## **Young Scientist Research Project - Topic 3**

**Title** 

Field diagnosis of soil chemical properties for soil management and fertilizer recommendations

## 1 Background Information

- O **Personnel:** 1 person, A researcher from one of KAFACI member countries
- O Period of Training: June 2020 ~ November 2020 (6 months)
- O Implementing Department: Soil and Fertilizer Division, Department of Agricultural Environment in National Institute of Agricultural Sciences
- O Research Studies Currently Being Implemented:
  - Support for establishment of agricultural policy by soil testing in major land of eup, myeon, dong
    - \*eup, myeon, dong: subunit of district in Korea
  - Establishment of decision making procedures for soil environmental management by linking soil testing and field diagnosis

## **② Course Description**

- (Training Purpose) Acquisition of techniques of soil management and fertilizer prescription, and capacity building through implementation of field diagnosis of soil chemical properties
  - \* Quantitative goal: field diagnosis and prescription DB establishment, academic presentation (international), paper submission (SCI)
- O (Professional capacity building) Basic technology learning for field diagnosis and fertilizer description
  - \* Qualitative goal: Acquisition of farm household problem-solving technology through field diagnosis and fertilizer prescription
- O (Promotion of research and learning activities) Participation in extension services and cooperation with extension providers on issues regarding soil problems
  - \* Qualitative goal: cooperation with extension service providers through participation in extension specialist association of soil environment
- (Capacity building for future response) Establishment of soil testing big data and capacity building in its utilization
  - \* Qualitative goal: Establishment of soil testing big data and comprehension of its utilization using KSIS (Korea Soil Information System) Portal

## (3) Qualifications of the Trainee

- (General Requirements)
  - A government official working in one of KAFACI member countries, and recommended by the head of his/her organization
  - Proficiency in English, writing papers, computer applications and operations
- (Specific Requirements)
  - A researcher who has master's expertise (or Doctor's) in soil chemistry and has more than 5 years of research experience in this field