



Ege University Faculty of Agriculture

Department of Soil
Science and Plant
Nutrition



“Explore, Learn, Apply”



DEPARTMENT OF SOIL SCIENCE AND PLANT NUTRITION

The Department of Soil Science and Plant Nutrition at the Faculty of Agriculture, Ege University was established in 1958 under the name 'Chair of Plant Nutrition and Soil.

1958

1960

The proposal to establish the first compost fertilizer factory in our country was put forward, and for the first time, the physical and chemical analyses of compost fertilizer were conducted.

The Chair of Soil Science and the Chair of Plant Nutrition were separated into two distinct units.

1963

1971

It was reorganized to also include the Departments of Plant Nutrition and Agricultural Structures and Irrigation.

The first studies on the use of potassium fertilizers (including research, master's theses, and doctoral dissertations) were conducted.

1973

1976

The first scientific meetings on potassium fertilization were organized.

Soil properties in agricultural lands were identified using radar satellite imagery.

2004

2010

On June 14, 2010, with a decision by the Council of Higher Education (YÖK), the name of the department, formerly 'Department of Soil', was changed to 'Department of Soil Science and Plant Nutrition'.

The first semi-automatic software was developed to inventory olive trees based on their canopy widths and coordinates.

2010

2023

The Undergraduate Program in Soil Science and Plant Nutrition received a 2-year accreditation as of March 28, 2023.



DEPARTMENT OF SOIL SCIENCE AND PLANT NUTRITION

ORGANIZATIONAL CHART



Prof. Dr. Sezai DELİBACAK

Head of Department



Prof. Dr. Mahmut TEPECİK

Vice Head of Department



Assoc. Prof. Dr. Ali Rıza ONGUN

Vice Head of Department

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Soil Microbiology and Biochemistry
Soil Science
Microbial Fertilizers



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Plant Biochemistry



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Plant Nutrition
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Soil and Plant Analyses



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Soil Mineralogy
Soil Genetics
Remote Sensing and GIS



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Soil Physics
Irrigation Water Quality
Soil and Water Pollution



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Microbial Ecology
Organic Waste Management
Climate Change and Soil Interactions



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Soil and Water Conservation
Rainfall Simulators
Soil Erosion

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Soil Survey and Mapping

Soil Genetics

Remote Sensing and GIS



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Plant Nutrition

Fertilizers and Fertilization

Soil and Plant Analyses



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Soil Pollution



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Soil Fertility

Fertilizers and Fertilization



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Plant Nutrition

Soil Fertility

Soil and Plant Analyses

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Soil Survey and Mapping

Soil Genetics

Remote Sensing and GIS

MISSION & VISION

Ege University, as a pioneering research university in Turkey and a leading one globally, aims to meet regional, national, and universal needs in research and education, transfer its R&D capacity for the benefit of society, and educate individuals who are student-centered, committed to core values, professionally and culturally equipped, open to change, and who have adopted scientific thinking as a way of life.

Its vision is to be a world-class university that leads in scientific research, has a strong network of collaboration and communication with national and international stakeholders, is student-oriented, environmentally friendly, sustainable, accessible, and livable, and contributes to economic, social, and cultural life with a robust financial structure.

Mission of the Faculty of Agriculture;

To be among the world's leading faculties of agriculture, organizing innovative research and student-centered educational activities in the field of agricultural sciences, providing scientific and technological solutions to regional, national, and global needs, and raising individuals who are committed to national values, have perspective, think analytically, apply scientific techniques, and are strong in cultural and social aspects.

Department of Soil Science and Plant Nutrition;

With a mission to serve society through universal education and research, the department aims to train agricultural engineers who are equipped with the knowledge and skills to work in all areas of the profession in collaboration with public institutions, the private sector, and NGOs on a national and international scale; who follow developments in the field, are self-improving, team-oriented, inquisitive, value ethics, and are specialists in soil science and plant nutrition.



EDUCATIONAL OBJECTIVES

1. To work in national and international institutions and organizations in the fields of soil conservation, sustainable soil fertility management, design and planning of plant nutrition and fertilization for cultivated plants, smart farming techniques, and R&D in Soil Science and Plant Nutrition
2. To pursue postgraduate education and/or work as academic staff at universities
3. To work as responsible engineers or managers in all types of agricultural production enterprises

Program Educational Objectives	Faculty of Agriculture Core Duties	Ege University Core Duties
To work in national and international institutions and organizations in soil science and plant nutrition fields such as soil conservation, sustainable fertility management, plant nutrition and fertilization design and planning, smart agriculture technologies, and R&D	Individuals who are committed to national values, have a perspective, can think analytically, can apply scientific techniques, and have strong cultural and social aspects	Meeting regional, national and universal needs
To pursue postgraduate studies and/or serve as academic staff at universities	To organize innovative research and student-oriented educational activities in agricultural sciences,	Meeting regional, national and universal requirements in research and education
To work as managers or responsible engineers in agricultural production enterprises	Individuals who are committed to national values, have a perspective, can think analytically, and can apply scientific techniques	Professionally and culturally equipped individuals who are open to change and adopt scientific thinking as a way of life



You can access the education program details of our faculty and department via QR code.

PROGRAM OUTCOMES

1. To be able to use theoretical and practical knowledge with sufficient knowledge in the fields specific to Soil Science and Plant Nutrition discipline,
2. Ability to identify, define, interpret, formulate and solve problems related to the field of Soil Science and Plant Nutrition; ability to select and apply appropriate analysis, modeling and solution methods for this purpose,
3. The ability to design a process, product, model related to the field of Soil Science and Plant Nutrition under realistic constraints and conditions, in other words, taking into account the possibilities at hand and the current situation of the field in question, to meet certain requirements, to develop and to use information technologies effectively,
4. Awareness of entrepreneurship, innovation and sustainable development related to the field,
5. Ability to select, use and develop modern tools necessary for field applications and to use information technologies effectively,
6. Ability to design, conduct experiments, field work, collect data, analyze and archive results, solve and/or interpret texts related to their field of study,
7. Ability to work effectively individually and in teams,
8. Ability to communicate effectively both orally and in writing in Turkish,
9. Ability to write effective reports in the field and to understand written reports, to prepare production reports, to make effective presentations, to give and receive clear and understandable instructions,
10. Awareness of lifelong learning, access to information, ability to follow developments in science and technology and continuous self-renewal,
11. Awareness of professional ethics and responsibility,
12. Awareness of the universal and social impacts (environmental problems, economy, sustainability, etc.) and legal consequences of field practices,
13. Awareness of the standards used in field practices.

CAREER OPPORTUNITIES

There are also job opportunities in every unit where our department students find internship opportunities. In addition to these,

- Ministry of Environment and Urbanization and Affiliated Organizations
- Fertilizer Sales Companies
- Vocational Schools
- Agricultural Credit Cooperatives
- Agricultural Sales Cooperatives and Unions
- Agriculture Insurance Companies
- Ministry of Food, Agriculture and Livestock
- Various Public and Private Sector Banks Providing Agricultural Credit
- State Production Farms Affiliated to TİGEM
- Agrochemical Companies
- Agricultural Quarantine Directorates

EDUCATION AND RESEARCH OPPORTUNITIES

The Department of Soil Science and Plant Nutrition is working on solutions to the existing problems of the country's soils and crop production. Specialized staff trained in different branches of science successfully carry out many national and internationally supported projects. The department has the facilities to carry out these researches with its advanced laboratories, test fields and greenhouses.

The results obtained from the studies are transferred to scientists, public or private institutions and farmers working in the relevant field through activities such as congresses, symposiums, workshops, seminars and farmer meetings organized in certain periods as well as publication activities.

The laboratories of the department are open to public and private institutions and farmers and provide soil fertility and fertilization recommendations and consultancy services based on soil, plant, water and fertilizer analysis, as well as services related to soil survey mapping and remote sensing.

Analytical Chemistry and Radioisotope Laboratory	Greenhouse (2 units, total 545 m ²)
Computer Room	Soil Survey and Mapping Laboratory
Plant Nutrition and Soil Fertility Laboratory	Soil Physics Laboratory
Plant Physiology Laboratory	Soil Genetics Laboratory
Trial Field (60 da)	Soil Chemistry Laboratory
Library	Soil Microbiology and Biochemistry Laboratory (2pcs)
Undergraduate and Graduate Classrooms	Soil-Water Conservation and Erosion Control Laboratory
Student Application Laboratory (2 units)	Remote Sensing and Geographic Information Systems Laboratory

You can examine the physical infrastructure facilities of our department on the following page.



Flame Spectrophotometer



Colorimeter



Spectrophotometer (UV-visible)



Nitrogen combustion Unit



Nitrogen Distillation Unit



***Soil-Water Conservation and Erosion Control
Laboratory and Artificial Sprinkler***



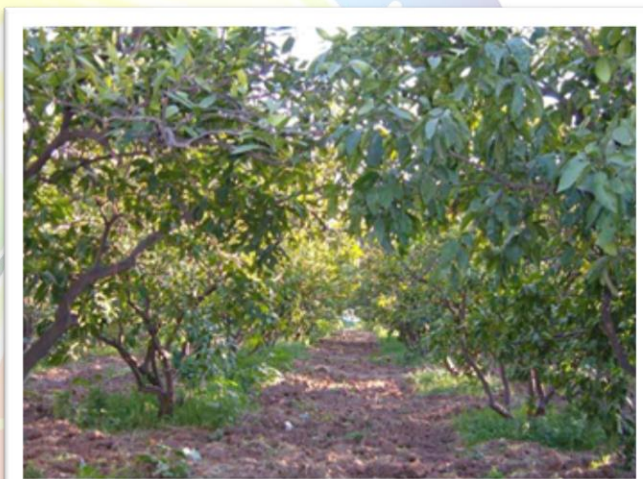
A Section from the Department Greenhouses



A Section from the Department Greenhouses



View from a Trial in the Departmental Greenhouse



Section View of one of the Trial Gardens



A View from the Department's Olive Trial Garden

Our department has a 30 decaire trial field (olive orchard), a 200 m² greenhouse and a 200-tree mandarin orchard, which support our production and research activities.



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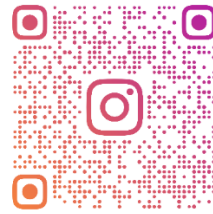
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DEPARTMENT WEBSITE



DEPARTMENT INSTAGRAM



EGETOPRAKBILIMIVEBITKIBESLEME