

agricultural engineering

Agricultural and horticultural machinery, implements, equipment and buildings. Aspects include design, construction, selection and operation and control as well as effects on crops, livestock and soil.

applied economics and sociology

Policy formation, development programmes, the economics of the food industry, natural resources utilization, farm management, aspects of education and research, and rural sociology.

animal production

Breeding and genetics of animals of economic importance, animal production, animal nutrition, animal biotechnology, aquaculture, dairy science and technology.

animal health

All aspects of veterinary medicine, animal welfare and behaviour, zoonoses and food safety (of meat and milk, including meat inspection).

animal nutrition

All aspects of nutrition, feeding and metabolism of farm animals, companion animals, equine, zoo and game animals.

aquaculture

Production, feeding, husbandry, breeding, genetics and health of cultured fish, crustaceans, molluscs, and other aquaculture species.

biofuels

Production and processing of energy crops into biodiesel or fuel ethanol, energy forestry, biogas production from livestock wastes and agricultural residues, fermentation technology, energy policy, economics and land-use issues.

biosafety and bioterrorism

Biosafety issues associated with introduction of transgenic organisms, including environmental impact and food safety issues, regulations, treaties and trade. Also biosafety issues associated with agricultural chemicals and laboratory techniques relevant to agriculture and food. Detection and prevention of bioterrorism, particularly involving pathogens affecting humans and agricultural organisms.

biotechnology

The application of molecular genetics, genetic engineering and *in vitro* culture to organisms of agricultural importance, with an emphasis on methodology, studies of agriculturally useful traits, applications of biotechnology for traditional animal and plant breeding, economic, planning and policy aspects of biotechnology, biosafety, GM food, legal and social issues.

breeding

All aspects of breeding and genetics of animals and plants using traditional approaches and modern techniques, use of genetic resources in breeding, breeders' rights, reproduction, evolution and domestication.

chemistry

Pesticides, adjuvants, botanical pesticides, biochemistry of pest organisms, biocontrol, farmed animals and plants, biofuels, the chemistry of soils, fertilizers, freshwater, waste water and nutritional biochemistry.

climate change

The effect of climate change on natural resources, crop production, pests and diseases, animal health and production, human health. Also agro-economic aspects such as rural development and demography, tourism, the production and processing of bio-fuels, microbiology fermentation, energy co-generation in the sugar industry.

crop science and grasslands

All aspects of the genetics and breeding, taxonomy, botany, physiology, biochemistry, propagation, production, management and storage of field and forage crops, and the ecology, management and sustainability of grasslands and rangelands.

ecotourism

Ecotourism, sustainable tourism development, tourism for development and poverty alleviation in developing countries, environmental management systems, environmental impact of tourism and tourist facilities, nature conservation, resource use.

entomology

Taxonomy, genetics, behaviour, morphology, physiology, control of insects and other arthropods of medical, veterinary or agricultural importance.

environmental science

Environment, biodiversity and ecology, including soil science, water resources, organic farming, forestry and integrated crop management, environmental pollution and remediation. Issues relating to the conservation of land, forest, soil, biological and genetic resources, and nature conservation.

food science and technology

Entire food chain – from farm to fork and beyond. Composition, quality control, processing, analytical methodologies, safety, hygiene, effect on human health, technology, and legislation.

forestry

All aspects of global forest and wood science research from silviculture and forest management to tree biology and forest ecology, agroforestry, and logging through to wood anatomy, wood technology and international trade of timber and non-wood forest products.

genetics

Genetics of organisms of agricultural or economic significance and wild relatives (molecular genetics, cytogenetics, population genetics, genomics) and nutrigenomics and the prevalence of genetic risk factors and susceptibility genes in humans.

helminthology

All aspects of medical and veterinary helminthology. All aspects of genetics, physiology, biochemistry, ecology, pathology, immunobiology, epidemiology and transmission, life cycle, vectors, treatment and control, scientific techniques.

horticultural science

All aspects of horticultural science, including genetic resources, breeding, biology, propagation, pests, diseases, crop management, growth models, environmental physiology, postharvest treatment, crop quality, marketing and economics of horticultural crops.

human nutrition

Physiology and biochemistry of all nutrients, analytical methodologies, public health nutrition, sports nutrition, nutrition education, dietary surveys, reproduction and diet, human growth, infant feeding, ageing, nutritional status and clinical nutrition.

invasive species

All invasive plants and cyanobacteria. Any invasive animal (including many insects and other arthropods, rodents, feral goats and other mammals) that affects crops and forest trees, stored agricultural products and timbers, grasslands, soils, water supplies, human health or animals of veterinary importance.

leisure and tourism

Social, economic and environmental impacts of leisure, recreation, sport, tourism and travel activities, products and services.

medicinal plants and pharmacology

Botany, physiology, biochemistry, propagation and cultivation of medicinal plants and pharmacological papers on plant constituents and herbal drugs.

microbiology

Veterinary microbiology, plant pathogens, mycorrhizas, soil microbiology, forest microbiology, food microbiology, microbiology related to water pollution, toxinogenic fungi, mycotoxins and other toxins, animal vaccines. Plus the taxonomy, ecology, biochemistry and genetics of microorganisms of veterinary or agricultural importance.

mycology

Molecular genetics, physiology, biochemistry and systematics, plus all aspects of mycoses in both humans and animals including pathology, epidemiology, immunology, diagnosis and therapy.

natural resources, land/water management

All aspects of soil science and management, land resources and management, fertilizers, earth sciences and environmental pollution and remediation aspects. Water resources and their management in terms of agriculture and water supply in relation to factors such as climate change. Issues relating to the conservation of land, forest, soil, biological and genetic resources, and nature conservation are covered.

nematology

Plant nematode diseases, other nematodes and hosts, biology and ecology, control, nematicides, nematodes as genetic models, techniques, equipment and machinery, economics, extension and education.

organic and sustainable agriculture

Organic and sustainable crop production and animal husbandry, including soil fertility management, composting, pest control, organic methods of animal healthcare, low input and traditional farming systems, environmental impacts of farming and organic foods.

parasitology

Medical and veterinary parasitic diseases and vectors and vector-borne diseases, which includes many of the most important tropical diseases. Complete coverage of host organisms, taxonomy, biology and control.

plant pathology

All types of plant pathogens, diseases of all crops, forest trees, weeds and wild plants, pathogen biology, mycotoxins, plant disease control, fungicides, techniques and equipment and economics.

plant protection

Comprehensive coverage of the control and management of pests, weeds, parasites and pathogens. Including chemical control (all aspects of pesticides), biological control, cultural and physical control, integrated pest management, pest/disease resistance, pest surveys, quarantine, control equipment. Includes all organisms that harm crops, stored products, forest trees and timber.

postharvest

All aspects of postharvest research, from harvesting the crop up to the initial stages of processing.

protozoology

Taxonomy, morphology, molecular genetics, physiology, host relationship, clinical aspects of protozoal infections of medical and veterinary importance. Includes immunobiology, treatment and control of the diseases and their vectors.

soil science

All aspects of soil science including soil properties, soil management, classification and formation, soil conservation, irrigation and drainage and fertilizer technology.

veterinary medicine

Comprehensive coverage of veterinary medicine (food animals, pets, sport horses, zoo and wild animals), including all aspects of veterinary pharmacology, surgery, diagnosis, immunology, and veterinary public health.

virology

Phage and fungal viruses related to animal and plant pathogens, viruses of agricultural and forestry species, animal viruses and viral infections of veterinary interest. Insect viruses where there is potential for biological control and plant viruses carried by insects.

waste management

Biological, chemical and physical treatment of water and agricultural wastes, the use (including genetic manipulation of) microorganisms for the breakdown of specific compounds. Reclamation and bioremediation of polluted lands, soil and freshwater pollution from natural and man-made sources