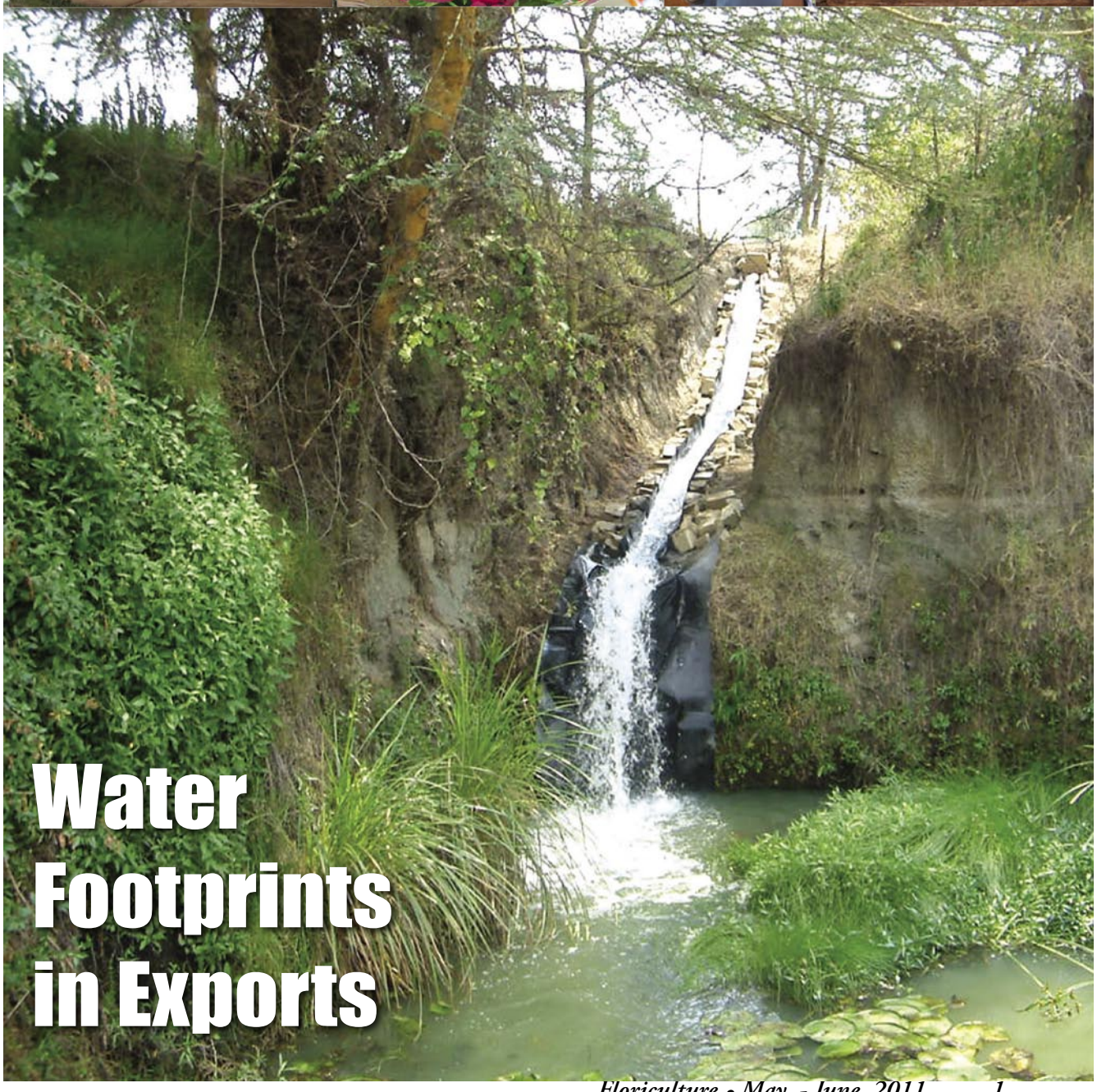
MAY-JUNE 2011

THE LEADING FLORICULTURAL JOURNAL IN THE REGION

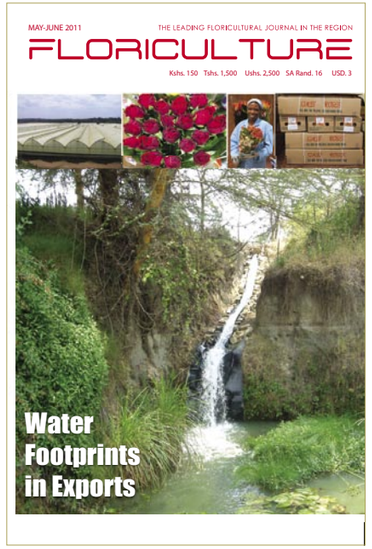
FLORICULTURE

Kshs. 150 Tshs. 1,500 Ushs. 2,500 SA Rand. 16 USD. 3



Water Footprints in Exports

Contents



Inside

The Leading Floriculture Magazine

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

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

Watch Out! Wrong Flowers; Negative Emotions

A leading cosmetics brand once tried to market flower-scented perfumes in Latin America. Unfortunately, one of these fragrances reportedly failed in Brazil, because this flower was reportedly used for funerals in the region… Flowers have different meanings in different countries and cultures. They have a wide range of meanings from love to professional courtesy, congratulations and sympathy.

Confusing these messages could be devastating, not only for a cross-border romance, but also for global business.

Before sending flowers internationally, research the various cultural connotations those flowers may carry and be sure the message you send is intentional. Trademarks, logos and product names referencing or incorporating flowers of ill fortune have all performed poorly overseas.

In other cases, the number of flowers is important. Did you know that Russians generally give flowers in odd numbers because even numbers of flowers are for funerals and sympathy? By contrast, in other countries, an even number of flowers may send a more positive message.

In addition to type and number, intercultural colour meanings can influence the message communicated with a bloom. In Muslim and many Pacific Rim countries, the colour white is reserved for funerals. In many of the Central and South American countries, the same is true of the colour yellow.

In the United Kingdom, poppies are traditionally worn each November in remembrance of those who have died serving their country. The symbol comes from the poppies that grow in Flanders Fields where many Englishmen died in World War I.

When U.K. Prime Minister David Cameron and his aides visited China, Chinese officials requested they remove the red flowers from their lapels because the poppy reminds the Chinese of the Opium Wars fought between the two countries in the 1800s. Considering the strong emotion on each side in that sensitive circumstance, it would be difficult to come up with a resolution to satisfy both parties.

Before a company includes flowers on its international logo, website, advertising, product or packaging, a precautionary step would be to obtain an evaluation from international customers.

Have a careful reading.

Editor
Masila Kanyingi

Chief Sub-Editor
Ann Ndung'u

Editorial Assistant
Eunice Masila

Contributors
Victor Juma
Jacqueline Njeri
Daniel Kagwe

Photographers
Jairus Ndani
Peter Mbasa

Circulation
Evelyne Ndiema

Marketing
Martin Nyachwaya
Beatrice Kariuki
Benard Muendo
Wilbur Njemah

Graphic Designer
Evelyne Ndiema

Consulting Graphic Designer
Sam Kyalo

Editorial Consultants

Tom Ochieng	-	Penta Flowers
Victor Juma	-	Syngenta EA Ltd
Charles Njuki	-	Homegrown
Francis Karanja	-	BASF
Samson Mwangi	-	Consultant
Daniel Kisongwo	-	Consultant
Richard Gitonga	-	Chemtura
Ezekiel Karanja	-	Bayer CropScience

Publishers:-

Scoop Communications
A member of JOLY INVESTMENTS

Railway Open Shed, Muki Room 13
P. O. BOX 79396 - 00200 Nairobi.
Tel: 2244892 • Cell 0722-558172,
Fax: 2244892
Email: info@floriculture.co.ke

Importance of Water Footprint

What is a water footprint?

The water footprint of a product is an empirical indicator of how much water is consumed, when and where, measured over the whole supply chain of the product. The water footprint is a multidimensional indicator, showing volumes but also making explicit the type of water use (evaporation of rainwater, surface water or groundwater, or pollution of water) and the location and timing of water use. The water footprint of an individual, community or business, is defined as the total volume of freshwater that is used to produce the goods and services consumed by the individual or community or produced by the business. The water footprint shows human appropriation of the world's limited freshwater resources and thus provides a basis for assessing the impacts of goods and services on freshwater systems and formulating strategies to reduce those impacts.

What is new about the water footprint?

Traditionally statistics on water use focus on measuring 'water withdrawals' and 'direct water use'. The water footprint accounting method takes a much broader perspective. First of all, the water footprint measures both direct and indirect water use, where the latter refers to the water use in the supply chain of a product. The water footprint thus links final consumers and intermediate businesses and traders to the water use along the whole production chain of a product. This is relevant, because generally the direct water use of a consumer is small if compared to its indirect water use and the operational water use of a business is generally small if compared to the supply-chain water use. So the picture of the actual water dependency of a consumer and business can change radically.

The water footprint method further differs in that it looks at water consumption (as opposed to withdrawal), where consumption refers to the part of the water withdrawal that really gets lost through evaporation, i.e. the part of the water withdrawal that does not return to the system from which it was withdrawn. Besides, the water footprint goes beyond looking at blue water use only (i.e. use of ground and surface water). It also includes a green water footprint component (use of rainwater) and a grey water footprint component (polluted water).

To Page 6

From Page 4

Is the water footprint more than a nice metaphor?

The term "footprint" is often used as a metaphor to refer to the fact that humanity appropriates a significant proportion of the available natural resources (land, energy, water). However, just like the "ecological footprint" and the "carbon footprint", the "water footprint" is more than a metaphor: there is a rigorous accounting framework with well-defined measurable variables and well-established accounting procedures to calculate the water footprints of products, individual consumers, communities, nations or businesses. We discourage people to use

the water-footprint concept as a metaphor, because its strength lies in its effectiveness when used in a context of strict accounting and measurable reduction targets.

A wet land

Water is a renewable resource, it remains in the cycle, so what's the problem?

Water is a renewable resource, but that does not mean that its availability is unlimited. In a certain period, precipitation is always limited to a certain amount. The same holds to the amount of water that recharges groundwater reserves and that flows through a river. Rainwater can be used in agricultural production and water in rivers and aquifers can be used for irrigation or industrial or domestic purposes. But in a certain period one cannot use more water than is available. A river can be emptied and in the long term one cannot take more water from lakes and groundwater reservoirs than the rate with which they are recharged. The water footprint measures the amount of water available in a certain period that is consumed (i.e. evaporated) or polluted. In this way, it provides a measure of the amount of available water appropriated by humans. The remainder is left for nature. The rainwater not used for agricultural production is left to sustain natural vegetation. The ground- and surface water flows not evaporated for human purposes or polluted is left to sustain healthy aquatic ecosystems.

Is there agreement on how to measure a water footprint?

The methods for water footprint accounting have been published in peer-reviewed scientific journals. In addition, there are also practical examples available of how one can apply the methods to calculate the water footprint of a specific product, an individual consumer, a community or a business or organisation. In generic sense there is agreement about the definition and calculation of a water footprint. However, every time one applies the concept in a situation not done before new practical questions arise. These are practical questions like: what should be included and what can be excluded, how to deal with situations where the supply chain cannot be properly traced, what water quality standards to use when calculating the grey water footprint, etc. Discussion therefore focuses on how to handle those practical issues. There is also still discussion about the precise method of how to estimate the local impacts of a water footprint.

Why distinguish between a green, blue and grey water footprint?

Freshwater availability on earth is determined by annual precipitation above land. One part of the precipitation evaporates and the other part runs off to the ocean through aquifers and rivers. Both the evaporative flow and the runoff flow can be made productive for human purposes. The evaporative flow can be used for crop growth or left for maintaining natural ecosystems; the green water footprint measures which part of the total evaporative flow is actually appropriated for human purposes. The runoff flow – the water flowing in aquifers and rivers – can be used for all sorts of purposes, including irrigation, washing, processing and cooling. The blue water footprint measures the volume of groundwater and surface water consumed, i.e. withdrawn and then evaporated. The grey water footprint measures the volume of water flow in aquifers and rivers polluted by humans. In this way, the green, blue and grey water footprint measure different sorts of water appropriation. When necessary, one can further classify the water footprint into more specific components. In case of the blue water footprint, it can be considered relevant to distinguish between ground and surface water use. In case of the grey water footprint, it can be considered valuable to distinguish between different sorts of pollution. In fact, preferably, this more specific pieces of information are always underlying the aggregate water footprint figures.

To Page 8

A green field

From Page 6

Why should we look at the total green water footprint of a crop? Why not look at the additional evaporation if compared to evaporation from natural vegetation?

It depends on the question that one would like to address. The green water footprint measures total evaporation and is meant to feed the debate about the allocation of water to different purposes in a context of limited availability. Information about increased or reduced evaporation is relevant from the perspective of catchment hydrology and potential downstream effects.

Research has shown that crops can sometimes result in increased evaporation when compared to natural vegetation (particularly in the period of rapid crop growth), and other times in reduced evaporation (e.g. because of soil deterioration or reduced aboveground biomass). In many cases the differences are not very significant at basin scale. The change in evaporation is interesting from the perspective of catchment hydrology and potential downstream effects, but not for the debate on how limited freshwater resources are allocated over different purposes. The water footprint is designed for the latter debate. The purpose of the green water footprint is to measure human's appropriation of the evaporative flow, just like the blue/grey water footprint aims to measure human's appropriation of the runoff flow. The green water footprint measures the part of the evaporated rainwater that has been appropriated by human being and is therefore not available for nature. The water footprint thus expresses the cost of a crop in terms of its total water use.

Isn't it too simplistic to add all cubic metres of water used into one aggregate indicator?

The aggregate water footprint of a product, consumer or producer shows the total volume of fresh water consumed or polluted annually. It serves as a rough indicator, instrumental in awareness raising and for getting an idea of where most of the water goes. The water footprint can be presented as one aggregate number, but in fact it is a multidimensional indicator of water use, showing different sorts of water consumption and pollution as a function of space and time. For developing strategies for sustainable water use, one will need to use the more detailed layer of information embedded in the composite water footprint indicator.

Shouldn't we weigh the different water footprint components based on their impact?

The idea of 'weighing factors' sounds like an attractive idea, because not every cubic metre of water used has the same impact. However, we strongly discourage this approach for three reasons. First, weighing is and will always remain very subjective, because there are many different sorts of impacts, some of which cannot even be easily quantified. Second, impacts are always fully local-context dependent, which means that it is impossible to design universally valid weighing factors. As a matter of fact, the impact of one cubic metre of water withdrawn from one particular point in a river at a certain point in time depends on the characteristics of that river, like the volume and variability of water flow in the river, the competition over water at that point in the river at that particular moment and the effects of withdrawal on downstream ecosystems and other users. Third, weighing would take away the beauty of the current approach, namely that the water footprint figures actually mean something (they refer to actual volumes of water used).

In order to properly address the fact that different water footprint components do indeed have different impacts, we emphasize that the water footprint is a multidimensional indicator, showing volumes, but also the type of water use and the locations and timing of water use. The aggregate water footprint figure is always composed of various components, so that one can precisely tell where and when what type of water is used or polluted. 'Water footprint accounting' means that one quantifies the water footprint in all its details. This forms the proper basis for an impact assessment, in which one assesses the various impacts for each separate water footprint component in time and space. Obviously, the impact assessment will show that the impact is different for each separate water footprint component. For formulating water policy aimed to reduce water footprint impacts it is more useful to know how different water footprint components link to various impacts than to have a weighed water footprint indicator. The risk of making a seemingly advanced weighed water footprint indicator is that such indicator hides all information related to impacts instead of making the impacts explicit. Some people have suggested that weighing has been successful in other fields, like the weighing of different greenhouse gasses by looking at their so-called 'global warming potential'. Suffice here to say that the cases are simply not similar, which makes copying the idea of weighing a thoughtless thing to do.

How does water footprint accounting relate to life cycle assessment?

The water footprint can be an indicator in the life cycle assessment (LCA) of a product. Being applied in an LCA is one of the many applications of the water footprint. In an LCA, the multi-dimensional, spatial explicit water footprint should first be overlaid with a water-stress map in order to arrive at a spatial-explicit water footprint impact map. The various impacts should subsequently be weighed and aggregated in order to arrive at an aggregated water footprint impact factor. For LCA an important question is how impacts can be aggregated – which is a specific requirement for LCA and not relevant to other applications of the water footprint. Other applications of the water footprint are for example identifying hotspot areas of the water footprints of certain products, consumer groups or businesses, and formulating response strategies to mitigate water footprint impacts. For those purposes aggregation is not functional, because specification in type of water and space-time is essential in those applications.

How does the water footprint relate to ecological and carbon footprint?

The water-footprint concept is part of a larger family of concepts that have been developed in the environmental sciences over the past decade. A "footprint" in general has become known as a quantitative measure showing the appropriation of natural resources or pressure on the environment by human beings. The ecological footprint is a measure of the use of bio-productive space (hectares). The carbon footprint measures the amount of greenhouse gases produced, measured carbon dioxide equivalents (in tonnes). The water footprint measures water use (in cubic metres per year). The three indicators are complementary, since they measure completely different things. Methodologically there are many similarities between the different footprints, but each has its own peculiarities related to the uniqueness of the substance considered. Most typical for the water footprint is the importance of specifying space and time. This is necessary because the availability of water highly varies in space and time, so that water appropriation should always be considered in its local context.

What is the difference between water footprint and virtual water?

The water footprint is a term that refers to the water used to make a product. In this context we can also speak about the 'virtual water content' of a product instead of its 'water footprint'. The water footprint concept, however, has a wider application. We can for example speak about the water footprint of a consumer by looking at the water footprints of the goods and services consumed or about the water footprint of a producer (business, manufacturer, service provider) by looking at the water footprint of the goods and services produced by the producer. Furthermore, the water footprint concept does not simply refer to a water volume only, like in the case of the term 'virtual water content' of a product. The water footprint is a multidimensional indicator, not only referring to a water volume used, but also making explicit where the water footprint is located.

water tap

Simbi Roses Fifteen Years Of Tremendous Growth and Success

Introduction

In 1995, one woman's Love of flowers began the story of a small 2 hectare farm, situated in the middle of a large coffee plantation. Over the last 15 years, both the passion for roses and the farm itself have expanded to a glorious 20 hectares. Simbi is now able to produce up to two hundred thousand stems per day for the international market and keeps growing.

Since its inception, Simbi Roses have established a modern and efficient crop management system and high quality control within their growing infrastructure. These include the propagation of their own plants, and the state-of-art irrigation and spraying systems, all managed by highly skilled and professional team.

These systems, combined with the ideal climate and water availability, allows Simbi Roses to produce superior Quality Roses. Currently the farm is producing over 13 different varieties of roses for the international market which include Belle Rosa, Red Ribbon, Good Times, Sonarissa, Vanilla Sky, Marie claire, Mariyo, High & Magic, shanti and Upper class.

The Farm

Perched on the highlands of Gatanga area in Thika County at 1600 metres above sea level is Simbi Roses Limited. The farm which is an exclusive rose grower of several varieties, boasts of having the best technical team and outstanding quality roses.

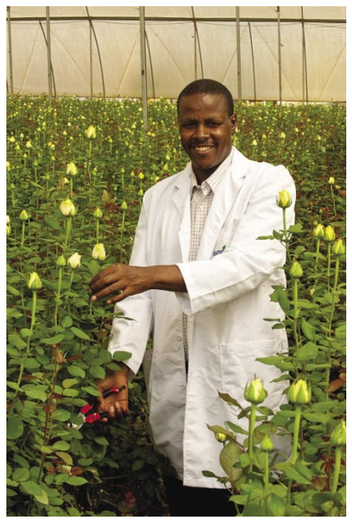
The farm has made judicious upgrading in the technology they employ thus making it one of the best flower farms

Aerial view of workers prepare flowers at the farm's pack house

in Kenya. Their vision is to be a focal source of quality flowers for their customers with whom they have created long term relations.

Simbi Roses also seeks to be the leading farm in the region in terms of quality and services by producing high quality flowers in a safe environment and fully participate in development of workers' welfare and their families. They also strive to incorporate the neighbouring community through various corporate social responsibilities to alleviate poverty and other social vices.

The farm's effort to produce high quality flowers in a safe environment has earned it several accolades among them, MPS A, KFC Silver Award and FLO Certifications.



Mr. Karue inspects rose flowers at the farm

Simbi Roses is a subsidiary of Eureka Holdings formally known as Sansora Group.

Production
With a daily turnover of about 3 tonnes of flowers for export and a total of 40 Million stems per year, Simbi has shown impressive growth, considering they only began with 2 ha of roses in 1995. The farm now produces 16 varieties of roses on 23 hectares for the international market.

Simbi has established a modern and efficient crop management system and high quality control within its growing infrastructure. These includes a 100% in-house propagation, the-state-of-art irrigation and spraying systems, all managed by highly skilled and professional team.

Management
The farm is headed by Mrs. Grace Nyachae as the Executive Director, the General Manager Jefferson Kingi Karue, Assistant General Manager Wilfred Chege, Joel Kikoech Maina who is the Post Harvest Manager, Mark Kiplagat heads the Technical Department, Philip Musonye as the Production Manager and Pius Muriithi in the Human Resource Department.

Pests and diseases
The Assistant General Manager Mr. Wilfred Chege says that despite the good climate, the farm has in the past experienced diseases known to attack roses like downy mildew, powdery mildew and botrytis.

The farm has also had several bouts of aphids, red spider mites and thrips. Mr. Chege says that the farm has been emphasizing on good sanitation which remains the key control to disease so as to reduce chemical use.

Simbi Roses management donates desks to Muthuri primary School

Employment and Workers Welfare
The farm strives to be a fair employer and has introduced a number of incentives in a bid to enable the workers perform their duties in a conducive environment.

Simbi Roses has a workforce of 598 employees (261 men and 337 women) all of whom are on permanent basis.

The farm has a clinic on site to cater for minor ailments. It also has a hall where workers gather during lunch and tea breaks to take their meals which are served free of charge.
Though the workers are not housed in the premises, they receive house allowances to enable them commute to and from work place.

The farm also takes workers through safety training programs on chemical usage. They are provided with protective gear which includes overalls, gloves and masks for those handling chemicals.

Corporate Social Responsibility
The farm believes that their success is truly determined by employees' hard work coupled with the support of the people living around them hence the need to give back to the community.

According to Mr. Chege the CSR projects undertaken by the farm is an effort to bail out the surrounding community from poverty which is a major economic goal to the country's development agenda.

Mr. Chege says the farm has engaged in a number of CSR projects in the area among them, beautification of the neighbouring Kirwara District Hospital, constructing water tanks, fencing and renovating classrooms in the neighbouring Muthuri Primary School.

The farm further provides fuel for Kirwara Police Station twice a month an initiative Mr. Chege said has gone a long way in beefing up security in the area.

Simbi Roses has also embarked on a tree planting program in the area in tandem with the re-afforestation bid going on across the country.


Workers arrange flowers for export

Environmental conservation and waste management
The farm has been certified by Kenya Flower Council (KFC), Labelling Organizations International (FLO) and MPS all of which are enforcers of environment conservation rules and regulations. To qualify for certification by these three organizations a grower must adhere to all environmental safeguards for both workers welfare and the environment in general.
Like most other flower farms waste includes green waste which results from remnants of flowers, food waste, sewerage and important of all chemical waste.
The farm sends all chemical containers to the supplier for incineration due to their toxicity which if not properly dispose of can result into serious environmental and health impacts.
The chemical waste water from greenhouses is recycled and reused to avoid releasing the same into the surrounding drainages which might end up emptying the same into the river and other water sources. This ensures that the farm saves on fertilizer application and protects local flora and fauna from damage by chemicals.

For green waste, the farm plows it back to the farm's other crops like coffee as compost.

Contrary to most growers, Simbi Roses runs on 100 percent harvested rain water. The water is collected in two main dams with a capacity to meet the farm's daily water needs for five months. This is usually essential during dry spell periods like the one that hit the country recently.

The farm has also embraced green energy by using direct sunshine to heat the greenhouses an initiative which the Mr. Chege says has significantly reduced the cost of operations.

Future Prospects
With the recent fair-trade certification, and the continuous expansion of the farm, the future of Simbi Roses is filled with endless Possibilities.

Mr. Chege says that the future of the farm is looking up. He says the farm plans to expand to a total of 30 hectares in the next two years.

The expansion is done by reclaiming land from an expansive coffee estate owned by the umbrella company, Eureka Holdings.

The company which sells 70 percent of its flowers through auction and 30 percent direct sales plans to reverse this to 70 percent direct and 30 percent auction.

BASF, Launch Bellis To Combat Botrytis and Downy Mildew in Ornamentals.

Participants follow proceedings during the launch of Bellis

The biggest chemical company in the world, BASF, has launched a fungicide to combat a wide spectrum of diseases affecting ornamentals.

The fungicide, BellisR WG, is a multi-purpose fungicide for the control of botrytis, downy mildew, powdery mildew, black spot and rust.

The launch comes at a time when long rains are expected to pound different parts of the country and due to its rain fastness, BellisR will come in handy for growers

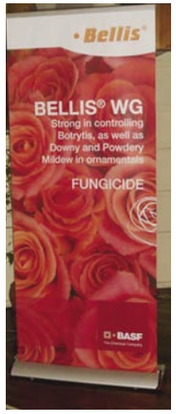
Launching the new product at a Nairobi Hotel, BASF Country Manager Patrick Ngugi said Bellis should mostly be used for preventive measures against the above diseases though it has curative action.

He assured farmers of the safety of the fungicide on beneficial predatory insects like bees, birds and earthworms.

Mr. Ngugi said the fungicide consists two active ingredients, Boscalid and Pyraclostrobin. He noted that Boscalid components are excellent in the control of botrytis and once sprayed the chemical depresses future infections. Boscalid is known to block spore germination besides inhibiting formation of germ tube and appressoria.

On the other hand, Pyraclostrobin, the other active ingredient is strong in the control of downy mildew. He said it blocks the electron transport at the cytochrom-bc, complex.

Francis Karanja the Regional Manager disclosed that BASF-Kenya is currently dealing with agro-chemical products only, though its products portfolio ranges from plastics and performance products to agricultural products, fine chemicals as well as oil and gas.



As a reliable partner BASF creates chemistry to help its customers in virtually all industries to be more successful. With its high-value products and intelligent solutions, BASF plays an important role in finding answers to global challenges such as climate protection, energy efficiency, nutrition and mobility.

In East Africa, BASF will focus on key vegetable crops such as green beans, tomatoes and green peas as well as ornamentals and cereals. As part of its growth strategy for Africa, the company plans to extend and enhance its services to additional countries and farmers across important crops such as cocoa, cotton, sugarcane, maize, specialty crops, sunflowers, coffee and rice.

He further revealed that plans to introduce more innovative products into the Kenya markets are underway.

Application

Bellis should be applied preventatively as a 23 block sprays with a maximum of 50 percent of all sprays per growing cycle. Apply as an interval of 5-10 days at the time of infection or as first disease symptoms are visible.

The fungicide should be applied within a spray programme with fungicides of different modes of action for resistance management purposes.

A summary of the product benefits are:

- Wide control spectrum meaning it is a multi-purpose fungicide.
- Strong preventive activity.
- Long duration of control (7-14 days).
- Ideal for resistance management.
- Compatible with IPM- programs
- Both active ingredients (Boscalid and Pyraclostrobin) inhibit the mitochondrial respiration but at different target site.
- Has some curative action but is recommended only for preventive use.
- Acts systemic and translaminar, preventing and inhibiting spore germination and energy supply.

Gatit®
FERTILIZER SERIES

Full range of products to optimize nutrition of different crops under different growth stages

Gatit® SUPER START
14-28-18 + 0.16Mg + TE

Establishment formula of high phosphorus content hence suitable for soils that are poor in phosphorus.
Gatit superstart should be used after germination or transplanting to give your crops a strong and vigorous rooting system which will help the crop to absorb nutrients and water efficiently from the soil. Also stimulates flower initiation.

Gatit® SUPER GROWTH
23-12-12 + 0.16Mg + TE

Vegetative growth formula high of Nitrogen content to enhances formation of adequate dark green foliage for photosynthesis. The high Nitrogen content makes your plants grow healthy and vigorously.

Gatit® SUPER FLOWERS
21-7-21 + 0.16Mg + TE

Formulation High in Nitrogen & Potassium for balanced vegetative and reproductive. The complete solution for flower induction. It makes your crop to have increased flower production and will also reduce flower abortion.

Gatit® SUPER FRUITS
15-5-35 + 0.16Mg + TE

Extra Potash formula for improving fruit quality and the ripening stage of your crop. The high potassium will help your plant achieve uniform ripening as well as good sugar and starch synthesis leading to a high quality of harvested produce. It also enhances hardening for fruits for better storage.

Gatit® COMPOUND
Gatit 19-19-19 + TE

Made for multipurpose formula for general growth.

RICHER NUTRITION

PREMIUM QUALITY

TIMELY DELIVERY

FIELD CONSULTANCY

GROWTH ENHANCEMENT

Packing Capacity: 250g 0.5kg. 1kg. 25kgs.

Dipchem®

total farming solutions

THE ADVANTAGES OF GATIT FOLIAR FERTILIZERS OVER OTHER FERTILIZERS:

- High quality product from Israel made with premium raw materials.
- Offers total plant nutrition to ensure strong root systems, greener foliage, and big size fruits and berries.
- Is highly concentrated with added chelated trace elements to prevent leaching to guarantee a perfect absorption.
- A highly soluble fertilizer which mixes completely with water to prevent clogging of spray equipment. It is also free flow and anti-caking.
- Very convenient packaging for ease – 500g, 1kg and 25kg.
- Will protect your crops during times of stress for example during water shortages, cold weather e.t.c.
- Is adaptable to different climate, soils, temperatures, varieties, yields and irrigation systems.

Gatit®
FERTILIZER SERIES

Kephis launch online certification

Kenya's Permanent Secretary for Agriculture Dr. Romano Kiome (Right) Logs in to officially launch the Export Electronic Certification System, Flanked by Dr. James Onsando, Managing Director KEPHIS (2nd Left) and KEPHIS staff who took part in the development of the System.

Kenya has launched an online phytosanitary certification system to cut on the time taken to approve horticultural exports.

The move which will be implemented through the certifying body, the Kenya Plant Health Inspectorate Service (KEPHIS), will cushion from long delays, wrong data entry and corruption in the clearance system. The certification process is usually done manually thereby making it time consuming and incase of a mistake during the entry of data it cannot be corrected since the paper certification represent permanent records.

The system will also ensure that farmers will no longer have to make trips to the Kephis inspection offices in Nairobi for certification, as the process will be done electronically. .

The electronic phytosanitary certification system, which is used to manage, maintain and view plant health certificate data, generates both paper based and paperless certificates for the trade of plants and plant products.

Launching the new system in Nairobi Kephis Managing Director Dr. James Onsando said they have been running technical tests to see how effective the electronic phytosanitary certification is a process which has proved successful. He said the system will be used for roses' consignments especially to the Netherlands but will be gradually scaled up to other horticultural products.

"The implementation of the electronic certification program has been going on in selected horticultural exporters through the Client Kenya project supported by the Netherlands government from September 2009 to March 2011," said Dr. Onsando. "This system will be beneficial to the sector and the growers as they will be issued with inspection certificates by Kephis to show that their products are certified and fit for the export market," he added.

The horticultural industry is the fastest growing agricultural sub-sector in the country contributing about 23 percent of Gross Domestic Product and also raking in an average of Sh70billion annually in foreign exchange.

Agriculture Permanent Secretary Romano Kiome, said the system will also reduce the chances of revenue loss through fraud as all clients' data will be saved in a system accessible only to Kephis, the country's certificate issuer.

"It reduces the chances of direct contact, and these certificates can't be duplicated," said Mr Kiome.

The certificate includes the name of the importer or importing company, reducing the chances of tax evasion.

The government said it was negotiating with existing importers for acceptance of electronic certification, adding that it was eyeing new markets, including Latin America, Brazil, Argentina, China and Japan.

Taking Samples for Plant Nutrition

Rockwool, hydro cultivation, well water, greenhouse soil, peat, coco peat, sport field, outdoor soil, plant material

The aim of sampling after planting is to control composition and concentration of nutrients in the root environment. A reliable sample is the starting point for a reliable analysis result. Therefore the sample has to be taken properly, both when you take samples for plant nutrition test or for plant disease test. We take our samples according to a certain sampling procedure. When you take your samples yourself it is important that you do it the same way, to be able to compare test results. Therefore we explain in this email news letter how we work while taking samples for plant nutrition tests.

Sampling procedure substrate (rockwool)

Requirements
Absorber (type Sam) or injection syringe and sample bottle.

Starting point
Minimal 40 subsamples per ha or per greenhouse. The walking direction is as follows; do not sample the first and last gutter along the greenhouse front; half of the samples at the sunny side and half of the samples at the shade side, devided in 4 to 6 pathways (depending on the number of valves and the size of the valve sections) and always sample at the same spots per company.

Working method
The 40 subsamples (all the same size) are being collected in a sample bottle. Devide the section into 4 or 6 blocks, depending on size and location of the path. Check if there are marking points, like valves, heater or block numbers. Check regularly if the amount of water corresponds with the section that has to be sampled. Also check the greenhouse roof so that you sample the same water quantity from both the sunny side and the shadow side in the greenhouse.

Take samples at the start of the cultivation, always under the rockwool block or plugs. Move to the middle later on, between the blocks or plugs. In that way you take samples as close to the active roots as possible. “Dead ends” – so-called spots where the one slab holds course against the other slab, or spots where the plastic is pulled up in the slab – should not be sampled. For a correct pH test you should take both a feed/drip sample under the dripper and in between two drippers.

Sampling frequency and analysis
Cut flowers have to be sampled once every 3 weeks, vegetables once every 2 weeks. Have the sample be tested for macro- and micronutrients, test code VW.

Sampling procedure substrate (perlite, pumice, hydroponics)
Follow the same working method as described for rockwool. Preferably take a drain water sample, when you want to sample in a just planted crop and you do not have a small water film under the substrate yet. It is not possible to get enough water out of the substrate itself in that situation.

Sampling procedure substrate well water

Requirements
Large sampling stick (for example a bamboo stick), sampling bottle, rubber band, hydrochloric acid (HCl) and pipette.

Starting point
Take care that you take a homogeneous sample. For pH and total iron test you must use two different sample bottles. In one of them the sample has to be acidified so that we are able to test for total iron concentration.

Working method
Attach the bottle to the sampling stick with rubber band. Let the bottle in the water from the top downwords, with the same speed so that different water layers are mixed properly. Take care that the sample bottle is filled completely, to avoid a reaction with the air. For iron total determination an extra sample bottle has to be send. Fill the empty bottle with 1 ml per liter hydrochloric acid (HCl) 30% before sampling, or fill it with 3 ml per liter HCl 10%. Let the well water run for 15 minutes when the sample is taken from piped well water.

Analysis
Send the sample bottles in a light-tight packing within 2 days after sampling. Mark the bottles (for example 1a and 1b (acidified and not acidified). Test results are sent back within 2 days per email, fax or post.

Sampling procedure greenhouse soil

Requirements
Sampling stick 30 cm, “thumb” and sample bag.

Starting point
Follow the sampling procedure substrate.

Working method
Take 40 subsamples with sampling stick and “thumb”. Eventually put minimal 300 gram soil in a sample bag. Sampling depth is 5-25 cm.

Soil sampling for pre-plant fertilizer application
Such samples are taken before planting. Sample all soil in the sampling stick. The reason for this is that the topsoil layer is worked through the under lying soil layer. Based on the soil test results we recommend to rinse the soil with clean water to decrease any high salt concentration.

Soil sampling for fertilizer application after planting
The upper 5 cm from the soil is not sampled. The reason for this is that salt accumulates in the top soil layer.

Working method
Sample at both sides of the overhead irrigation system. Take the samples in the row, between the plants. In case of drip irrigation system, sample in the soil under the drip irrigation, close to the dripper. The reason for this is that we want to avoid that you sample soil too far away from the drippers, causing any wrong interpretation of the nutritional status of the soil. Use the lowest 2/3 part of the sampling stick.

Sampling frequency and analysis
A sample after planting is taken once every 4-6 weeks, depending on growth development. Send samples for macro- and micronutrients. Have the sample be tested for macro- and micronutrients, test code VG.

Sampling procedure peat substrate (pot plants)

Requirements
Sampling stick peat substrates, “thumb” and sample bag.

Starting point
The 40 subsamples potting soil per sample. One subsample is approximately 1 spoonful. For container size larger than 21 cm 25-30 subsamples are sufficient. Walking direction is similar to water sampling or greenhouse soil. Devide the section into 4 or 6 blocks, depending on size and location of the path. Check if there are marking points. Like valves, heater or block numbers. Check regularly if the amount of water corresponds with the section that has to be sampled. Also check the greenhouse roof so that you sample the same water quantity from both the sunny side and the shadow side in the greenhouse.

Working method
Subsamples have to be taken from the whole section. Take always subsamples from the lowest 1/3 part from the container, near the active roots. Peat substrate in small container size is sampled by hand. Take the plant out of the container carefully with three fingers and take out a little substrate. Peat substrate in large container size is sampled with sampling stick. Take care that only the lowest 1/3 part of the subsample is put in the sample bag. In case of drip irrigation samples have to be taken in the substrate close to the dripper, not too far from the dripper.

Sampling frequency and analysis
Depending on crop and cultivation method sampling frequency is once every 2-4 weeks. Have the samples be tested for macro- and micronutrients, test code VV.

Sampling procedure coco peat substrate

Requirements
Sampling stick (for cultivation in containers) or sampling spatula (for coco peat bales), “thumb” and sample bag.

Starting point
The 40 subsamples potting soil per sample. One subsample is approximately 1 spoonful. For container size larger than 21 cm 25-30 subsamples are sufficient. Walking direction is similar to peat substrate.

Working method
The subsamples have to be taken from the whole section, see the working method for peat substrate. Use an apple corer when you sample coco peat bales and divide subsamples over the whole section. Take care that only the lowest 1/3 part of the subsample is put in the sample bag.

Sampling frequency and analysis
Both crops growing in container and coco peat bale should be sampled once every 2-4 weeks. Have the samples be tested for macro- and micronutrients, test code VC. Fresh coco peat should also be tested with bariumchlorid as extraction liquid. We make a 1:1.5 volume extract (at pF 1.5), after that

the sample is shake/mix and filter the sample. EC and nutrients are measured in the extract, pH is measured in the suspension (after 16 hours storage at 20°C).

Sampling procedure sport field and green

Requirements
Sampling stick, "thumb", tray (to collect subsamples) and sample bag.

Starting point
Minimal 40 subsamples per field. Sampling depth is 5-10 cm or 5-15 cm, depending on rooting depth. Walking direction is according to so-called sand glass line.

Sampling frequency and analysis
Have the samples be tested for test code SV (outdoor soil test without lutum or soil particles < 16 micron) or test code SB (outdoor soil test including lutum or soil particles < 16 micron). We test for pH-KCl, organic matter, magnesia reserve, potassium reserve, P-Al (phosphate reserve) and in water soluble Fe.

Sampling procedure outdoor soil

Requirements
Sampling stick, "thumb", tray (to collect subsamples) and sample bag.

Starting point
Minimal 40 subsamples per section. Walking direction is according to so-called sand glass line.

Working method
Take 40 subsamples over the whole section, sampling depth 0-30 cm, depending on the crop rooting depth. Mix the sample properly. When there is any canal or river, do not take samples closer than 5 meters. Deviating spots should be sampled separately.

Sampling point of time
Take samples before sowing or planting.

Depending on the crop growth development 1 or 2 samples should be taken during the cultivation period.

Sampling frequency and analysis
We test via test code BA or BF. The first one BA includes pH (KCl), organic matter, magnesia reserve, potassium reserve, P-Al (phosphate reserve). As a result BA test code does not include liming recommendation. Test code BF includes lutum or soil particles < 16 micron, organic matter, pH (KCl), calciumcarbonate, magnesia reserve, potassium reserve, P-Al (phosphate reserve).

Sampling procedure greenhouse soil (basic soil test)

Requirements
Sampling stick, "thumb", tray (to collect subsamples) and sample bag.

Starting point
Take samples according to the sampling procedure greenhouse soil. Sample at both sides of the overhead irrigation system.

Working method
Take 40 subsamples over the whole section, sampling depth 0-30cm. Mix the subsamples properly.

Sampling point of time
The frequency is once every two years. Take samples two times per year when you have applied a major cultivation of the soil, because soil structure and physical properties can change.

Sampling frequency and analysis
Have the samples be tested for test code BK or for extraction with calciumchlorid (test code BL). Test code BK includes lutum or soil particles < 16 micron, organic matter, pH (KCl) and calciumcarbonate. Test code BL includes Nmineral, potassium, sulphur, magnesium and boron.
Sampling procedure plant material (in the dry matter)

Requirements
Sample bag.

Starting point
Take enough plant material, so that after drying we still have sufficient sample left for analyses. We need at least 50 grammes fresh plant material, in most cases resulting in approximately 5 grammes dry weight. Minimal 40 subsamples per ha or per greenhouse. The walking direction is as follows; do not sample the first and last row/gutter along the greenhouse front; take half of the samples at the sunny side and half of the samples at the shade side, devided in 4 to 6 pathways (depending on the number of valves and the size of the valve sections) and always sample at the same spots per company.

Working method
The working method depends on what you want to determine with the sample. Take samples of leaves with visible deficienyor excess symptoms when you expect nutritional inbalance. Take enough plant material. Take samples from young, full-grown leaves when you do not expect nutritional inbalance. Take leaf samples from the same age or growing phase when you want to compare different samples with each other.

Sampling point of time
Take samples to confirm nutritional inbalance, in addition to samples from water, soil or substrate.

Sampling frequency and analysis
Have the samples be tested for test code VB. (macro- and micronutrients, including percentage dry matter).

Sampling procedure plant disease test
We have several sampling procedures for plant disease test. On request manuals for plant disease tests are sent. These manuals contain information regarding the amount of sample required and include a sampling protocol for DNA tests, fungi and bacteriae cfu count, virus test and nematode test.

Charm Flowers: Home of Lisianthus.

Mr. Nderitu during the interview

In the competitive world of floriculture distinction, recognition of what works for the market coupled with well coordinated teamwork are the three key ingredients to success. The combination of the three values is what makes Charm Flowers Limited remain one of the best and largest Lisianthus producer in the world.

In Kenya, it's the only farm growing the variety therefore making it distinct in its production. Lisianthus are trendy flowers which the farm supplies to renowned supermarket chains in the United Kingdom namely Waitrose, Marks & Spencer, Sainsbury, Tesco and Asda and has acquired a new market in Russia.

Headed by two directors Mr. Ashok Patel and Mr. Kantai Kerai, the farm has managed to stay ahead of others. Also in the top management are Mr. Ambrose Nderitu who is the Lisianthus Production Manager, Assistant Manager Lisianthus Mr. Moses Kuria, Sushanti Wankar the production manager of roses, Elizabeth Gathoni Assistant Production Manager roses and Shandra Prakash who serves as the Administration Manager.

Background
Situated about 15 kilometres from Kitengela town along Nairobi- Namanga road, CFL blooms with some of the finest flowers in the industry. Established in May 2001 with a mere 4 greenhouses on a 2 hectare piece of land, Charm Flowers has not only grown in size, but also in varieties and

staff turnover. From an initial seven varieties of Lisianthus grown a decade ago, the farm now has a total of eleven varieties on a total of 16 hectares of greenhouses under production.

Production

Lisianthus grown in the farm comes in a wide range of flower colors ranging from deep purple, blue, rose, pink, yellow and white to various bicolor. While on a tour to the farm, the Floriculture Editorial Team found out that the plant can grow to a length of between 50 and 70 centimeters, and has hundreds of species.

Mr. Moses Kuria displays one of neatly arranged flowers in a vase

Though Lisianthus still maintains its status as the flagship product of the company, CFL also produces top quality roses which come in three varieties namely Mario, Maliclair and Red Ribbon.

According to Mr. Nderitu plans to expand the farm to 36 greenhouses and expected to cover a total of 18 hectares are at an advanced stage.

The farm relies on rain water and boreholes, which is collected in a reservoir, to irrigate their crops and meet their day to day water needs.

Employees Welfare and Social Strategy

To foster the feeling of harmonious working relationship the management has prioritized workers welfare.

The farm has built reasonable residential houses for its 250 workers and has put in place recreational facilities for workers to interact and socialize after a hard day's work

Provision of health facilities is especially a serious area that the company has prioritized,

Lisianthus in a green house

and has thus set up a health and safety committee to address employees' safety and health concerns. The company ensures that employees who fall sick are treated at the Kitengela hospital, but for minor injuries they are taken to the neighbouring Succos Dispensary. The management has also registered employees with the National Hospital Insurance Fund (NHIF).

Charm Flowers has taken this arrangement further, by entering into an agreement with the hospital to provide occupational health and safety training to the farm's members of staff.

Corporate Social Responsibility

The community on the other hand benefits from several initiatives, which include a fund set aside to upgrade learning facilities in the neighbouring schools. That fund has helped in refurbishing the classroom floors of Korompoi primary school.

Apart from upgrading learning centers, Charm Flowers also provides clean drinking water to the community. While this helpful service has gone a long way in keeping water borne diseases at bay, it is hoped that more efforts directed at tree planting drives and soil erosion awareness programmes, which the farm has already started, will change the environment into a viable living place.

During drought spells which are perennial in the country, Charm Flowers offer grazing land and water to the neighbouring community.

Environmental Conservation and waste management

The farm adheres to set down rules and regulations in an ambitious drive to conserve the environment. According to Mr. Nderitu, the farm is very mindful of how they dispose off all waste by ensuring that no spillovers of liquid waste go to the environment. Likewise, all solid waste is disposed safely to ensure no impact to the environment.

Fertilizers are applied through drip irrigation systems, to eliminate chemical runoffs.

Chemical containers and Personal Protective Equipments (PPE's) are returned to the supplier for incineration while recyclable material is reused.

The farm has pits to dispose off liquid effluent from the farm whereas human waste is drained off in septic tanks within the premises.

Panda Flowers Unique Package

Thirty five years down the line Panda Flowers Business Park is growing stronger by the day making it a major achiever in the flower industry.
Located in the Great Rift Valley in Naivasha, Kenya about 90 Km from Nairobi, the Flower Business Park has several flower outfits situated at the 150-acre namely Panda Flowers, Biggot Flowers, Terra Nigra, Maridadi and Kreative Roses. Also in the park are Kenya Flora and Star, Schrus Flowers, Interplant Roses (East Africa) Ltd and Linsenn.
The Park was brought into being by Mr. Egal Elfezouaty and is the only one of its kind in the area. It has a competent team of human resources which has led the company to its current strength and position as a reliable, audible and accountable supplier of quality flowers
The Flower Park provides employment to thousands of Kenyans which is a major mile stone towards poverty eradication in the country. Most employees are mainly unskilled workers from the neighbouring regions thus the project has been an equal opportunity employer.

Panda Flowers grow rose flowers in hectares of Green Houses using modern Technology. Their roses are exported to EU. They have in-house propagation, harvesting, grading and packaging facilities. Panda Flowers aligned itself with market realities with competitiveness through careful selection of the latest technologies whilst maintaining economic advantage through strategic alliances.
Also in the Park is Terra Nigra a dynamic company that is active in breeding, propagation and marketing of gerberas and roses. They have developed a contemporary state of art complex which is the home to some of the best rose varieties in the world. All their direct cuttings are from Holland but Terra Nigra is one of the breeders who can breed on the spot. This allows for the plants to be tested under the African climatic conditions.

Bigot Flowers Kenya also produces roses and stretches 40 hectares of greenhouses. It is one of the best managed flower farms in the country currently. The good management is attributable to the business focused brand of directors and purpose- driven management team and a well trained workforce. They are also committed to being a leader in environmentally responsible floriculturist. They endeavor to comply with local, government and international environmental laws.
Maridadi has continuously expanded in all aspects of floriculture business practices. They encourage creativity at all levels in search of new inventive ways of solving problems in order to meet requirements of their employees. They never compromise or endanger neither their mission nor the people involved.
Also established within the park is Kuehne + Nagel, a leading logistics company. The company offers transport and custom clearance services. It offers customers a full range of sea freight, airfreight, customs clearance and warehousing services, as well as national and cross-border transports, including oversized and heavy goods. They have employed over 100 logistics specialists in the head office at Jomo Kenyatta International Airport and the Mombasa branch. Kuehne + Nagel's superior service and integrated end-to-end supply chain management solutions help their customers turn their logistics challenges into a real competitive advantage.

They have evolved from a traditional international freight forwarder to a leading global provider of integrated supply chain solutions for a comprehensive range of industries. Kuehne + Nagel provide integrated, flexible logistics solutions that address the unique, diverse needs of their customers.

The flower farms has made judicious upgrading in the technology they employ thus they are listed as among the best flower farms in Kenya. They do not limit themselves to a set number of services on the contrary; no need is too significant and no assignment is too small for their dedicated and skillful teams.

Soloplant Kenya Ltd.:
A Professional and Innovative Plant Propagator

Mr. Hagai(left) explains the propagation process to a *Floriculture Magazine* staff during a recent visit to the farm

Soloplant Kenya, a sister company to an Israel nursery, was established in 2001 to produce rose seedlings. The plant nursery is located in Magana area, near Nairobi. The greenhouses in Solo Plant Kenya are a state of the art ultramodern greenhouses built to conform to new technology and development. The growing process of the seedlings is also performed in strict accordance with the methods developed in the main plant in Israel. The demand of the market is mainly of grafted seedlings. The grafting is done manually by adding the rootstock to the scion, using a special knife. The rootstock is of "Natal Brier" type and it is propagated in the greenhouses, in high sanitation level and modern technology.

After grafting, the cutting is stuck in a plug. The process of producing a seedling, from the moment of grafting till the day of marketing lasts about six weeks. During this time it develops roots, leaves and strengthens the joint of the rootstock and the scion. The seedlings are marketed in a quality package.

A visit to the farm recently revealed that the farm prides itself of being the propagator of choice for most leading flower farms in Kenya. "Most leading farms in Kenya propagate with Soloplant. It is the only propagation company fully proved tissue culture clean of any disease in closed greenhouses" said Soloplant General Manager Hagai Horwitz.

The plant nursery is marketing millions of grafted seedlings a year to customers in different regions, mainly in Kenya and Ethiopia. Mr Hagai says that more than 90 percent of their clients are Kenyan flower farms and the rest across the globe.The Kenyan registered company has an excellent medical scheme for all its workers in conformity to laid down labor laws.

Mr. Hagai says the farm employs workers from the surrounding community which has gone a long way in alleviating poverty in the area besides being a major booster towards the country achieving Millennium Development Goals (MDGs).

The farm is run through several departments namely, administration, preparation of root stock, soil preparation, grafting, planting and selection. The enormous experience and know-how is clearly reflected through the success realized by the company since inception both in Kenya and Israel.

Workers busy in one of the farm's numerous greenhouses

According to their website, Solo Shtil which is the mother company specialises in various seedling production and growth of plants, but today the most significant is the growth of orchids for export.

Solo Shtil, which was established in1982 in Moshav (village) "Shahar" by brothers Yitzhak and Yossi Solomon, is a pioneer in this branch of export in Israel. It began to grow orchids in year 2004 and today possess 20,000 sqm of Phalaenopsis and Dendrobium.

The amount of planted orchids is expanding in the company permanently; the territory of greenhouses with planted orchids and the number of special sorts is increasing systematically.

In the field of orchids Solo Shtil is specializing in two species, which are designated for export: "Dendrobium" and "Phalaenopsis".

Another field of specialization of Solo Shtil is seedlings of roses, which were in the past the main branch and very successful in Israel and abroad.

"Solo Shtil" is the supplier of vine seedlings to more than 300 vine growers in Israel and thus covers 50% of the consuming in Israel. Besides the company also exports vine seedlings.

Soloplant Kenya is informed about any professional developments by Solo Shtil.

FLOWER FARMS IN KENYA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
Akina	Mr. Girish Appana	Roses	0726-089555	girish@fontana.co.ke
Africalla	Mr. Rob Holtrop	Zentadacia	066-76453	sales@africalla.com
Aquila Flowers	Mr. Uday Bhat.	Roses	0722-205868	gm@aquilaflowers.com
Arts Flowers	Mr. Nyakundi	Roses	0722-348070	
Batian Flowers	Mr. G. Muriungi	Roses	062-41268	gm@batianflowers.com
Beauty Line	Mr. Amnon Zafoni	Gypsophila, Solidago	050-50116/7	amnon@beautyli.com
Bekya Floriculture	DK	Roses	0732258234	admin@bekya.com
Bigot Flowers	Mr.Jagtap Kakasaheb	Roses	0722205271	jagtap.kt@bigotflowers.co.ke
Bila Shaka Flowers.	Mr.Joost Zuurbier	Roses	050-50328	bilashaka.flowers@zuurbier.com
Black Petal/ 4-10	Mr.Nizra Junder	Roses	0722848560	nj@blackpetals.co.ke
Blue Sky	Mike	Roses	0720005294	blue-sky@africaonline.co.ke
Brill		Roses	(49) 06821/6223	info@rosenbrill.de
Buds and Blooms	Mr. Shivaji		0720895911	shivaniket@yahoo.com
Carnations Plants	Yossi Shamia	Carnations	0733697404	cpl@exoticfields.com
Carzan	Nicole			
Celinico	Mr. Chris Shaw	Roses, Summer flowers	066-72170	celinico@nbinet.co.ke
Charm Flowers	Mr. Ashok Patel	Lisianthus	020 2222433	info@charmflowers.co.ke
Colour Crops	Mr. K. Marigoma	Hypericum, Ammi	020 2313859	admin@coulourcrops.com
Colour Crops	Mr. Geofrey Mwaura	Veronicoh	0724083111	nva@coulourcrops.com
Cordia	Mr. Harun	Roses	0733527665	cordiafarm@jambo.co.ke
Countrywide Connections	Abraham Kimani	Erygium, agapathus	0721793286	production@countrywide.co.ke
De Ruiters	Mr. Sebasten Alix	Roses	0720-601600	info@drea.co.ke
Desire	Mr. Rajaat Chaohan	Roses	0724264653	rajatchaohan@hotmail.com
Elbur Flora Ltd.	Mr. Peter K. Kagotho.	Roses	0724722039	elflora@africaonline.co.ke
Enkasiti	Mr.Thambe	Roses	067 44222/3	enkasiti@gmail.com
Everflora Ltd	Mr. Khilan Patel	Roses	067-5854406	everflora@dmblgroup.com
Equinox	Mr. Tom Lawrence	Roses	0722312577	tom@equinoxflowers.com
Fides(K) Ltd	Mr. Francis Mwangi	Roses	068-30776	info@fideskenya.com
Flora Kenya	Mr. Jack Kneppes	Roses	0733333289	jack@maridadiflowers.com
Florensis Hamer	Mr. Eddy Verbeek	Cuttings	050-50010	verbeek@florensis.co.ke
Fontana Ltd	Mr. Girrish Appana	Roses	0726 089555	fontana@africaonline.co.ke
Fourteen Flowers	Mr. A.c. Achaia	Roses	051 343322	sarju@fontana.co.ke
Flora Delight	Mr. Marco	Roses	0710802065	olkegerunited@gmail.com
Florema (K) Ltd	Mr. Peter Maina.	Begonia	050-2021072	info@floremakenya.co.ke
Gatoka Roses	Mr. M.K. Gacheru	Roses	0733619505	gatoka@swlfkenya.com
Greystones Farm	Silas Mbaabu		0722312316	silas.mbaabu@greystones.co.ke
Groove	John Ngoni		0724448601	plow@kenyaweb.com
Harvest Ltd	Mr. Farai Madziva	Roses	0722849329	harvest@harvestflowers.com
Hamwe Limited	Mr. Andrew Khaemba	Hypericum.	0722431170	production@hamwe.co.ke
Hatabor Rainbow Blooms	Mr. John Ndung'u	Hypericum, Salidago	0726320007	
Highland Plants	Mr. Pius Osore		0726929932	osore@yahoo.com
Homegrown- Flamingo.	Mr. Peter Mwangi	Roses, Fillers, Gerbera	0722-204505	peter.mwangi@f-h.biz
Homegrown- Hamerkop.	Mr. Jacob Wanyonyi	Roses, Fillers	0722-773560	jacob.wanyonyi@f-h.biz
Homegrown-Kingfisher.	Mr. Charles Njuki	Roses, Carnations	0724 391288	charles.njuki@f-h.homegrown.co.ke
Homegrown-Siraj	Mr. S. Paul	Carnations & Lilies	0722470717	paul.salim@f-h.biz
Homegrown-Sirimon	Mr. Brian Allen			
Isinya Roses	Mr. Yash .Dave	Roses	0721 403175	info@isinyaroses.com
Interplant	Mr. Nehmiah Abraham	Roses	020 2014606	info@sunrosenurseries.co.ke
James Finaly	Mr. Richard Fox	Roses	052- 30142	flowers@finlay.co.ke
JatFlora	Mr. James Oketch		0724418541	jatflora@gmail.com
Kabuku Farm	Mr. S. Thirumalai	Roses	020 822025	info@eaga.co.ke
Kalka	Mr Shiva	Roses	0715356540	shiva@kalkaflowers.com
Kentalya	Mrs Linet	Cuttings	0733549773	lynette@kentalya.com
Karen Roses	Mrs. Rabecca Kotut	Roses	020 2078270	karen@karenroses.com
Kariki Ltd	Mr. Samuel Kamau	Hypericums	0722 337579	samuel.kamau@kariki.co.ke
KenFlora	Mr. Aleem Abdul	Roses	0722311468	info@kenflora.com
Kenya Cuttings	Mr. Martin Kolvenbach	Cutting	060-2030280/81	martin.kolvenbach@syngenta.com
Kenya Highlands	Mr. B.H. Nathani		051851722	
Kisima Ltd	Mr. Ken Mwenda	Roses	0722475758	flowers@kisima.co.ke
Kongoni Farm	Mr.vivek Sharma		0722203837	vivek@vegpro-group.com
KPP Plant Production	Mr. Wilson Kipketer	Poinsettia, Carnation	020-352557	w.keter@selectakpp.com
Kreative Roses	Mr. Alkis Charitatos	Roses	050-50163	info@kreative-roses.com
Kundenga Flowers	Mr. Joseph Juma	Hypericum, Eringium	0725-643942	production@kudenga.co.ke
Lake Flowers	Mahamoud Mohamed	Roses	050-2021418	info@lakeflowers.com
Lauren	Mr. Chris Ogutu	Roses	0722783598	laurenflowers@access.co.ke
Larmona Flowers	Mr. Peter Mureithi.	Roses , Hypericum	0722-238474	lamonaacounts@africaonline.co.ke
Lex +	Mr. Thomas Nyaribo.	Roses	050 2021260	lex@lex-ea.com
Liki Riverfarm	Mr. Sumanta Dash	Roses	020-2191804	sumanta@vegpro-group.com
Linsen	Mr. Livingstone Wadeya	Roses	020-2070339	info@linssenroses.co.ke

FLOWER FARMS IN KENYA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
Live Wire Limited	Mr. Gordon Millar	Hypericum, Lilies	050-2020050.	info@livewire.co.ke
Lobelia Ltd	Mr. J.P.Viljoen	Roses	020-2040418	info@lobelia.co.ke
locland	Mr. A. A. Patel	Roses	0721237936	locland@bidii.com
Longonot Horticulture	Mr Harry Milbank	Roses / Liasianthus	050-50173/4	longonot@vegpro-group.com
Magana Flowers	Mr. Peter Mwangi	Carnations & Roses	0726 212520	Pmwangi@maganaflowers.com
Mahee Flowers	Mr. S. Thirumalai	Roses & Carnations	020-827488	malai@eaga.co.ke
Maaskant Flowers	Sasse J O		0713 194897	auctionflwer@nbi.ispkenya.com
Maridadi Flowers	Jack Kneppers	Roses	0733333289	jack@maridadiflowers.com
Matasia Valley	Kephar L Tande	Roses		kephar.tande@eapcc.co.ke
Maua Agritech	Mr. Kori	Roses	0722-206318	gm@mauaagritech.com
May Flower	Mr. Maarten Brussee	Roses	050-21174	cuttings.ke@royalvanzanten.com
Mosi Ltd	Ms. Alice Mureithi	Roses	0733509673	alicemurugi@mosiflowers.co.ke
Morop Flowers				
Mt Elgon Orchads	Bob Anderson	Roses	054- 31460	info@mtelgon.com
Mweiga Blooms	Mr. Aggrey Wahome	Arabicum	0722-788135	info@mweigagrowers.co.ke
Newholland	Eric Doodeman	Roses	0720632258	
Nini Frams	Ruth Vaughan	Roses	050-50406	production@niniltd.com
Nirp	Mr. Michael Gathage	Roses	020 3563141	
Ol Njorowa	Mike Kikwai	Roses	020-574011	olnjorowa@iconnect.co.ke
Olij Kenya	Mr.Reza Sorabjee	Roses	054-30916	reza@swiftkenya.com
Oserian Dev. Company.	Mr. Roddy Benjamin	Roses / Gypsophilla / Statice	0722207729	roddy.benjamin@oserian.com
Panda Flowers	Mr. George Ndegwa	Roses	050-50046	info@pandaflowers.co.ke
Panacol International Ltd.	Paul Wekesa	Roses	054-30916/7	paul.wekesa@panacol.co.ke
Penta Flowers	Mr. Thomas Ochieng	Roses	0722 904006	tom@wananchi.com
PJ Thande	Ms. Elizabeth Thande		0722380358	Elizabeth@wetfarm.co.ke
PJ Dave Flowers	Mr. Hitesh Dave	Roses	045-21381/2	pjdaveflowers@wananchi.com
Plantations Plants.	Mr. William Momanyi.	Geranums / Impentia	050-20-20282	pplants@kenyaweb.com
Pollen Ltd	Mr. Daniel Kisavi	Seeds/cuttings	0733603530	daniel.kisavi@syngenta.com
PP Flora	Mr. A. Omondi	Roses	020-828981	ppflora@swiftkenya.com
Preesman K Ltd	Mr. Ron Preesman		0737260040	Rpreesman@preesman.com
Primarosa	Mr. Vijay M. Jadhav/Bilipe	Roses	045-22661	info@primarosaflowers.com
Primarosa Flowers.	Mr. Aand Patil	Roses	065-22010	info@primarosaflowers.com
Racemes	Bonny		0721938109	bonny@kenyaweb.com
Red Lands Roses	Isabelle Spindler	Roses	067-25051	gm@redlandsroses.co.ke
Riverdale Blooms Ltd	Ms. Zipporah Mutugi	Roses	0202095901	rdale@swiftkenya.com
Roseto Ltd.	Mr. Anad Shah	Roses	0734848560	gm.roseto@megaspringroup.com
Sarkish Flora	Mr. Kondola Singh	Roses	051 211046, 32222	kondola@africaonline.co.ke
Shades	Mishra Ashutosh	Roses	0722792018	sagars66@yahoo.com
Shalimar Farm	Mr. S. Thirumalai	Roses	020 822025	info@eaga.co.ke
Sher Karuturi	Mr. Sai Karuturi	Roses	050-50001	ram@karuturi.com
Sian Agriflora.	Mr. Andrew Wambua	Roses / Zantendaschia	0724 256592	agrifm@agriflora.sianroses.co.ke
Sian Equator Flowers	Nehemiah Kangogo	Roses	0725 848910	nehemiah@equator.sianroses.co.ke
Sian Maji Mazuri	Clement Kipng'etich	Roses	0725848914	
Sian Winchester	Mr. Raphael Mulinge	Roses	0725848909	rmulinge@sianroses.co.ke
Sian Masai Farm	Mr. W. Munyao	Roses	0725848912	wmunyao@sianroses.co.ke
Silze Kenya	Mr. W. Mureithi	Cuttings	0720-995195	info@silze.co.ke
Simbi Roses	Mr.Jefferson Karue	Roses	020-2042203	simbi@sansora.co.ke
Sirgoek Flowers	Mr. A. Keittany	Roses	0721591016	sirgoek@africaonline.co.ke
Solo Plants	Mr. Hagai Horwitz	Roses	0732 439942	hagai@soloplant.co.ke
Sote Flowers	Charles Asunda	Roses	0721-959076	soteorama@gmail.com
Star Flowers	Mr. Sailesh Kumar	Roses	0722-203750	sailesh@vegpro-group.com
Stockman Rozen Kenya	Edwin Broekhizen	Roses	050-21409	info@srk.co.ke
Subati Flowers Ltd	Mr.Ravi Patel	Roses	020 2048483	info@subatiflowers.com
Suera Flowers.	Susan Mureithi	Roses & Lilies	065-32309	suerafarm@suerafarm.sgc.co.ke
Suguta Growers	Mr. Yabesh N. Marga	Roses	0733-719053	sugutagrowers@yahoo.com
Sunrose Nurseries	Mr. Nehmiah Abraham	Roses & Seeds	020 2014606	info@sunrosenurseries.co.ke
Scheures	Haicko Becker	Roses	050-50390	sailesh@vegpro-group.com
Tambuzi Ltd	Mr. Tim Hobbs	Roses	062-31019/7	info@tambuzi.co.ke
Terra Nigra	Mr. P. Van Der Meer	Roses	050-5050310	petervandermeer@terranigra.com
Terrafleur Ltd	Mr. Chris Kaluku	Hypericums	067-30063	chris@terrafleur.com
Terrasol	Mr. Sjaak Nannes	Cuttings	0722-387943	info@terrasolkenya.com
Timaflor Ltd	Mr.Julius Kinoti	Roses	0725947133	timaflor@wananchi.com
Transebel	Mr.Morris Wahome	Roses	067-44022	admin@transebel.co.ke
Tropiflora	Mr.N. Krasensky	Alstroemeria	0724646810	tropiflora@tropiflora.net
Tsarah Rozen	Mr. Jan Molenoor	Roses	0734417157	jan@tsararozen.com
Tulaga Flowers	Mr. Denis Wedds	Roses	0724-465427	denisweds@africaonline.co.ke
Uhuru Flowers	Mr. Ivan Freeman	Roses	020-3538797	ivan@uhuruflowers.co.ke
Valentine-Karura	Mr. Susan Maina	Roses	020-3542466	info@valentineflowers.com

Valentine-Kibubuti	Mr. Susan Maina	Roses	020-3542466	info@valentineflowers.com
Vankleef	Judith Zuurbier	Roses		
Van den berg Kenya	Mr.Johan Remeeus	Roses	050-50439	johan@roseskenya.com
Vegpro Group	Piet Van Den Berg	Roses	050202084	piet@vegpro-group.com
Waridi Ltd.	Mr. P.D. Kadlag	Roses	0723149968	info@waridifarm.com
Wildfire	Christine Karembu	Hypericums & Carnations	050-2020837	info@wildfire-flowers.com
Windsor Flowers	Mr. Pardeep V. Kumar	Roses	067- 24208	farm@windsorflowers.com
Xpression Flora Ltd	Mr. M. Rasam	Roses	020-2312888	info@xflora.net
Zena Roses	Mr.Mohan Choundery	Roses	0722825429	rmchoudhery@zenaroses.co.ke
Zena Roses Sosiani	Rakesh Kuttaiah	Roses	0723 965788	rakesh@zenaroses.co.ke

FLOWER FARMS IN ETHIOPIA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
A" flower	Rashid Mohammed	Roses	+251 11 5533237	mekiya@ethionet.Et
Abyssinia flowers		Roses		ggh-link@ethionet.Et
Addisfloracon plc	Ketema	Roses		tasfaw@addisflora.Com
Agri flora p.L.C		Roses		flowers@ethionet.Et
Alliance flowers plc	Ravi	Roses		allianceflowers@rediff.Com
Almeta impex pl	Ato Yonas Alemu			almeta.Impex@ethionet.Et
Aq roses plc				ethiopia@aqroses.Com
Arsi agricultural	William Ngelechei/Tahir Aman	Roses	+251911869953	arsiflowers@ethionet.Et
Mechanization service	Belay			
Avon flowers plc.				Gomba@ethionet.Et
Awassa greenwoods plc	Hypericums			awassagreenwood@ethionet.Et
Beauty green plc	Yonas Tsegaye		+251 11 5544601	seidlert@ethionet.Et
Blen flowers plc	Anteneme Zenebe			blenflowers@ethionet.Et
blu nile flora plc				bnf2etf@ethionet.Et
Chibo flowers	Ato habtamu gesesse			expincor@ethionet.Et
Dandi bour floralia plc				dbuc@ethionet.Et
dire highland	Tesfaye Asegidew		+251911793408	dhf@ethionet.Et
Flower plc				
Dream flowers plc	E.Ravi Chandran / Wycliffe Otieno	Roses	+251116521662	dreamflowers@ethionet.Et
Dugda floriculture				dugdaagr@ethionet.Et
Development plc				
Dyr	Yosef Beyene	Carnations	+251113390251	dyr@ethionet.Et
Eden roses	Tshaye			edenroseplc@ethionet.Et
Enyi ethio rose	Tewahido Haymanot/Teshalewolde	Roses	+25111182143	enyi@ethionet.Et
Eteco plc				eteco@ethionet.Et
Et-highland flora plc	Tim Harrap / BrianSheepers	Roses		bnf2etf@ethionet.Et
Ethio agri-ceft	Arvind / Kebede / Biru abebe	Rose	+251116621029	ethioagriceft@ethionet.Et
Ethio dream plc	Bimal /Emmanuel	Roses	+251911502152	ethiodream@ethionet.Et
Ethio flora plc				bnf2etf@ethionet.Et
Ethiopian cuttings		Geraniums		ethiopiacultting@ethionet.Et
Ethiopian magical farm		Roses		emf@ethionet.Et
Ethioplant plc	Felix Steeghs/ Kontos			
Experience inc. Plc	Telahum Makonnem			
Fiyori ethiopia pvt.Ltd. Co	James Mwicigi	Roses		yoshe@ethionet.Et
Florensis ethiopia plc	Ronald Vijverberg	Cuttings	+251 11 6525556	flrensis@ethionet.Et
Golden rose agrofarm ltd.	Shahab Khan / Sunil Chaudari	Roses	+251 11 5519049	gomba@ethionet.Et
Herburg roses plc	Mr. Adrianus Gerardus			herburgj@ethionet.Et
Holeta rose plc	Navale Bhausaheb K.	Roses	+251 11 4671791/2	holroses@ethionet.Et
Ilan tot plc				
J.J.Koari plc	Ashok Bhujbal	Roses		jkothari@telecom.Net.Et
Joe flowers plc		Roses		jflowers@ethionet.Et
Jordan river herbs plc				flower-herb@yahoo.Com
Joytech				mail@joytechplc.Com
Karuturi sai	Ramarkrishna Karuturi/Anil	Roses		aniltumu@yahoo.Com
Linssen roses	Wim Linssen			linssenrosesset@ethionet.Et
lafto roses plc	Gerard Van Der Deijl			aftoroses@ethionet.Et
Lucy ethiopia flowers plc				ger@lucyflowers.Com
Mam -flower farm	Mussema Aman/ Idris/ Absalom Orero	Roses		
Maranque plants plc				maranqueplants@hotmail.Com
Marginpar ethiopia pvt. Ltd. Co	Peter Pardoen/Mwangi	Eryngiums, hypericums		marginpar@ethionet.Et
Metro lux flowers	Roy/Daniel	Roses		dgad@ethionet.Et

FLOWER FARMS IN ETHIOPIA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
Meskel flowers	Francis Muriuki	Roses		(Sher group)
Minaye flowers plc.	Eyob Kebebe/MauriceOjow	Roses		minaye@ethionet.Et
Mullo farm plc				gglink@ethionet.Et oda.
Noa flora plc	Mr.David Klein			noaflora@gmail.Com
Oda flower plc	Lemlem Sisay/Jackton Ogola Arek	Roses		odaflowers@ethionet.Et
Omega farms plc				dgad@comcast.Net
oromia wonders	Mr.Siva			romiawonders@yahoo.Com
Rainbow colours plc	Ato. Mekonnen A.			hekole@yahoo.Com
Queens flowers	Wondi Assefa	Roses		
Red fox ethiopia plc	G.Symondson	Erygniums, poinsettia		info@ethiopia.Redfox.De
				g.Symondson@ethiopia.Redfox.De
Roman ayele				
Rose ethiopia plc	Ketema Alemayeh	Roses		roseethiopia@ethionet.Et
Roshanara roses plc.	Mr.K.Bhanu Prasad			roshanararoses@gmail.Com
Sathya sai farms (e)ltd, plc	N.L Shyam Sundar	-		saifarms2006@gmail.Com
Roshanaper rose plc				
Saron rose agrofram plc	Bruk Melese	Roses		saronfarm@ethionet.Et
sheba flowers plc	Clemence			office@shebaflowers.Com
siet agro plc	Ermias Tadesse			sietagro@ethionet.Et
soparasity (mekiya)	Ken Murwayi	Roses		
Spirit plc				spirit@ethionet.Et
Summit plc	Michael Asres /Paul Muteru	Roses		Mekiya@ethionet.Et
Supra flowers plc	Rakesh Kumar Gautam			supraflloritechplc@yahoo.Com
				rakeshkgautam@sify.Com. Et
Tabor herbs				taborherb@ethionet.Et
Tal flowers plc.				Tal@ethionet.Et
tepo agricultural plc				
Tinaw business s,c	Ato Tesfaye			bap@ethionet.Et
Uni-flower plc				uniflower@ethionet.Et
Johnsonflower farm.	Ato Yasin Igesse			yassinj@yahoo.Com
Zaguwe flora plc	Ato. Adiam Eyasu			adiam.Eyasu@gmail.Com
Zubka general business				
Flower farm plc	Zubeda Kedir			kajo@ethionet.
				teppo@ethionet.Et
Top flower plc	Tadesse Bekele	Roses		mekia@ethionet.Et
Valley farm plc				peval@ethionet.Et
yassin legesse johnson				yassinj@yahoo.Com
Flower farm				
Ziway roses plc				heukelom@ethionet.Et

FLOWER FARMS IN UGANDA

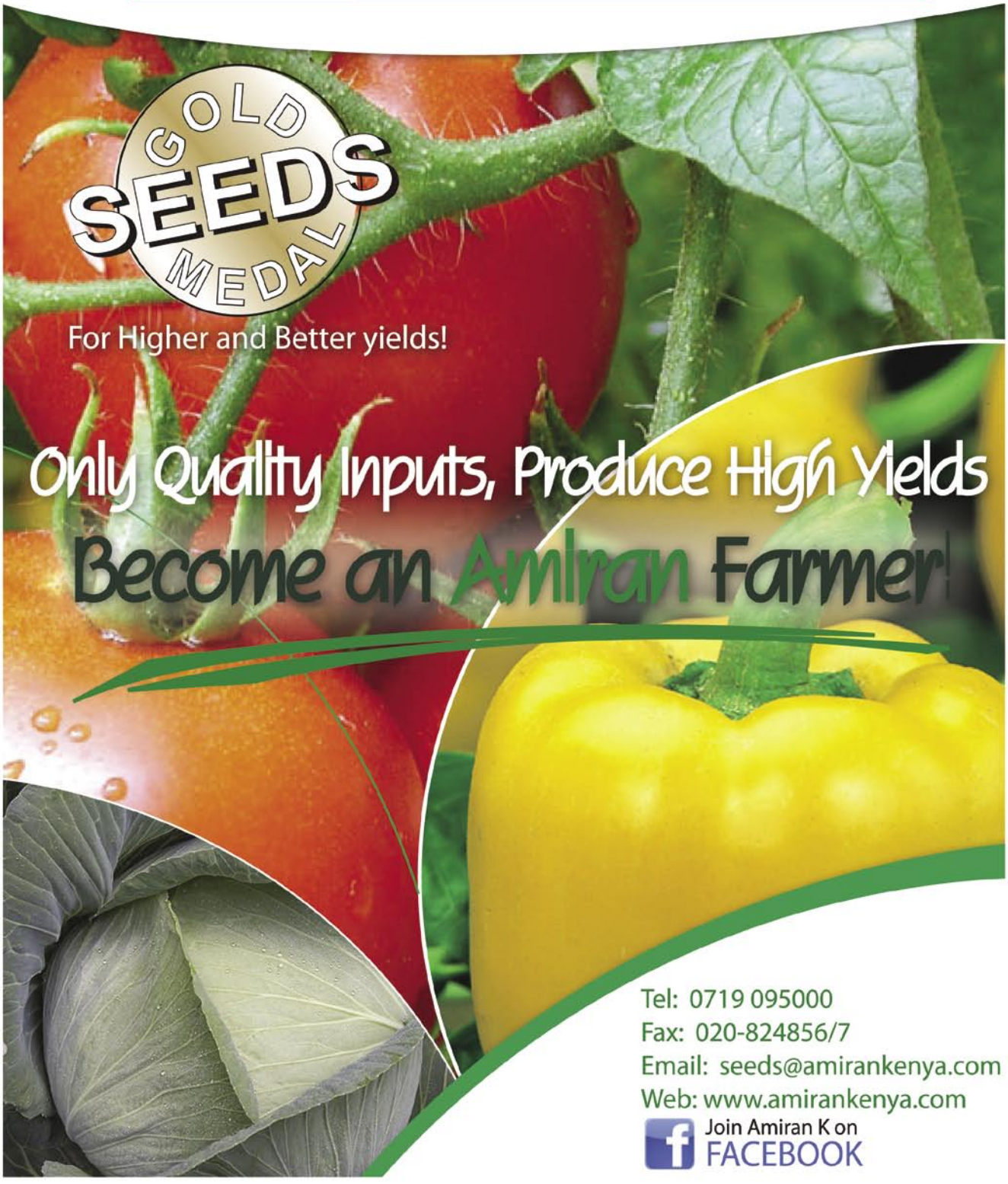
FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
Aurum Roses	James Mwicigi	Escimo,maxime	071 333999	kunal@aurumroses.com
Africa agro	Diamond Droliya	Escimo,Lambada,	071 202005	pressions@utlonline.co.ug
indurstries Xpressions		Frisco,First red		
Belflowers	Mark Graves	Dream, Lambada,	077 740101	info@beflowers.com
Fiduga	John Rutten	Chrysanthemums	077 722037	john@fuduga.co.ug
Jambo Roses	Daniel Kiryango	Escada, Frisco,Tineke,	075 748077	jambo@infocom.co.ug
Magic	Jan Krul	Poeme, Sunbeam, Sacha	077 744623	
Mairye Estate	Mahmood Hudda	Chelsea, Frisco, Escimo,	077 744620	mairye@mairye.co.ug
Oasis Nurseries	Vincent Senyonjo	Amore, Dream, Escimo,	071 286534	oasis_nursery@yahoo.com
Pearl Flowers	Raghbir Sandhu	Frisco,Rodeo, Black	077 725567	pearl@utlonline.co.ug
Roal Van Zanten (u) ltd.	Jacques Schrier		077 765555	ier@royalvanzanten.com
Rosebud 1 & 11	Sudhir Ruparelia	Frisco, Escimo, Rodeo,	077 777743	sudhir@rosebudlimited.com
Uganda Hortec		Iceberg, konfetti,	077 748217	harma@mehtagroup.com
Victoria Flowers (u) ltd		Sunbeam,Red calypso,	071 730066	victoriaflwr@one2netmail.co.ug
Wagagai	Pim De Witte,		071 727372	victoriaflwr@one2netmail.co.ug
Graham Stone			077200499	graham@freshhandling.com

FLOWER FARMS IN TANZANIA

FARM NAME	CONTACT PERSON	PRODUCT	TELEPHONE	E-MAIL
Arusha Cuttings		Chrysanthemums		
Dekker - Bruins		Chrysanthemums		
Enza Zaden	Jan	Tomatoes		manager@enzazaden.co.tz
Fides Tanzania	Bert kuyper	Geraniums	+255272553148	b.kuyper@fides.nl
Hortanzia	J. Giovinazzo		+ 215 784 200827	hortanziagm@cybernet.co.tz
Kiliflora	Nick Stu	Roses	+255755027103	simon@kiliflora.com
Kilimanjaro Flair Ltd	B. Mutiso		+255784512967	
Kilihortex Ltd	Erick Korster	Rasp berries, Hypericums	+255272553230	
Mount Meru Flowers	H. Niskala	Roses	+255272553385	hn@mount-meru-flowers.com
Q-Sem Ltd	S.De Bock	Vegetables	+255272553444	s.de.bock@q-sem.com
Serengeti fresh	Erick Zweig			
Tanzania Flowers	Nick Stubs		+255744508891	erik-zweigtfl.co.tz
Tengeru Flowers		Roses	+255272553834	teflo@africaonline.co.tz

Amiran Kenya Ltd

The Complete solution for the Best Harvest!



Tel: 0719 095000
Fax: 020-824856/7
Email: seeds@amirankenya.com
Web: www.amirankenya.com
Join Amiran K on FACEBOOK