

PRODUCTION AND CONSUMPTION OF AFRICAN PALM WEEVIL (*RHYNCHOPHORUS PHOENICIS*) IN GHANA

AFRICAN PALM WEEVIL LARVAE - A VALUED FOOD IN GHANA

Among the nine insect species regarded as edible and traditionally consumed in Ghana, the African Palm Weevil larvae — the larvae of the beetle *Rhynchophorus phoenicis* — are among the most widely consumed. Especially in the mid- and southern parts of the country, where palm trees thrive, the larvae are considered a delicacy (1). They are traditionally obtained through wild collection from palm trunks, often harvested when palms are tapped for sap used in fermenting alcoholic beverages. The larvae are typically purchased directly from palm tappers and are rarely available at farm gates or markets. As a result, consumption is seasonal, typically peaking twice a year, which limits their contribution to livelihoods and food security.



Overall, consumer attitudes in Ghana toward edible insects are positive, with palm weevil larvae particularly appreciated for their taste and high nutritional value, especially their protein content (2). Therefore, effective approaches to enhance insect production through farming in the Ghanaian context are needed to ensure sustainable availability. Early pilot initiatives in the Ahafo, Bono, and Ashanti regions, led by non-governmental organizations and research institutions, have demonstrated that African Palm Weevil larvae can be produced year-round in controlled farming environments. This makes the larvae available for consumption in these regions and potentially in other parts of Ghana.



Picture: The freshly harvested African Palm weevil larvae (right) turned into a roasted delicacy (left)

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ADVANCING AFRICAN PALM WEEVIL FARMING IN GHANA

Farming palm larvae in closed containers as a form of 'mini livestock' is a novel practice in Ghana. First initiated in 2012 in Kumasi by Dr. Jacob Paarechuga Anankware, a semi-domesticated production method was developed by training farmers to transfer beetles from the wild and rear larvae in small containers (1). In 2014, more than 500 small-scale farmers were introduced to palm weevil farming in the Ashanti and Brong-Ahafo regions. However, sustaining production was hindered by a lack of technical knowledge, logistical support, substrate availability, and investment in farming facilities. These challenges discouraged further scale-up efforts to meet community demand.



Picture: Training farmers in Asutifi North, Nkensere, 2022

AFRICAN PALM WEEVIL FARMING IN PRACTICE

The technical challenges are addressed in research at the University of Energy & Natural Resources (UENR), Sunyani. First, the optimal procedure for the beetles to mate, lay eggs and grow a new generation of palm weevils was established (5). In short, a breeding substrate of coconut coir, brew waste, peeled cassava and elephant ear corm were put into a small containers. Three pairs of mature palm weevils were added to each container, covered with mesh. The female adults were allowed to mate and lay eggs until they died. When the eggs hatched, 50 small neonates with an average weight of 0.5 g were transferred to containers with fresh substrate. After 25 days the larvae have grown to 5 g and transferred to a new container with unpeeled sugarcane for cocooning from which a new generation of palm weevil emerged (5,6).

THE HEALTHYNSECT PROJECT

- The HEALTHYNSECT project brings together research partners from Ghana, Uganda, Kenya, and Denmark with the aim of accelerating rural insect farming for food and nutrition in Africa.
- The project is supported by Danida, Ministry of Foreign Affairs, Denmark (grant 19-06-KU, 2020–2024).
- Insects are increasingly recognized as alternative food sources through scalable farming practices. Small-scale household farming has the potential to improve food security, nutrition, and livelihoods by generating jobs and income.
- Ghana, Uganda, and Kenya are at the forefront of emerging insect farming innovations.
- HEALTHYNSECT aims to fill critical knowledge gaps in understanding drivers and barriers for insect production and consumption by conducting cutting-edge research in drivers, barriers and impacts of farming crickets in Kenya, grasshoppers in Uganda, and palm weevil larvae in Ghana.
- We investigated incentives for insect farming by providing farmers with start-up kits and training, and by promoting insect consumption by educating caregivers of young children about the nutritional benefits of insects.

Project link: [HEALTHYNSECT](#)



Picture: Male and female palm weevils for breeding next generation