





BELGIUM



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State or Federal Research Facilities, Institutes or Organisations

Royal Belgian Institute of Natural Sciences

https://www.naturalsciences.be/en/science/home

The Institute's research strategy concentrates on evolution, biodiversity, ecosystems and natural resources. The Institute's collections are important "biodiversity archives" and form an inexhaustible research resource.

Faculty/Department/Areas of Competence:

- 1. Directorate of Natural Environment
- 2. Directorate of Taxonomy and Phylogeny

Wallonie Service Public (SPW)

https://spw.wallonie.be/

The mission of the Walloon Public Service is to implement the policy decided by the Walloon Government, in the areas of competence and matters which are devolved to it. It is also the first interface between regional institutions and its citizens. Through the many actions carried out and measures implemented within the framework of regional competences, the SPW is also proving to be an essential partner of the local authorities. It is made up of 8 entities among which the SPW Agriculture, Natural Resources and Environment.

Centre wallon de Recherches agronomiques (CRAw)

https://www.cra.wallonie.be

The CRA-W brings together scientific research, service and support functions in support of Walloon farmers, stockbreeders, horticulturists, forestry producers and operators in the agri-food sector. Scientific research is focused in four main areas: precision farming (to produce more sustainably), risk management (to stabilise production outcomes while protecting the environment and consumers), precision livestock farming (for more sustainable production) and understanding products (to ensure the quality of the production processes and the products derived from them).





Faculty/Department/Areas of Competence:

- 1. Current research projects
- 2. Life Sciences Department
 - Biological engineering
 - Biodiversity and plant and forest improvement
 - Crops and forest health
- 3. Productions in agriculture Department
 - Crop production
 - Animal production
 - Agriculture, territory and technologies integration
- 4. Sustainability, systems and prospectives Department
 - Soir, water and integrated production
 - Agricultural systems
 - Agriculture and sustainability
- 5. Knowledge and valorization of agricultural products Department
 - Protection, control products and residues
 - · Valorization of agricultural products, biomass and wood
 - Quality and authentication of agricultural products

Flanders Research Institute for Agriculture, Fisheries and Food (ILVO)

https://www.ilvo.vlaanderen.be/language/en-US/EN/Home.aspx

ILVO performs multidisciplinary, innovative and independent research aimed at economically, ecologically and socially sustainable agriculture and fisheries. Through this research, ILVO accumulates fundamental and applied knowledge which is vital for the improvement of products and production methods for quality control and the safety of end products, and for the amelioration of policy instruments as a foundation for sector development and agricultural policy for rural areas.

Faculty/Department/Areas of Competence:

- 1. Crops
- 2. Plant genetics and physiology
- 3. Plant breeding and soil
- 4. Crop protection
- 5. Animal husbandry
- 6. Aquatic environment and quality
- 7. Fisheries and aquatic production
- 8. Food science



- 9. Agricultural engineering
- 10. Environment and nature
- 11. Rural development
- 12. Agricultural farm development

Universities/Higher Education Institutes

University of Antwerp

https://www.uantwerpen.be/en/about-uantwerp/

Faculty of Pharmaceutical, Biomedical and Veterinary Sciences

Faculty/Department/Areas of Competence

- 1. Natural Products and Food Research
- 2. Department of Veterinary Sciences

Faculty of Sciences

- 1. Ecology and the Environment
- 2. Environmental Ecology & Microbiology (ENdEMIC)
- 3. Integrated -omics
- 4. Institute for Environment and Sustainable Development (IMDO)
- 5. Sustainable Energy, Air & Water Technology (DuEL)

Ghent University

https://www.ugent.be/en

Ghent University is one of the largest universities in the Dutch language area, located in Flanders, Belgium. Ghent University Global Campus is also the first European university in Songdo, South Korea. Its 11 faculties offer more than 200 courses and conduct in-depth research within a wide range of scientific domains.

Faculty of Sciences

Faculty/Department/Areas of Competence:

1. Department of Plant Biotechnology and Bioinformatics





Faculty of Veterinary Medicine

Faculty/Department/Areas of Competence:

- Pharmacology, biochemistry and toxicology
- Morphology
- Virology, parasitology and immunology
- Pathology, bacteriology and poultry diseases
- Veterinary public health and food safety
- Nutrition, genetics and ethology
- Reproduction, obstetrics and herd health
- Internal medicine and clinical biology of large animals

Faculty of Bioscience and Engineering

The Faculty is a European research leader in the field of appliced biological and lifesciences or bioengineering, supporting innovation and sustainability in life sciences that manage and protect natural and man-made ecosystems.

1. Department of Environment

- Forest & Nature [ForNaLab]
- Hydro-Climate Extremes Lab [H-CEL]
- Precision Soil and Crop Engineering [PreSco]
- Remote Sensing | Spatial Analysis Lab [REMOSA]
- Soil Contamination [SoCon]
- Soil Degradation and Conservation [SoDeCo]
- Soil Fertility and Nutrient Management [SoFer]
- Soil Genesis [SoGen]
- Soil Physics [SoPHy]
- Soil Spatial Inventory Techniques [ORBit]
- Wood Technology [Woodlab]

2. Department of Plants and Crops

- Horticultural sciences
- Plant ecology
- Sustainable crop production
- Tropical and subtropical agriculture and ethnobotany
- Plant Breeding

3. Animal sciences and aquatic ecology

• Animal Nutrition and Animal Product Quality



- Aquaculture & Artemia Reference Center
- Aquatic Ecology (AECO)
- Blue Growth Research Lab
- Environmental Toxicology (GhEnToxLab)
- Immunology and Animal Biotechnology
- 4. Food Technology, Safety and Health
 - Food Technology
 - Food Microbiology
 - Nutrition & Health
 - Food Chemistry
 - Packaging
 - · Food Safety & Risk Assessment

University of Liège

https://www.uliege.be/cms/c 8699436/en/uliege

As a public university open to the world and is anchored in the scientific, cultural and economic development of its region, the University of Liège relies on its three pillars: teaching, research and civic engagement.

Gembloux Agro-Bio Tech

https://www.gembloux.uliege.be

Gembloux Agro-Bio Tech is at the crossroads of research and development and at the heart of issues of international and societal interest, which makes it an essential player in terms of sustainable development.

Faculty/Department/Areas of Competence:

- 1. Food supply
- 2. Biomass
- 3. <u>Biotechnologies</u>
- 4. Climate
- 5. Environment and biodiversity
- 6. Forestry
- 7. Animal production
- 8. Plant production
- 9. Crop protection
- 10. Soil
- 11. Statistics

12. TERRA Teaching and Research Centre

TERRA is a unique research unit in Belgium whose mission is to develop research in biological engineering applied to agronomy, biotechnology and the environment. An important objective is to develop transversality and exchanges between researchers from different disciplines.

Climate change: monitoring, impact and adaptation





- Multiscale soil systems
- Innovative methods in agricultural production
- Innovation, new approaches and crop protection
- Dynamics and changes of forest socio-ecosystems in Central Africa
- Feeding the future
- · Genetic improvement of agro-biological resources
- Innovative processes in biotechnology
- Development of urban agro- and eco-systems

Faculty of Sciences

https://www.sciences.uliege.be/cms/c 4155459/fr/facsc-unites-de-recherche

Faculty/Department/Areas of Competence:

Freshwater and Oceanic sciences Unit of reSearch (FOCUS)

Faculty of Veterinary Medicine

https://www.fmv.uliege.be/cms/c 4746271/en/fmv-research-at-the-faculty

The faculty conducts research with direct applications for society, for example, the improvement of animal production, infectious diseases, the safety of the food chain. There are six priority research areas: infectious diseases, food safety, animal production, translational veterinary medicine, modelling, and aquaculture.

Faculty/Department/Areas of Competence:

- <u>Fundamental and Applied Research for Animals and Health</u> (FARAH)
- GIGA
- TERRA Teaching and Research Centre (see above)

UCLouvain (Université catholique de Louvain)

https://uclouvain.be

UCLouvain prioritises universal access to high-quality education and makes innovation the governing principle of its activities, in teaching as much as in research. It creates synergies between its involvement in regional development and its international influence, enabling them to fuel each other.

Faculty of Bioscience Engineering

https://www.biw.kuleuven.be/english; https://www.biw.kuleuven.be/english/about-us/contact

Faculty/Department/Areas of Competence:

1. Department of Earth and Environmental Sciences



The department aims at making an important contribution to the scientific understanding of societal issues such as environmental pollution, food production, climate change, nature and landscape management, soil and water management, exploitation of underground resources, rural and urban development, international development collaboration and tourism.

- Division Soil and Water Management
- Division Forest, Nature and Landscape
- Division of Bioeconomics

2. Department of Biosystems (BIOSYST)

Research includes bacteriophages, microorganisms, plants, animals and humans. A profound knowledge of their physiology, genetic regulation and their interaction with the environment is combined with engineering approaches to design, optimise and control bioprocesses involving them. Applications are found in sustainable agroproduction, better health and more human and animal welfare, both in the industrial and developing world.

- Division of Mechtronics, Biostatistics and Sensors
- Division of Crop Biotechnics
- Division Animal and Human Health Engineering

3. Department of Microbial and Molecular Systems (M2S)

The research mission of the Department is to gain scientific insight into complex biological and molecular systems, and specifically into micro-organisms, plants, food and catalysts. The Department contributes actively to the public debate on topics including environmental protection, natural resources, energy and fuels, food and health issues of mankind, animals and plants.

- Centre for Membrane Separations, Adsorption, Catalysis and Spectroscopy for Sustainable Solutions (cMACS)
- Centre for Surface Chemistry and Catalysis: Characterisation and Application
- Centre for Food and Microbial Technology
- Centre of Microbial and Plant Genetics

School of Veterinary Medicine

https://uclouvain.be/en/faculties/sc/vete

Haute école provinciale de Hainaut Condorcet, ATH agrobiosciences et chimie

https://www.condorcet.be/departements/agrobiosciences-et-chimie/ath.html

Since 2009, the Haute École Provinciale de Hainaut - Condorcet offers local and quality education, open to students from other provinces and abroad.

Faculty/Department/Areas of Competence:

- 1. Laboratory of biotechnology and applied biology
 - Plant pathology
 - Environmental metagenetics





- Genetic ressources
- Sanitary quality of agricultural and food products
- 2. Applied Plant Ecophysiology (A.P.E) Laboratory
 - Plant physiology
 - Soil sciences
 - Agronomy & environment
- 3. Phytopathology, Microbial and Molecular Farming Lab (P.M.M.F.)
 - Phytopathology
 - · Microbial farming / Applied Microbiology
 - Molecular farming
- 4. Laboratory of Green Chemistry
- 5. <u>Laboratory of Entomology</u>
 - Applied entomology
 - Insect Physiology
 - Insect farming
 - Pest management & Pollination

Haute École de la Province de Liège

https://www.provincedeliege.be/en/hauteecole

- 1. Sciences agronomiques
 - Agro-industries et biotechnologies
 - Environnement
 - Forêt et nature
 - Techniques et gestion agricoles

Université libre de Bruxelles (French for Free University of Brussels), abbreviated ULB

https://www.ulb.be/

Faculté des Sciences

University of Mons

https://web.umons.ac.be/en/





Faculty of Science

University of Namur https://www.unamur.be/

Faculty of Science