



African Genetic
Biocontrol
Consortium

GenBio News

AFRICAN GENETIC BIOCONTROL NEWS

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World Malaria Day is an opportunity for the global community to collectively raise our voice in unison to keep malaria high on the global health agenda.

WORLD MALARIA DAY:

WORLD MALARIA DAY 2022

On April 25, 2022, the world marked the Word Malaria Day under the theme “Harness innovation to reduce the malaria disease burden and save lives.” To date, there is no single tool available to solve the malaria problem.

The World Health Organization (WHO) is calling for investments and innovation that bring new vector control approaches, diagnostics, antimalarial medicines and other tools that will provide enhanced intervention in the fight against malaria. In the last two decades, there have been advances in lowering the malaria burden but progress has stalled, thus there is need for concerted action.

Some of the key messages in the fight against malaria put forth by the WHO include:

- ❖ Step up innovation – No single tool that is available today will solve the problem of malaria. Add your voice to those calling for investments that bring new vector control approaches, diagnostics, antimalarial medicines and other tools to speed the pace of progress against malaria.
- ❖ Expand access to the tools we have now – There is an urgent need to make more effective use of currently available tools for the prevention, diagnosis and treatment of malaria, particularly in countries hardest hit by malaria.
- ❖ Expand the use of RTS,S – the first malaria vaccine – WHO recommends expanded use of the vaccine among children living in areas with moderate and high malaria transmission. If implemented broadly, the vaccine could save tens of thousands of lives each year.
- ❖ Strengthen country ownership – Government stewardship of malaria responses is essential, together with the engagement and participation of affected communities.
- ❖ Ensure resilient and equitable health systems – Progress against malaria depends on strong health systems that are adequately funded and equipped to deliver quality health care to all.
- ❖ Tailor responses to the local setting – WHO’s updated malaria strategy emphasizes the need for carefully tailored prevention, diagnostic and treatment approaches, informed by local data and disease patterns.
- ❖ Improve surveillance systems – Strong surveillance is the cornerstone of malaria program planning; it helps countries identify gaps in coverage of control tools and take action based on the data received.

The fight against malaria requires deployment of new generation of malaria tools in order to achieve the 2030 global malaria targets. The approval of world’s first malaria vaccine, known as RTS,S provided a valuable tool in the fight against malaria especially in children, whereby the vaccine has reached African children in Ghana, Kenya, and Malawi. The vaccine reduces child illness and death from malaria and, if widely deployed, could save tens of thousands of lives every year. Other complementary tool in vector control but still under evaluation include new types of insecticide-treated nets, spatial mosquito repellants, gene-drive approaches and sugar baits that provide an integrated approach in the fight against malaria.

World Malaria Day is an opportunity for the global community to collectively raise our voice in unison to keep malaria high on the global health agenda. By raising our voices together, we can make the strongest case for how increasing investments in malaria will rapidly drive down malaria cases and deaths in high burden countries, while continuing to sprint towards elimination in low burden countries.

GENE EDITING WORKSHOP:

AFRICAN GENETIC BIOCONTROL CONSORTIUM REPRESENTED IN COMMUNICATING GENE EDITING WORKSHOP



The African Genetic Biocontrol Consortium Secretariat represented by Willy Kibet (Scientific and Technical Coordinator) took part in “Communicating Gene Editing Workshop” in Naivasha, Kenya. The workshop was held by the Alliance for Science (AfS), in partnership with the International Institute for Tropical Agriculture (IITA) and the Open Forum for Agriculture Biotechnology (OFAB). The purpose of the workshop was to empower participants with knowledge about the science of gene editing and its regulation, as well as effective communications tools. Objectives of the workshop included providing participants with a better understanding and appreciation of gene editing technology, building capacity on communicating science with lay audiences, addressing issues such as public and stakeholder engagement, media relations, scientific language complexity, and accountability in communication, and understanding regulatory opportunities and challenges surrounding the science and show how the public can contribute to the policy-making process.

Participants in the workshop included scientists conducting research using gene editing. Notable scientists who gave presentations were Dr. Leena Tripathi of International Institute of Tropical Agriculture (IITA) who gave a talk on ‘Principles of gene editing’ and Dr. Andrew Kiggundu who gave a talk on ‘The potential for gene editing in medicine and private sector.’ On policy and regulations, Josephat Muchiri of the National Biosafety Authority, Kenya gave a presentation on ‘Kenya gene editing policy update.’ A youthful participant pool was evident spanning from students (MSc and PhD), science writers, and journalists.

Overall, the workshop provided valuable insights in communicating science and research findings to the public. In addition, training was given on communication of science through the media through platforms such as social media, print, and videos. The outcome of this training bridged the gap between science and the public. Further, it is expected there will be formation of a Kenya gene editing sub-coalition, which will become part of the wider Africa gene editing coalition.

COUNCIL INAUGURATION:

AFBSA NEW COUNCIL INAUGURATION



On 7th April, 2022, the African Biological Safety Association (AfBSA) inaugurated a new board as well as president. Anastasia Trataris-Rebisz was appointed president, who takes over from Fayiz Mahamat.



Anastasia Natasha Trataris-Rebisz, President, AfBSA

Anastasia Trataris-Rebisz is a biorisk management specialist at the National Institute for Communicable Diseases (NICD), in Johannesburg, South Africa. She holds a Master of Science in Medicine degree from the University of the Witwatersrand and is currently in the process of completing a PhD at the University of Pretoria. She has 14 years’ experience working at the NICD, 11 and a half of which were spent working as a medical scientist in a high containment (BSL-3) laboratory (BSL3) working with select agents such as *Bacillus anthracis*, *Brucella* spp. and *Yersinia pestis*. She is responsible for the drafting of various biosafety and biosecurity policies, as well as implementing and overseeing institutional legislative compliance. She serves on the Institutional Biosafety and Biosecurity Committee (IBBC) and is chairperson of the NICD

“..an experienced and enthusiastic trainer for IATA shipping of dangerous goods and Advanced Biorisk Management.

Health and Safety Committee (HSC). She holds two IFBA certifications in Biorisk management and Biosecurity, is an alum of the Global Mentorship Program where she now serves as a Mentor for the program.

She is an experienced and enthusiastic trainer for IATA shipping of dangerous goods and Advanced Biorisk Management. She serves in other roles related to biorisk management, which include, but are not limited to the following: member of the national WHO JEE, National Action Plan for the Implementation of the International Health Regulations (IHR), Biosafety and Biosecurity Technical Working Group; Secretary of the South African Biorisk Association (SABA); member of the Biological Weapons Working Committee (BWWC) of the South African Council for The Non-Proliferation of Weapons of Mass Destruction (NPC); BSL3 Facility inspector under the National Department of Health in enforcing Regulation 178. She is often called upon by the National Department of Health as a subject matter expert of Biosafety and Biosecurity and has presented on efforts of the Southern African Regional Collaborating Center (Africa CDC) at the 2019 MX3 Meeting of Experts on Strengthening National Implementation of the Biological Weapons Convention at the Palais des Nations, Geneva, Switzerland.

GEN BIO WEBINAR:

AFRICAN GENETIC BIOCONTROL CONSORTIUM WEBINAR: REGULATION OF GENETICALLY MODIFIED ORGANISMS.

On 28th April, 22, the African Genetic Biocontrol Consortium successfully hosted a webinar titled "Regulation of Genetically Modified Organisms." The panelists during this webinar included:

- Mr. Sunday Akile - Senior Programme Officer-Legal/Policy on Biosafety Issues, AUDA-NEPAD.
- Dr. Roy Mugiira - Acting Chief Executive Officer of the National Biosafety Authority (NBA), Kenya.

The objectives of this webinar were:

- To provide an overview of the status of biosafety frameworks in Africa as well as guidance and best practices.
- To discuss country experiences on biosafety frameworks for genetic biocontrol technologies specifically genome editing Regulations of Kenya.

The opening remarks were given by Dr. Lilian Chimphepo, the Principal Environmental Officer, Environmental Affairs Department of Malawi who welcomed the attendees to the webinar by the African Genetic Biocontrol Consortium. She then welcomed the speakers and gave an overview of the program. She finalized by giving the housekeeping rules and then proceeded to introduce the first speaker.

The first speaker was Akile Sunday Igu Rocks who gave a presentation on "Status of Biosafety Frameworks in Africa: Guidance and Best Practices." He started off by stating that regulation has always been central to the general debate about genetically modified organisms (GMOs)

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The building blocks of biosafety regulatory framework include policies, international law, legislation, regulation, provisional laws, and standard operating procedures.

and it is especially important because of the potential implications of GMOs for the environment and human health. Motivations of GMO regulation include regulation has been part of the negotiations at the CBD and its protocols (Cartagena and Nagoya), it enables countries to protect consumer health and the environment, and the impact regulation has on research and trade of GM products.

The building blocks of biosafety regulatory framework include policies, international law, legislation, regulation, provisional laws, and standard operating procedures. He noted that there is a global order that influences biosafety regulation in Africa. They include United Nations Environment Program (UNEP), World Health Organization (WHO), Food Agriculture Organization (FAO), World Trade Organization (WTO), International Animal Health Organization (OIE), and the African Union (AU). Drivers for biosafety regulation in Africa as per the Agenda 2063 is envisaged based on inclusive growth and sustainable development, specifically Africa's agriculture will be modern and productive, using science, technology, and innovation.

Webinar 1



April 28, 2022
04:00 PM Nairobi

REGULATION OF GENETICALLY MODIFIED ORGANISMS



Dr Jeremy T. Ouedraogo

Status of Biosafety Framework in Africa: Guidance and best Practices



Dr Roy Mugiira - NBA, Kenya

Country experience on biosafety frameworks for genetic biocontrol technologies: Genome Editing Regulations, Kenya



Lilian Chimphepo

Principal Environmental Officer, Environmental Affairs Department, Malawi.

Theme:

Expanding regional research capacity and preparing for informed decision-making and effective governance of Genetic Biocontrol Technologies in Africa



Registration: [Click here](#)

AGRICULTURAL BIOTECHNOLOGY:

STATUS OF AFRICAN COUNTRIES THAT HAVE ADOPTED AGRICULTURAL BIOTECHNOLOGY

Sunday Akile wrapped up his presentation by giving a summary of guidance and best practices. These include: Preferred policies should be science-based, avoid text or language in the law that could create regulatory hurdles, outreach is essential in to create an enabling ground for legislative development, application of liability regime provided under the Nagoya, Kuala Lumpur supplementary protocol, application of traditional liability regimes provided under national civil liability frameworks, and having stewardship plans in place.

The second presentation was given by Dr. Roy Mugira titled "Regulation of Genome Editing in Kenya." Dr. Mugira started off by giving an objective of the guidelines by stating that the guidelines are designed to provide a technical guidance to applicants on the criteria for determining which genome editing organism or their derived end products are regulated under the Biosafety Act, 2009. Some of the key features of Kenya's Genome Editing Guidelines include early consultation state where applicants fill out a form, expeditious timelines for decision making, clear flow of steps, and categorization of genome editing outcomes expected to be regulated under the Biosafety Act, 2009.

Examples of genome editing applications at research level that have been approved using the Biosafety Act 2009 include:

- African Swine Fever Vaccine.
- Goat for Trypanosome resistance.
- Sorghum for Striga resistance.
- Sorghum (anthracnose resistance).
- Yam (Vitamin A and disease resistance).

- Cassava for nutritional enhancement.
- Cassava for early flowering.
- Banana for fungal and bacterial resistance.
- Potato for potato virus Y resistance.

The scope of the guidelines applies to genome edited plants, genome edited animals, and genome edited microorganisms. Exemptions of these regulations are genome-edited pharmaceuticals for human-use given that they are regulated by Pharmacy and Poisons Board. Dr. Mugira wrapped up his presentation by indicating that the genome editing guidelines may be reviewed based on new scientific information. Further, the NBA reserves the right to alter its decision if new scientific information previously unknown becomes available.

An engaging and organic question and answer session then followed. The link to the webinar recording can be accessed below under the title "Regulation of Genetically Modified Organisms."

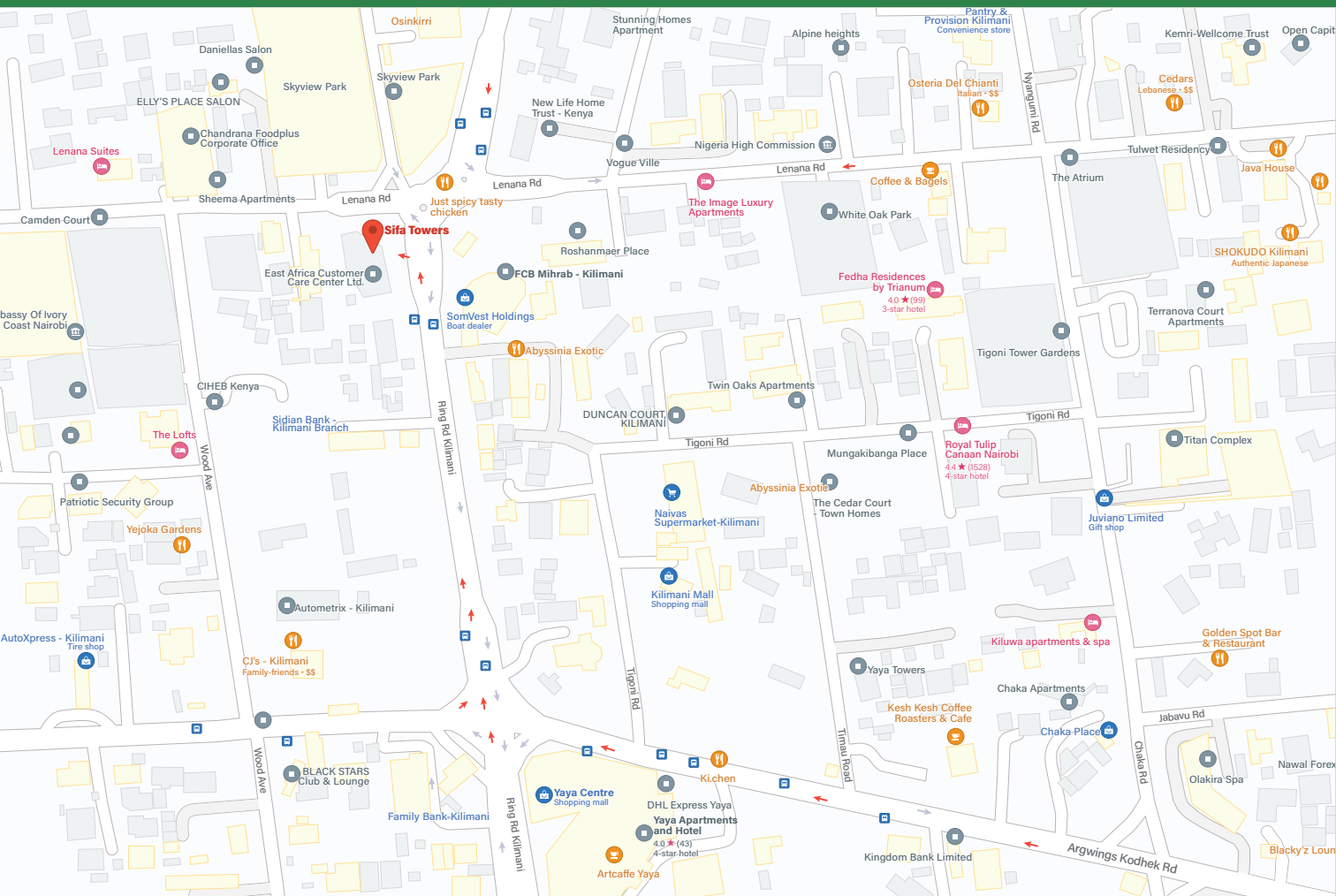
Link: <https://www.genbioconsortium.africa/events/>

...the NBA reserves the right to alter its decision if new scientific information previously unknown becomes available.

- ★ Countries that approved commercial release
- Countries with a biosafety framework
- Countries without any biosafety framework



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