



KEPHIS RELEASES SUPERIOR CROP VARIETIES FOR FOOD SECURITY AND NUTRITION



New varieties of amaranthus (terere) which have been released suitable for breakfast, porridge and ugali.

KEPHIS Headquarters, Nairobi -

KEPHIS has released 25 crop varieties which have been recommended by the National Productivity and Competitiveness Centre (NPCC) to promote food security and nutrition. At KEPHIS Headquarters at a meeting by the National Variety Release Committee, plant varieties of Irish potato, paddy rice, amaranthus (terere), oats, sunflower, sorghum, maize and French beans were released (made available for multiplication). These varieties will enable farmers get enhanced yields since they are drought and disease tolerant and are highly nutritious compared to the existing varieties.

The release comes at a time when Kenya has been experiencing drought due to climatic changes and pests like the Fall Army Worm which has led to a decrease in maize harvests. The Committee released MH402 and MH502 (Taji) maize varieties which are tolerant to GLS, rust, MSV and MLN. These maize varieties also have good milling quality, uniform cob placement and strong stalk (which leads to reduced lodging). MH402 is resistant to

TLB, has extra early maturity (80-85 days) to physiological maturity and the ears droop when mature. ADV2304W and ADV2308W are both tolerant to major leaf diseases like GLS, Turicum, blight and MSV as well as have good husk cover and standability. ADV2304W is highly adaptable to low nitrogen soils while ADV2308 is tolerant to drought. X28F421W owned by Pioneer Overseas Cooperation was also part of the released varieties which is drought tolerant, early maturing, has quality grains and good standability.

The Committee approved the release of organic paddy rice, moving away from conventional rice due to the good attributes revealed by the latter. Five (5) varieties from Afritec Seed Limited were released among them ATH741A which is aromatic and has good seed yields; ATH732I, which is tolerant to Imidazolonone herbicides and ATH744A which is also aromatic. FHR-K1 and TBD paddy rice varieties from Hybrid East Africa Limited have good to excellent seed yields. Two new varieties of amaranthus commonly known as terere were also released.

The varieties from KALRO Katumani whose release names are KAT Gold and Terere Smart, are both highly digestible, immune boosters and particularly good for malnourished children and those with low immunity, highly nutritious with high quality proteins and have early maturity. They are also dual purpose whereby they can be fed to livestock and their seeds can be used for breakfast in cooking porridge, cakes and ugali.

"Amaranthus survives cold climatic conditions and the seeds are good for porridge, ugali and baking cakes." said Fatuma Omari from KALRO Katumani. High yielding cream hybrids, resistant to green bug pests and drought tolerant sorghum varieties were also released. These varieties are ADV7031, ADV7450 and ADV7431 all from Advanta Seeds and are single cross hybrids as well as highly commercialized in the USA and other European countries. Moreover, one wheat variety with good milling and baking quality, red hard grains, stem rust resistance, average height of 90cm which makes it easy for harvesting and combining has been approved.

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The wheat variety is spring type with seven tillers per plant hence good tillering ability. Sunflower-NK NEOMA variety from Syngenta AG, Switzerland produced using the two line hybrid technology was released as it has proved to have high quality oil content due to the presence of conventional linoleic oil type and is tolerant to IMI herbicides. In addition, two French Bean Varieties namely Kenya Amboseli and Kenya Safari were approved by the NVRC. Additionally, one cunning bean variety with Kenya Red Kidney being the release name was also approved and showed to be resistant to angular leafspot, anthracnose, rust,

common bacterial blight, common root rots, very good water uptake after soaking, fast cooking (34.8 minutes), good yield potential, physical appearance and sensory traits. Present during the event were representatives from the Ministry of Agriculture and Irrigation and the Council of Governors, breeder organizations among them Kisima Farm, Suera, East Africa Seed, Advanta, Pioneer Overseas Co-operation, Kenya Seed Company, KARLO Katumani, Syngenta E.A, Afritec, Hybrid East Africa Limited and

the University of Nairobi.

Agriculture contributes greatly to Kenya's economy and contributes 24% of the GDP and 40% of total exports. It serves as a source of employment, supplies raw materials, raises living standards of the populace and earns the country much in foreign currency.

The release of the new plant varieties therefore, will contribute to national food security and nutrition, focus areas of the government as part of its Big 4 Agenda. **KN**

KEPHIS NAKURU SEED TESTING LABORATORY UNDERGOES ITS SIXTH INTERNATIONAL SEED TESTING ASSOCIATION (ISTA) RE-ACCREDITATION

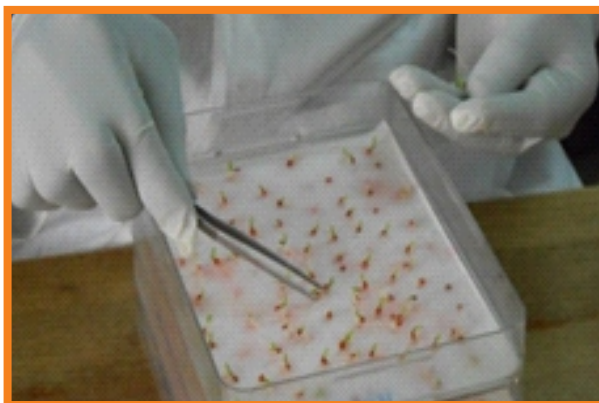
KEPHIS Nakuru Regional Office – The KEPHIS seed testing laboratory's history dates back to 1964 when the first International Seed Testing Association (ISTA) training course was held in Kenya organized by Dr. F. Schoorel, then secretary and later president of ISTA. The laboratory became an ISTA member in the same year and is Kenya's National Seed Testing Laboratory. Through the support of The Government of The Netherlands, Kenya established the seed testing laboratory at the National Agricultural Research Laboratories (NARL) Nairobi in 1965. The laboratory was later

transferred to the current site (KEPHIS Lanet, Nakuru) in 1979. The current site in Lanet was officially known as the National Seed Quality Control Service (NSQCS) until 1996 when KEPHIS began its operations absorbing the functions of NSQCS. The laboratory was first accredited in 2002 and has since been re-accredited (done after every three years) by ISTA; the last accreditation was on 27th March 2018. The KEPHIS seed testing laboratory remains the only government owned laboratory accredited by the International Seed Testing Association in East and Central Africa.

The laboratory's accreditation covers seed sampling, purity

and other seed determination, moisture, germination, viability, vigour, weight determination and seed health. The laboratory carries out these tests as part of the seed quality certification process. The seed testing laboratory has hosted three ISTA workshops in 2006, 2008 and 2010 on purity testing, germination, vigour and moisture testing and seed germination, sampling and statistics.

The laboratory also serves local and international students on short term attachments and exposing them to the current procedures of seed testing in accordance to ISTA standards. **KN**



Left: Seed evaluation and (right) germinating seeds in sand



Left: Seed sample reception and (right) purity analyses processes

KEPHIS GIVES BACK TO THE COMMUNITY THROUGH ITS CORPORATE SOCIAL SUSTAINABILITY ACTIVITIES

Karai Children's Home, Kikuyu, Kiambu County – Karai Children's Home in Kikuyu, Kiambu County, houses over 100 children from ages 5 to 18. The home depends on well-wishers for food, clothing and education. The home was the focus of the Corporate Social Sustainability initiative by KEPHIS in the 2017-2018 financial year. KEPHIS has been conducting follow up visits to the home to assess the progress of the facility after donating a greenhouse to grow tomatoes for the children. The tomatoes would be used in preparing the children's meal and the excess sold for income. The farm manager, Mr. Wangai Mungai reported that tomato production was good, based on the last harvest season that produced over 17 tomato buckets of 20kg each. The tomatoes were attacked by white flies but still production was not affected.

KEPHIS through the headquarters office will continue monitoring the progress of the home and explore introducing the children to food production at an early age. "Introducing farming skills at an early age will be helpful to the pupils especially with the current state of high unemployment rate in the country. Those who may not be able to get jobs in future can practice agribusiness to earn a living," stated the home manager, Ms. Mary Wanjiku. **KN**



Karai children's home farm manager Mr. Wangai Mungai (2nd left) and the home manager Ms. Mary Wanjiku (2nd right) with part of the KEPHIS Corporate Social Sustainability initiatives committee inside the KEPHIS donated green house. The tomato seeds planted led to a harvest of seventeen buckets of 20 kilogramme tomatoes.

Right: The greenhouse donated by KEPHIS

KEPHIS DONATES SHOES TO MOI GIRLS NAIROBI AFTER FIRE TRAGEDY

Moi Girls School, Nairobi – Moi Girls School, Nairobi is a premier school in Nairobi where hundreds of students have passed through for their secondary education. The school has produced women who now work in government, the private sector, academia, among other sectors. Last year, however, a fierce fire broke out leading to the deaths of some students and injuries to others.

The process of re-building the school started and the girls are slowly re-building their lives. KEPHIS donated 56 pairs of shoes to needy students who lost their valuables as a result of the fire. Present at the event were KEPHIS MD, Dr. Esther Kimani, the school deputy principals, teachers and students.

Dr. Kimani urged the students to work hard, not to look back at past events but focus on the future since every problem has a solution.

She also encouraged them to embrace agriculture since it is a source of self-employment and a well-paying job if practiced effectively and efficiently through agribusiness.

“KEPHIS can assist you in line with our mandate such as soil testing through our laboratories and advice on the type of certified seeds to plant and management of pests and diseases,” the MD said.

Corporate Social Sustainability (CSS) is one of the six core values of KEPHIS where the Institution practices sustainability initiatives to members of the society in line with its mandate. **KN**

THE DEPARTMENT OF AGRICULTURE RESEARCH LESOTHO LEARNS ABOUT PESTICIDE RESIDUE ANALYSIS AND AFLATOXINS FUNGAL DIAGNOSIS

KEPHIS Headquarters, Nairobi

The Department of Agricultural Research - Lesotho has been trained on the use of High Performance Liquid Chromatography (HPLC) and Gas Chromatograph Mass Spectrometer (GCMS) techniques for pesticide residue analysis and aflatoxins fungal diagnosis in vegetables and cereals by the Analytical Chemistry Laboratory (ACL) staff at KEPHIS Headquarters. The training was to build the technical capacity of the southern African country on the use of LCMSMS and GCMSMS techniques.

In a 3-week certified training conducted through the Centre of Phytosanitary Excellence (COPE), six representatives were taken through major scientific techniques to ensure food safety controls, testing and quality control processes that ensure credibility and reliability of results as well as enhancing safe trade with their partners.

The team was introduced to ISO 17025:2005, the accreditation scope of the Analytical Chemistry laboratory and quality assurance manual where they learnt how the laboratory has implemented the requirements of the standards through the established quality control assurance manual which explains the importance of having accreditation to

standard; this provides confidence, reliability and validity of results to the clients.

The training addressed various laboratory procedures necessary for analyses where demonstrations were conducted on sample reception procedures, sample coding to ensure confidentiality and samples allocation to analysts through worksheets. More demonstrations on sample registration, processing, retention and storage were conducted to ensure that samples are homogenous to allow a representative sample to be taken for analysis and retention, an aspect that increases surface area making it easy to extract pesticides.

On standard preparation during analyses, it was noted that it is essential to have well prepared standards or reference materials through which samples are analyzed against. Standard preparation procedures, preparation of reference standards (primary, stock and working), labeling and storage of reference standards were also covered. Additionally, the team was trained on the Quechers Method used in sample extraction where the Standard Operating Procedures (SOP) for the determination of multi-residues in low fat fruits and vegetables is done.

Continued on the next Page.

Preparation of extraction salts, sample weighing, extraction, clean up, spiking for recoveries and use of internal standards, solvent exchanging and sample packaging -standards, solvent

SOP for determination of multi-residues in low fat fruits and vegetables, preparation of extraction salts, sample weighing extraction, clean up, spiking for

determination. The Basotho expressed their gratitude to KEPHIS for the training, requested KEPHIS to share the same information in their country. The Head of ACL Mr. Onesmus



The Lesotho Department of Agriculture Research during the training on pesticide residue processes at the Analytical Chemistry laboratory (left) and (right) at the final meeting

exchanging and sample packaging for instrumental determination were also part of the practical training.

“Once the samples have been processed, the next step is to perform extraction of pesticide residues in the samples. This step involves the addition of extraction buffer salts and organic solvents - usually acetonitrile - then shake the mixture to move the residues from samples to the organic solvents for determination by LCMSMS and GCMSMS. The

recoveries, use of internal standards, solvent exchanging and sample packing for instrumental determination,” explained Juliet Mulei, a KEPHIS ACL analyst.

An intensive elaboration on aflatoxin analysis, instrumentation and reporting of results was also been carried out using SOP in determining aflatoxins in cereals, preparation of extraction solvent, sample weighing, sample extraction, cleanup, spiking for recoveries, use of internal standards and sample packaging for instrumental

Mwaniki finalized the training by re-stating that strengthening food control systems is important to ascertain what people eat is safe.

“Due to the increasing populations in Africa, food security has been under threat. Therefore, there is need for Africa to come together to learn from each other for us to attain a food secure continent. This training has also enhanced the relationship between Kenya and Lesotho and I hope that we will continue working together to achieve food security.” **KN**

ZAMBIA AGRICULTURE RESEARCH INSTITUTE LEARNS ABOUT THE ELECTRONIC CERTIFICATION SYSTEM AND THE IMPORT CERTIFICATION SYSTEM

KEPHIS Headquarters, Nairobi - The Zambia Agriculture Research Institute (ZARI) visited KEPHIS Headquarters to familiarize themselves with the Electronic Certification System (ECS), which is used to facilitate the export of plants and plant

materials. Users log into the System using their mobile devices for their phytosanitary certificates, the 'plant passport' used in the plant export process and that is issued by KEPHIS. The southern Africans were also familiarized on the Import

Certification System which is used to facilitate the import of plants. Plant import and export regulations were among the key issues discussed during the benchmarking visit by the Zambia team which also focused on the permitted imports

those under quarantine and prohibited articles. To meet required regulations, countries are to register on the ECS/ICS system which will help in inspection requisition and certificate issuance.

“E-certification has changed the way we do business. The application is easy for traders and has increased accessibility; initially our users were 500 but we can now serve 2000 users. Before, we only worked with The Government of the Kingdom of the Netherlands using the system but through enhancing the ECS system we are now working with other countries like Chile, Argentina, China, Japan, South Korea, the United States of America, among others,” said Dr. Isaac Macharia, General Manager for Phytosanitary Services. **KN**

“Client documentation as well as KEPHIS generation and issuance of phytosanitary certificates has been made easier through ECS. This has extended to international levels and it has made the exchange of phytosanitary certificates easier,” added Dr. Macharia.

Despite challenges like outages due to clients logging in at the same time, fraud and forgery rates have reduced since inception of the System. Mr. Edgar Mwale, the Director of ZARI said the benchmarking visit

would enhance collaboration between KEPHIS and ZARI as well as boost capacity building and market accessibility. He urged KEPHIS to partner with them by sending IT experts to Zambia for further learning on the ECS design, modules and specifications.

The team later toured the Analytical Chemistry Laboratory where they saw how analyses for market access is done for produce destined for the key European Union market.



The Zambia Agriculture Research Institute during a tour to the KEPHIS Analytical Chemistry Laboratory

INSPECTORS, YOUTH AND NURSERY OPERATORS TRAINED ON NURSERY MANAGEMENT AND CERTIFICATION FOR NUTRITION

“Nurseries have been viewed as a source of direct income, employment as well as possessing aesthetic and health values therefore, youth have been advised to venture into nursery business since it pays and there is demand for its accessibility”

THIKA – KEPHIS, conducted a 3-day training on nursery management held at KALRO Thika station. In a forum attended by plant inspectors, youth and nursery operators from Meru, Machakos and Uasin Gishu counties, nursery establishment, management and grafting were among the key areas that were discussed.

Key agricultural institutions such as the Kenya Agricultural and Livestock Research Organisation (KALRO), Horticultural Crops Directorate (HCD), World Agroforestry Centre (ICRAF) and Jomo Kenyatta University of Agriculture and Technology (JKUAT) also attended the training.

Speaking while officially opening the forum, KARLO Centre Director

Dr. Jesca Mbaka stated that establishing nurseries is important as it is the basis of production in the country and emphasised on the need for nursery operators to be keen on health issues to prevent spread of pests and diseases as well as obtaining certification.

The training commenced with a theoretical session which was followed by a practical field session where participants toured the KALRO tree nurseries where demonstrations were carried out on grafting of avocado, mango and macadamia fruit trees.

Trainees have been taken through establishment and management of seedling nurseries where they have learnt about seed bed preparation requirements such as soil/media suitability putting into consideration the soil drainage, structure, depth and organic matter content and selecting spacing or plant density to enhance germination of good and healthy plants..On management of the seed bed, trainees were urged to protect seedlings against drying, hot and cold temperatures by ensuring that there is proper shading/mulching, sufficient water supply through sprinkling the seedbed to curb risks of

wilting as well as weeding. They were encouraged to practice proper seedling handling and transplanting in relation to the size of the seedling, fragility, nutrient content and overcrowding, failure to which damage will occur on soft stem tissues.

The trainees were also trained on embracing various methods of plant propagation such as asexual or vegetative propagation which include division and separation, stooling, cuttings and layering; the micro-propagation for example tissue culture and macro propagation which involves the use of whole suckers and use of large pieces of parent plants.

At the orchards, they were able to identify different fruit

varieties and pick scions for grafting. They were also able to differentiate between grafting techniques such as wedge grafting, splice or whip grafting, side wedge, top-working or bark grafting, approach grafting, bridge and T-budding. Nurseries have been viewed as a source of direct income, employment as well possessing aesthetic and health values therefore, youth have been advised to venture into nursery business since it pays and there is demand for its accessibility. "I urge all youth to embrace nurseries as a business since I have practised it and I have never regretted since it pays well and there is huge demand for its accessibility," said Mr. Peter Gicheru, a retired KARLO employee.**KN**



Attendees of the nursery management training(left) during a tour to the KALRO nurseries learning on how to graft mangoes,avocadoes and macadamia using different grafting methods

FOCUS ON AGRICULTURAL SHOWS

KEPHIS Wins at Agricultural Shows

Embu ASK Show



Crops Development PS Dr. Richard Lesiyampe(left) and Embu Governor H. E. Martin Wambora(2nd left) present the trophy for 1st position of The Best Local Stand in Strategies of International Trade and Exports to KEPHIS GM Finance and Administration Mr. James Ang'awa at the Embu ASK Show



KEPHIS Embu Team with their trophies at the conclusion of the Embu show

Eldoret Agricultural show



From left: KEPHIS Board member Mr. William Ng'elechei, MD Dr. Esther Kimani, Board member Ms. Teresia Muchira and GM Quality Assurance Mr. Simeon Kibet with trophies won during the 2018 Eldoret National Show



KEPHIS staff proudly holding aloft a trophy won during the just concluded 2018 Eldoret National Show

PRESIDENT UHURU KENYATTA AND PRESIDENT YOWERI MUSEVENI COMMISSION THE BUSIA ONE STOP BORDER POST

Busia - KEPHIS Busia Plant Inspection Unit (PIU) office is located at the Busia One Stop Border Post (OSBP) and started operations in September 2003. The main activities are inspection and certification of imported and exported plants, plant produce and regulated articles.

The major agricultural produce inspected are cereals, pulses, timber, fruits and plant by-products such as wheat bran and maize germ.

The OSBP at Busia was commissioned on 24th February 2018 by the Head of States of Kenya H.E. Uhuru Kenyatta and H.E. Yoweri Museveni of Uganda. KEPHIS has an office inside the Busia OSBP from where it carries out

its mandate in a bid to facilitate trade between the East African countries in the spirit of the East African Community integration. Through the OSBP arrangement, KEPHIS Busia will facilitate trade through increased efficiency since its officers will be stationed in offices located in entry/exit points of Kenya and Uganda sharing the border. In this arrangement, the plant consignments only stop in a single facility in which they will undergo the necessary inspections and controls following applicable regional and national laws to exit one state and enter the adjoining state. **KN**



President Uhuru Kenyatta and President Yoweri Museveni after commissioning the Busia One Stop Border Post.



Transport, Infrastructure, Housing and Urban Development Cabinet Secretary James Macharia(front), Trade PS Dr. Chris Kiptoo(2nd right), KEPHIS Board Chair Wycliffe Murwayi and KEPHIS MD Dr. Esther Kimani before the official commissioning of the Busia One Stop Border Post. KEPHIS is in the Busia OSBP where it facilitates the inspections and clearance of plants and plant materials between Kenya and Uganda

"Through the OSBP arrangement, KEPHIS Busia will facilitate trade through increased efficiency since its officers will be stationed in offices located in entry/exit points of Kenya and Uganda sharing the border"

KEPHIS WORKING IN COUNTIES TO PROMOTE FOOD SECURITY AND NUTRITION

KEPHIS Partners with Nyeri County to Promote Avocado Production

Nyeri - KEPHIS, the County Government of Nyeri and other stakeholders in the agriculture sector held a farmers training and field day in March at Karatina Stadium. The aim was to create awareness of the benefits of growing avocado, and particularly the hass variety. Farmers were also trained how to manage pests and diseases of avocado, market access including which countries Kenya is currently exporting avocado to, nursery certification by KEPHIS, among other good agricultural practices.

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KEPHIS Partners with Nyeri County to Promote Avocado Production

Nyeri

Nyeri Governor H. E. Mutahi Kahiga urged farmers to embrace new technologies and to diversity for food security. "My government will work with farmers to ensure that you get seedlings to start you off in this project," he said.

KEPHIS MD Dr Esther Kimani reiterated that KEPHIS would continue to work with counties to enhance agricultural production for food security. She also enumerated the KEPHIS mandate, i.e. seed certification, plant variety protection, phytosanitary or plant health services and analyses of agro-inputs through KEPHIS accredited laboratories. **KN**



KEPHIS Inspector Lucy Ngatia (front, in blue jacket) teaching farmers in Karatina, Nyeri County on avocado nurseries certification. KEPHIS trained over 400 farmers from the county and beyond on the importance of planting seedlings certified by KEPHIS, how to manage fruit tree nurseries, safe use of pesticides, market requirements and opportunities for export and challenges in avocado production



Demonstrating how to use protective gear during the farmers training and field day in Nyeri County and right, hass avocado seedlings

Potato Field Day Creates Demand for Varieties for Chips and Crisps

Moiben, Uasin Gishu County-

Over 700 farmers attended the Moiben Potato Field Day where over 10 varieties of potatoes were displayed and shown to be a crop that can promote food availability in the country. The event, attended by Uasin Gishu Governor Jackson Mandago, Deputy Governor Daniel Chemno and the Cabinet Administration

Secretary for Agriculture and Irrigation Dr. Andrew Tuimur, saw farmers shown how potato has the capacity to promote food security in the country, provide employment to young people and be used by the business community in the production of starch and commercial foods.

The various dignitaries in attendance also urged farmers to diversity and minimize over reliance of maize that is facing serious challenges of pests such as the Fall Armyworm and diseases such as the Maize

Lethal Necrosis Disease. CEC Uasin Gishu County Mr. Yego urged farmers to diversify because of the current problems facing maize production. "Let us also not ask our neighbours for seeds, or recycle seed from the last season, but let us plant certified seed and test our soils for enhanced crop yields," he said.

Governor Mandago urged KEPHIS to continue watching out for unscrupulous seed dealers whose aim is to defraud farmers of the basic input of agricultural production.

"My government will continue working with KEPHIS to ensure that farmers get only the best seed for planting," he reiterated. CAS Andrew Tuimur reminded the farmers that the government is focused on ensuring that there is available food for all Kenyans; this however could only be achieved if farmers diversified to other crops, such as potatoes.

"As you all know, food security and nutrition is one of the

government's Big 4 Agenda; however, we have to diversity to other crops if we are to achieve this goal by farmers growing other crops and using certified seed as a first step in food production," he said.

KEPHIS MD Dr Esther Kimani urged farmers to look out for the seed sticker label as it is a mark that shows the farmer that the seed they purchase from agrovet shops has been certified by KEPHIS.

About 10 potato varieties, developed by various breeders, were showcased; these included Unica, Shangi, Voyager, Tigoni, Karibu, Rumba, Jelly, Arcoustic and Destiny. The day before, 81 farmers from Moiben and surrounding areas had been taught the importance of potatoes, using certified potato seed as a first step in getting quality yields, sampling and labelling and potato disease management. **KN**



Eighty one farmers were taught on the importance of potato as a food security crop, potato seed certification as a first step in potato production, diseases of potato and their management and lot sampling. The training preceded the field day at Jagir Farm



Uasin Gishu Governor Jackson Mandago (holding potatoes) during the Moiben Potato Farmers Field Day. About 10 potato varieties were showcased during the event that was attended by over 700 farmers from Moiben and surrounding areas

The KEPHIS-Plant Quarantine and Biosecurity Station (PQBS) has supplied over 60,000 orange-fleshed sweetpotato vines to support the project in Bomet and Elgeyo Marakwet Counties.

Nairobi - World Vision through the ENRICH Project is promoting the production, utilization and consumption of nutrient dense food crops such as the Orange Fleshed Sweetpotato and iron rich beans.

The KEPHIS-Plant Quarantine and Biosecurity Station (PQBS) has supplied over 60,000 orange-fleshed sweetpotato vines to support the project in Bomet and Elgeyo Marakwet Counties. World Vision is working with KEPHIS on Orange fleshed Sweetpotato clean materials and other services such as phytosanitary inspections, seed certification, plant variety protection, diagnostics and analytical services as well as awareness on pest management strategies to promote food security.

KEPHIS PQBS is producing clean sweetpotato farmer preferred varieties. These materials are produced through tissue culture techniques and virus indexing. The tissue culture plantlets are then multiplied in the facility's screen house to produce cuttings for sale. Currently, two sweetpotato orange fleshed varieties - vitaa and kabode - are in production. These varieties are early maturing, rich in β -carotene content and high yielding.

For sustainable production of sweetpotato planting material, the proceeds from these sales are channeled back to meet recurrent production. **KN**



KEPHIS AND TRADE MARK EAST AFRICA TO AUTOMATE THE SEED CERTIFICATION AND PLANT VARIETY PROTECTION PROCESSES

Nairobi - Trademark East Africa and KEPHIS have entered into an agreement to automate the seed certification process, and to also to link the import and export systems to a common User Identity Access Management (UIAM) platform for effective service to customers.

While the KEPHIS seed certification process is very well defined both in practice and the law, the activities have largely been manually coordinated which brings a number of challenges including inefficiency of service delivery, duplication of records, and inefficient traceability and monitoring of certified seed.

Also, currently the plant variety protection process,

the seed

inspection activities in the various regions and the seed export and import processes are not centrally managed or coordinated.

This presents a number of challenges as follows:

- Inability to track seed lots of certified seeds from production to the market
- Difficulty in producing accurate and adequate statistics and other market data on certified seeds in the country
- Duplication of data and effort in the seed certification programs
- Lack of country wide visibility in the seed certification process as the activities are localized to the regions

- Inability of farmers and other stakeholders to verify data.

KEPHIS has managed to automate its import and export services for plant materials including seeds and integrated the systems to the Kenya Electronic Single Window System (KENSWS), but the import and export systems are separate and independent from each other. This means that a trader with both import and export regimes would be required to login and operate two systems when dealing with KEPHIS. This is not very efficient for the traders and there is a need to link these disparate systems into a single platform with a single login. **KN**



KEPHIS MD Dr. Esther Kimani and Head of Seed Certification and Plant Variety Protection Mr. Simon Maina speaking on Hope Fm's Morning Show about the importance of urban farmers or telephone farmers using right agro inputs for planting. KEPHIS has been sensitizing farmers on the importance of using certified seeds and the agro-inputs for food security and nutrition during the current planting season

KEPHIS CONTACTS:

In order to enhance communication with our stakeholders, customers and the public, we are happy to inform you of our phone numbers which will make it easier for you to reach and engage with us.

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KEPHIS News is published three times a year by Kenya Plant Health Inspectorate Service.

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