UNIWERSYTET ROLNICZY
im. Hugona Kołłątaja w Krakowie

Centrum Innowacji

European Funds
Smart Growth

Republic of Poland

Ministerstwo Edukacji i Nauki

European Union
European Regional Development Fund

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The program entitled: „Innovation Incubator 4.0" is carried out under the non-competitive project entitled: „Support for scientific research management and commercialization of R&D results in scientific entities and enterprises" under the Operational Program Intelligent Development 2014-2020 (Measure 4.4).

We are proud to once again present modern research that are being carried out at the University of Agriculture in Krakow.

The scientific-research works, published for the first time in this catalogue, are carried out under the programme called "Innovation Incubator 4.0", which was co-financed by the Ministry of Education and Science.

The objective of the „Innovation Incubator 4.0" programme is to support the process of managing the results of scientific research and development works, particularly in terms of their of their commercialization. Implementation of the project contributes to the promotion of scientific achievements, increasing their impact on the development of innovation and strengthening cooperation between the scientific community and the economic environment.

Seventeen pre-implementation works have been financed, carried out within the framework of the „Innovation Grant". *They concern, among others, the latest methods to reduce the production of plastic waste, various environmental and veterinary measurements. All details can be found on the further pages of this catalogue.*

Promotion of innovations and technologies created at the University of Agriculture in Krakow is one of the main activities carried out by the Technology Transfer Center of the University of Agriculture in Krakow and the special purpose vehicle – Innovation Centre of the University of Agriculture in Krakow Ltd. Our goal is to find the right business partners and to commercialise the presented technologies and products.

Technology Transfer Centre (CTT UR) of the University of Agriculture in Krakow *focuses its activities on bridging the gap between science and business. The aim of the CTT UR activity is to stimulate innovation of the University and to enable full use of the intellectual potential of the University research employees. The tasks of CTT UR include the commercialization of research results, conducting activities in the field of intellectual property protection, building a network of cooperation between the science and economy to facilitate and intensify the flow of innovative technologies and knowledge. We cooperate in the fields of economy in which the University of Agriculture in Krakow conducts research (e.g. agriculture, horticulture, forestry, biotechnology, food technology).*

Innovation Centre of the University of Agriculture in Krakow Ltd*is involved in the commercialization of research results developed at the University of Agriculture in Krakow. The primary method of commercialization is the acquisition of shares in newly created spin-off technology companies (so-called indirect commercialisation).*

At the Innovation Centre we aim to support cooperation between science and business and to promote innovative activity, primarily through identification, support and marketing of innovations and high-tech products. We provide assistance and advice on setting up and running technology companies.

Enjoy your reading!
The team of authors

1

Science: Mechanical Engineering

Title: DesiGate - a mist disinfection device for everyday objects

Description and benefits of implementation:
Within the framework of the project, a prototype device for disinfecting everyday objects, tools, luggage, etc., by fogging them with hypochlorous acid (HOCl) has been developed. The aim of disinfection is to remove viruses (including SarsCoV-2 coronavirus), bacteria and fungi. The use of proven fogging technology works regardless of the object of disinfection. During the industrial research carried out, the effect of HOCl on the basic pathogens present in the human environment has been verified. As a result of this work, optimum conditions for the disinfection process have been established, ensuring destruction of pathogens. There are no economically viable methods of disinfecting everyday objects, tools or luggage in Poland or abroad. Therefore, the new device meets the needs of the market - it disinfects all smooth and porous surfaces, removes at least 90% of pathogens from their surface, produces disinfectant in real time preventing its contamination. Furthermore, it does not leave any odour or stains, is safe for people and the environment and shows 80-120 times higher effectiveness in microorganisms fighting than e.g. sodium hypochlorite.

Type of innovation: Product, process

Team:
Head: dr inż. Maciej Gliniak, prof. URK
Research team: dr inż. Jan Giełżecki
mgr inż. Janusz Tabor

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

DESIGATE
URZĄDZENIE DO DEZYNFEKCJI MGŁĄ PRZEDMIOTÓW CODZIENNEGO UŻYTKU

2

Science: Veterinary Medicine

Title: Development and optimisation of a biochemical marker assay protocol for the assessment of gonadal reproductive function in the male dog aiming to prepare a diagnostic immunochromatic test

Description and benefits of implementation:
In the framework of the project, a protocol for the determination of p16 protein has been developed in order to prepare a product in the form of an immunochromatic assay for low-cost, rapid, easy and reliable testing of testicular dysfunction in dogs. By using simple, rapid diagnostic tests in clinical trials, diagnosis and treatment and/or further breeding decisions can be made. Until now, there are no dedicated tests on the market for the assessment of a dog's gonadal function. Such diagnostic analyses are particularly significant for breeders of pedigree dogs, especially reproductive animals. The new technology will contribute greatly to the breeding progress of pedigree dogs as it will enable a notable improvement in the quality of dog breeding by early elimination of dogs with testicular dysfunction. It will also bring measurable financial benefits to breeders.

Type of innovation: Process

Team:
Head: prof. dr hab. Małgorzata Kotula-Balak
Research team: dr Piotr Pawlicki
dr wet. Jarosław Wieczorek
dr wet. Grzegorz Ramisz
mgr Tomasz Chochorowski

Innovation broker: mgr Klaudia Kłeczek

Possible forms of commercialisation: spin-off company, sale, licence

3

Science: Mechanical Engineering

Title: Innovative technology of mineral raw materials granulation

Description and benefits of implementation:
Within the framework of the project, an innovative technology for granulation of mineral raw materials has been developed and a prototype granulation station has been created. The technology enables granulation of mineral mixtures (particle size below 0.5 mm) into quality granules. The first stage of the technology is based on disc granulation. The second stage, after forming the granules, is carried out in the drum device, where the granules are hardened and dried. Granules made using this technology have a repeatable granulation and increased mechanical strength. The developed prototype station offers the possibility of granulating free-flowing mineral mixtures with the application of bonding agents in the form of liquid solutions. Moreover, it is possible to obtain layered granules, e.g. with a functional coating (e.g. with increased strength). The main innovation of the presented technology is the possibility to granulate mineral mixtures with a precisely defined geometry. This process is conducted in two stages with the possibility of introducing the so-called „pelleting" with an additional functional fraction in the second stage. The additional fraction allows for increasing the durability or obtaining the effect of delayed decomposition of granules in soil. In the second granulation stage, strengthening qualities are imparted to the granules. Apart from the pelleting process, the basic process is to increase the density by means of intensive turning in a stream of warm air. To achieve such quality features of fertiliser granules with a single production process is an innovative process solution.

Type of innovation: Process (technological), product

Team:
Head: dr hab. inż. Krzysztof Mudryk, prof. URK
Research team: dr hab. inż. Marek Wróbel, prof. URK
dr inż. Marcin Jewiarz, prof. URK

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

GRALUR
GRANULACJA SUROWCÓW MINERALNYCH

4

Science: Food and nutrition technology

Title: Protein hydrolysates from soy processing by-products as active packaging for vegan and vegetarian products

Description and benefits of implementation:
Within the framework of the project, a production technology for active biopolymer coatings has been developed, which uses protein hydrolysate from post-production waste from soya bean processing with high antioxidant potential. Such coating can be used as active vegan packaging to extend the shelf life of perishable food products. The offered solution is innovative on a global scale. At present, there is no packaging on the market that is vegan, edible and biodegradable at the same time. Foodstuffs are packaged in plastic bags or sheets (most often: polyethylene, polypropylene or polyamide), paper or collagen films. The latter, despite their natural origin and biodegradable nature, are not vegan, are not edible and do not affect the shelf life of products. The innovation also comes from the raw materials used to produce vegan coatings. The active protein hydrolysate from soy processing waste is a product developed by the scientific research team and, until now, no one has ever used it as a component of a biopolymer film.

Type of innovation: Product

Team:
Head: dr hab. inż. Joanna Tkaczewska, prof. URK
Research team: dr hab. inż. Ewelina Jamróz, prof. URK
dr hab. inż. Marzena Zając, prof. URK
dr inż. Katarzyna Turek
mgr inż. Paulina Guzik

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

AKTYWNE powłoki TECHNOLOGIA BIOPOLIMEROWE

5

Science: Zootechnics and fisheries

Title: The application of stem cells in the treatment of inflammatory conditions of the udder of dairy cows

Description and benefits of implementation:
In the framework of the project, an alternative therapy with the use of stem cells has been developed that will accelerate the eradication of inflammation and promote udder regeneration in dairy cows, and therefore reduce the occurrence of mastitis in dairy herds. Many dairy herds suffer from recurrent inflammation of the mammary glands (mastitis) in breeding animals. So far, the only effective way to tackle the disease is the use of broad-spectrum antibiotics. As of 28 January 2022, the preventive use of antibiotics in animals has been banned in the European Union, therefore there is a great need to find an efficient therapy that could improve the mastitis treatment process without the use of antibiotics. The innovation of the offered solution is in the use of more available adipose tissue as a source material for stem cells. The obtained product (allogeneic stem cell suspension) as well as the method of its application to sick cows will be applied in veterinary services used in dairy farms.

Type of innovation: Product, process (technological)

Team:
Head: dr inż. Joanna Pokorska
Research team: prof. dr hab. inż. Monika Bugno-Poniewierska
mgr Sebastian Sawicki
dr inż. Dominika Kułaj
dr inż. Edyta Bauer
dr inż. Olga Lasek

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

STEM CELLS FOR COWS

6

Science: Forest Sciences

Title: LandTAX- Habitat productivity assessment system

Description and benefits of implementation:
Within the framework of the project, the LandTAX application has been developed, which provides an automatic assessment of the potential productivity of habitats for different forest tree species in any area located in Poland, as well as the prediction of volume increment, of newly established and existing forest stands. The LandTAX system offers an automatic evaluation of the productivity of habitats for any area. The application also facilitates optimisation of species selection with respect to habitat suitability and the expected economic effects of afforestation, including timber and biomass production. Until now, there are no tools on the market to determine the growth potential of forest-forming species in non-forest areas. The developed application will be a tool for forest-wood sector companies providing services in the field of forest inventory, forest management planning, property valuation, including forest land and areas potentially designated for afforestation. This solution is also dedicated to the managers of private, local and state forests. The developed system aims at the domestic market with the possibility of expanding to international markets.

Type of innovation: Product

Team:
Head: prof. dr hab. inż. Jarosław Socha
Research team: dr hab. Paweł Netzel, prof. URK
dr inż. Paweł Hawryło
dr inż. Luiza Tymińska-Czabańska

Innovation broker: dr inż. Magdalena Szara-Bąk

Possible forms of commercialisation: spin-off company, sale, licence

LANDTAX
APLIKACJA

7

Science: Civil engineering and transport

Title: Method of delimitation of the central zone of a city

Description and benefits of implementation:
Within the framework of the project a method of delimitation of the central zone of the city has been developed, which can be used in the initial stage of the spatial planning process to recognise the investigated area and to analyse the way it is used by people. This product is a map of urbanisation levels and a map of real estate prices in the city of Krakow, which will help to objectively determine the boundaries of the city's central zone. With the knowledge of where the city's central zone boundaries are, it is possible to optimise the location of various commercial and service facilities, manufacturing plants and housing estates. Its findings can be used for integrated planning when drafting investment plans. The product is based on a proprietary method for determining the level of urbanisation of an area, enriched by an analysis of the real estate market. This method can be applied to any area in the world. The innovative character of the central city zone delimitation method, which uses cadastral data and data from the real estate market, lies in the new way of utilising these data. The data provide a source of information on spatial activities taking place over large areas, rather than on individual plots or properties.

Type of innovation: Product

Team:
Head: dr hab. Agnieszka Bitner-Fiałkowska, prof. URK
Research team: mgr inż. Małgorzata Frosik

Innovation broker: mgr inż. Adelina Kasprzak

Possible forms of commercialisation: spin-off company, sale, licence

8

Science: Forestry Science/Mechanical Engineering/Agriculture and Horticulture

Title: Microwave device for destruction of invasive plants

Description and benefits of implementation:
In the framework of the project, a microwave device (remote-controlled robot) for destroying invasive plants, particularly Sosnowski hogweed, has been developed. The mobile device can be used in different types of habitats (alternately humidified - the unit pressure of the device on the ground is three times lower than under human foot). The microwaves emitted by the device's antennas are capable of destroying hogweed plants at any phenological growth phase. Unlike other existing technologies, the device is able to permanently reduce the germination capacity of seeds, which has not yet been achieved by any other method. The results of the work include the permanent elimination of unwanted invasive plants from various habitats, including naturally valuable areas, e.g. Natura 2000, landscape parks, and natural parks. The authors propose microwave radiation emitted from a horn antenna onto plants and into the ground to destroy invasive vegetation. The radiation emitted in this way causes heating of the plants and the ground, including the roots, which causes protein denaturation in them and thus their annihilation. The undeniable advantage of this solution is also the heating and therefore destruction of numerous seeds around the invasive plants, from which new invasive plants could arise in the next growing season.

Type of innovation: Product, process (technological)

Team:
Head: dr hab. inż. Krzysztof Słowiński, prof. URK
Research team: dr hab. inż. Sylwester Tabor, prof. URK
dr inż. Beata Grygierzec

Innovation broker: mgr inż. Adelina Kasprzak

Possible forms of commercialisation: spin-off company, sale, licence

9

Science: Civil engineering and transport

Title: New Highways

Description and benefits of implementation:
In the framework of the project, a platform for assessing the impact of a motorway on agricultural land has been developed, in the form of a computer application, which, after inputting data from a map with the marked course of the linear investment, allows to calculate and present total losses related to its negative impact on agricultural land. This allows for a quick assessment of variants of the linear investment course and selection of the most beneficial variant from the perspective of its impact on agricultural land. An indirect effect is the possibility of optimising the placement of motorway viaducts, railway viaducts, etc. At present, in order to assess the impact of a 2.8 km section with the use of previous methods, it is estimated that it takes about 50 hours of work, while the method presented shortens the assessment process to a maximum of 30 minutes. Furthermore, visualisation tools have been developed that make it possible to place a motorway in space and, apart from assessing its negative impact on agricultural land, also estimate the aesthetic aspect connected with disturbing the space with this construction, which allows for a rough assessment of the aesthetic values in a given landscape. Using the developed method, it is possible to quickly and precisely select the most beneficial variant of the motorway route.

Type of innovation: Process (technological), product

Team:
Head: dr hab. inż. Stanisław Bacior, prof. URK
Research team: dr hab. inż. Barbara Prus, prof. URK

Innovation broker: mgr Klaudia Kłeczek

Possible forms of commercialisation: spin-off company, sale, licence

NEW
HIGHWAYS

Science: Zootechnics and fisheries

Title: PolPiGen_muscle

Description and benefits of implementation:
In the framework of the project, a tool for genetic selection of breeding pigeons has been developed in the form of a molecular marker. Marker-based selections allow for the adjustment of training plans, nutrition, and training intensity to the potential of individuals, and therefore truly prevent wrong starting decisions and enhance flight potential. Thanks to technological advances in high-throughput genome sequencing techniques (NGS), it is possible to accurately predict the place on the DNA strand responsible for desired traits. The breeding and the sport of pigeon flying is a highly profitable industry in the market for services, products and amateur breeding. Elite birds that achieve outstanding sporting results are valued in thousands of euros. Discovering the knowledge behind the genetic basis of traits associated with animal performance is a leading research direction in animal science. The growing awareness of breeders and sales representatives selling pigeons worldwide of the capabilities of molecular biology and DNA analysis has resulted in great interest in commercial testing of pigeons.

Type of innovation: Product

Team:
Head: dr hab. inż. Monika Stefaniuk-Szmukier
Research team: dr inż. Tomasz Szmatoła
inż. Grzegorz Myćka

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

POLPIGEN_MUSCLE

11

Science: Food and Nutrition Technology

Title: Biofortified lettuce with organic iodine compounds as a dietary supplement in the prevention and support of COVID-19 treatment

Description and benefits of implementation:
In the framework of the project, a dietary supplement with a comprehensive health-promoting effect has been produced, i.e.: showing immunomodulatory properties and applicable in the prevention of iodine deficiency. The biological properties of lettuce enriched with organic forms of iodine has been carried out by in vitro evaluation using the coronavirus model HCoV-229E and HCov-OC43 (human lung cells infected with alpha-coronavirus 229E and beta-coronavirus OC43, respectively). The antiviral activity has been evaluated by a cytopathic effect assay (CPE) and a protein panel of SARS-CoV-2-specific cytokines and chemokines. The proposed product provides an opportunity to supplement iodine in the diet and is thus an excellent alternative to iodising cooking salt, which will result in a reduction in the incidence of cardiovascular disease and may have applications in the prevention and support of COVID-19 treatment.

Type of innovation: Product

Team:
Head: dr hab. inż. Aneta Koronowicz, prof. URK
Research team: prof. dr hab. inż. Sylwester Smoleń
dr Anna Wisła-Świder prof. URK
mgr inż. Joanna Mrożek
mgr Olga Sularz

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

Science: Food and nutrition technology

Title: Total biodegradable packaging

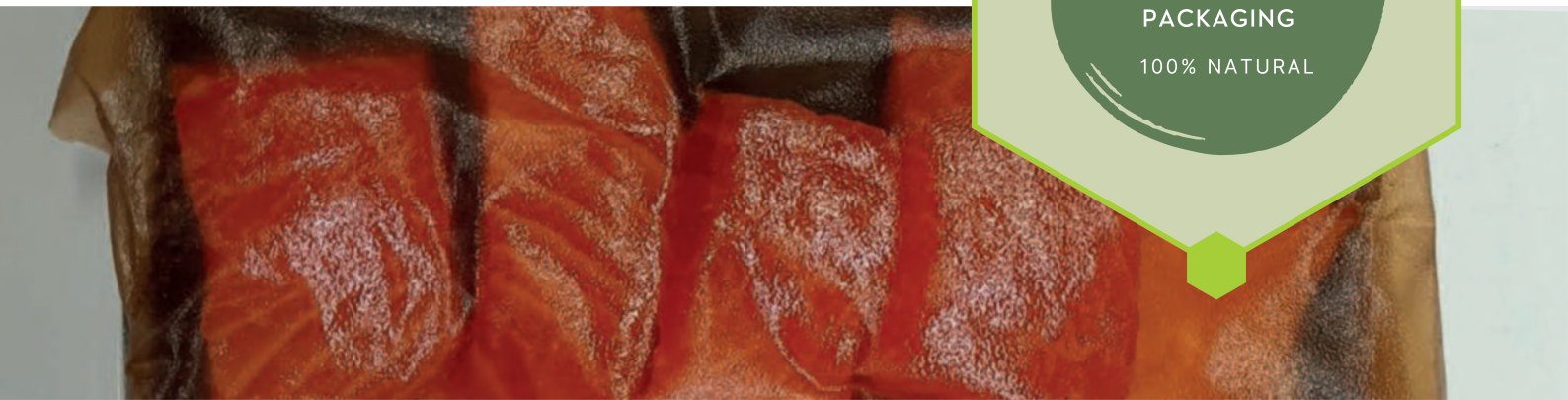
Description and benefits of implementation:
A biopolymer bilayer film based on furcelleran, CMC, gelatin hydrolysate and bilberry extract and biopolymer trays based on tea grounds have been obtained in this project. The obtained films show high antioxidant and antimicrobial activity. Additionally, bilayer films enriched with bilberry extract and biopolymer trays were used as packaging materials for the salmon storage. The results obtained indicated an improvement in the quality of fish during storage compared with salmon stored in synthetic films. The presented films and trays are biodegradable within a period of four weeks. This technology offers a promising alternative to conventional packaging as its use can improve food safety by inhibiting pathogenic bacteria or oxidation reactions while reducing the environmental impact of wasted food and packaging waste. The use of active films can extend the shelf life of stored products and maintain the ‚clean label' trend. Since the packaging is made of waste materials, the cost of the technology for the entrepreneur will be low.

Type of innovation: Product

Team:
Head: dr hab. inż. Ewelina Jamróz, prof. URK
Research team: dr hab. inż. Joanna Tkaczewska, prof. URK
dr hab. inż. Marzena Zając, prof. URK
mgr inż. Paulina Guzik

Innovation broker: dr inż. Magdalena Szara-Bąk

Possible forms of commercialisation: spin-off company, sale, licence



Science: Agriculture and horticulture

Tytuł: Implementation of the water stress mitigation procedure in the cultivation of medicinal plants

Description and benefits of implementation:
An effective procedure for mitigating the stress of water deficit in the substrate during the cultivation of an evergreen plant with pharmacopoeial properties, valued in the cosmetics industry, was developed. Biochemical stabilization and industrial value were verified raw material– Hederae Folium that it is included in many commercial preparations. So far, there has been no economically justified domestic raw material base for this representative of the Araliaceae family, containing a number of valuable metabolites, such as triterpene saponins, flavonoid glycosides, and phenolic acids. As part of the project, a modular cultivation formula was created that allows to obtain a product of Polish origin, which will be available for sale throughout the year. Optimization of the cultivation process allows to obtain a raw material of high commercial value. This will enable the development of documentation for the Patent Office and the commercialization of the product. The subject of research is of particular importance in the face of climate change leading to an increase in the areas of crops exposed to drought, and metabolites from certified raw materials are the basis for the availability of medicinal products for the purposes of pharmacognosy and cosmetology.

Type of innovation: Process

Team:
Head: dr hab. inż. Ewa Hanus-Fajerska, prof. URK
Research team: dr inż. Iwona Kamińska
mgr inż. Cezary Kruszyna
mgr inż. Joanna Jasińska

Innovation broker: mgr inż. Adelina Kasprzak

Possible forms of commercialisation: sale, spin-off company

HYDROHELIX
MODUŁOWA FORMUŁA UPRAWY

14

Science: Food and nutrition technology

Title: Obtaining a functional drink based on cloudy apple juice and selected bee products

Description and benefits of implementation:
As part of the project, a method of producing a food product (drink) based on fresh, cloudy apple juice and bee pollen or propolis extract was developed, ensuring an increase in the nutritional value and potential extension of the product's storage life. The innovativeness of the product consists in the use of a unique set of various biologically active compounds present in propolis and bee pollen, which makes them a group of pharmacological and medicinal substances with a wide spectrum of action on the human body. The addition of bee products to low-processed food will not only significantly enrich its composition, but also have a positive effect on durability by inhibiting the development of undesirable microorganisms. An additional advantage is the fact that the ingredients of bee bread and propolis with antimicrobial and antioxidant activity have GRAS status, i.e. they are considered safe for the consumer. The solution can be used by local and national producers of juices and beverages to expand their offer with a natural functional product.

Type of innovation: Product

Team:
Head: dr Małgorzata Makarewicz
Research team: dr inż. Marek Zdaniewicz, prof. URK
mgr inż. Katarzyna Pańczyszyn

Innovation broker: dr inż. Magdalena Szara-Bąk

Possible forms of commercialisation: spin-off company, sale, licence

15

Science: Food and nutrition technology

Title: Vegan paradise

Description and benefits of implementation:
As part of the project, a probiotic fermented plant-based drink was created for a wide range of consumers with diverse nutritional needs. The developed product does not contain artificial preservatives, emulsifiers and thickeners, synthetic colors and flavors, added sugar or any sweeteners, gluten, soy and animal products. It is obtained only from natural plant components from Poland. The product currently has no competition on the market. This is ensured by a clean label, native raw material from local producers, and the use of lactose-free, vegan probiotic yoghurt cultures. With the constantly growing demand for vegan products, which usually reach the conscious customer, the presence of this drink on the market will largely fill the gap on the domestic and foreign markets.

Type of innovation: Product

Team:
Head: dr inż. Daniel Żmudziński
Research team: dr hab. inż. Dorota Najgebauer-Lejko, prof. URK

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

PROBIOTYCZNY FERMENTOWANY NAPÓJ ROŚLINNY
WEGAŃSKI RAJ

16

Science: Food and nutrition technology

Title: Isotonic soft drinks

Description and benefits of implementation:
As part of the project, an isotonic non-alcoholic drink made of natural ingredients was created. The drink ensures proper hydration of the body and provides the necessary electrolytes. A natural non-alcoholic drink with isotonic properties is a response to the preferences of consumers who increasingly reach for non-alcoholic drinks and attach more and more importance to the composition and properties of finished products. The produced podpiwek is a natural product with isotonic properties, a slightly sweet, caramel, roasted, malt flavor and a hop, citrus and herbal aroma. The hop content introduces properties important for health, including: antiseptic, slowing down the skin aging process, positive effect on the digestive system. The product does not contain sweeteners or artificial colors. The use of raw materials developed by the research team in appropriate proportions and the obtained properties make the product innovative and currently uncompetitive on the market.

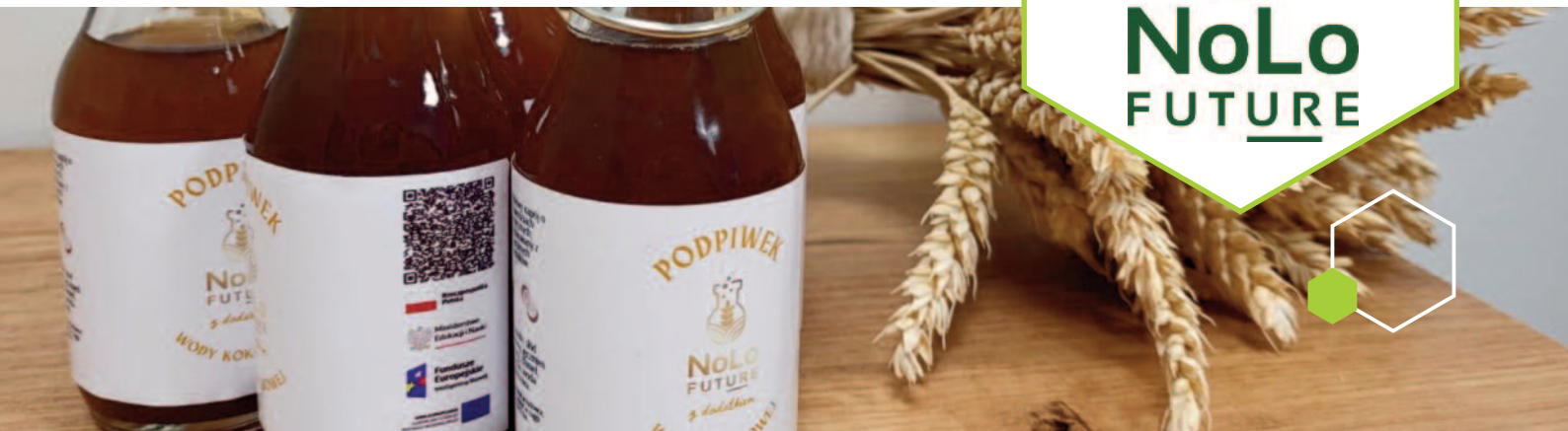
Type on innovation: Product

Team:
Head: dr inż. Magdalena Januszek
Research team: dr inż. Aneta Pater

Innovation broker: mgr inż. Justyna Warot

Possible forms of commercialisation: spin-off company, sale, licence

NoLo FUTURE



17

Science: Agriculture and horticulture, zootechnics and fishing

Title: The use of sheep wool as a biodegradable fertilizer composite

Description and benefits of implementation:
As part of the project, an innovative, biodegradable agent improving soil properties 'WOOLSOIL-CRF' was created. The fertilizer matrix is a biodegradable thermoplastic polymer polylactide (PLA), while the modifiers are nutrients: nitrogen, potassium, phosphorus and sulfur. The most important filling of the fertilizer is mixed sheep wool, which, due to its hygroscopic properties, accumulates and gradually releases water and slowly decomposes, gradually releasing nutrients. Fertilizer products based on sheep wool have the characteristics of slow-release fertilizers (CRF). The benefits of using CRF fertilizer containing wool fibers are important from both economic and environmental points of view, and the introduction of sheep wool into the crop production stream is an important link in the circular economy. The proposed fertilizer composite is fully biodegradable, so it can be used in mountain areas in organic farming or forest areas. The product recipe can be used in other geographical regions where there is also a problem with the use of three-fraction mixed wool.

Type on innovation: Product

Team:
Head: dr hab. inż. Edyta Molik, prof. URK
Research team: dr hab. inż. Marcin Niemiec, prof. URK
dr inż. Monika Komorowska

Innovation broker: dr inż. Magdalena Szara-Bąk

Possible forms of commercialisation: spin-off company, sale, licence

WOOLSOIL CRF

UNIWERSYTET ROLNICZY
im. Hugona Kołłątaja w Krakowie

Centrum Innowacji

”INNOVATION INCUBATOR 4.0”

The aim of „Innovation Incubator 4.0” programme is to support the process of managing the results of scientific research and development works of employees and research teams of the University of Agriculture in Krakow, in particular in terms of their commercialisation.

Implementation of the programme contributes to the promotion of scientific achievements, increasing their impact on the development of innovation and strengthening cooperation between the scientific community and the economic environment.

For more details of the programme:

e-mail: inkubator4@urk.edu.pl

www: Inkubator4.urk.edu.pl

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„Support for scientific research management and commercialization of R&D results in scientific entities and enterprises”
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European Funds Smart Growth

Republic of Poland

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European Union
European Regional Development Fund

VISIT THE TECHNOLOGY BASE

AGRITECHMARKET.PL

TO READ ALL THE INVENTIONS DEVELOPED

AT THE UNIVERSITY OF AGRICULTURE IN KRAKOW

IM. HUGONA KOŁŁĄTAJA W KRAKOWIE

TECHNOLOGY BASE

INVENTIONS KNOW-HOW SOFTWARE DEVICE UTILITY PATTERNS

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