

KEYWORDS
to select
projects:

- Resource use efficiency
- Resources availability
- Ecological theory to agriculture
- Sustainable management
- Integration of Breeds – Environment
- Management
- Increasing productivity
- Water and soil management
- Agricultural insurances on future climate change scenarios

MAPPING OF CURRENT RESEARCH:




Environmentally sustainable growth and intensification of agriculture

BELGIUM



Research Effort (Person Month)

Joint Programming Initiative: Agriculture, Food Security and Climate Change

SECTORS	Total Projects (last 3 years)	Total Funding (last 3 years)	AREAS	MAIN PROJECTS	Research Effort (Person Month)
 <p>PLANT PRODUCTION (CROPPING SYSTEMS)</p>	[Bar]	[Bar]	Plant genetic resources (breeding / genetics / biodiversity)	Genetic control of plant architecture in 2 agricultural crops as a basis for yield improvement through adapted cropping technique and a more efficient breeding Multi-species swards and multi scale strategies for multifunctional grassland-based ruminant production systems Valorizing Andean microbial diversity through sustainable intensification of potato-based farming systems (FP 7)	[Bar]
			Land based innovative cropping systems	Innovative methods to maintain or improve soil fertility within the objectives of the manure policy Research on the management of crop residues in vegetable production and possibilities of catch crops and crop rotations // Mechatronic systems for optimal thinning in pear Effect of different management measures for carbon storage under grassland // Influence of crop rotation, succession and cultivation syst. on the carbon cycle and soil biod.	[Bar]
			Production in greenhouses	SmartKas: ecophysiological-energetically profitable cultivation in an intelligent controlled glasshouse environment	[Bar]
			Low input – high efficiency crops (water / energy / fertilisers/ soils)	On-line monitoring and model-based advisory system for 'just-on-time N-fertilization in outdoor vegetable cultivation	[Bar]
			Plant protection		[Bar]
			Remote sensing	Remote sensing as a tool for soil moisture control in pear and apple orchards: at valorising the spatial variation ADASCIS: Earth Observation to support Agricultural Damages Assessment System in Crop Insurance Schemes MERINOVA: Meteorological risks as drivers of environmental innovation in agro-ecosystem management	[Bar]
			Agro-ecological technologies on plant production intensification	FERTIPLUS: Reducing mineral fertilisers and agro-chemicals by recycling treated organic waste as compost and bio-char products (FP 7)	[Bar]
			Others	Compatibility of Agricultural Management Practices and Types of Farming in the EU to enhance Climate Change Mitigation and Soil Health (Catch-C)	[Bar]
 <p>ANIMAL PRODUCTION</p>	[Bar]	[Bar]	Farm animal genetic resources (breeding / genetics / biodiversity)	Genotype-milieuinteracties bij het bepalen van de fokwaarde van beren [Genotype-environment interactions in determining the breeding value of boars] METHAMILK: Helping to decrease methane emissions using a fast and precise method for estimating individuals emissions DAIRYHEATSTRESS - Creating and using innovative tools to select robust dairy cows under anticipated climate changes	[Bar]
			land-based management systems	Individual monitoring of fertility in dairy cattle through online measurable milk parameters	[Bar]
			land-less management systems	Optimizing performance and welfare of fattening pigs using High radio Frequency Identification (HF RFID) and synergistic control on individual level Precision Nutrition of pigs: meerfazenvoeding based on home-grown protein sources Feeding strategies to improve P utilization and reduce P emissions into the environment in poultry Optimization of the redox status for better intestinal health in intrauterine growth retarded piglets	[Bar]
			Remote sensing (Grass, Grazing systems)		[Bar]
			Agro-ecological technologies on farm intensification		[Bar]
			Others		[Bar]
			Global sustainability of agricultural production	OPTENERGES - Optimisation of energy efficiency of catering farms and reduction in their greenhouse gases emissions CLIMAGRO - Evaluation of the climatic impact of agro-environmental methods DECIDE - Tool for evaluating GHG emissions and energetic consumptions from Walloon farms	[Bar]
 <p>HORIZONTAL ASPECTS</p>	[Bar]	[Bar]	Diversification of production systems		[Bar]
			Socio-economic aspects		[Bar]
			Adaptation to local-regional level		[Bar]
			Others	Improved Nutrient and Energy Management through Anaerobic Digestion (INEMAD, FP 7) ERA-NET ICT-AGRI: Coordination of European Research within ICT and Robotics in Agriculture and related Environmental issues Upgrading of purified effluent from manure to produce reusable water for agriculture	[Bar]