Passion Fruit	Mr.O.P.Bij Okra	020-822812/196	infoa@makindugrowers.co.ke
Meruherbs		Organic Producers	Marketing Manager	254-20-4442081	meruherbs@meruherbs.com
Muount Elgon Orchard Ltd	Kitale	Orchards	Bob Andersen	254-5431352	info@mtelgon.com
Mboga Tuu Ltd	Nairobi	Chillies And Vegetables	Mr.J.Kent	020-3877988	mtl@wananchi.com
Mixa Foods And Beverages	Kisumu	Fruits And Milk	Charles O.Odira	254-733-714584	info@mixafoods.co.ke
Mosi Ltd	Juja	Fruits	Rose Wahome	254-722204911	mwaiwahome@mosiflowers.com
Migotiyu Plantations Ltd	Nakuru	Herds And Seed Production	Mr. Rao	051-2214898	alphegaisal@wananchi.com
Namelok Exotic (K) Ltd			Mr. Sinkeet	0724-743258	info@namelokexotic.com
Njambiflora Ltd		Vegetables	Njambi	020-822506/7	njambiflora@yahoo.co.uk
Nicola Farms Ltd	Nanyuki	Fresh Fruit And Vegetables	Ms. Grace Wanjiku	020-2048874/76	marketing@nicola.co.ke
Olivado Kenya EPZ Ltd	Nairobi	Avocado	Nairobi General Managers	020-710-535303	gh@tanlay.com
Saw Africa EPZ Ltd	Thika		General Manager	254-722531106	wainana_patrick@yahoo.com
Sacco Fresh Ltd	Nairobi	French Beans	Mr.Muia	020-824687/8	info@sacco-fh.com
Shree Ganesh Ltd	Nairobi	Vegetables And Onions	Mr. Kanji Kalyan Patel	020-80243645	meleka@freshanjuici.co.ke
Sian Agiflora Kenya Limited	Nairobi	Calla Lillies	Ms. Angelina Mangat	020-822220	rano@sianexports.com
Syngenta EA Ltd	Nairobi	Seeds	Sales Manager	254-203222800	synjenta.east_africa@synjenta.com
Sunripe (1976) Ltd	Nairobi	Fresh Fruit And Vegetables	Mr. Hasit Shah	020-822518/822879	info@sunripe.co.ke
Value Pak Foods Ltd	Nairobi	Fruits And Vegetables	Mrs. Patel	020 2695633	valuepak@wananchi.com
Valentine Growers Co Ltd	Kiambu	Vegetables	Sales Team	254-720203765	info@valentine-flowers.com
Vegpro Kenya Ltd	Nairobi	French Beans	Mr. Bharat.Patel	020-822831-4	bharat@vegpro-group.com
Wamu Investments Ltd	Nairobi	Fresh Fruit And Vegetables	Mrs. Peris Muriuki	020-822441	peris@wamu-investments.com

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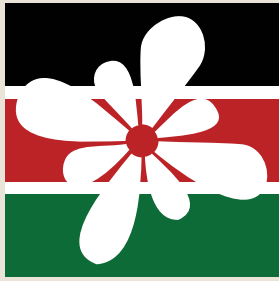
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