



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
AFRICAN CENTRE OF EXCELLENCE IN SUSTAINABLE USE OF INSECTS AS  
FOOD AND FEEDS**

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**TRAINING MODULE**

**FOR**

**CRICKET FARMERS**

**ACE- INSEFOOD  
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## **MODULE DESCRIPTION**

Globally, there is a growing need to expand food resources and create diversity for resilience. This has generated interest in rearing insects as an alternative source of food and feed of high nutritional quality. In Kenya, like many parts of Africa, many species of insects are known to be a delicacy. Most of these edible insects have been, by practice, collected from the wild. However, collection from the wild has limitations. As a consequence, rearing of insects would help surmount this challenge.

In response to the growing interest in rearing crickets as food and feed, JOOUST in collaboration with the World Bank within the African Centre of Excellence in Sustainable use of Insects as Food and Feeds (INSEFOODS) Project, has developed appropriate cricket rearing technology manuals. The project foresees the training on appropriate technologies as an important component of its operations. This was brought about by the quest of knowledge by different

stakeholders. These modules seek to provide systematic and comprehensive information on cricket rearing focusing on the whole cricket value chain.

## **LEARNING OUTCOMES**

By the end of the training the main learning outcomes will be:

1. To train farmers on how to establish and manage a cricket farm.
2. To train farmers on how to harvest and process crickets for food and feed.
3. To provide farmers with knowledge on how to sustainably rear crickets.
4. To provide opportunities for skill development and transfer in cricket rearing.
5. To provide business and job opportunities for trainee farmers.

## **COURSE CONTENTS**

### **MODULE ONE: ENTOMOPHAGY AND CRICKETS**

1. Concept, development and policy issues of entomophagy
2. Cricket Biology
3. Cricket Behaviour

### **MODULE TWO: COLONY ESTABLISHMENT**

1. Inputs: Materials and Equipment
2. Cricket Housing: Housing Types, Strengths and Weaknesses, Selecting the Site
3. Rearing Systems
4. Laying and Drinking Substrates

### **MODULE THREE: COLONY MANAGEMENT**

1. Procuring of Eggs and Mother stock
2. Egg Collection
3. Hygiene
4. Feeding Regime
5. Production Plan and Record Keeping
6. Harvesting

### **MODULE FOUR: CRICKET NUTRITION**

1. Cricket Feeding Behaviour
2. Importance of Balance in Nutritional Components

3. Feed Types, Stimulants and Deterrents
4. Feed Preparation, Formulation and Feeding Rates

#### **MODULE FIVE: THREATS TO CRICKET FARMING**

1. In-breeding
2. Pathogens, Parasites and Diseases
3. Predators
4. Environmental degradation and Genetic Factors

#### **MODULE SIX: CRICKET PRODUCTS AND MARKETING**

1. Potential Cricket Enterprises Within the Value Chain
2. Gross Margin Analysis of Each Enterprise
3. Product Development
4. Production Marketing