STRATEGIC PROGRAMME FOR SCIENTIFIC RESEARCH

2024.-2028.

Josip Juraj Strossmayer University of Osijek
Faculty of Agrobiotechnical Sciences Osijek

Faculty of Agrobiotechnical Sciences Osijek

Osijek, 2024.

Sveučilište Josipa Jurja Strossmayera u Osijeku

Fakultet agrobiotehničkih znanosti Osijek

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Na temelju članka 19. stavak 3. Zakona o visokom obrazovanju i znanstvenoj djelatnosti („Narodne novine“ br. 119/2022.) i članka 30. stavak 1. podstavak 33. Statuta Fakulteta agrobiotehničkih znanosti Osijek, Fakultetsko vijeće Fakulteta agrobiotehničkih znanosti Osijek je na 7. redovitoj sjednici u akademskoj 2023./2024. godini održanoj dana 29. travnja 2024. pod točkom 10.2. dnevnog reda, a na prijedlog Odbora za znanost donijelo

ODLUKU

I.

Imenuje se Povjerenstvo za izradu Strateškog programa znanstvenih istraživanja Fakulteta agrobiotehničkih znanosti Osijek Sveučilišta Josipa Jurja Strossmayera u Osijeku u sastavu:

1. prof. dr. sc. Zvonko Antunović, prodekan za znanost i poslijediplomske studije, predsjednik
2. prof. dr. sc. Vlatka Rozman, koordinatorica za znanost Zavoda za fitomedicinu, članica
3. prof. dr. sc. Vesna Rastija, koordinatorica za znanost Zavoda za agroekologiju i zaštitu okoliša, članica
4. prof. dr. sc. Igor Kralik, koordinator za znanost Zavoda za bioekonomiju i ruralni razvoj, član
5. izv. prof. dr. sc. Josip Novoselec, koordinator za znanost Zavoda za animalnu proizvodnju i biotehnologiju, član
6. izv. prof. dr. sc. Monika Marković, koordinatorica za znanost Zavoda za biljnu proizvodnju i biotehnologiju, članica
7. doc. dr. sc. Domagoj Zimmer, koordinator za znanost Zavoda za poljoprivrednu tehniku i obnovljive izvore energije, član.

II.

Ova Odluka stupa na snagu danom donošenja.

Sveučilište Josipa Jurja Strossmayera u Osijeku Fakultet agrobiotehničkih znanosti Osijek 1

DEKAN

Prof. dr. sc. Krunoslav Zmaić

Dostaviti:
1. Imenovano Povjerenstvo
2. Prodekan za znanost i poslijediplomske studije
3. Ured za znanost
4. Pismohrana Fakultetskog vijeća
5. Pismohrana Fakulteta

FOREWORD

Faculty of Agrobiotechnical Sciences Osijek (FAZOS) is a leading regional scientific research institution in the field of biotechnical sciences that for already 64 years educated young researchers, teachers, masters of agronomy, specialists, and doctors of science. Throughout its existence, the Faculty has achieved successful cooperation at the national and international level, it has profiled itself in the interdisciplinary approach to the education of professionals and in the implementation of scientific research activities and projects. By delivering its programs and services, the Faculty has contributed significantly to advancements in biotechnical sciences and agriculture, ensuring thereby the relevance and quality of education and research.

Scientific research activity undertaken by the Faculty has a long tradition and represents one of its fundamental values. The Faculty is proud to highlight its scientific production, projects, and partnerships that have resulted in innovations and advancements in the field of biotechnical sciences, especially in the field of agriculture and related fields. In the future, the Faculty will strive for continuous improvement and strengthening of scientific and research activity, especially emphasizing the transfer of innovative technologies and sustainable solutions in agriculture, environmental protection, and adaptation to climate change. The Faculty aims to profile itself as a leader of technological development in agriculture and to contribute to the sustainable development of agriculture and rural areas, thereby assuring competitiveness and economic growth.

This Strategic program for scientific research 2024-2028 defines strategic aims that pursue scientific excellence and are aligned with the Faculty's mission and vision. The Faculty, as one of the leading higher education and research institutions in the field of biotechnical sciences, disposes of unique scientific and research potential, which is well-recognized both at home and abroad. Our vision is to achieve global recognition through cutting-edge scientific research, innovation and transfer of knowledge in cooperation with academia and industry around the world. The Faculty strives to create a platform for cooperation that shall facilitate the exchange of knowledge and experiences, and encourage application of innovation and the latest scientific knowledge into practice. In this way, the Faculty shall contribute not only to the development of science and education, but also to overall social and economic prosperity.

Dean of Faculty of Agrobiotechnical Sciences Osijek
prof. dr. sc. Krunoslav Zmaić

CONTENT

1. INTRODUCTION

Faculty of Agrobiotechnical Sciences Osijek (abbreviation used in the text: FAZOS; the Faculty), is a leading regional scientific research and higher education institution in the field of biotechnical sciences. Over 60 years of its existence and constant activity, the Faculty profiled itself in the education of professionals and implementation of scientific research activities within projects funded from different sources. At the same time, the Faculty maintains successful cooperation with many business entities and state administration bodies, mostly through the transfer of knowledge and technologies to the economy sector.

In cooperation with many national and European partner institutions, the Faculty is systematically encouraging research activities through the development and implementation of scientific research projects.

Since 1972, the Faculty has been conducting postgraduate studies, among which the doctoral study programme in Agricultural Sciences is the most representative one. This study programme provides a platform for the advanced education of high-quality scientific staff, as well as for the transfer of knowledge into the economic sector.

The strategic programme for scientific research for the period 2024–2028 is a follow-up of the previous strategic programmes for scientific research realised from 2014-2018 and 2019-2023, yet it offers significantly improved actions and recommendations for the forthcoming period.

The strategic programme for scientific research 2024-2028 determines strategic aims that the Faculty shall achieve, having in focus its mission and vision in the future period. While respecting the trends of globalisation, the Faculty is faced with numerous challenges in biotechnical sciences and related scientific fields to which it aims to provide answers by offering meaningful, innovative and feasible solutions.

In the future, the Faculty will develop its scientific research activities through delivery of teaching and research that are harmonised with the set strategic aims, while receiving support from the local, regional, national and international community. The demanding strategic aims defined in this Strategic Programme have been determined while considering the fact that the Faculty disposes of significant human resources and quality infrastructure (Central Agrobiotechnical Analytical Unit - CAAU, laboratories, scientific equipment, experiment stations, Biotechnical Scientific Research Centre - BSRC). One of the most important strategic aims that the Faculty sets by this Strategic programme is to increase the number of scientific papers published in journals indexed in the Web of Science (WoS) database, especially the number of papers published in Q1/Q2 quartiles, and to increase the number of project proposals and funded competitive research projects. The above-stated will contribute to more successful profiling of the Faculty not only in the region but also at the international level.

2. MISSION AND VISION OF THE FACULTY OF AGROBIOTECHNICAL SCIENCES OSIJEK

Faculty of Agrobiotechnical Sciences Osijek has clearly defined its mission and vision, both of which shall significantly contribute to the realization of tasks determined by the Strategic program for scientific research for the period 2024-2028.

2.1. MISSION OF THE FACULTY OF AGROBIOTECHNICAL SCIENCES OSIJEK

Mission of the Faculty of Agrobiotechnical Sciences Osijek is to develop, sustain and advance dynamic and multidisciplinary teaching and research environment. Such an environment facilitates the development of existing and the establishment of new research potentials and innovations, enables critical thinking and creativity, and ensures an excellent transfer of the latest knowledge and skills. The Faculty educates experts in biotechnical sciences, in the field of agronomy, it contributes to the sustainable development of science and technology, and serves to the community and society through continuous development of knowledge and skills necessary for lifelong education.

2.2. VISION OF THE FACULTY OF AGROBIOTECHNICAL SCIENCES OSIJEK

As a leading regional research and higher education institution in the field of biotechnical sciences with unique scientific research potential, the Faculty of Agrobiotechnical Sciences Osijek will develop an excellent and competent educational and scientific research profile that is recognised internationally. The Faculty shall continue to educate prominent, competitive experts to become widely recognisable in biotechnical and interdisciplinary scientific areas in which they will achieve excellence. It will actively participate in the European higher education and research area, aiming to become a biotechnical centre of excellence for the transfer of innovations, knowledge and technology into the economy.

Referring to its scientific and research activities, the Faculty positions itself as a recognizable center of biotechnical sciences and related interdisciplinary fields aligned with the European concept of "smart specializations", with a stronger orientation towards applied science and modern scientific knowledge transfer into everyday practice. In the future, the Faculty wants to position itself as an active and internationally recognized creator of new knowledge in the field of agriculture and related scientific disciplines. Achievement of this goal shall be supported by a synergy of higher education at all levels of study, based on modern learning outcomes and lifelong learning. The Faculty will emphasize the expertise, creativity, work ethics, and social responsibility of its employees and students, which will further contribute to accomplishing of the strategic aims. In that way, the Faculty counts on cooperation with foreign higher education institutions, with other constituents of the University of Osijek, and with public institutions and business entities, all of which help in completion of the set strategic tasks and contribute to more active involvement in the European higher education and research area.

3.COMPLIANCE OF THE STRATEGIC PROGRAMME WITH EUROPEAN AND NATIONAL STRATEGIC DOCUMENTS

Strategic programme for scientific research of the Faculty of Agrobiotechnical Sciences Osijek prepared for the 2024-2028 is aligned with the Faculty Development Strategy 2023/2024 -2027/2028, which determines fundamental specificities, strategic framework and the main direction of the Faculty's development.

Strategic programme for scientific research Faculty of Agrobiotechnical Sciences Osijek for the period 2024-2028 is aligned with the University acts, SWOT analysis of the Faculty and with the following European and national strategic documents:

1. Act on Scientific Activity and Higher Education (OG 119/2022)
2. European Strategic Agenda 2024-2029
3. National Development Strategy of the Republic of Croatia 2023 (OG 13/21)
4. Education, Science and Technology Strategy
5. National Plan for the Development of Education and Training 2030
6. National recovery and resilience plan
7. Croatia's Smart specialisation strategy 2029
8. Development plan of scientific and research infrastructure in the Republic of Croatia 2023-2027
9. Strategy of the Agency for Science and Higher Education 2021-2025
10. Development Strategy of Josip Juraj Strossmayer University of Osijek 2021 – 2030
11. Development Strategy of the Faculty of Agrobiotechnical Sciences Osijek 2023/2024-2027/2028
12. Horizon Europe - Framework Programme of the European Union for research and innovation 2021-2027
    1. CELEX:32021R0695
    2. CELEX:32021D0764
13. Operational Programme Competitiveness and Cohesion 2021-2027
14. Operational Programme Efficient Human Resources 2021-2027

4. SWOT ANALYSIS OF SCIENTIFIC ACTIVITIES PERFORMED BY THE FACULTY OF AGROBIOTECHNICAL SCIENCES OSIJEK

For the successful realization of the Strategic program for scientific research and its incorporation into the increasingly demanding national and international scientific and research community, it is of utmost importance to assess Faculty's strengths, weaknesses, opportunities and threats, in order to be able to use all available human, infrastructural and financial resources for the institutional progress. For this reason, the SWOT analysis was completed, which provided four main indicators of strengths, weaknesses, opportunities and threats in a given situation to facilitate assessment of FAZOS internal and external environment. The presented SWOT analysis is performed by using data provided by all FAZOS departments. While considering the Faculty's development perspective for its scientific and research activities, the following characteristics marking the basic strengths and weaknesses, as well as the basic development opportunities and possible threats are to be stated:

STRENGTHS:

- long tradition and rural environment
- involvement of scientific and teaching staff in professional and organisational bodies, from local to international level
- significant number of signed agreements on cooperation with akin faculties and universities in the EU and in the countries of South-eastern Europe
- successful long-term interdisciplinary scientific cooperation with other University constituent units and institutes
- significant teaching and research potential
- significant number of published scientific and professional papers and participation in national and international conferences
- established research teams that perform scientific activities and implement Faculty scientific and research projects
- strengthening of the scientific research potential through management of human resources and laboratory equipment management, and established Biotechnical Scientific Research Centre (BSRC)
- publication of the Agriculture Scientific Journal indexed in the WoS and SCOPUS database
- tradition in organising national and international scientific and professional conferences as well as various workshops and popularisation events
- support for application and implementation of international projects as a basis for international cooperation and initiatives
- continuous increase in number of Faculty employees and students engaged in international mobility programmes
- established experiment stations for teaching, research and transfer of knowledge and innovations to the economy sector
- significant cooperation with the economy sector
- training courses, transfer of technology and cooperation on preparation of studies that support development of economy at local, regional, national and international level

WEAKNESSES:

- no experiment station for animal production
- insufficient equipment in some laboratories
- weak motivation of employees to apply for funding of scientific projects
- insufficient funds for pre-financing and co-financing of projects
- small number of published papers with high impact factor (quartiles Q1 and Q2)
- lack of additional criteria for encouraging the excellence of Faculty staff
- weak motivation of staff for longer trainings abroad at international higher education and scientific institutions
- inappropriate structure of staff in the Central Agrobiotechnical Analytical Unit
- insufficient utilisation of existing laboratory equipment
- insufficient cooperation with professional institutions

OPPORTUNITIES:

- implementation of new innovation agenda of green, digital and social transformation for development of innovations and technology transfer
- using of international networks for exchange of guest teachers and researchers with the aim of raising the quality of scientific-teaching process
- development of the Biotechnical Scientific Research Centre for animal production and biotechnology by using available infrastructural and development projects
- increase in number of research projects and funding sources for doctoral students (assistants) through the Croatian Science Foundation and EU projects
- accreditation of new laboratory methods as a benchmark with the aim of upgrading the scientific research process and stronger market positioning
- increase in the number of excellent papers published in the Agriculture Journal and increase in the number of citations
- support for publishing activity by implementing a system for digital publication and availability of scientific and teaching materials
- intensifying the work of the Alumni Association of Faculty graduates and friends through cooperation with the economy sector
- development of new technologies for production, patenting and branding of technologies and products

THREATS:

- the uncertainty of agricultural production due to climate change
- reduced interest in agricultural studies, unattractiveness of agricultural profession and unrecognised position of agronomists in society
- constant reduction of state investments in higher education
- insufficient financing of scientific-research projects at the national, regional and local level
- further reduction of financial resources for research from EU programmes and funds, which affects the number of employed young researchers and assistants
- lack of funds for experiment stations and purchasing of equipment (capital equipment)
- underappreciated profession of agronomists on the labour market
- potential decrease in professional cooperation with the economy sector due to acquisition of foreign technological solutions and intellectual property

5. ANALYSIS OF SCIENTIFIC RESEARCH POTENTIAL OF THE FACULTY OF AGROBIOTECHNICAL SCIENCES OSIJEK FROM 2019-2023

This section elaborates on the scientific research activities that the Faculty of Agrobiotechnical Sciences Osijek realized in the past five-year period, from 2019-2023, as planned by the last Strategic programme for scientific research.

The structure of employees involved in the teaching process at the Faculty as of 01 June 2024 is overviewed in Table 1. Total number of teachers appointed to teaching positions in all scientific fields was 109, with additional 10 senior assistants, 10 assistants, 2 senior lecturers and 2 lecturers. The most teachers are appointed to teaching positions in the field of biotechnical sciences, 109 of them or 82.00%. They are followed by teachers in the field of social sciences, 9 of them or 6.80%, 6 teachers in natural sciences, or 4.50%, 4 teachers in technical sciences or 3.00%, and 2 teachers in humanities and biomedicine and healthcare (1.50% respectively), and one teacher in interdisciplinary scientific field (0.75%)

Table 1. Structure of employees involved in the teaching process at the Faculty of Agrobiotechnical Sciences Osijek

	RPTI	RP	IP	DOC	VP	PR	VA	AS	TOTAL
Biotechnical sciences	37	22	18	19	0	0	8	5	109
Social sciences	3	2	1	0	2	0	0	1	9
Natural sciences	0	1	1	0	0	1	1	2	6
Technical sciences	1	0	0	0	0	0	1	2	4
Human sciences	0	0	1	0	0	1	0	0	2
Biomedicine and healthcare	2	0	0	0	0	0	0	0	2
Interdisciplinary	0	1	0	0	0	0	0	0	1
TOTAL	43	26	21	19	2	2	10	10	133

In the period from 2019 to 2023, the Faculty employees published 1094 papers, of which 505 papers were published in journals indexed in the WoS (Web of Science).

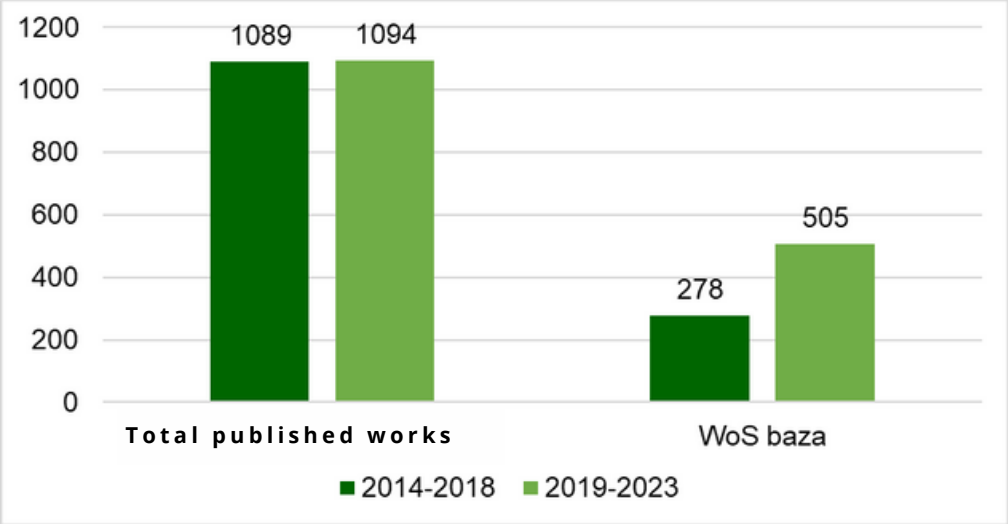


Figure 1. Published papers compared to the previous five-year period

As shown in Figure 1, from 2019-2023, there was a significant increase in the number of published and indexed papers (1094 papers published in total) if compared to the previous reporting period of 2014-2018, when the Faculty employees published 1,089 papers. Out of 1094 papers published from 2019 to 2023, 505 papers were published in journals indexed in WoS, while that number from 2014 to 2018 was significantly lower (278 papers). In addition, the employees of the Faculty published 360 papers (scientific and professional) in conference proceedings, while this number in the previous period amounted to 472 papers. In the end, the sum of 1094 papers consists of 681 scientific papers, 53 professional papers and 360 scientific and professional papers in proceedings.

The analysis of indexed publications in the WoS database shows that in the observed period, Faculty employees have 98 published papers in Q1 quartile journals and 98 papers in Q2 quartile journals, while in Q3 56 papers were published, and in Q4 253 papers with a total of 3829 citations, which represents a significant increase compared to the period from 2014 to 2018, in which 26 papers were published in Q1 quartile journals and 30 papers in Q2 quartile journals, according to data from JCR from 2018.

Analyzing the number of citations for the period from 2019 to 2023, it is evident that the number of citations in the WoS database was 3829 with an h-index of 27, while in the period from 2014 to 2018 the number of citations was significantly lower and amounted to 689, and h-index of the Faculty was 13. After the differentiation of papers from the WoS database, in the observed period a total of 28 more papers were indexed in the Scopus database with a total number of citations of 123 and the h-index of the Faculty was 5. In addition to the above papers, in the CAB Abstract database for the above period, another 92 scientific and professional papers published in journals and 136 papers published in symposium proceedings were indexed.

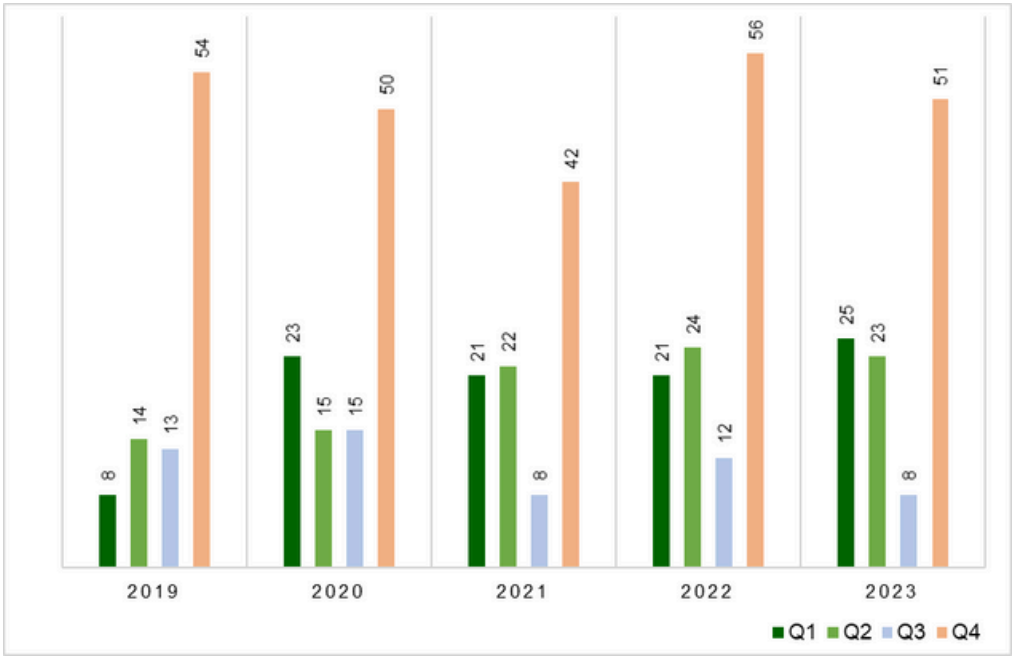


Figure 2. Overview of papers published in WoS from 2019-2023 per quartiles

The Faculty constantly supports high-quality scientific production by awarding grants for published scientific papers in the WoS Q1 and Q2 journals, and uses its Science Fund to allocate support for young scientists for their papers to be published in such journals. The Figure 3 overviews allocated funds of the Faculty for awarding of employees, whose papers were published in WoS Q1 and Q2 journals over the period of academic years 2018/2019-2022/2023.

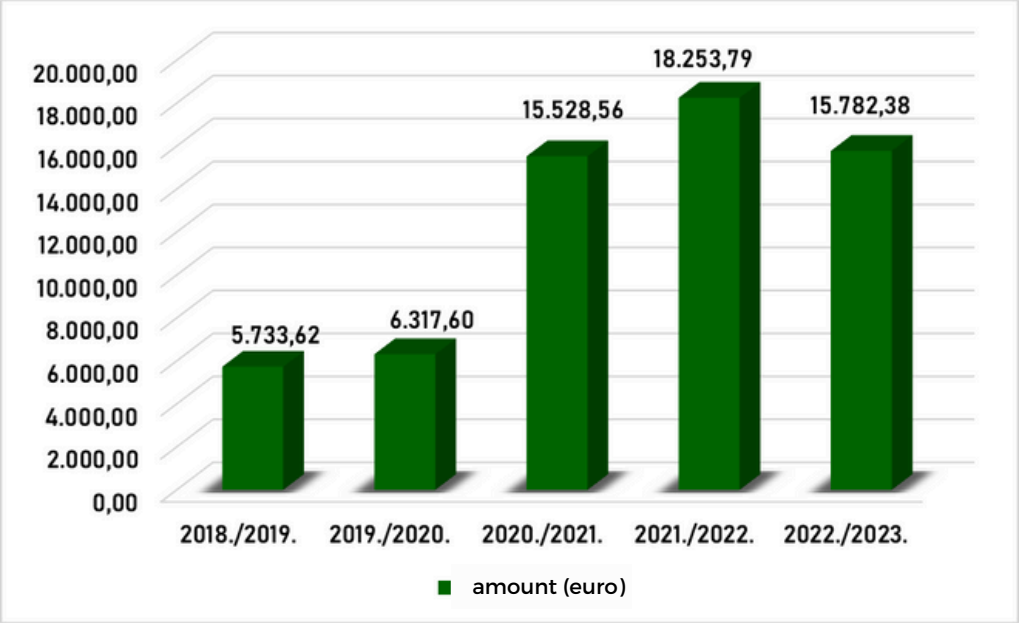


Figure 3. Overview of funds allocated in EUR for support to publishing of scientific papers in high-ranking journals in WoS Q1/Q2 quartiles from 2018/2019-2022/2023

Since 1995 the Faculty of Agrobiotechnical Sciences Osijek and the Agricultural Institute Osijek have been publishing the Agriculture Journal. It publishes papers in all areas of agronomy science and profession, summaries of doctoral theses and other articles, as decided by the Editorial Board. Papers and other manuscripts are printed in Croatian and English. Papers published in the Agriculture Journal are cited in the following databases: Web of Science Core Collection - Emerging Sources Citation Index, CAB International (CAB Abstract), SCOPUS, DOAJ, HRČAK and the National and University Library in Zagreb. In the WoS ESCI, the Agriculture Journal is placed in the Q4 quartile. It is published twice a year with financial support by the Ministry of Science, Education and Youth of the Republic of Croatia, and by the Faculty fund for basic scientific activity, the means of which amount to 3% of the total amount paid to the Faculty by the Ministry of Science, Education and Youth. In the period from 2019 to 2023, there were 106 papers published in the Agriculture Journal, of which 86 were original scientific papers, 15 review papers and 5 preliminary communications (Figure 5). From 2019-2023, papers published in the Agriculture Journal were cited 153 times in the WoS, and 192 times in the Scopus.

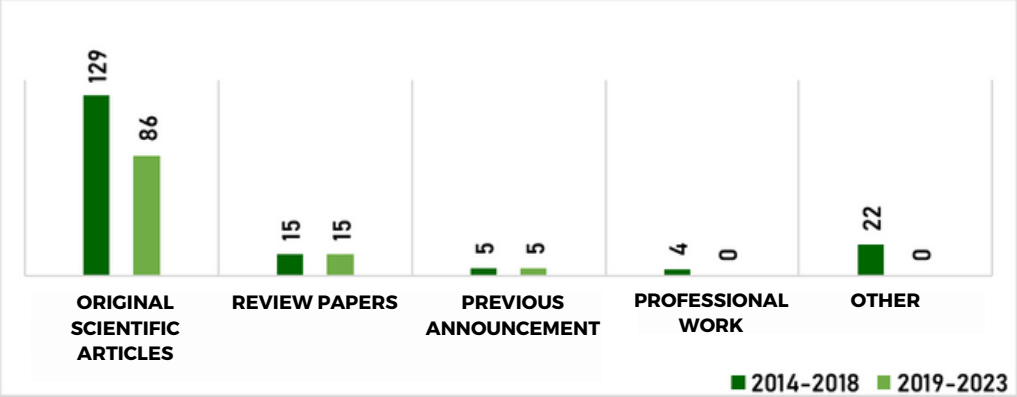


Figure 5. Papers published in the Agriculture Journal and comparison between 2014-2018 and 2019-2023

In the observed period, the Faculty of Agrobiotechnical Sciences Osijek was the holder or partner of 17 scientific research projects of the Croatian Science Foundation, 8 research projects of the Ministry of Science and Education, 6 COST actions, 24 projects financed by the EU (European Commission), three scientific projects from the cycle Horizon 2020 and two scientific projects from the Horizon Europe cycle and 7 bilateral projects (Serbia, Norway, Hungary and Slovenia). In cooperation with other components of Josip Juraj Strossmayer University in Osijek, Faculty employees participated in 8 projects and published 261 papers with researchers from different components of the University.

Referring to the Doctoral study in Agricultural Sciences, which consists of eight modules, enrols 113 students, which makes 13.83% in the total number of students, while specialist studies are attended by 9 students or 1.1% of the total number of students. In the last 5 years, 34 doctoral students defended their doctoral theses, of which 11.76% presented their doctoral thesis a collection of published scientific papers accompanied by a critical review chapter (a collection of original scientific papers prepared according to the so-called Scandinavian model). Specialist theses were defended by 5 students of postgraduate specialist studies.

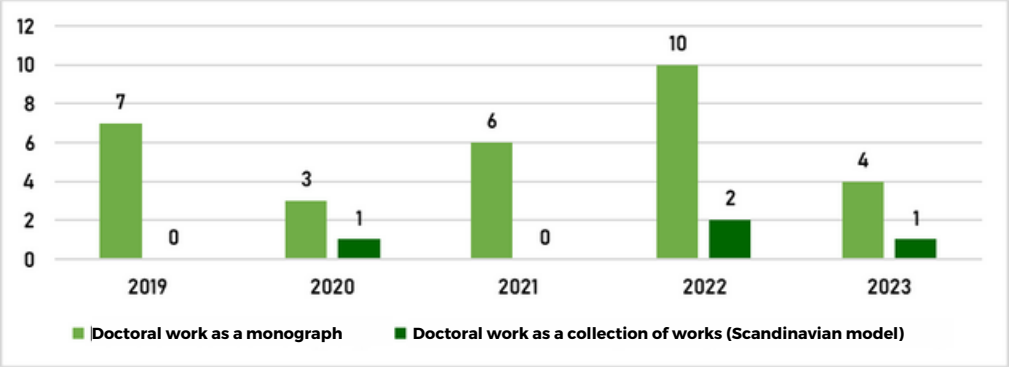


Figure 6. Defended doctoral theses from 2019 to 2023 by type

In 2019, the Faculty of Agrobiotechnical Sciences Osijek established 17 research teams, which developed 26 research projects and applied them for funding. Since September 2023, upon expiration of the mandate to the established 17 research teams, there have been 19 new research teams established. Newly established research teams of the Faculty have a mandate for a 4-year period and so far they have applied for and are realising 29 scientific projects.

Awarding of scientific and research excellence is carried out in accordance with the Ordinance on awarding the excellence of teachers and associates, which entered into force in 2021. The Faculty employees are rewarded for the best results achieved in their scientific field.

Table 2. Awards presented to Faculty employees from 2018 to 2023

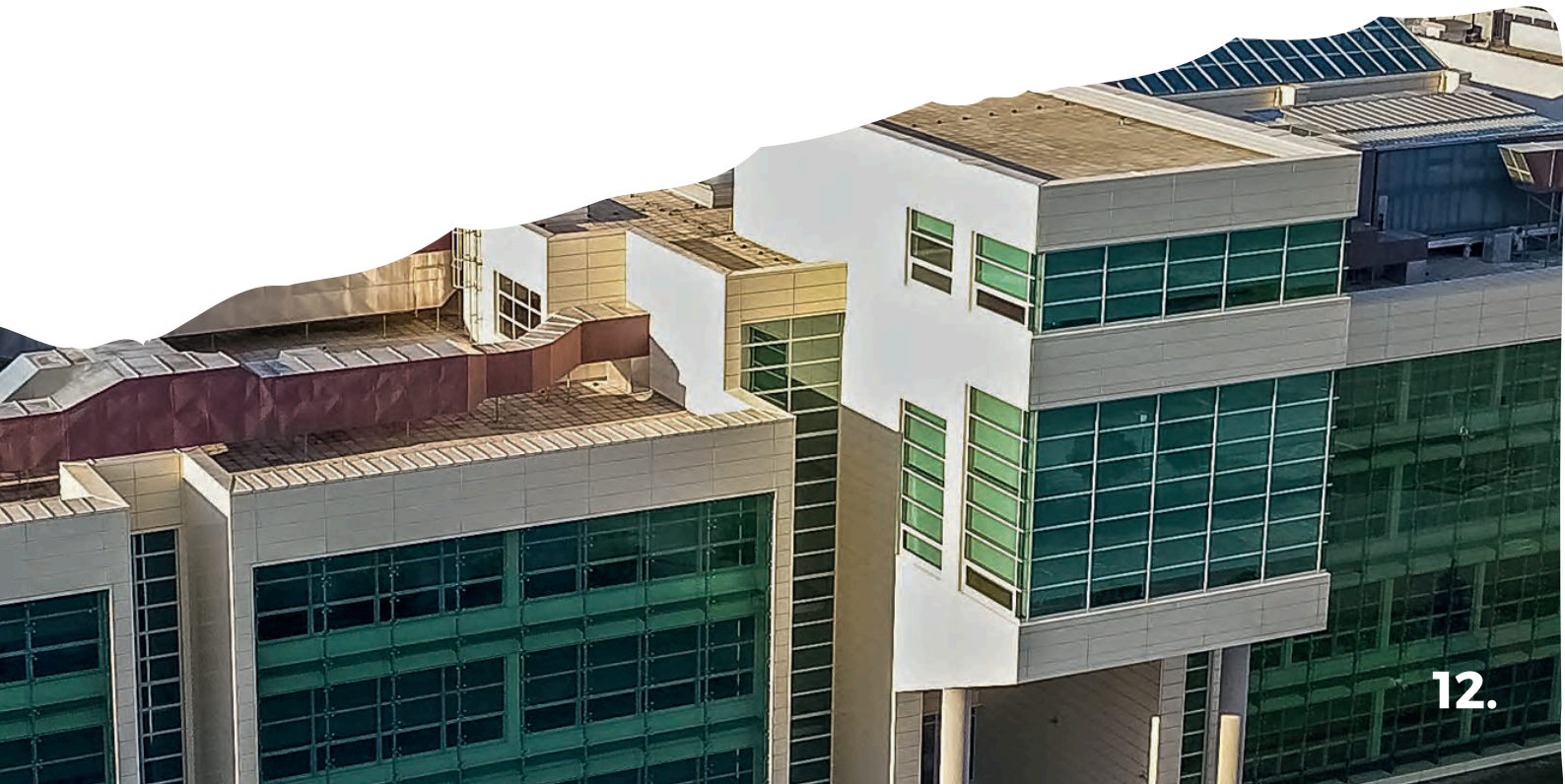
	Name of award/recognition	Academic year				
		2018./2019.	2019./2020.	2020./2021.	2021./2022.	2022./2023.
1.	National science awards	1	1	-	2	-
2.	Award for excellence in teaching and working with students	-	-	1	1	1
3.	Award for excellence in scientific research work	1	1	1	1	1
4.	Award for successful cooperation with the economy	1	1	1	-	1
5.	Award for a successful young scientist	1	1	1	1	-
6.	Award for a scientific work published in a journal with the highest resonance factor	1	2	1	1	1
7.	Award for excellence in the implementation of international, EU and national projects financed by the Croatian Science Foundation (HRZZ) and the Ministry of Science and Education of the Republic of Croatia	2	-	-	-	1
8.	Commendation for the first group's scientific papers	2	2	2	2	2

9.	Commendation for mentoring during the preparation of a seminar paper awarded with the Rector's Award	-	-	1	1	2
10.	Letter of thanks for improving the work of the faculty	-	-	-	-	4
11.	Letter of thanks for dedicated and long-term work	-	1	5	5	1
Ukupno:		9	9	13	14	14

Activities related to the international exchange of researchers are also significant. In the reported period, 386 foreign researchers visited the Faculty, and 221 Faculty employees participated in the outgoing mobility at the institutions abroad.

In the reported period, the Faculty realised 194 projects in cooperation with the economy sector and concluded 8 new cooperation agreements with prestigious international institutions.

Faculty employees are continuously participating in symposia or conferences or other forms of meetings, which the Faculty organises or co-organises with well-known international, national or regional scientific institutions.



6. PRIORITY AREAS AND RESEARCH TOPICS FOR THE PERIOD 2024–2028

Determination of priority areas and research topics of the Faculty of Agrobiotechnical Sciences Osijek is based on the analysed European and national strategic documents, by reviewing parts of those documents that are particularly referring to development of science and innovation. In addition, priority areas and topics of research are aligned with Faculty's strategic documents and development plans. Areas and topics that will be in focus of the Faculty's scientific research activity are elaborated in the text below.

1. SUSTAINABLE AGRICULTURE FOR PRODUCTION OF HIGH QUALITY FOOD

a) production systems

research into new technological systems in plant and animal production to overcome stress conditions of agrobiocenosis caused by climate change and burdens of the ecosystem through applying optimal soil and water management, crop and animal care and appropriate agricultural technology, research into introduced plant and animal genotypes

b) biofortification and enrichment of products

research into biochemical, physiological and genetic mechanisms of biofortification and enrichment of plant and animal products with essential nutrients, assessment of barrier mechanisms of toxic elements in the soil-plant-animal system for the purpose of producing safe and quality food

c) development of functional products and technology

research into mechanisms of biosynthesis, distribution and accumulation of functional substances of plant and animal origin, research into mechanisms of plant secondary metabolites, design of bioactive molecules and research into agrotechnological measures of ecosystems management for the purpose of transferring these mechanisms to natural and industrial systems

d) feeding and physiology of animals and forage technology

research into the quality of forage, numerous by-products of the agricultural and food industry and nutritional additives, mixtures and diets in animal nutrition through the influence on metabolism of nutrients, physiological processes, immuno-modulation mechanisms, productivity, physical potential, quality and health status of products, application of bioinformatics, metabolomics, proteonomics and nutrigenomics in research

2. AGRICULTURE AND NATURE PROTECTION

a) soil protection

research into the physical, chemical and biological soil properties and the impact of soil management on quality of soils in terms of environmental protection and increasing agricultural productivity

b) environment protection

research into the impact of agricultural production and climate change and the use of natural resources on the environment and biodiversity with the aim of achieving appropriate coexistence in a healthy environment; researches include permanent data collection, risk assessments and systematic monitoring and assessment of flora and fauna and their habitats

c) organic agriculture

organic plant and animal production

d) regenerative agriculture

research into reducing of atmospheric carbon in soil and biomass, which contributes to increasing and maintaining soil fertility and to establishing and sustainable management of nutrients, water and soil organic matter circulation, with the aim of creating agricultural farms resistant to the climate change

e) conservation agriculture

research into sustainable approach to management of agricultural ecosystems aimed at increasing the productivity, profit and food security and preserving natural resources and the environment, with the concept of minimal interventions for soil cultivation, permanent coverage of production areas with plants and plant residues and adherence to crop rotation

f) agroforestry systems and agriculture

research into diversification of agriculture through development of agroforestry systems as well as hunting and forest protection

g) sustainable energy and nature protection

research into exploitation of biomass and by-products and waste obtained from agricultural production for energy production with overall aim of protecting nature and reducing the harmful influence of agricultural production

3. CONSERVATION OF AGROECOSYSTEM BIODIVERSITY

a) conservation of genetic resources
research and collection of old, original and protected varieties, strains and breeds of plants and animals as well as wild flora and fauna, which represent valuable genetic material

b) use of genetic resources
research into the genetic basis of collected genetic resources by using molecular techniques and biotechnological methods and their application in selection

c) application of environmentally acceptable methods in protection of plants and animals while conserving the biodiversity of agro-ecosystems
research into environmentally acceptable methods, procedures and measures for protection of plants and animals and conservation of biodiversity of agro-ecosystems

4. DIGITAL AGRICULTURE

a) digital transformation of agriculture
research into topics of digital transformation in agriculture through the upgrade of information systems and creation of new digital tools based on combining biotechnological sciences with information and communication technologies; application of database theory and statistics for collecting, storing, interpreting and analysing data and application of computer tools as aids in acquiring new information

b) development of geoinformation technologies and precision agriculture
research into the application of geoinformation systems in agriculture, forestry and environment protection - GIS, remote research by using satellite images of aerial vehicles for the purposes of cyclical monitoring, classification and detection of anomalies, and precision agriculture, which includes the application of agricultural information technologies in agricultural machinery for the purpose of optimising agrotechnical procedures

5. AGROECONOMIC ASPECTS OF SUSTAINABLE AGRICULTURAL PRODUCTION

a) bioeconomy and green transition
research into bioeconomy and the effect of the European Green Deal on creation of modern, resource-efficient and competitively strong agricultural farms

b) rural development
research into sustainable agricultural production and its effect on development of rural areas with an emphasis put on family farms and models of agricultural production organisation

c) marketing and market of agricultural products

research into needs and trends occurring on the markets of agricultural products with an emphasis on high-quality and functional products, as well as newly applied technologies, as well as analyses of consumes' preferences; research into marketing activities with the aim of increasing the consumption of high-quality and functional products and upgrading of applied production technologies

Depending on many factors, the realisation of research within defined priority research topics will be upgraded and adjusted in the course of time. Factors that will influence the realisation of planned research are the availability of financial resources, the success of project proposals in terms of funding approval, availability of national and international funding for scientific and professional projects, success of cooperation with other home University constituents, with other faculties and universities, institutes and scientific organisations involved in scientific research and professional work, and efficiency of support provided by the ministries of the Republic of Croatia.

At the 9th regular session of the Faculty Council in the academic year 2022/2023, held on June 29, 2023, 19 new Research Teams of the Faculty of Agrobiotechnical Sciences Osijek were established for 2023-2027. who are the bearers of scientific research activities, and at the 11th regular session of the Faculty Council in the academic year 2022/2023. year, held on September 27, 2023, 29 scientific projects were accepted as part of the activities of the Research Teams of the Faculty of Agrobiotechnical Sciences Osijek as follows:

	Research Team Name	Coordinator	Project name	Project manager
1.	Technical and technological systems in agriculture, GIT, precision agriculture and environment protection	prof. dr. sc. Mladen Jurišić	Soybean cropland suitability prediction based on machine learning regression	dr. sc. Dorijan Radočaj
			Application of modern technologies and additional materials with aim of extending the life of working part of agricultural machinery	dr. sc. Ivan Vidaković
2.	Development of fitness potential of animals with modern technologies	prof. dr. sc. Pero Mijić	Research on the production-condition the potential of animals in economically sustainable agricultural production	izv. prof. dr. sc. Tina Bobić
3.	Breeding – technological aspects of animal production	prof. dr. sc. Zvonko Antunović	Newer technologies lead to more efficient and environmentally friendly animal production	prof. dr. sc. Zvonko Antunović
4.	Growth and development of field crops in stress conditions	prof. dr. sc. Manda Antunović	Growth and development of field crops in different growing conditions	prof. dr. sc. Manda Antunović
5.	Crops biodiversity – genetic, nutritive and usage value conservation	prof. dr. sc. Sonja Vila	Variability of cereals in nutritional value under different growing conditions	prof. dr. sc. Andrijana Rebekić
6.	Bioeconomy and green transition	prof. dr. sc. Krunoslav Zmaić	Socio-economic research of agricultural sector in the conditions of globalization with a reference to regional identity	prof. dr. sc. Krunoslav Zmaić
			Sophisticated agro economic tools as basis for applied research in the monitoring of the agricultural sector with regard to the specific objectives of the Common Agricultural Policy	doc. dr. sc. David Kranjac

			Research on the potential of different lignocellulose biomass for biofuels production	doc. dr. sc. Đurđica Kovačić
7.	Agroecological and physiological mechanisms of plant nutrition and biofortification	prof. dr. sc. Zdenko Lončarić	New methods of crops and vegetables biofortification with microelements	prof. dr. sc. Zdenko Lončarić
			Consumer preferences towards biofortified food	dr. sc. Sanja Jelić Milković
			Biofortification and biostimulant application towards increased yield and functionalized vegetables	prof. dr. sc. Tomislav Vinković
			Role of selenium and sulphur in resistance of seedlings to oxidative stress	prof. dr. sc. Miroslav Lisjak
8.	Design of bioactive molecules	prof. dr. sc. Vesna Rastija	Design of environmentally friendly active components for plant protection	prof. dr. sc. Vesna Rastija
			The biological impact of Eastern Croatian wild edible plant metabolites on the metallopeptidase of M49 family	izv. prof. dr. sc. Dejan Agić
9.	The research on wild plants extracts with biostimulative effect on plantig material	prof. dr. sc. Miroslav Lisjak	Treatment of seed and plantlets with wild plant-derived products	prof. dr. sc. Miroslav Lisjak
10.	Diversification of Agriculture by Agroforestry Systems	izv. prof. dr. sc. Vladimir Zebec	Influence of intercropping short rotation coppice with field crops on soil fertility	izv. prof. dr. sc. Vladimir Zebec
11.	Genomic conservation and invertebrate adaptation for ecosystem resilience	prof. dr. sc. Ivana Majić	Biomonitoring of wild flora and fauna using standard and audio methods	izv. prof. dr. sc. Ankica Sarajlić
			Genomic characterization and population structure of local autochthonous breeds in Croatia	izv. prof. dr. sc. Boris Lukić

12.	Innovative technological technical solutions in the production of renewable energy sources	prof. dr. sc. Davor Kralik	Increasing every production per unit area from biomass by applying various agrotechnical measures and pretreatments	prof. dr. sc. Davor Kralik
13.	Innovative agrotehnics for improvement of arable crops desirable treats for fermentation process	prof. dr. sc. Bojan Stipešević	Innovative agrotechnics for improvement of arable crops desirable treats for fermentation process	prof. dr. sc. Bojan Stipešević
			Innovative agrotechnics for improvement of light use for arable crop	dr. sc. Anamarija Banaj
14.	Conservation agriculture and climate change	prof. dr. sc. Danijel Jug	The role of conservation agriculture as a measure of adaptation to climate change	prof. dr. sc. Danijel Jug
15.	Conservation and sustainable use of wild fauna and flora	prof. dr. sc. Tihomir Florijančić	Biodiversity in the function of ecosystem conservation and sustainable development of rural area	prof. dr. sc. Tihomir Florijančić
16.	Protection of plants against pests	prof. dr. sc. Karolina Vrandečić	Organic protection of plants against pests	prof. dr. sc. Karolina Vrandečić
17.	Quality and Safety of Products of Animal Origin	prof. dr. sc. Goran Kušec	Understanding the consumer and producer perception on alternative sources of proteins, animal welfare and interaction of climate change with livestock production	prof. dr. sc. Ivona Djurkin Kušec
			Profile of fatty acids in oils and animal samples	prof. dr. sc. Zlata Kralik
18.	Animal production in future society	prof. dr. sc. Vesna Gantner	Ecologically and economically sustainable animal production	prof. dr. sc. Vesna Gantner
19.	New technologies in vine cultivation and wine production	izv. prof. dr. sc. Mato Drenjančević	Introduction and characterization of table and wine interspecific hybrids	izv. prof. dr. sc. Mato Drenjančević

7. STRATEGIC AIMS AND TASKS IN SCIENCE AND RESEARCH IN THE PERIOD 2024–2028

Strategic aim 1

Continuous improvement of scientific excellence through increased implementation of competitive projects and increased scientific production

Measure 1.1.
Continuous increase in the number of project proposals and funded competitive scientific and professional projects
Measure 1.2.
Continuous increase in scientific production
Measure 1.3.
Intensification of international scientific cooperation
Measure 1.4.
Raising the visibility and recognition of journals published by the Faculty
Measure 1.5.
Supporting the excellence and scientific productivity of Faculty staff

Strategic aim 2

More efficient use and modernisation of the existing research infrastructure

Measure 2.1.
Modernisation of research infrastructure
Measure 2.2.
Development and implementation of new scientific methods and procedures applied in research in the field of biotechnical sciences
Measure 2.3.
Development of the Experiment station for innovation and technology by procurement of new equipment and by intensified scientific and professional cooperation

Strategic aim 3

Increase in the number of excellent graduate students and young scientists employed at the Faculty through projects and cooperation with the economy

Measure 3.1.
Strengthening of human resources for performing scientific research by employing excellent graduates and scientists
Measure 3.2.
Encouraging the development of young researchers' skills (assistants, postdoctoral students) and ensuring the availability of funding

Measure 3.3.
Encouraging the involvement of students at all study levels in scientific research work

Strategic aim 4
Raising the quality of the Doctoral study and improving the quality of doctoral students

Measure 4.1.
Promoting the defence of doctoral theses according to the Scandinavian model
Measure 4.2.
Improvement of doctoral student assessment on an annual basis
Measure 4.3.
Improvement of mentors' skills within the Doctoral study and application of modern teaching methods
Measure 4.4.
Encouraging the excellence of doctoral students
Measure 4.5.
Promotion of the Doctoral study programme at the national and international level

Strategic aim 5
Development of the open science concept and improvement of intellectual property rights

Measure 5.1.
Development of the open science concept
Measure 5.2.
Increase the transfer of knowledge and technologies based on innovation and academic entrepreneurship
Measure 5.3.
Strengthen cooperation with the economy sector by providing more services of their interest

Strategic aim 6
Increase in the number of activities for popularisation and promotion of science

Measure 6.1.
Encouraging more intensive communication with the public about the Faculty's scientific and research activities
Measure 6.2.
Organisation of national and international scientific conferences
Measure 6.3.
Support to the Alumni Association of the Faculty's graduates and friends and the Association of Faculty Postgraduate Students with the aim of promoting agronomy as a profession and the research potential of the Faculty

8. PERFORMANCE INDICATORS FOR THE IMPLEMENTATION OF STRATEGIC TASKS IN SCIENCE AND RESEARCH IN THE PERIOD 2024–2028

STRATEGIC AIM 1
CONTINUOUS IMPROVEMENT OF SCIENTIFIC EXCELLENCE THROUGH INCREASED IMPLEMENTATION OF COMPETITIVE PROJECTS AND INCREASED SCIENTIFIC PRODUCTION

Measure 1.1.
Continuous increase in the number of project proposals and funded competitive scientific and professional projects

Executive authorities: dean, vice-deans, research teams, Board for science, Office for science, Office for international relations and projects, Faculty Council
Implementation deadline: end of 2028 and comparison with the previous three-year period
Performance indicators:

1. Well-functioning support for proposals and implementation of competitive scientific research projects
2. Number of activities related to shared information on project application
3. Increase in number of projects submitted for funding and funded national and international competitive scientific and professional projects, as well as an increased number of scientific papers produced by research teams
4. Number of established research teams and realized scientific projects compared to the previous period
5. The amount of funds used for pre-financing or co-financing of competitive scientific research projects
6. Number of interdisciplinary and multidisciplinary projects submitted and approved for funding by national and international funding bodies
7. The number of developed and funded projects realized in cooperation with the home University constituents and with other universities

Measure 1.2.
Continuous increase in scientific production

Executive authorities: dean, vice-deans, research teams, Library, Office for science, Board for science, Faculty Council
Implementation deadline: continuously, comparison with previous years
Performance indicators:

1. Number of published scientific papers in the a1 category, their distribution according to quartiles, and the number of scientific papers in the a2 and a3 categories
2. Number of scientific papers resulting from cooperation of different research teams
3. Increase in the number of published scientific papers
4. Number of citations per scientist and comparison with the previous period
5. List of employees and h-indexes obtained from WoS and Scopus

Measure 1.3.
Intensification of international scientific cooperation

Executive authorities: dean, vice-deans, research teams, Office for science, Office for international relations and projects, Faculty Council, Faculty departments, Advisory board for international issues
Implementation deadline: end of 2025 and comparison with the previous period
Performance indicators:

1. Number of outgoing mobilities and duration of stay of the Faculty employees at foreign universities for the purpose of conducting scientific research
2. Number of incoming mobilities and duration of stay of foreign researchers at the Faculty for the purpose of conducting scientific research
3. Number of bilateral projects
4. Number of international projects
5. Number of cooperation agreements with foreign scientific institutions
6. Number of scientific papers published in co-authorship with foreign authors and their categorisation
7. Number of foreign members in the scientific or organisational boards of symposia organised by the Faculty
8. Number of organised international summer schools

Measure 1.4.
Raising the visibility and recognition of journals published by the Faculty

Executive authorities: dean, vice-deans, research teams, Office for international relations and projects, Office for science, Board for science, Faculty Council, Editorial Board of the Agriculture Journal, Library
Implementation deadline: continuously and comparison with the previous years
Performance indicators:

1. Number of scientific and professional papers published in Faculty's journals
2. Number of citations per paper published in Faculty's journals and comparison with the previous period
3. Number of citations in WoS and Scopus related to the papers published in Faculty's journals
4. Number of other published articles (summaries of doctoral theses, reviews of books, etc.) in Faculty's journals

Measure 1.5.
Supporting the excellence and scientific productivity of Faculty staff

Executive authorities: dean, vice-deans, Committee for awarding of teachers and associates, Office for science, Office for international relations and projects, Faculty departments, CAAU
Implementation deadline: continuously
Performance indicators:

1. Number and type of awards presented to employees according to the Ordinance on awarding the excellence of teachers and associates for their scientific activities
2. The amount of funds allocated according to the Dean's Decision for awarding of scientific publications in high-ranking journals of the WoS Q1/Q2
3. Number and type of local, regional, national and international awards presented to the Faculty scientists for their scientific research activities

STRATEGIC AIM 2
MORE EFFICIENT USE AND MODERNISATION OF THE EXISTING RESEARCH INFRASTRUCTURE

Measure 2.1.
Modernization of research infrastructure

Executive authorities: dean, vice-deans, Faculty Council, Faculty departments, research teams, CAAU, Committee for cooperation with the economy sector and innovations, employees
Implementation deadline: continuously
Performance indicators:

1. Number of CAAU activities implemented through organisational units and comparison with the previous period
2. Number of other scientific activities and comparison with the previous period
3. Number and value of newly acquired capital equipment to be used for strengthening of science and innovation potential, expressed as purchase within projects, Faculty investments or as cooperation with the economy sector
4. Number of activities carried out by Biotechnical Scientific Research Centre - BSRC
5. Number of researches carried out by CAAU in cooperation with other University constituents
6. Number of papers published in co-authorship with businessmen
7. Number of proposed and funded projects in cooperation with the economy sector

Measure 2.2.
Development and implementation of new scientific methods and procedures applied in research in the field of biotechnical sciences

Executive authorities: dean, vice-deans, Faculty Council, Faculty departments, research teams, CAAU
Implementation deadline: continuously
Performance indicators:

1. Number of accredited laboratory methods and procedures, and comparison with the previous period
2. Number of other scientific activities and comparison with the previous period
3. Continuous assurance of quality of CAAU management by retaining the ISO 9001:2015 standard

Measure 2.3.
Development of the Experiment station for innovation and technology by procurement of new equipment and by intensified scientific and professional cooperation

Executive authorities: dean, vice-dean for development of experiment stations and technology transfer, Committee for development and organisation of experiment stations, Faculty employees
Implementation deadline: end of 2026 and continuously
Performance indicators:

1. Number of newly acquired movable and immovable equipment
2. Number of activities aimed at building and equipping of the Biopark for animal production and biotechnology
3. Number of scientific and professional research conducted at the experiment stations

4. Number of professional cooperation projects realised by the experiment stations
5. Number of activities of business entities carried out at the experiment stations (Field Days and similar promotional activities)

STRATEGIC AIM 3
INCREASE IN THE NUMBER OF EXCELLENT GRADUATE STUDENTS AND YOUNG SCIENTISTS EMPLOYED AT THE FACULTY THROUGH PROJECTS AND COOPERATION WITH THE ECONOMY

Measure 3.1.
Strengthening of human resources for performing scientific research by employing excellent graduates and scientists

Executive authorities: dean, vice-deans, Central administration office, Faculty Council, Faculty departments, CAAU
Implementation deadline: continuously
Performance indicators:
1. Number and type of advancements of scientists into grades in different fields and areas of science and comparison with the previous period
2. Number of newly employed assistants on projects and in teaching
3. Number of newly employed scientists in different fields and areas of science
4. Number of assistant professors in relation to the total number of scientific-teaching staff
5. Number of newly employed technicians and laboratory associates
6. Number of requests for obtaining consent from authorised institutions to employ new assistants and senior assistants

Measure 3.2.
Encouraging the development of young researchers' skills (assistants, postdoctoral students) and ensuring the availability of funding

Executive authorities: dean, vice-deans, Central administration office, Faculty Council, research teams, Faculty departments
Implementation deadline: continuously
Performance indicators:
1. Number, type and value of supports intended for development of research skills and careers of young scientists in different areas and fields
2. List of providers of supports to young scientists
3. Number of stimulating actions financed by the Science Fund and other projects or agreements
4. Number of scientific research projects coordinated by young researchers
5. Number of presentations delivered by young researchers at the Young Researchers' Day organized by the University

Measure 3.3.
Encouraging the involvement of students at all study levels in scientific research work

Executive authorities: dean, vice-deans, research teams, Faculty departments, CAAU
Implementation deadline: continuously
Performance indicators:
1. Number and categorization of papers published with students at all levels of study, presented papers at conferences, and the number of defended bachelor, master, specialist and doctoral theses
2. Number of projects involving students
3. Number of dean's and rector's awards presented to students and their mentors

STRATEGIC AIM 4
RAISING THE QUALITY OF THE DOCTORAL STUDY AND IMPROVING THE QUALITY OF DOCTORAL STUDENTS

Measure 4.1.
Promoting the defence of doctoral theses according to the Scandinavian model

Executive authorities: vice-dean for science and postgraduate studies, Committee for the doctoral degree award, coordinators of the Doctoral study programme modules, Office for science
Implementation deadline: end of 2026 and continuously
Performance indicators:

1. Number of doctoral theses defended in the period 2023-2026 compared to 2019-2022
2. Number of doctoral theses prepared as a scientific monograph in the period 2023-2026 compared to 2019-2022
3. Number of doctoral theses prepared as a collection of scientific papers in the period 2023-2026 compared to 2019-2022
4. Number of activities and media posts aimed at promoting the Scandinavian model of doctoral thesis defence
5. Number of scientific papers with doctoral students as first authors published in high-ranking journals in WoS, and which are included in doctoral thesis defended according to the Scandinavian model
6. Number of citations of related papers in WoS and Scopus

Measure 4.2.
Improvement of doctoral student assessment on an annual basis

Executive authorities: vice-dean for science and postgraduate studies, Committee for the doctoral degree award, coordinators of the Doctoral study programme modules, Office for science
Implementation deadline: end of 2026 and continuously
Performance indicators:

1. Report on assessment of PhD students
2. Report on biennial assessment of postdoctoral students

Measure 4.3.
Improvement of mentors' skills within the Doctoral study and application of modern teaching methods

Executive authorities: vice-dean for science and postgraduate studies, Faculty Council, Committee for the doctoral degree award, coordinators of the Doctoral study programme modules, Office for science
Implementation deadline: end of 2026 and continuously
Performance indicators:

1. Number of workshops organized for doctoral students and their mentors
2. Results of surveys conducted at the end of each workshop
3. Results of surveys comprising the last three years on the satisfaction of doctoral students with the work of mentors and co-mentors
4. Report on conducted surveys among the doctoral students over the period of three years
5. Annual report on the evaluation of doctoral students' mentors and study advisors

Measure 4.4.
Encouraging the excellence of doctoral students

Executive authorities: vice-dean for science and postgraduate studies, Committee for the doctoral degree award, coordinators of the Doctoral study programme modules, Office for science, Committee for cooperation with the economy sector and innovations
Implementation deadline: end of 2026 and continuously
Performance indicators:

1. Number of international members in the committees for the evaluation of doctoral topics and defence of doctoral theses
2. Number of doctoral theses prepared within a joint doctorate in science in the period 2023-2026 compared to 2019-2022
3. Number of activities realised with the economy sector and other scientific and professional institutions for the purpose of conducting research for doctoral theses
4. Number of scholarships awarded to doctoral students (Enrolment Scholarship and Graduation Scholarship)
5. Number of research activities conducted at another University constituent, another University or scientific organisation in the country and abroad for the purposes of preparing a doctoral thesis
6. Number of doctoral students who presented papers at national and international scientific conferences

Measure 4.5.
Promotion of the Doctoral study programme at the national and international level

Executive authorities: vice-deans, Committee for the doctoral degree award, coordinators of the Doctoral study programme modules, Office for science, Office for international relations and projects
Implementation deadline: end of 2025 and continuously
Performance indicators:

1. Courses within the Doctoral study programme that can be taught in English
2. Number of doctoral theses in English
3. Number of joint doctoral theses
4. Exchanges of scientific-teaching staff and doctoral students
5. Number of press releases and posts related to the promotion of the Doctoral study programme
6. Number of participants involved in the mentioned activities
7. Organisation of the Doctorate Day and number of participants
8. Establishment of a digital database of employers interested in educating their employees at the Doctoral study
9. Number of activities aimed at promoting the Doctoral study programme among graduate students and employees in public, economic and other scientific institutions
10. Prepared promotional materials for the Doctoral study programme in Croatian and English language

STRATEGIC AIM 5
DEVELOPMENT OF THE OPEN SCIENCE CONCEPT AND IMPROVEMENT OF INTELLECTUAL PROPERTY RIGHTS

Measure 5.1.
Development of the open science concept

Executive authorities: dean, vice-deans, Office for science, Office for international relations and projects, Library, IT office
Implementation deadline: end of 2024 and continuously
Performance indicators:

1. The Faculty repository (NIB) updated and analysis of entered scientific publications made, emphasis put on open access to publications
2. The Dabar national repository updated and analysis entered scientific publications made, emphasis put on open access to publications

Measure 5.2.
Increase the transfer of knowledge and technologies based on innovation and academic entrepreneurship

Executive authorities: dean, vice-deans, Office for science, Office for international relations and projects, Committee for cooperation with the economy sector and innovations
Implementation deadline: end of 2028
Performance indicators:

1. Adopted Regulations on intellectual property
2. Number of activities aimed at development of intellectual property
3. Number of submitted applications for copyright registration (innovation, patent, method, trademark, technology, etc.)
4. Number of approved copyright registrations (innovation, patent, method, trademark, technology, etc.)
5. Number of start-up and/or spin-off companies

Measure 5.3.
Strengthen cooperation with the economy sector by providing more services of their interest

Executive authorities: dean, vice-deans, Office for science, Office for international relations and projects, Committee for cooperation with the economy sector and innovations
Implementation deadline: end of 2024 and continuously
Performance indicators:

1. Number of training activities organised for development of entrepreneurial skills
2. System developed in cooperation with the economy sector for establishment of joint interdisciplinary teams for research, innovations, new knowledge, technologies and patents
3. Number of realised activities and projects with the economy sector
4. Number of activities for the transfer of knowledge through training courses, preparation of studies and expert opinions, by respecting green and digital transition

STRATEGIC AIM 6
INCREASE IN THE NUMBER OF ACTIVITIES FOR POPULARISATION AND PROMOTION OF SCIENCE

Measure 6.1.
Encouraging more intensive communication with the public about the Faculty's scientific and research activities

Executive authorities: dean, vice-deans, Office for science, Office for international relations and projects, Library, research teams, Scientific Forum
Implementation deadline: end of 2024 and continuously
Performance indicators:

1. Number of activities for science popularisation carried out at the level of the Faculty, University, in the region or internationally
2. Number of participants involved in activities of science popularisation
3. Number of scientific research activities carried out by BSRC
4. Number of activities related to the updates on research activities on the Faculty website and social media profiles
5. Number of science popularisation events focused on promotion of citizen science organised by the Faculty
6. Number of activities organised by the Scientific Forum
7. Number of press releases related to the science popularisation

Measure 6.2.
Organisation of national and international scientific conferences

Executive authorities: dean, vice-deans, Office for science, Office for international relations and projects, Library
Implementation deadline: end of 2024 and continuously
Performance indicators:

1. 1Number of international and national scientific meetings organised and co-organised by the Faculty
2. Number of papers presented at the aforementioned meetings organised by the Faculty

Measure 6.3.
Support to the Alumni Association of the Faculty's graduates and friends and the Association of Faculty Postgraduate Students with the aim of promoting agronomy as a profession and the research potential of the Faculty

Executive authorities: dean, vice-deans, Alumni Association, Association of Faculty Postgraduate Students
Implementation deadline: end of 2024 and continuously
Performance indicators:

1. Number of activities organised by Faculty associations
2. Prepared annual reports on the activities of associations

9. LITERATURE

1. Action plan for science (MSE, 2020)
2. Europe 2020: statistics and indicators for Croatia, Paris Communiqué (EHEA, 2018)
3. New Colours of Knowledge - Strategy for education, science and technology (MSE, 2015)
4. Development plan of scientific and research infrastructure in the Republic of Croatia (MSES, 2016)
5. Manual for quality assurance of the Faculty of Agriculture (2015)
6. Strategic programme for scientific research Faculty of Agrobiotechnical Sciences Osijek 2018.-2023.
7. Digital Croatia Strategy for the period until 2032
8. Development Strategy of the Faculty of Agrobiotechnical Sciences Osijek 2023/2024-2027/2028
9. Education, Science and Technology Strategy (OG 124/2014)
10. Development Strategy of Josip Juraj Strossmayer University of Osijek 2021- 2030
11. Act on Quality Assurance in Science and Higher Education (OG 151/2022)

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