

1-15 April 2024

Developing eco-friendly packaging materials from cassava waste

Through the BioInnovate Africa Program, Kyambogo University is developing eco-friendly packaging materials using cassava waste.

- https://www.newvision.co.ug/category/education/kyambogo-lecturer-wins-sh3858m-grant-for-cass-NV_185103

Insects are the future food

We consume a lot of resources to produce food and insects may be a viable option as they contain high protein and require minimal production space.

- <https://www.fr.de/wirtschaft/mehlwuermer-als-super-food-insekten-sind-das-lebensmittel-der-zukunft-92991786.html>

Beekeepers get tips on smart hive technology to increase honey production

By Times Reporter

The University of Rwanda's African Center of Excellence in Internet of Things (ACEIoT) on March 30, conducted an awareness session for beekeepers associated with cooperatives in Huye District for the newly invented Smart Bee Hive Technology (SBHT). This technology was developed to enhance beekeeping activities and ultimately boost honey production.

SBHT is a technology that tracks temperature, humidity, sound, and movement inside and outside the hives. By utilising sensors, beekeepers can remotely control these parameters through their smartphones.

The technology which got funding from the International Centre of Insect Physiology and Ecology (ICIPE), is being implemented in partnership with NARADA Electronics Limited, a Rwandan private company dedicated to embedded systems development, training, and consultancy.

Elias Ntawuzumuni, a doctorate student at the African Centre of Excellence in the Internet of Things (ACEIoT), who invented the device said this was the opportunity to even get ideas on how to improve this technology before commercialisation.

Ntawuzumuni explained, "The device is equipped with a digital siren to deter animals and intruders, smoke detectors to notify beekeepers of forest fires, and an air ventilation system to protect bees exposed to harmful external air." Ntawuzumuni was inspired by the significance of honey for health and the observed untapped potential in Rwanda's beekeeping industry.

After getting to know the functionality of the device, beekeepers expressed interest in the use of the device once at their disposal. Wellars Munyaneza, one of the beekeepers from the KOPABUHU cooperative, finds this device addresses key issues such as lack of adequate information about hive conditions, theft of honey produce, and colony health monitoring.

He said, "During the rainy season, most



Participants during an awareness session for beekeepers associated with cooperatives in Huye District for the newly invented Smart Bee Hive Technology (SBHT). Photos: Courtesy.



Elias Ntawuzumuni, the brain behind the new innovation in beekeeping dubbed Smart Bee Hiving.



The newly innovated tool dubbed Smart Bee Hiving.

of the bees die due to humidity. With this technology, we will be able to monitor this ahead of time and take actions to avoid the loss."

He added, "If possible for smartphone owners, you can include the feature where instead of getting only an alarm, we even get an image of the object passing by the beehive so that we know how to deal with it."

One device costs Rwf150,000. Assoc. Prof. Damien Hanyurwimfura, the Principal investigator of the project and the Director of ACEIoT, said they are aware that this might not be affordable to everyone but promised to advocate for incentives so that all beekeepers can afford it.

"We will continue to mobilise more funds for the improvement of the device, multiplication, and affordability," he noted.

"NARADA LTD in collaboration with the involved researchers at ACEIoT will continue to update the product adding more features as suggested by beekeepers before commercialisation," he added.

With funding from the partnership for skills in applying sciences, engineering, and technology (PASET) with the Africa Regional Scholarship and Innovation Fund (RSIF) under the International Centre of Insect Physiology and Ecology (ICIPE), the African Center of Excellence in Internet of Things (ACEIoT) at the University of Rwanda has been working on the "Smart Bee Hive Technology" project for the past two years.

Through the partnership with Africa Regional Scholarship and Innovation Fund (RSIF) for applied sciences, engineering, and technology, knowledge of the device has already been disseminated to more than 50 beekeepers.



Beekeepers admired this innovation in beekeeping, saying that it will help in improving the honey production.



Beekeepers during a study tour to learn about new technology in beekeeping that uses solar power.

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LOG ON www.newtimes.co.rw

The New Times-Rwanda, published on April 2, 2024.

Social Media

African Center of Excellence in Internet of Things
@ACEIoT_UR

This training is one of key activities under the project funded by International Centre of Insect Physiology and Ecology (@icipe), implemented in partnership with @NARADALTD. This technology is invented by Elias Ntawuzuminsi, a doctorate student @ACEIoT_UR @Uni_Rwanda



1:04 PM · Mar 30, 2024 · 59 Views

Cordaid Kenya
@CordaidKenya

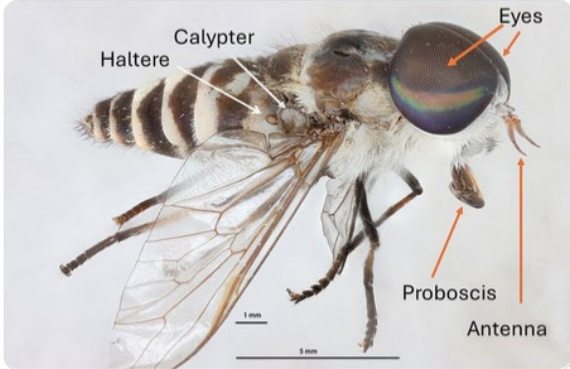
Post-training reflection session with County Agricultural Extension Officers from Marsabit, Isiolo, Samburu, and Laikipia counties trained as TOTs. Exciting insights surfaced regarding the opportunities for target communities under #BeatTheLocustProject. @Kenya_IMPACT @icipe



9:50 AM · Apr 2, 2024 · 142 Views

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@icipe

Our #insect of the week will be familiar to most people. *Tabanus sp.* #Horseflies. With their strong proboscis they have been known to ruin an afternoon picnic or two. Read more icipe.org/news/blog/inse...



11:53 AM · Apr 3, 2024 · 394 Views

Jacob Trefethen
@JacobTref


Proud to support, exciting discoveries from the @icipe team in Kenya

What a neat little microbe. Found in the wild, gets transmitted from mother mosquito to child and between mates, and seems to block transmission of the malaria parasite. More to explore.. imagine if it works...

icipe @icipe · Mar 26

We gratefully acknowledge new support by @open_phil to push forward on a #malaria transmission tool.

#icipe.org/new-grant-for-... @CVRinfo @Falling_walls @JeremyHerren @Samooner @lambrechtslab @GatimuMuchai @JohnAgboola_ @farmerscornerng



11:33 PM · Apr 1, 2024 · 2,095 Views

Research. Innovate. Transform
Rsif @PasetRsif

Enhancing street food safety in #Ghana

Read more on this @PasetRsif project here: rsif-paset.org/project/innova... #PASET #DesignThinking @icipe @WorldBankAfrica

University of Ghana @UnivofGh · Mar 27

Over 100 street food vendors across 29 Metropolitan, Municipal and District Assemblies (MMDAs) in Greater Accra have benefited from a two-day training session organized by the Department of Agricultural Economics and Agribusiness as part of its UrbanSafe Project.

1/2...
[Show more](#)



10:29 AM · Apr 3, 2024 · 187 Views



Laikipia County community members currently undergoing Training of Trainers (ToTs) @icipe under #BeatTheLocustProject. The ToTs will play a crucial role in empowering the community members by training them on cricket rearing. @Kenya_IMPACT



9:34 AM · Apr 4, 2024 · 249 Views



Today at the #RPCA, Dr. Abdou Tenkouano from the @icipe presents #innovative forms of #nutrition, notably #insects as a base for #fertilizers and food, considering their high #protein intake. 🦋🦋🦋

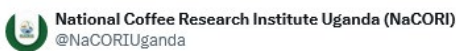
Proteins for Animals vs Humans

Key conventional sources of feed additives: Soybean meal, Fish, Oil cake meal.

35% of worlds crop calories consumed for animal feed
16% of world fish catch ends feeds

waste into climate-smart, soil inputs for crop production

4:37 PM · Apr 4, 2024 · 279 Views



We hosted Dr. Julius Ecuru & Mrs. Shira Mukiibi from @icipe @Biolnnovate on a field excursion @narouganda Coffee Research Institute. @nacoriuganda is set to conduct research into effective biofungicides to save Robusta coffee from devastation by the Coffee Wilt Disease.



6:46 PM · Apr 5, 2024 · 702 Views



@icipe participated in #EarthDay events in Ethiopia with a display of commercial insect products developed by our youth partners with support of @MastercardFdn #bees #silk #honey #TextileArt



2:46 PM · Apr 4, 2024 · 352 Views

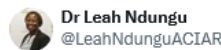


NEW RESEARCH @EarthsFutureEIC:

"An Integrated Assessment Approach for Socio-Economic Implications of the Desert Locust in Eastern Africa" by Bonoukpoè Mawuko Sokame @icipe and colleagues.

Earth's Future
agupubs.onlinelibrary.wiley.com
An Integrated Assessment Approach for Socio-Economic Implications of the Desert Locust in Eastern Africa
Earth's Future is a transdisciplinary, open access AGU journal examining the state of the planet, sustainable and ...

10:40 AM · Apr 5, 2024 · 231 Views



@ACIARAustralia leads Black Soldier Fly farming initiatives in Kenya, prioritising #circulareconomy principles for #sustainable farming. Partnering with @icipe, we empower women and youth while tackling waste, #food insecurity, and #climatechange.

Watch:

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

11:36 AM · Apr 5, 2024 · 228 Views



@kyambogou @EliKatunguka I met a delegation from ICiPE in Nairobi to discuss their continued funding of Research in the university. Dr Julius Ecuru led the delegation.



11:29 AM · Apr 7, 2024 · 1,598 Views

Cordaid Kenya
@CordaidKenya

Last week, Laikipia County community members completed their week-long training with a Business and Marketing session in our ongoing ToT program hosted by @icipe and @Kenya_IMPACT #BeatTheLocustProject.



12:07 PM · Apr 8, 2024 · 40 Views

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.As the regional centre of the #StockholmConvention on Persistent Organic Pollutants, we are pleased to host the sub Regional Workshop to Strengthen Implementation of the #RotterdamConvention #BRS @brsmeas @theGEF @SEL_Africa @NemaKenya @FAOGeneva



11:53 AM · Apr 9, 2024 · 581 Views

@SPOTONews
@spotonews

Insects for Food @icipe @DiscoverJKUAT @DrKathyKunyanga

Larry Madowo @LarryMadowo · Apr 14

Have you tried flying termites? Don't sleep on these delicious bugs 🪳



5:38 PM · Apr 14, 2024 · 15 Views

icipe
@icipe

🙏 We are immensely grateful to @noradno for their wonderful #partnership , and for graciously hosting our ExBo meeting. 📺📺
icipe.org/news/norad-pro...
#Norway #Africa #development #science #research



ACIAR in Eastern and Southern Africa
@ACTIAfrica

A recently concluded review of the PROTeinAfrica project identified critical research opportunities for further innovation and collaboration between #ACIAR, @icipe and other stakeholders, underscoring the projects' impact on #Sustainable agricultural development in 🇳🇵, 🇰🇪, and 🇪🇹



ACIAR and 9 others

9:25 AM · Apr 10, 2024 · 169 Views

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