



LITHUANIAN RESEARCH CENTRE FOR AGRICULTURE AND FORESTRY



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AGRICULTURE RESEARCH INSTITUTIONS IN LITHUANIA



Lithuanian Research Centre For Agriculture and Forestry



Aleksandras Stulginskis University (formerly Lithuanian University of Agriculture)

Lithuanian University of Health Sciences (with the Veterinary Academy and Institute of Animal Science)

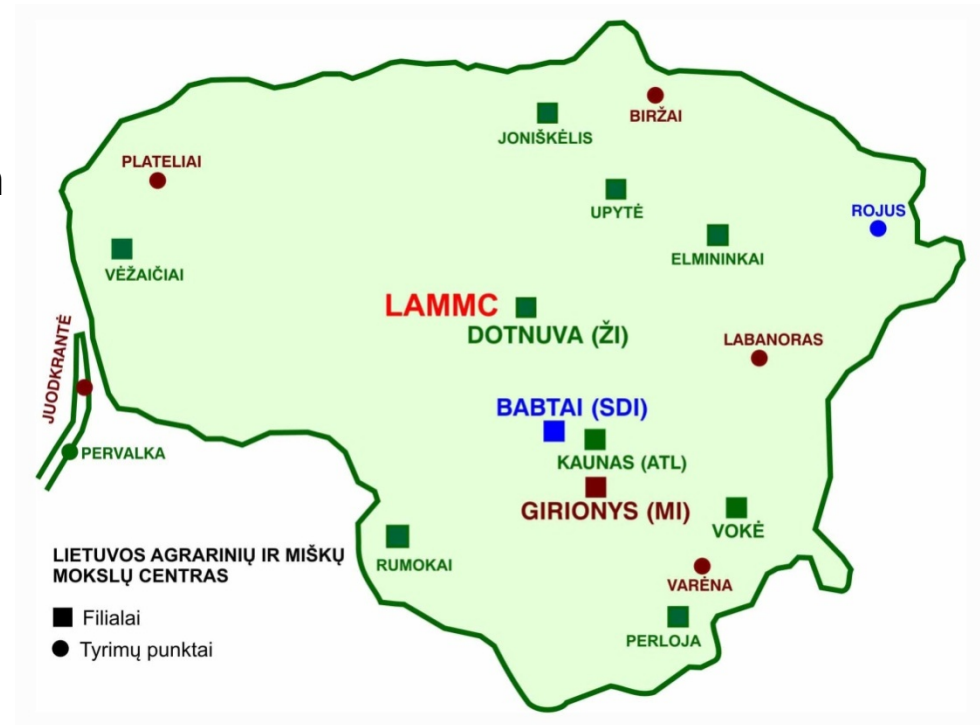


The Lithuanian Institute of Agrarian Economics



Lithuanian Research Centre for Agriculture and Forestry (LRCAF) was established in 2010 as a merger of three related research institutions:

- Lithuanian Institute of Agriculture with 2 Branches ,Agrochemical Research Centre and 6 Experimental Stations*
- Lithuanian Institute of Horticulture,*
- Lithuanian Institute of Forestry*





The objective of the reorganization of 3 institutes into the Centre was:

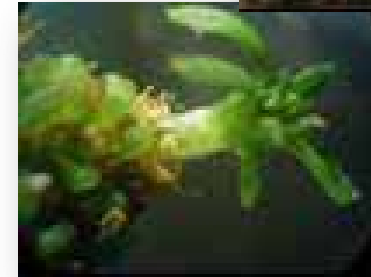
*to create a forward-looking research institution **that would consolidate Lithuanian agricultural and forestry science**, would use a complex approach to the solution of basic and applied research problems and experimental development in the fields of agriculture and forestry.*

the Centre was created with 3 stem and 8 regional branches



Stem branch -INSTITUTE OF FORESTRY LRCAF

1. Ecology department
2. Forest protection and game management department
3. Forest genetics and tree breeding department
4. Forest resources, economics and policy departments
5. Forest plant biotechnologies laboratory
6. Silviculture department



Stem branch INSTITUTE OF HORTICULTURE

1. Laboratory of plant physiology
2. Plant protection laboratory
3. Sector of vegetable growing technologies
4. Laboratory of biochemistry and technology
5. Sector of vegetable breeding
6. Department of horticulture technologies
7. Department of orchard plant genetics and biotechnology



Stem branch INSTITUTE OF AGRICULTURE

1. Department of plant nutrition and agroecology
2. Department of plant pathology and protection
3. Department of soil and crop management
4. Department of cereal breeding
5. Department of grass breeding
6. Laboratory of genetics and physiology
7. Chemical research laboratory
8. Sector of apiculture



8 REGIONAL BRANCHES

1. Agrochemical Research Laboratory LRCAF
2. Vokė Branch LRCAF
3. Vėžaičiai Branch LRCAF
4. Elmininkai Experimental Station LRCAF
5. Joniškėlis Experimental Station LRCAF
6. Perloja Experimental Station LRCAF
7. Rumokai Experimental Station LRCAF
8. Upytė Experimental Station LRCAF





MISSION AND STRATEGIC OBJECTIVES

The mission of LRCAF is the conduct of basic and applied research relevant for science, national economic development and ecological needs, rational and sustainable use of land, forest and environmental resources and high quality production in compliance with the envisaged major directions of the scientific activities;

development of experimental and other activities in the fields of agronomy, horticulture, forestry science, ecology_ and other related braches;

accumulation of new scientific knowledge, its systemization and dissemination to the public; promotion of balanced and sustainable land and forest economy and rural development.



RESEARCH FIELDS IN LRCAF

- ❑ *Research into soil physical, chemical, biological characteristics and plant nutrition processes and ascertainment of their regularities.*
- ❑ *Research into agricultural and forest plants' genetics, biotechnology, physiology and biochemistry, plant breeding, seed production, conservation and development of plant genetic resources.*
- ❑ *Research into agricultural and forestry plants' biology regularities, modelling of agrobiological systems determining quality and productivity.*
- ❑ *Research into agricultural and forestry crops' microbiological, pathological, pathogenetic control, toxicology tests of plant raw materials and products.*
- ❑ *Modelling and optimization of agricultural and forest plant products' processing processes and storage methods, safety and control of plant food products, research on horticultural plants' biologically active substances in natural and processed produce.*
- ❑ *Research into sustainability of agro and forest ecosystems under changing climate conditions.*
- ❑ *Research into agricultural, horticultural and silvicultural systems, investigation of social and economic problems intended for agricultural and forestry policy shaping.*



LONG-TERM RESEARCH PROGRAMMES, (started from 2012)

- 1. Biopotential and quality of plants for multifunctional use (IA)*
- 2. Sustainable forestry and global changes (IF)*
- 3. Horticulture: agrobiological foundations and technologies (IH)*
- 4. Productivity and sustainability of agricultural and forest soils*
- 5. Genetics and purposeful change of genotypes of agricultural and forest plants*
- 6. Harmful organisms in agro and forest ecosystems*

*The Centre carries out research and implements various programmes and projects obtained by tender funding method and funded by the Ministries of **Agriculture**, **National Economy**, and **Environment**; conducts various research and experimental development projects*

Staff number 2013-01-02

Staff groups	In. of Agriculture	In. of Horticulture	In, of Forestry	Regional branches	Total LRCAF
Researchers with PhD degree	42	38	22	35	137
Researchers without PhD degree	13	6	10	5	34
PhD students	12	8	16	11	47
Total researchers and PhD students:	67	52	48	51	218
Other	107	86	41	153	387
Total :	174	138	89	204	605

RESEARCH STRUCTURE 2010-2012

Research topics and Projects	2010	2011	2012
Institutional budget-funded research	225	223	186
Projects of national research programs (LSB)	3	4	4
Projects of researchers' groups and other (LSB)	7	9	12
Applied research (funded by ministries etc.)	6	23	30
Work supported by national and foreign business entities	49	58	77
International programs and projects	22	30	22



PROJECTS BEING IMPLEMENTED IN 2013

* - 2013-06-18 data

	Number of projects							
	COST Projects	International projects	Lithuanian Science Board	Ministries of Agriculture and Environment	Agency for Science, Innovation and Technology	With national economic entities	With foreign economic entities	Total
In. of Forestry	4	7	4	9	3	10	-	38
In. of Horticulture	-	2	9	6	1	8	7	31
In of Agriculture	-	6	7	12	1	6	24	57
Regional divisions	-	-	-	5	1	22	4	32
Total:	4	15	20	32	6	46	35	158

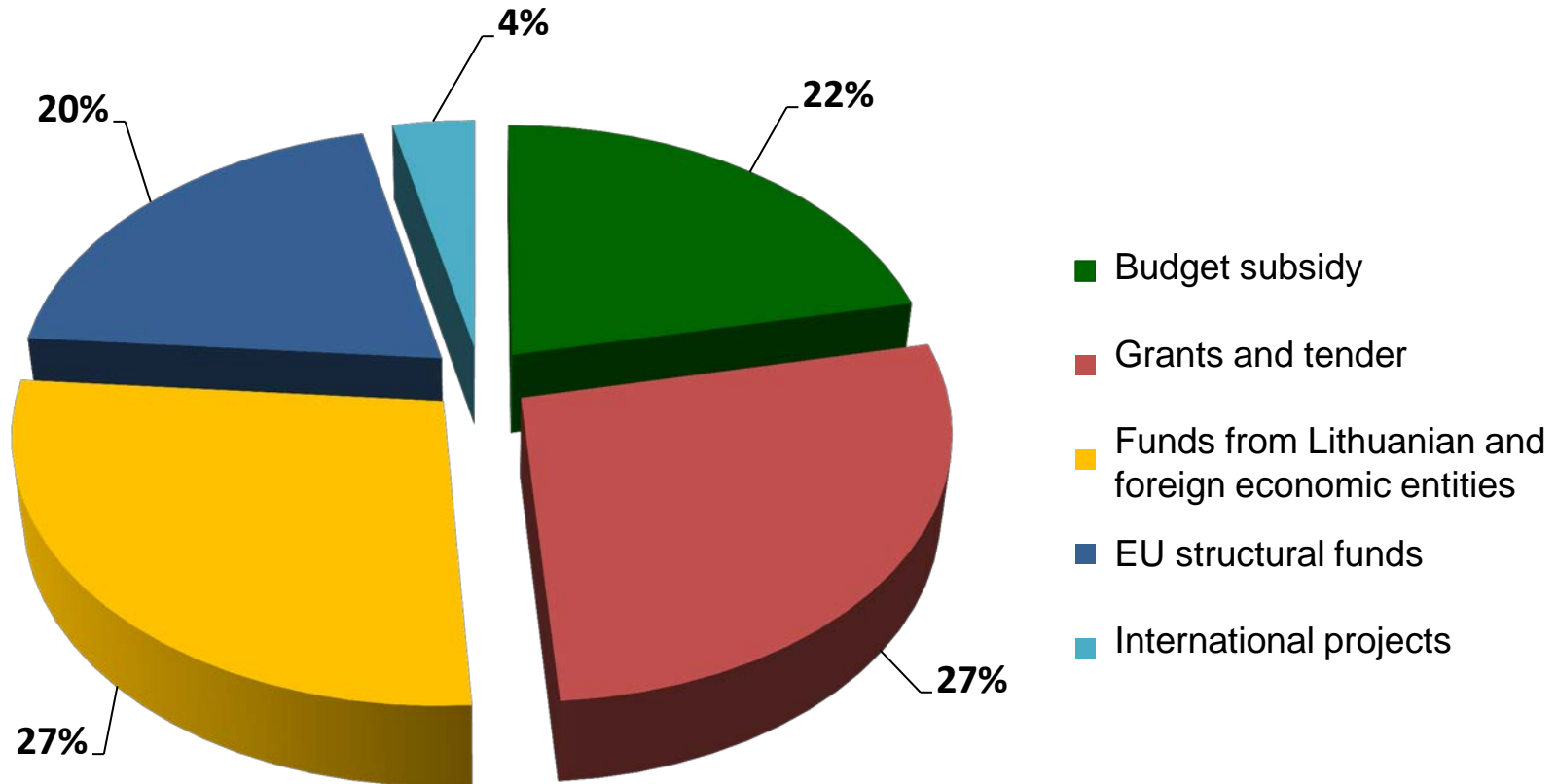
Scientific production in 2010-2013

Production	Amount			
	2010	2011	2012	2013*
Publications in Journals with IF	49	52	82	54
Sections of monographs published by international publishers	6	5	7	2
New Crop varieties included in Common European varieties list	12	10	9	6
Publications in other refereed journals	46	35	25	20
Science popular articles	145	138	114	70

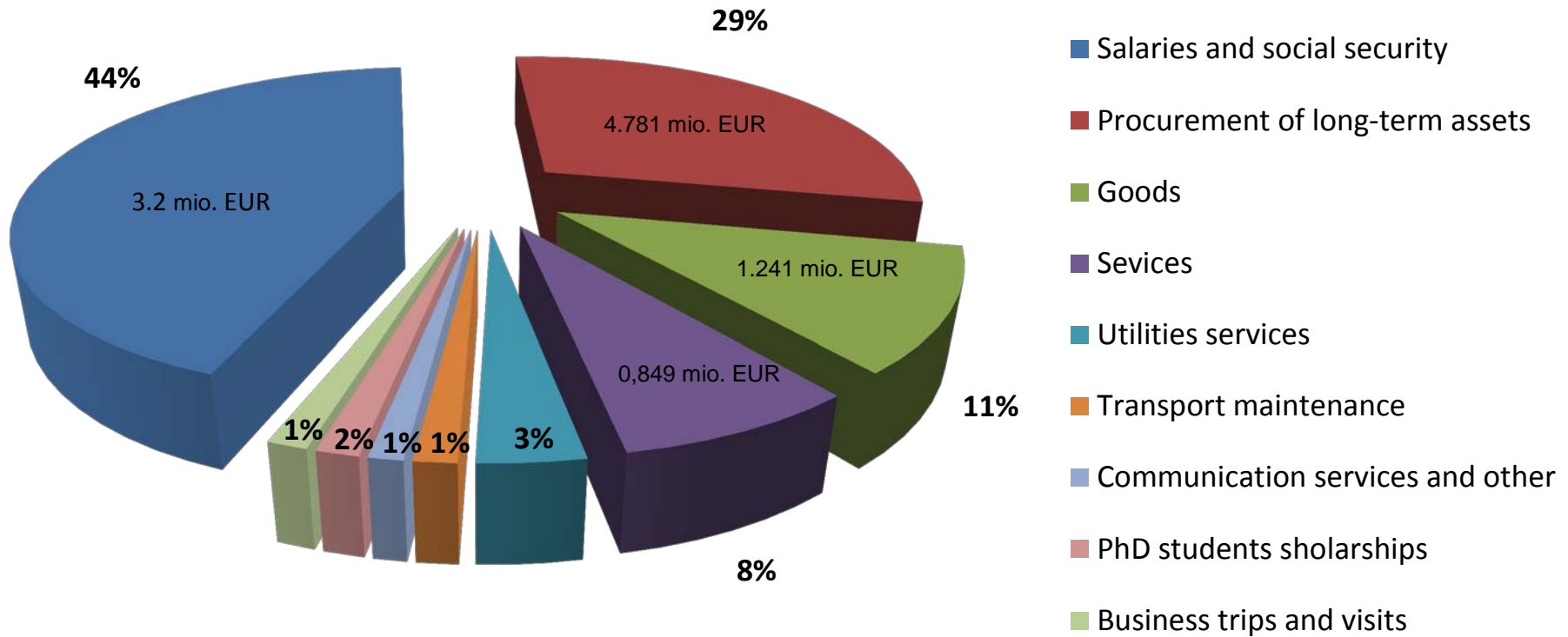
Scientific articles with IF for 2013*

Journal title	IF	Number of articles
Proceedings of National Academy of Sciences of the USA	9,681	1
Journal of Applied Ecology	5,045	1
Biomass and Bioenergy	3,646	2
Plant Science	2,945	1
Industrial Crops and Products	2,469	1
European Journal Forest Research	1,982	1
J.of Environmental of Eng. and Landscape Management	1,958	1
Journal of Science of Food, Agriculture	1,436	2
Analytical Letters	1,016	1
Central European Journal of Biology	1,0	1
Other Journals	0,1- 0,999	42

Income structure for 2012



COST STRUCTURE for 2012





DOCTORAL (PhD) STUDIES

AGRICULTURAL SCIENCES (A 000)

✓ **AGRONOMY** and **FORESTRY**- in cooperation with **Aleksandras Stulginskis University**

BIOMEDICAL SCIENCES (B 000)

✓ **ECOLOGY AND ENVIRONMENT**. in cooperation with **Vytautas Magnus University**.

PHYSICAL SCIENCES (P 000)

✓ **BIOCHEMISTRY**. in cooperation with **Vytautas Magnus University**, **Lithuanian University of Health Sciences**, **Nencki Institute of Experimental Biology (Poland)**

Science field	Accepted Number of PhD students			
	2010	2011	2012	2013
Agronomy	6	7	10	11
Forestry	2	4	3	4
Ecology and Environmental Sciences	1	1	3	-
Biochemistry	-	-	1	1
Total	9	12	17	16

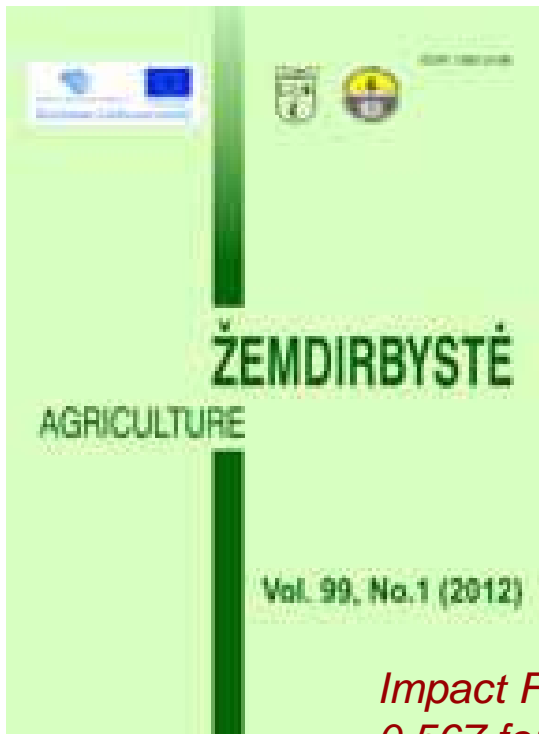


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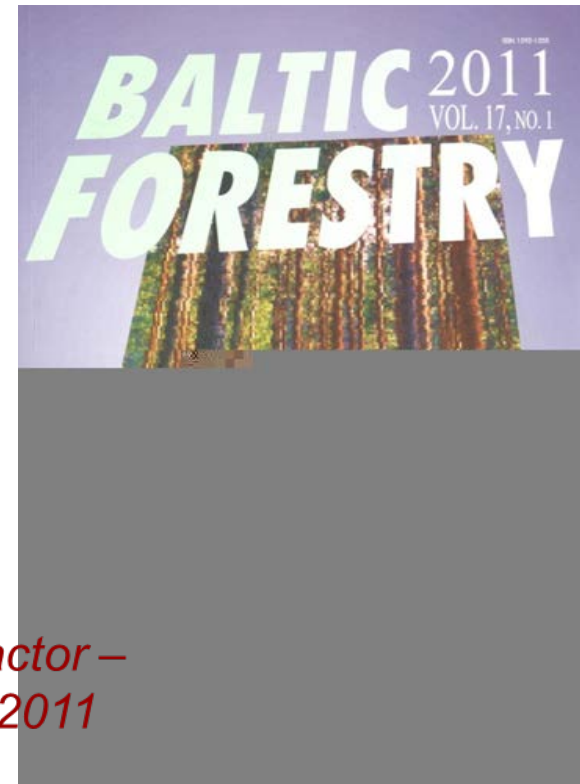
PUBLISHING

Žemdirbystė=Agriculture is a quarterly scientific journal which covers a wide range of topics in the field of agricultural sciences, agronomy.

The journal **Baltic Forestry** welcomes the original articles on forestry and forest science in the Baltic States and throughout the Baltic Sea region.



Impact Factor – 0,567 for 2012



Impact Factor – 0,532 for 2011

DISEMINATION OF RESEARCH RESULTS

Each year, the LRCAF organizes **scientific conferences, seminars, field days** and invites specialists from national research and education institutions, representatives from governmental and economic entities of agriculture, specialists from state and private forest enterprises, farmers, and foreign researchers.

10–15 scientific conferences are organized by LRCAF researchers annually in cooperation with national and foreign institutions and international scientific organizations.

Researchers of the LRCAF **publish** numerous articles and conference roceedings, and present the latest research findings and disseminate new know-how.



*Since 2007, the Institute of Agriculture, LRCAF in cooperation with the Lithuanian Association of Plant Protection have been arranging an exhibition of agricultural technologies “**Agrovizija**”, whose objective is to disseminate the latest scientific know-how and expertise, necessary for the application of novel, environment-friendly and resource-sustaining agro-technologies.*



The exhibition is a unique, open-air event, where visitors can familiarize themselves with the cultivation technologies in natural, field conditions.

OTHER SERVICES

- ❑ Markets basic and *pre-basic seed of winter and spring cereals and forage grass varieties bred at the Centre.*
- ❑ Conducts *bee breeding work*, markets bee queens of the best bee races, honey and bee products.
- ❑ Carries out *analyses of agricultural and greenhouse soils, peat substrates, sewage, industrial wastes, plants and forages, foodstuffs, water, organic and mineral fertilizers, lime materials, pesticides etc.*
- ❑ Takes soil, water, fertilizer, sludge and other samples, develops maps of soil agrochemical properties and fertilization plans.
- ❑ Submit top and *small fruit plant material*, garden projects, fruit, berry and vegetable processing technologies.
- ❑ *Provides consultations*, and helps state institutions to prepare legal documents.



Slėnis NEMUNAS
MOKSLŲ, STUDIJŲ IR VERSLO CENTRAS

The valley Nemunas opens new facilities for native, regional and international cooperation

During 2008 – 2013 the research, studies and business centre – valley “Nemunas” – was created with the purpose of concentrating research, studies and business potential in agriculture, forestry, water and food management as well as human resources and research and experimental development infrastructure for the implementation of promising projects in the fields of agro-biotechnologies, bioenergetics, forestry, food technologies, safety and healthiness, for training of highly qualified specialists and for passing knowledge to private business.

Members of the Association valley

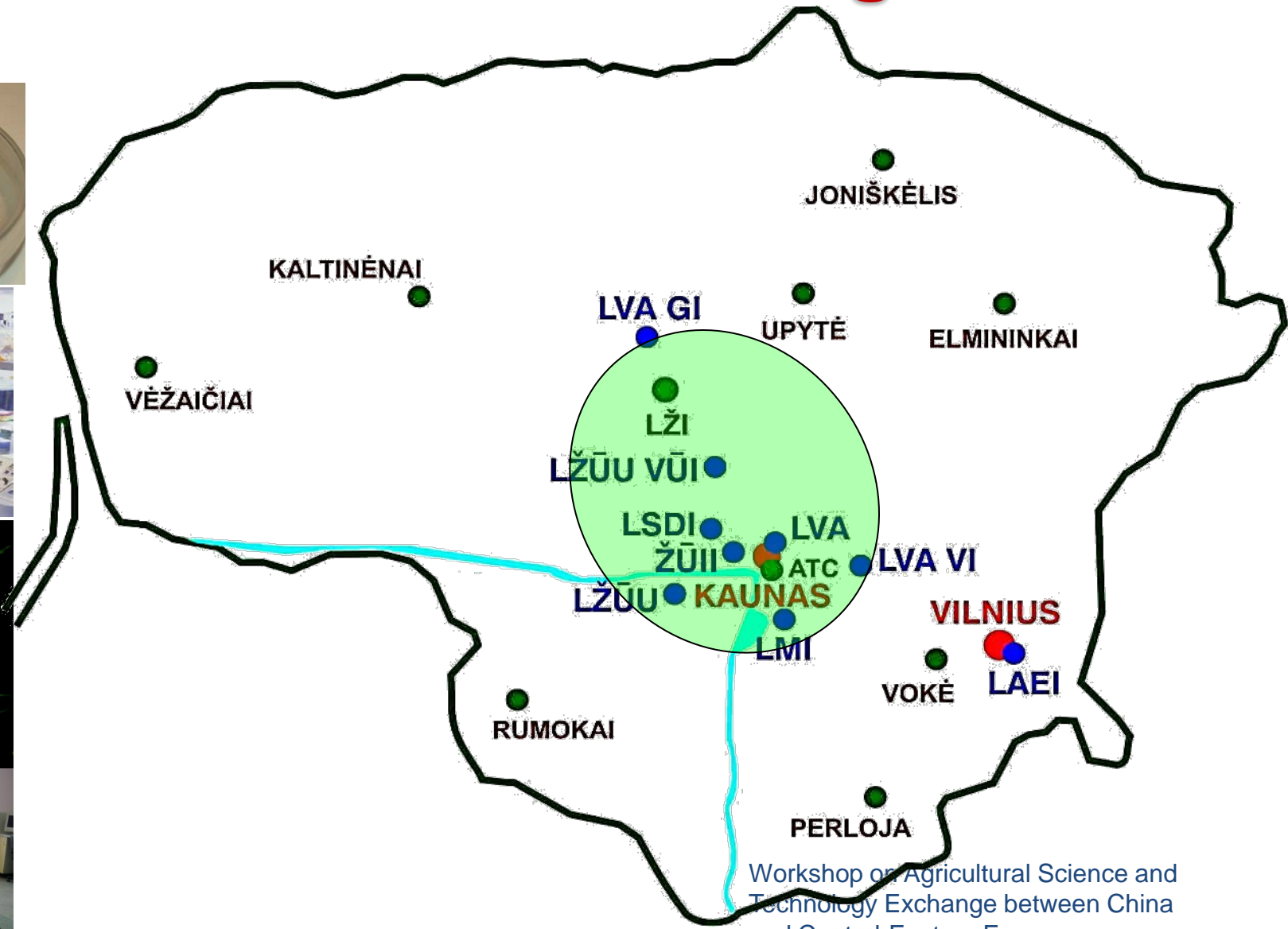
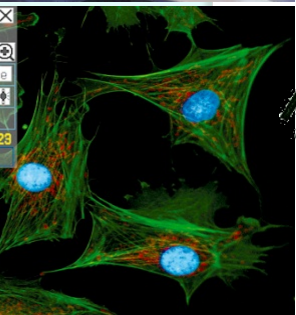


- **Aleksandras Stulginskis University (Lithuanian University of Agriculture)**
 - Water Management Institute of Lithuanian University of Agriculture
 - Institute of Agricultural Engineering of Lithuanian University of Agriculture
- **Centre of Lithuanian Agrarian Sciences and Forestry**
 - Lithuanian Institute of Horticulture
 - Lithuanian Institute of Agriculture
 - Lithuanian Forest Research Institute
- **Lithuanian Veterinary Academy**
 - Institute of Animal Science
 - Veterinary institute
- **Kaunas University of Technology**
 - Food Institute of Kaunas University of Technology
- Lithuanian Institute of Agrarian Economics
- Lithuanian Agricultural Advisory Service
- Mykolas Romeris University
- Baltic Agribusiness Institute
- JSC Concern “Achema Group”
- JSC ARVI Management Enterprise of Enterprises Group
- JSC “Mestilla”
- Lithuanian Association of Biomass Energetics “Ltbioima”
- **And other enterprises**



R&D infrastructure in Agrosector

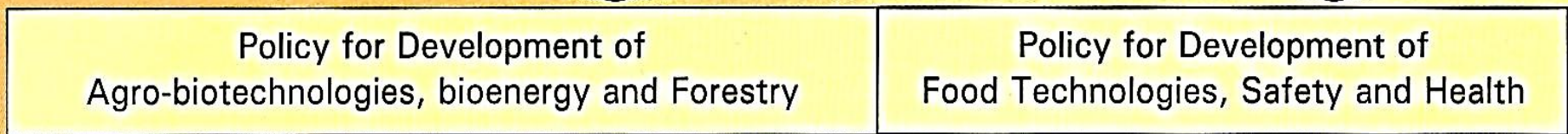
Slėnis NEMUNAS
MOKSLO, STUDIJŲ IR VERSLO CENTRAS



Organisation of the Valley "Nemunas"

R&D infrastructure of the Valley "Nemunas"

Centre of Agrarian and Forestry Sciences	Research, Study and Development Centre of the Forestry Sector	Plant Genetics and Biotechnology Centre	Science and Study Centre of Agroecology and Plant Biopotential	Animal Nutrition and Biotechnology Centre	Biosystem Engineering, Biomass Energy and Water Engineering Centre	Food Science and Technology Centre	Centre for Animal Health and Quality of Raw Materials of Animal Origin
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Cooperation with enterprises in the process of carrying out R&D projects, creating favourable conditions for the establishment of new, knowledge-intensive spin offs and commercialisation of research results

Valley's joint Communication and Technology Transfer Centre, Agroinnovation Economy and Management Centre and Centre of Information Technologies in Agricultural Science, Training and Consulting

THANK YOU FOR YOUR ATTENTION !

