



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DISPAA
DIPARTIMENTO DI SCIENZE DELLE
PRODUZIONE AGROALIMENTARI
E DELL'AMBIENTE

DISPAA

Department of Agrifood Production and
Environmental Sciences
University of Firenze

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DISPAA was formed in 2013 as a merger between the Departments of Plant, Soil and Environmental Science and Biotechnology.

It now includes: 65 professors and researchers,
40 technical and administrative staff,
100 graduate students, senior and junior research fellows.

The Department deals with numerous disciplines that share similar methodological approaches, although in different sectors of agricultural and environmental systems.

The aim is to achieve basic and applied scientific activities in the field of plant and animal productions, of environmental protection and recovery, of the study on chemical, physical, biological and genetic components, including their interactions, which characterize the agricultural and environmental systems. The activities are focused on integrated and multidisciplinary studies of multifactorial components crucial in determining agriculture production quantity and quality and environmental protection (soil, microorganisms, climate, plants, animals, biodiversity).

Educational activity

Bachelor Degree

Agricultural Science (Coordinator: Prof. Oreste Franci)

Wildlife Sciences (Coordinator: Prof. Riccardo Bozzi)

Plant Nursery Science, Environment and Green Area Management
(Coordinator: Prof. Francesco Nicese)

Master of Science

Agro-environmental biotechnology (Coordinator: Prof. Roberto De
Philippis)

Natural resources management for tropical rural development
(Coordinator: Prof. Andrea Pardini)

Science and Management of Wildlife- Environmental Resources
(Coordinator: Prof. Giovanni Argenti)

Agricultural Science and Technology (Coordinator: Prof. Giuliana Parisi)

PhD

Agricultural and Environmental Science
Coordinator: Prof. Giacomo Pietramellara

Research activity: seven sections

During the period 2015-2017 600 papers with IF have been published on different subject areas, including environment, soil, agriculture, with application from molecular biotechnology to engineering. Most of them are based on international collaborations with Europe, USA, Australia and China

The DISPAA carries out a relevant activity supported by European (H2020, Life, PRIMA, JPI), national (PRIN) and regional (PSR, POR) projects.

Soil and Plant Science

This Section studies the relationships between soil and vegetation, with the aim of promoting conservation and sustainable management. The research lines concern: (i) the study of the soil as a complex ecological system, its genesis and degradation, and the role of the microbial component; (ii) soil and vegetation as carbon stocks; (iii) Vegetation distribution and responses to stress factors; (iv) applied systematics; biodiversity and its ecological, economic and cultural importance.



Agronomy and Land Management

The Section operates in the field of environmental modelling and precision farming, climate change and human health; characterization and conservation of germplasm; sustainable management of territory and natural resources, including soil, water and biodiversity; agroecology and organic farming; agro-silvo-pastoral systems and agroforestry; quality food production, including cereals, pseudocereals and ancient wheat varieties.



Microbiology

The Researchers of the Microbiology Section carry out research and training activities in the field of agricultural, food and environmental microbiology and, in particular, in the following sectors: biology and biotechnology of photosynthetic microorganisms; microbial biotechnology for the protection of the environment; use of microorganisms in the production of biofuels, new foods, primary and secondary metabolites of industrial interest.

Center of Tree Species

The center of Tree Species carries out research activities applying updated approaches to the study of the physiology of nursery and open field plants, of their genetic improvement, and of any other applied biological discipline, aimed at promoting sustainable and quality managements of crop systems, for the production of fruit and biomass, for ornamental and landscape purposes, and for the protection of the environment and its changes.



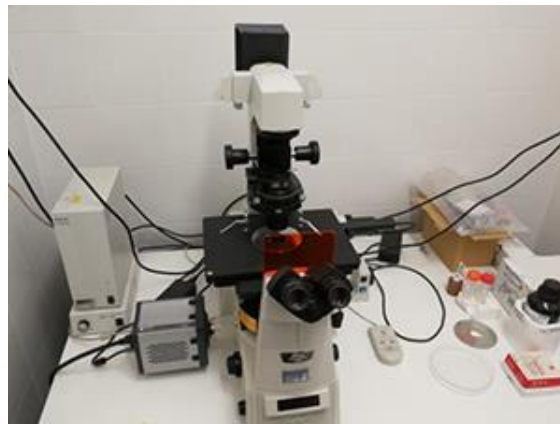
Agricultural Genetics

The scientific activity of the Section is related to the study of the gene structure, function, expression and inheritance in plant species of agricultural and forestry interest. Moreover, particular interest is given to the biometric, statistical and numerical methods for the analysis of complex characters and molecular polymorphisms, with particular attention to the improvement of agricultural and forest species of economic interest. The main research areas concern landscape genetics approaches.



Plant Pathology and Entomology

The Plant Pathology and Entomology Section deals with teaching and research related to biology, epidemiology and control of diseases of agricultural crops, forest and urban trees caused by phytopathogenic bacteria and fungi, insects and other phytophagous invertebrates, including emerging alien and invasive species. Host-pathogen interactions and environmental effects on disease emergence, the development and testing of new diagnostic protocols, based both on classical and molecular methods, and the design and evaluation of innovative control methods are among the most important activities.



Animal Science

Researchers and professors of the section deal with animal science. Scientific activities are focused on researches aimed to improve the knowledge about productive and reproductive performances of farm animals, animal nutrition and feed evaluation, genetics and animal breeding, livestock management systems, animal welfare, conservation and valorization of animal biodiversity, applied biotechnologies, wildlife and aquaculture.

