# A Proposal for the Young Scientist Project

Title

Exploration of Functional Properties and Development of Food Materials from Domestic Apicultural Products

## 1. Course Outline

- O Personnel: KAFACI member countries
- O Period of Training: March 2025 November 2025 (8 months)
- O Implementing Department: Apiculture Division, National Institute of Agricultural Sciences

#### **O Research Studies Currently Being Implemented**

- Development of technologies to address issues related to false acacia honey
- Development of functional materials derived from drone pupae and quality control technologies

### 2. Plan Course Direction

- O (Training Objectives) Research on the functional properties and food material development of domestic apicultural products
- \* <u>Quantitative Goals</u>: Functional exploration (2 topics), food material development (1 project), research paper submission (1 paper)
- O (Systematic Expertise Development) Enhance capabilities in functional exploration and food material development
- O (Enhancement of Self-Directed Learning) Improve individual capabilities through the implementation of research tasks
- O (Research and Academic Activities Enhancement) Enhance research capabilities through manuscript preparation and participation in academic conferences
- O (On-Site Problem-Solving Capability Development) Acquire processes and techniques to address domestic field challenges, and develop the ability to apply them in local settings
- O (Fostering Creative Job Experts) Establish a network of apiculture experts in the African region and collaborate on international issues
- (Future-Oriented Capability Development) Discover functional properties of domestic apicultural products and utilize them as food materials in home countries

# 3. Qualifications of Participants in Young Scientist Project

#### O (General Requirements) Requirements for all Young Scientists

- Must be a government official from a KAFACI member country, recommended by the head of their affiliated organization.
- Must hold a master's degree or higher in a relevant field with at least five years of related experience.
- Proficiency in English and strong computer skills are required.

### **O** (Details) Additional Requirements

- Applicants with advanced knowledge and research experience in the field\* holding a Master's degree or higher
  - \* Relevant Fields: Agricultural Biology, Entomology, Molecular Biology
- Researchers with an interest in apiculture and beekeeping products
- Proficient in MS Office and statistical software such as R, SAS, and SPSS