

## **SOIL SCIENTIST**

Soil scientists analyze characteristics of soil, the different soil types, and research the ability to survive in differentiated conditions. They also are responsible for the study of soil structure, properties, chemical compensations and the different stages of transformations that soil goes through.

## WHAT RESPONSIBILITIES WILL I HAVE?

- Research or study soil characteristics, map soil types, and investigate
  responses of soils to known management practices to determine use
  capabilities of soils and effects of alternative practices on soil productivity
- · Provide advice on rural or urban land use
- Perform chemical analysis on micro-organism content of soil to determine microbial reactions and chemical mineralogical relationship to plant growth
- Investigate responses of specific soil types to soil management practices, such as fertilization, crop rotation, and industrial waste control
- Conducts experiments on farms or experimental stations to determine best soil types for different plants
- Initiate and implement research & development programs for soil research
- Prepare documented proposals and successfully establish research trials
- Regularly communicate with relevant industry sectors and initiate well targeted research projects
- Meet the company requirements for trial planning and operation of research projects
- Manage trial establishment and collection of data
- Budget for research work and provide management reporting in regard to trial/research progress



### WHAT EDUCATION & TRAINING IS REQUIRED?

Bachelor's or advanced degree in soil science, plant science, crop science, biology, plant physiology, or related field

## THE FOLLOWING HIGH SCHOOL COURSES ARE RECOMMENDED...

Agricultural education, biology, chemistry, mathematics, botany, earth science, physics

### TYPICAL EMPLOYERS

Seed production companies, biotechnology companies, universities, cooperatives, research firms, government

#### FUTURE JOB MARKET/OUTLOOK

Poor Good Excellent

# SUGGESTED PROFESSIONAL ORGANIZATIONS & ASSOCIATIONS

- Soil Science Society of America
- Crop Science Society of America
- Weed Science Society of America

### **AVERAGE ANNUAL FULL-TIME SALARY**

\$69,000