A Proposal for the Young Scientist Project

Title

Agricultural Microbial Resource Management Technology

1. Course Outline

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

O Research Studies Currently Being Implemented

- Management of microbial resources in the Microbial Bank (KACC)
- Collection and preservation of beneficial microorganisms
- Molecular and morphological classification and characterization of beneficial microorganisms

2. Plan Course Direction

- O (Training Goal) Acquire microbial resource management technologies for member countries
- Learn preservation methods such as freeze-drying preservation, ultra-low temperature preservation, and mineral oil preservation (3 methods)
- Learn classification and identification methods for fungal resources (2 methods)
- Submit at least one research paper focusing on classification and characterization of microbial resources (1 paper)
- O (Developing Systematic Expertise) Strengthen professional capabilities in agricultural microbial resource management
- Learn long-term preservation methods for microbial resources: freeze-drying preservation, ultra-low temperature preservation
- Learn classification and identification methods for microbial resources: morphological and molecular techniques

- Learn management of microbial resources center

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 should possess advanced knowledge and research experience in the field of: Mycology, Agricultural Biology, Microbiology
- Preference will be given to researchers working at national or public research institutions with an interest in microbial resource management.