

1-15 May 2024

icipe founder is feted with a lifetime achievement award for his distinguished contributions to science, technology and innovation.

The Kenya's National Commission for Science, Technology and Innovation (NACOSTI) recognizes the exceptional efforts by Prof. Thomas Odhiambo and other Kenyan scientists, which have significantly promoted science-led development and environmental conservation, despite the remote implementation of these ideas, fostering sustainable socio-economic prosperity in Africa.

- <https://news.scienceafrica.co.ke/kenyas-pioneering-scientists-honoured-with-lifetime-achievement-awards/>

icipe @ the Africa Fertilizer and Soil Health Summit (AFSH) 2024

icipe prominently participated in the AFSH summit with an exhibition booth, side events and panel discussions. The topic of discussion at the summit was Africa's widespread, poor soil quality—a problem that has a detrimental effect on the continent's agricultural productivity and food security.

- <http://www.icipe.org/news/icipe-africa-fertilizer-and-soil-health-summit-2024>
- <https://kilimoneews.co.ke/agriculture-policy/organic-fertilizer-gets-attention-at-the-african-fertilizer-and-soil-health-summit/>

Video



Black soldier fly is transforming farming

The adoption of the black soldier fly as an alternative protein source for animal feeds is sustainable and is steadily growing in Kenya.

- <https://www.citizen.digital/business/black-soldier-fly-transforming-farming-in-kenya-n341754>
- <https://www.integrityalliance.biz/news/2024/05/14/black-fly-managing-waste-and-feeding-farm-animals-in-kenya/>

Funding to support the Biochar & Insect-composted Organic fertilizers in Kenya (BIO Kenya) project

The BIO Kenya project aimed at turning waste into wealth by promoting the use of biochar and insect-composted organic fertilizers for improved agricultural productivity, and reduction of crop pests and diseases and soil degradation has received financial support. The project partners include the Kenya Agriculture and Livestock Research Organization, University of Embu and Koitaleel Samoei University College, French National Research Institute for

Sustainable Development (IRD) and the French Agricultural Research Centre for International Development (CIRAD).

- <https://www.the-star.co.ke/sasa/technology/2024-05-13-two-kenyan-projects-awarded-sh283-million-french-funding/>

Title translation: icipe has developed a new method to diagnose African animal trypanosomosis



Taifa Leo (Kenya) - Published 1 May 2024

Black soldier fly comes to the rescue of dying poultry venture

The cost of commercial chicken feed had been increasing, discouraging Francis Muriuki from investing in the venture. However, introduction of the insects as an alternative way to get high-quality and cost-cutting feed became a turning point for him

by **Milliam Muriuki**
@millymur1

Francis Muriuki popularly known as Francis wa Nguku has been a poultry farmer for the last four years. However, in 2022, the high cost of feed almost drove him to quit poultry farming.

What was once a manageable expense soon became a heavy burden on the farm's finances. Muriuki, watched helplessly as his profits dwindled. "I tried to cut costs by buying cheaper feed brands, but still I found myself at crossroads. I had to supplement the feed with fishmeal, popularly known as omena (silver cyprinid) whose price was hitting the roof. I could no longer afford to keep my farm running. The thought of abandoning my beloved chicken weighed heavily on my heart," he recounts.

Luckily, before taking the hard decision, he was introduced to an Australian Government-supported Black Soldier Fly (BSF) farming initiative. The initiative aimed to improve the use of insects as animal feed and create employment for the youth and women through inclusive insect farming technology in Kenya, Uganda, and Rwanda.

Nutritious alternative

The Black Soldier Fly is ideally suited for food production due to its rapid production cycle and high concentration of protein. The high percentage of protein in the larvae makes them an ideal source of food for a wide variety of animals. BSF contains up to 43 per cent of protein and is rich in calcium and other

Chicken feeding on wet BSF. The flies can be fed either as wet or dried. INSET: Francis Muriuki has cut feed costs with black soldier flies. PD/MILLIAM MURIGI



nutrients. Apart from creating a high protein content feed and supplementing farmers' incomes, BSF can be used to clean up vast quantities of bio-waste, such as fruit and vegetable waste from markets, potato peels, beer waste, food waste, and pig manure. These products are readily available, and are a nuisance due to their offensive and unbearable smell.

Through this initiative, he was taught how to use the flies as an alternative feed thus addressing the high cost of feeds. Though at first he was a bit skeptical, he decided to give it a try, a move he says he does not regret.

"BSF has enhanced the nutrition of my poultry because they are rich in protein, essential amino acids, and fats, providing poultry with a balanced and nutritious diet. BSF has also reduced my reliance on conventional feed sources, which are expensive due to depleted soy and fishmeal sources. Apart from that BSF has

MURIUKI

BSF has enhanced the nutrition of my poultry because they are rich in protein, essential amino acids, and fats, providing poultry with a balanced and nutritious diet

also improved growth rates, and disease prevention due to the antimicrobial properties of the feed," he explains.

By harnessing the power of this remarkable insect, today Muriuki has transformed his small plot of land into a thriving poultry paradise with more than 4,000 birds. His chicken production and his egg sizes have also improved. The eggs are now bigger with a deeper colour of the yolk compared to what he used to get before adopting BSF feeding. His cost of production has also gone down as he gets a kilo of BSF at Sh50. Initially, he used to get a kilo of fishmeal at Sh120.

Muriuki is not the only farmer whose fortune has been changed. Flies are turning around the fortunes of farmers and the health of the broader community in Eastern Africa, creating jobs and wealth from waste, while strengthening food security and mitigating climate change.

Acknowledging the significance of this sustainable solution is why the Australian Centre for International Agricultural Research (ACIAR) has invested in a decade-long research initiative in Eastern Africa, investigating the potential of insect-based livestock feed production.

"Substantial progress has been made in establishing a burgeoning insect-based livestock feed industry in the region, with extensive benefits for waste management, agricultural productivity, and socio-economic empowerment," says Dr Leah Ndungu, Regional Manager - Eastern and Southern Africa, ACIAR.

Ndungu says the adoption of BSF farming is not limited to poultry farmers; pig and fish farmers have also integrated it into their practices as a dietary supplement for their animals. The versatility of BSF in providing high-quality protein and healthy fats makes it an attractive option for various livestock sectors. Pig farmers, for instance, have noted improved growth rates and overall health in their animals.

Economic viability

Fish farmers, on the other hand, have observed enhanced fish growth and resistance to diseases. Beyond the direct benefits to farmers, the use of BSF contributes to sustainable agriculture by reducing waste and reliance on conventional feeds. This holistic approach not only improves the economic viability of farming, but also supports environmental conservation efforts in the region.

Dr Chrysantus Tanga a research scientist at the International Centre of Insect Physiology and Ecology (ICIPE) says that there is a widespread acceptance of insect-based products by farmers, millers, and consumers. So far, more than 60,000 farmers have been trained in BSF technology and code of practices.

"Thousands of other jobs have spun off from the technology, including enterprises led by youth and women, building shelves, nets, containers, and other insect-rearing infrastructure. There are multiple value chains, and it benefits people from all age groups, genders, and education levels," says Dr Tanga.

In several nations throughout the world, insects have recently been recognised as a significant potential source of sustainable raw materials for animal feeds. In terms of nutritional make-up, amino acid profile, and feed acceptance as a component of various animal species' natural diets insects satisfy the dietary needs of animals.

The mass production of insect-based proteins could be a promising alternative to animal meat. Insect-based protein production requires less land, emits low GHGs, has low feed-food compatibility, and can transform organic wastes into valuable proteins, making the insects good for the environment.

People Daily (Kenya) - Published 7 May 2024

BRIEFLY

Initiative to boost bean, fruit trees and insect farming launched

by **Mwangi Mumbo**
@xPeopleDailyKE

A Sh3 billion bean, fruit trees and insect farming project has been launched to help develop low carbon, climate resilient systems among five million smallholder farmers in Kenya and other African countries.

The project is expected to benefit 2.5 consumers, value chain actors and entrepreneurs in the continent.

The project is also expected to boost earnings among women and youth, who form the bulk of the continent's population.

Funding is coming from the Government of Canada as a grant to the Alliance of Biodiversity and the

International Centre for Tropical Agriculture and the Nairobi-based International Centre for Insect Physiology and Ecology (Icipe).

Entitled, *Building Equitable Climate-Resilient African Bean & Insect Sectors (BRAINS)*, the initiative will be implemented across 15 sub-Saharan African countries, directly benefitting five million smallholder farmers, 2.5 million consumers and school-age children, and a range of value chain actors.

Indirectly, BRAINS will profit 50 million consumers, businesses and households.

"This initiative is an example of the power of partnerships. It will

harness the extensive experience, innovations, networks, efficiencies of scale and broad geographical reach.

This strategy will promote value chains and markets that are gender-transformative and resilient to climate change," observed Dr Abdou Tenkouano, Icipe Director General.

Researchers believe the combinations of various agricultural enterprises will broaden reach and benefits.

"Integrated bean, fruit tree and edible insect economies present a great opportunity for transformative change in Africa. They are effective vehicles to accelerate inclusive

climate adaptation outcomes at scale. They can also improve diets, food and nutrition security, and livelihoods for millions of consumers," noted Juan Lucas Restrepo, Director General, Alliance of Bioversity International and International Centre for Tropical Agriculture (CIAT).

In Kenya, only 20 per cent of an estimated 100,000 metric tonnes honey production potential has been tapped, according to the National Farmers Information Service (NAFIS).

With over 80 per cent of the country comprising arid and semi-arid areas, honey production

potential is high and can become a major economic activity in these regions.

Experts say that the quality of honey is affected by the type of hive, methods of harvesting and processing among other factors.

With urbanisation, fruits farming, such as avocados and mangoes demand has been rising across Africa, especially with rising middle class - opening better opportunities for rural communities to produce fruits. Schools have also ventured in this sub-sector, planting fruit trees in their expansive compounds especially in rural-based primary institutions.

People Daily (Kenya) - Published 14 May 2024

Social Media



IFPRI
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What is the role of the bioeconomy in addressing #foodsecurity, #nutrition and diets, & poverty reduction in low- and middle-income countries?

Join IFPRI in-person or online on May 7 at 9AM EDT to learn more: bit.ly/BioEcon

@CGIAR @ZEFbonn @BioInnovate @icipe @IICAnews

IN-PERSON HYBRID POLICY SEMINAR

Globalization of the Bioeconomy

Recent Trends and Drivers of Bioeconomy Programs and Policies

INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE (IFPRI) | International Advisory Council on Global Bioeconomy

WATCH LIVE | IFPRI.org

12:01 AM · May 3, 2024 · 2,330 Views



icipe
@icipe

Join us at the Africa Fertilizer and Soil Health Summit #AFSH24 #ListenToTheLand @RockefellerFdn

SAVE THE DATE
Agroecological and Regenerative Innovations for Soil Health and Sustainable Production

"To Nourish the Soil is to Nourish Life"

Agroecological innovations and regenerative inputs are promising pathways for sustainably improving soil and crop productivity, as well as increasing the nutrient density of food.

The session will also highlight the need for investment in these alternative technologies, including on the generation of evidence to fill knowledge gaps around the performance and sustainability of these interventions.

Tuesday, May 7, 2024 | Time: 1400 - 1530 Hours
Kenya International Convention Centre (KICC) Amphitheatre Hall (2nd Floor)

PLEASE REGISTER HERE FOR THE SUMMIT: <https://events.accreditation.go.ke/event/26/>
AND HERE FOR THE SIDE EVENT: <https://bit.ly/AgroecologicalRegenerativeInnovationForSoilHealth>

African Union | The Rockefeller Foundation | ICRISAT | ICRAF | IFPRI | icipe

1:46 PM · May 3, 2024 · 2,038 Views



ACIAR
@ACIARAustralia

With project partners @icipe, @Makerere and @UniRwanda, #ACIAR is supporting the promotion of black soldier fly farming as an innovative and sustainable waste management practice in Africa.

Watch now bit.ly/4a8D9JS

#PartnershipsForTheGoals #SDG17



youtube.com
Black Soldier Fly Farming
ACIAR is championing Black Soldier Fly farming initiatives in Africa, emphasising the circular economy principles to ...

3:00 AM · May 3, 2024 · 467 Views



icipe
@icipe

Snout #Bees!

Read more icipe.org/news/blog/inse...

#beestalk #biodiversity #Thrinchostoma #Africa #Research #science



11:49 AM · May 2, 2024 · 215 Views



My Science Journey
@Journey2Science

Join Our Upcoming #MSJ Webinar ft Dr. @masigaD, principal research scientist @icipe!

Date: Friday, 10th May 2024

Time: 15.00 EAT/08:00 ET/13:00 WAT/ 13:00 BST

Sign up for a personalized reminder and secure your spot today!

lnkd.in/eQKfpcBB

MY SCIENCE JOURNEY EXPERIENCES
ESTD 2022

2024 Edition

My Science Journey provides a platform for scientists to connect and share their experiences while offering mentorship to upcoming scientists

Dr. Dan Masiga
Principal Research Scientist, icipe

An infectious disease scientist with a commitment to vector-borne research and capacity building.

Join Conversation

10th May 2024
3:00PM EAT/8:00AM ET/
1:00PM BST/1:00PM WAT

bit.ly/3msnjqD

Scan Me

Favorite Outlet

Let's ponder
How does one remain relevant in a rapidly evolving career and technology landscape?

4:26 PM · May 7, 2024 · 2,085 Views



We're honored to accept the posthumous Lifetime Excellence Award on behalf of our founder, Prof. Calestous Juma @CalestousLegacy Heartfelt congratulations to Prof. Wangari Maathai @WangariMaathai & founder of @icipe Prof. Thomas Odhiambo for their remarkable contributions!



Konza Technopolis Development Authority and 3 others

ACTS @ACTSNET · May 7

The Multisectoral Conference on Research, Science, Technology & Innovation #RSTIConference2024 organized by @nacosti & @Kenya_aist is currently underway! We are pleased to participate in this incredible event, exploring the vital role of STI in global prosperity & public good!



1:56 PM · May 7, 2024 · 225 Views



It was an absolute delight to welcome @CarlaMontesi and Christophe Larose of @EU_Commission for a visit, demo of outputs of longstanding partnership and insightful discussions. Thank you 🙌



1:58 PM · May 9, 2024 · 608 Views



@icipe attending the 1st Coordinating meeting for Agricultural productivity and Food safety organised by @iaeaorg. @Prof Shaukat IAEA Director for Africa: Agriculture as way of life & business



11:21 AM · May 6, 2024 · 44 Views



"Harnessing Digital Agricultural Services for Enhanced Soil Health and Water Management": Live session starting at 15:30 with @ICiPE.

Will you join the conversation?

#AFSH24
#ListentotheLand

Sign up now: zoom.us/webinar/regist...



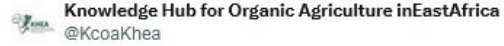
9:46 AM · May 8, 2024 · 225 Views



Life on Earth depends on Plants. Because they are so fundamental to humans, animals and the environment, they need Protection. SAVE THE DATE: Celebrating International Day (May 12th) with top notch speakers @iapsc2 @ippcnews @CABI_News @FAO @Kephiske @icipe



9:57 AM · May 9, 2024 · 567 Views



The panelists for this session include: Dr, David Amudavi- ED of Biovision Africa Trust, Ms. Carla Montesi-EU DG,INTPA, Dr. Abdou Tenkouano-ICIPE, IFAD Representative,ESA, Representative SME operator in organic/biofertilisers-Real IPM Company Kenya, Mr. Ibrahim Coulibaly-PAFO



Knowledge Hub for Organic Agriculture in East Africa @KcoaKhea · May 8
#Happeningnow:
Side event-Tent 5 on "Emerging opportunities with organic&biofertilizers for soil health in Africa" at the ongoing Africa Fertiliser Soil Health Summit at KICC in Kenya. #AFSA24
@FertilizerSoil @AfricanUnion @BiovisionAfrica @gjz_gmbh @BMZ_Bund ...
[Show more](#)



12:25 PM · May 8, 2024 · 183 Views



Dr. Abdou (ICIPE) ~ "The best organic fertilizer is the insects based fertilizer. They have the best qualities of the soil minerals compared to the rest". #AFSH24

Salimo Wa Kilimo, #TheVoiceOfAgriculture

12:16 PM · May 8, 2024 · 47 Views



#AFSH24: Did you know insect #fertilizer is unrivaled because insect exoskeletons contain rare micronutrients that enrich the soil?

"By transforming organic waste into valuable resources, we turn waste into wealth", Dr. Abdou Tenkouano, Executive Director of @icipe.



African Union and 9 others

1:28 PM · May 9, 2024 from Nairobi, Kenya · 391 Views



Straight snouted #beetles!
Did they help to nourish the giants that walked the Earth ages ago? 🤔

icipe.org/news/blog/inse...
[#icipeinsectoftheweek](#) [#biodiversity](#) [#Africa](#) [#insect](#)



11:57 AM · May 13, 2024 · 342 Views



Thank you @FranceinKenya @icipe and partners gratefully acknowledge this new support to use #insects to turn waste to wealth #frassfertilizer #SoilHealth

FrenchEmbassyKenya @FranceinKenya · May 10

Replying to @FranceinKenya

Improvement and development of biochar and insect-composed organic fertilisers to improve soil health and farm yields, thus providing additional sources of income to farmers. This inturn translates to transforming organic waste into wealth.



9:18 AM · May 13, 2024 · 649 Views



@icipe young farmers in Nyeri embracing black soldier flies. The attached article highlights on the practice.
BLACK FLY MANAGING WASTE AND FEEDING FARM ANIMALS IN KENYA
integrityalliance.biz/news/2024/05/1... via @Integrity Alliance



From integrityalliance.biz

11:34 PM · May 14, 2024 · 16 Views

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Twitter: [@icipe](#)

YouTube: <https://www.youtube.com/user/icipe>