USAMVB TIMIŞOARA

"YoungPeople And Multidisciplinary Research In Applied Life Sciences"

25 November, 2021

Section: Young people and scientific research in Animal Husbandry and Biotechnology

Faculty Of Agriculture, University Of South Bohemia, Ceské Budejovice-Czech Republic

Faculty Of Agrobiology And Food Resources, Nitra-Slovakia Faculty Of Biotechnology And Food Sciences, Nitra-Slovakia

Faculty Of Agriculture, University Of Novi Sad, Novi Sad-Serbia

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BIOENGINEERING FACULTY OF ANIMAL RESOURCES
TIMIŞOARA, 2021

BIOENGINEERING FACULTY OF ANIMAL RESOURCES

TIMIŞOARA, 2021

Topic: Conferința Ştiinţifică Internaţională "**TINERII SI CERCETAREA ŞTIINŢIFICĂ ÎN DOMENIUL ŞTIINȚELOR VIEȚII**" dedicată studenţilor, masteranzilor, doctoranzilor şi tinerilor cercetători.

Time: **Nov 25, 2021 09:30** AM Bucharest

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GENERAL PROGRAMME

Thursday, 25 November, 2021

9^{30} – 10^{00} – Participant admission

10^{00} – 10^{15} – *Opening conference , Akademika Banat Chorus – dirijor Prof.dr. Nicolaescu Ingrid*

Prof. univ. dr. Cosmin Alin Popescu

BUASVM`s Rector

–Opening speach

Prof.univ. dr.Isidora Radulov

BUASVM`s Vice rector for research and innovation

10^{15} – 10^{40} *Utilizarea inteligenţei artificiale în agricultură* - **Cristian Apa,** Solutions Business Manager, SAS CEMEA, Romania
Programul Academic al SAS România – **Alina Luchian**

10^{40} – **Paper presentations** (15min/presentation)

10^{40} – 10^{55} - Oral Communication OC1

10^{55} – 11^{10} - Oral Communication OC2

11^{10} – 11^{25} - Oral Communication OC3

11^{25} – 11^{40} - Oral Communication OC4

11^{40} – 11^{55} - Oral Communication OC5

11^{55} – 12^{10} - Oral Communication OC6

12^{10} – 12^{25} - Oral Communication OC7

12^{25} – 12^{40} - Oral Communication OC8

12^{40} – 12^{55} - Oral Communication OC9

12^{55} – 13^{10} - Oral Communication OC10

13^{10} – 13^{25} - Oral Communication OC11

13^{25} – 13^{40} - Oral Communication OC12

13^{40}-13^{55} - Oral Communication OC13

13^{55}-14^{10} - Oral Communication OC14

14^{10} – 14^{25} - Oral Communication OC15

Symposium Programme

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10^{40} – **Paper presentations** (15min/presentation)

Oral communications

10^{40} –10^{55} **OC1 –** *„Zero chemical" agriculture* – **Daniela Trifan, George Toader, Cătălin-Ionuț Enea, Alin-Ionel Ghiorghe, Emanuela Lungu, Leonard Ilie**, University of Agronomic Sciences and Veterinary Medicine of Bucharest

10^{55} –11^{10} **OC2 –** *Use of post cervical insemination in swine: economic aspects* – **Robert Florian Vlad, Cristian Beg, Alina Maria Dodu, Iasmina Loredana Indri, Ioana Dana Pandur**, Banats' University of Agricultural Sciences and Veterinary Medicine „King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

11^{10} –11^{25} **OC3 –** *Organoleptic characterization of desserts obtained from tapioca pearls* – **Alice Vasiloni**, **Zlatan Milosevic, Ana-Maria Creţu, Daniel Platon, Corina Mişcă, Delia Dumbravă, Camelia Moldovan** – "*Victor Babeş*" University of Medicine and Pharmacy from Timişoara, Faculty of Pharmacy

11^{25} –11^{40} **OC4 –** *The use of satellite images in agriculture, forestry and horticulture. Reflective indices* – **Olimpiu Ovidiu Cornea, Dorin Camen,** Banat University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Faculty of Horticulture and Forestry

11^{40} –11^{55} **OC5 –** *Konya – tourist destination and component of tourism products offered by Turkish travel agencies* – **Ayşe Gözeller, Burak Altiparmak, Cosmina-Simona Toader**, Erciyes University, Faculty of Tourism, Kayseri, Turkey

11^{55} –12^{10} **OC6 –** *Biochemical composition of Melia azedarach berries from the eastern mediterranean (Hatay, Turkey) region and evaluate in terms of Veterinary Toxicology* – **M. Yipel, Aysun Ilhan, Fulya Altinok-Yipel, Musa Türkmen**, Hatay Mustafa Kemal University, Faculty of Veterinary Medicine

12^{10} –12^{25} **OC7 –** *Current state and prospects for the development of renewable energy in Russia* – **Daniil Raspopin, Irina Minakova, Lucreţiu Dancea**, Southwest State University, Kursk, Russia

12^{25} –12^{40} **OC8 –** *Study on the vector role for Calicophoron Daubneyi of some aquatic snails form Western Romania* – **Cătălin Bogdan Sîrbu, Ioan Peţ, Claudia Alexandrina Goina, Miruna Magda Morariu, Beatrice Ana-Maria Sîrbu, Florica Morariu,** Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timişoara

12^{40}-12^{55} **OC9 -** *Recent researches for coenzyme Q_{10} from food matrices. Supplementation in aging and diseases*– **Andersina - S. Podar, Cristina - A. Semeniuc, Maria - I. Socaciu, Melinda Fogarasi, Anca - C. Fărcaş, Sonia - A. Socaci**, University of Agricultural Sciences and Veterinary Medicine from Cluj-Napoca

12^{55} –13^{10} **OC10 -** *Tomographic Analysis of Magnolia x soulangiana Soul. Bod. from the Historical Garden of the Baroque Palace in Oradea, Romania* - **Timea Kleszken**, **Daniela Sabina Poşta,** University of Oradea - Faculty of Informatics and Science, Biology department

13^{10} –13^{25} **OC11 -** *Consumers' opinions on bovine milk, especially on raw milk sold directly* - **Dzsenifer Mária Ruzsa, Karoly Bodnar**, Hungarian University of Agriculture anf Life Sciences

13^{25} –13^{40} **OC12 -** *Morphology of the skull in badger (Meles meles)* - **I. Crăciun, Ana-Maria Marin, C. Hulea, Crina Moşneang, M. Pentea,** Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" from Timisoara, Faculty of Veterinary Medicine

13^{40} –13^{55} **OC13 -***Possibility of using grape pomace as an antifungal and antimycotxigenic agent in wheat for food consumption* - **Voichiţa Bota, Renata Maria Sumălan, Loredana Pluştea, Andrada Gavra, Diana Obistioiu, Monica Negrea, Antoanela Cozma, Ersilia Alexa**, Banat`s University of Agricultural Sciences and Veterinary Medicine "*King Michael I of Romania*" from Timisoara, Faculty of Food Engineering

13^{55}-14^{10} **OC14 -** *The effects of including cinnamaldehyde or carvacrol on wethers' diets on their ruminal metabolism*
Alexandra - Gabriela Oancea*, Dragomir Catalin, Ana Cismileanu
INCDBNA, National Research-Development Institute of Biology and Animal Nutrition, Balotesti, Romania, jud. Ilfov.

14^{10} -14^{25} **OC15 -** *Researches regarding the microbiota of the homemade „bors", as healthy source*
Radu Ciobanu[1], Nicoleta Badaluta[1], Claudia Ungureanu[1], Ana-Maria Georgescu[2], Dumitra Raducanu[1]
1Vasile Alecsandri'' University of Bacau, Faculty of Sciences, Department of Biology, Ecology and Environment Protection, 157 Calea Marasesti Street, 600115 Bacau, Romania;[2]"Vasile Alecsandri" University of Bacău, Faculty of Engineering, Department of Chemical and Food Engineering, 157 Calea Mărăşeşti Street, 600115 Bacău, Romania

Section Young people and scientific research in Animal Husbandry and Biotechnology

Posters

P1 **EFFECTS OF FARM SIZE ON MILK PRODUCTION INDICES IN ROMANIAN SPOTTED COWS FROM HUNEDOARA COUNTY**

Alin Bucur (Prisecaru), Ligia Berzava, Silvia Erina, Ludovic Toma Cziszter

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P2 **INFLUENCE OF FARM SIZE ON ESTIMATED BREEDING VALUES AND SELECTION INDICES IN ROMANIAN SPOTTED COWS**

Bogdan-Roberto Mihuța, Ligia Berzava, Alin Bucur (Prisecaru), Silvia Erina, Ludovic Toma Cziszter

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P3 **INFLUENCE OF FARM SIZE ON SELECTED MILK QUALITY AND HYGIENE TRAITS IN ROMANIAN SPOTTED COWS**

Ligia Berzava, Alin Bucur (Prisecaru), Ludovic Toma Cziszter, Silvia Erina

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P4 **STUDY ON THE QUALITY OF MILK IN ŢIGAIE SHEEP IN THE FIRST PART OF LACTATION**

Alexandru Grigorescu, Ana Zaharia, Andreea Faur, Lavinia Stef, Octavian Sorin Voia

Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P5 **EVALUATION OF ENZYMATIC POTENTIALITIES OF *BACILLUS SUBTILIS* USING AS SUBSTRATE DIFFERENT ANIMAL RAW MATERIALS FEED**

Mihaela Dumitru, Nicoleta Lefter, Lavinia Idriceanu, Mihaela Habeanu
Department of Animal Nutrition and Biotechnology, National Research and Development Institute for Biology and Animal Nutrition (IBNA), Balotesti, Romania

P6 **NITROGEN EMISSIONS FROM AGRICULTURE AND LIVESTOCK SECTOR, AMONG THE CAUSES OF CLIMATE CHANGE**

Daniel Catalin Necula, Igori Balta, Eliza Simiz, Marioara Nicula, Lavinia Stef
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P7 **IMPACT OF DIFFERENT LEVELS OF VITAMIN D3 IN LAYING HENS DIET ON VARIOUS ASPECTS OF THE EGGS**

Petru Alexandru Vlaicu, Tatiana Dumitra Panaite, Alexandra Oancea Gabriela Maria Cornescu , Ovidiu Avram
National Research & Development Institute for Animal Biology and Nutrition, Balotesti, Ilfov, Romania
SC AVIPUTNA S.R.L., Aviputna S.R.L.. Goleşti County,Vrancea, România

P8 **THE EFFECT OF USING PHYTOADDITIVES IN THE NUTRITION OF BROILERS (GARLIC, PEPPER, TURMENIC AND CORIANDER) ON NUTRITIONAL AND BIOPRODUCTIVE INDICES**

Adrian Răşinar, Cristian Muntean, Gabriel Alexandru Ioniţă, Ştef Lavinia, Eliza Simiz
Banat's' University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

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Antonio Marcelo Duşa, Cătălin Paier, Adrian Răşinar, Silvia Pătruică, Eliza Simiz
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

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Sergiu Avram, Saida Feier-David, Lavinia Ştef, Gabi Dumitrescu, Ioan Peţ
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

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Dragoş Moraru, Adrian Răşinar, Lazăr Roxana Nicoleta, Cimpoca Denis, Silvia Pătruică
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

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Lazăr Roxana Nicoleta, Alexa Ersilia, Obiştioiu Diana, Răşinar Adrian, Pătruică Silvia
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

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Emanuela Diana Gherman, Ioana Mihaela Bălan
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" 300645 Timişoara, Romania

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Veronika Valková[1,2], Hana Ďúranová[1], Lucia Galovičová[2], Nenad Vukovic[3], Milena Vukic[3], Miroslava Kačániová[2,4]
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[3]University of Kragujevac, Faculty of Science, Department of Chemistry, P.O. Box 12, 34000 Kragujevac
[4]Institute of Food Technology and Nutrition, Department of Bioenergy, Food Technology and Microbiology, University of Rzeszow, Zelwerowicza St. 4, 35601 Rzeszow, Poland

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Ana-Maria Dănuț Salomie [1], Alexandru Nan [1], Gabi Dumitrescu [1], Valeriu Carabă [1], Liliana Petculescu Ciochină*
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" Timişoara, Romania

P16 **UTILIZATION OF EMULGELS AS SUBSTITUTES FOR SOLID FAT IN SWEET BUNS: RHEOLOGICAL, TEXTURAL AND MICROSTRUCTURE CHARACTERIZATION**

Hîrtie Simina-Cătălina[1] and Ropciuc Sorina[1]
[1]University "Stefan Cel Mare" of Suceava, Romania

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Ioana-Beatrice Gherasim[1], Sorina Ropciuc[1*]
Faculty of Food Engineering, Stefan cel Mare University of Suceava, Romania

P18 **POTENTIAL FOR RENEWABLE ENERGY PRODUCTION BY ANAEROBIC DIGESTION OF ORGANIC RESIDUES FROM PIG INDUSTRY**

Gabriel Ioan Moldovan[1], Teodora-Liana Toader, Karina-Dolores Drăgan[1], Laura Diaconu[1], Robert Sonkovics[1], Teodor Vintilă[1]
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania" Timişoara, Romania

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Grosu Georgiana Denisa[1], Monica Dragomirescu[1*]
[1]Banats' University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources, Calea Aradului nr.119, Timisoara - 300645, Romania

P20 **TESTING THE CHELATING PROPERTIES OF CORIANDER LYOPHILISATE (*CORIANDRUM SATIVUM)* IN EXPERIMENTAL LEAD POISONING IN *CARASSIUS GIBELIO* BLOCH**

Florina Făt, Gabi Dumitrescu, Diana Berzovan, Liliana Petculescu-Ciochina, Marioara Nicula (Neagu)
Banat's University of Agricultural Sciences and Veterinary Medicine „King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P21 **THE INFLUENCE OF SOME PHYTO-ADDITIVES ON BIO-PRODUCTIVE PERFORMANCES AND THE HEALTH OF THE FARMED FISH – REVIEW**

Petruţa Gherescu[1], Sandra Mihailov[1], Nicoleta Mihoc[1], Adrian Grozea[1*]
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Daniel Ilie Perţa Găulea[1], Daniela Moţ[1*]
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

P23 **THE STUDY OF CONSUMER BEHAVIOR AND THEIR PERCEPTION REGARDING THE ETHICS OF AGRI-FOOD MARKETING IN THE CITY OF TIMIŞOARA**

Gordana Prole[1], Buzamăt Genoveva[1*]
Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael the I st of Romania" from Timisoara", Faculty of Bioengineering and Animal Resources

BOOK OF ABSTRACT

"YOUNG PEOPLE AND MULTIDISCIPLINARY RESEARCH IN APPLIED LIFE SCIENCES"

25 November 2021, Timișoara

Section - "Young people and scientific research in Animal Husbandry and Biotechnology"

BIOENGINEERING FACULTY OF ANIMAL RESOURCES

TIMIŞOARA, 2021

OC2- USE OF POST CERVICAL INSEMINATION IN SWINE: ECONOMIC ASPECTS

R. F. Vlad[1*], C. Beg[1], Alina Maria Dodu[1], Iasmina Loredana Indri[1], Ioana Dana Pandur[1]

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Abstract
For more than a decade now, the post cervical insemination has become a common technique used in most swine farms, being a very useful tool as an alternative to traditional insemination. It allows a more rapid genetic improvement working faster and using a lower volume of semen, generating consequently a higher economical efficiency. Reproductive performance and the economic aspects have become a higher concern today for pork producers in the context of the major viral diseases that are decimating the swine population. The purpose of this paperwork is to reflect the economic aspects relating to cost to produce semen when post cervical insemination is used. Post cervical insemination technology generally reduces the production cost of a dose of semen as costs are either reduced or spread across more doses. In order to evaluate the economic aspects regarding post cervical insemination, a computer model was developed using Microsoft Excel, in order to to estimate costs for producing semen and overall cost of production under various scenarios. There are many variables to consider when evaluating the actual cost of post cervical insemination as compared to traditional insemination. The current values were assembled by the authors from the Romanian market

Key words: ***p****ost cervical insemination, sows, boars, semen, economic, cost*

OC8 STUDY ON THE VECTOR ROLE FOR *CALICOPHORON DAUBNEYI* OF SOME AQUATIC SNAILS FORM WESTERN ROMANIA

Cătălin Bogdan Sîrbu[1], I., Peţ[2], Claudia Alexandrina Goina[3], Miruna Magda Morariu[3], Beatrice Ana-Maria Sîrbu[1], Florica Morariu[2*]

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Abstract

In the last decade, Calicophoron daubneyi parasites have been found in animals in many european countries. Its development and spread are predicated on the presence of numerous intermediate hosts, but mainly on the presence of the aquatic snail *Galba truncatula.*

Natural infestations of three freshwater snail species with *Calicophoron daubneyi* were studied from april to june 2020 in western Romania. Were collected 235 snails belonging to the species *Galba truncatula* (115 snails (48.94%)), *Stagnicola palustris* (48 snails (20.43%)), *Planorbis corneus* (72 snails (30.64%)). Out of a total of 235 snails harvested, 165 were positive for the presence of cercariae, but of these only 93 (39.57%) had *Calicophoron daubneyi* cercariae.

These results indicate that *Calicophoron daubneyi* may be able to infect and grow in aquatic snail populations in western Romania. *Calicophoron daubneyi* has demonstrated its ability to adapt to an intermediate host in a new environment.

The aim of this study was to identify aquatic snail species in grassland areas on the basis of shell morphological characteristics and to identify juvenile life cycle forms of the trematode *Calicophoron daubneyi* from aquatic snails, intermediate hosts, by PCR method in order to determine areas where infestation with this parasite causes economic losses to livestock farmers.

Keywords: *Calicophoron daubneyi, Galba truncatula, Planorbis corneus, Stagnicola palustris,* ruminants, snails.

OC14 THE EFFECTS OF INCLUDING CINNAMALDEHYDE OR CARVACROL ON WETHERS' DIETS ON THEIR RUMINAL METABOLISM

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Abstract
Essential oils are plants secondary metabolites that might be used as feed additives. Literature background showed that cinnamaldehyde (main component of the cinnamon oil) and carvacrol (present in oregano leaves) possess properties that might influence the rumen metabolism. In order to assess this potential, a 3x3 Latin square experimental design was organised using wethers and pH, ammonia concentrations and VFA concentrations (total and individual) in rumen liquid (collected at 0, 2, 4, 6 and 8 hours after the morning meal) were measured. Supplementing wethers' diets with 4.5 g/kg SU cinnamaldehyde or 4.5 g/kg SU carvacrol led to a significant increase of pH values ($P<0.05$) in case of cinnamaldehyde, comparing to the control, but not in the case of carvacrol. Also, the synthetic parameters describing the pH dynamics were more favourable in case of cinnamaldehyde. A slight decrease, not statistically significant, was observed in case of ammonia and total VFA concentrations, for both cinnamaldehyde- and carvacrol- supplemented diets. However, the cinnamaldehyde-supplemented diet significantly influenced the VFA profile, leading to a decrease of the butyric acid ($P = 0.044$) and a decrease tendency for valeric acid ($P=0.067$). These changes showed the potential to influence the rumen metabolism, especially in the case of cinnamaldehyde.
Keywords: *carvacrol, cinnamaldehyde, essential oils, ruminal fluid*

Acknowledgements: The work of this study was supported from the Nucleus Project PN19-09.01.01 granted by the Ministry of Research, Innovation and Digitalisation (MCID); animal trial was organised within PN16-41.05.01. The authors thank Dr. Smaranda Toma for animals' monitoring and data collection.

P1. - EFFECTS OF FARM SIZE ON MILK PRODUCTION INDICES IN ROMANIAN SPOTTED COWS FROM HUNEDOARA COUNTY

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Abstract
Researches were carried out on 1707 Romanian Spotted cows raised in farms from Hunedoara County that were enrolled in official performance control scheme. According to the number of milking cows (farm size), farms were divided into three categories small (n≤10 cows), middle (n=11 to 25 cows) and large (n>25 cows). The influence of the farm size on the daily milk yield and milk components (fat, protein, casein and lactose) was determined by using ANOVA, and lactation curve was drawn using the gamma incomplete function. Generally, the farm size had a significant influence on all studied milk indices ($p<0.01$). For the daily milk yield and fat percentage, the highest values were obtained in the small farms (25.50 kg milk with 3.82% fat), followed by the large farms (23.45 kg milk with 3.76% fat) and the middle farms (21.46 kg with 3.69% fat). For protein percentage and casein content, the highest values were obtained in middle farms (3.32% protein and 25.66 g/L casein) followed by small farms (3.27% protein and 25.41 g/L casein) and large farms (3.25% protein and 25.58 g/L casein). The highest values for milk lactose percentage were obtained in large farms (4.81%) followed by middle and small farms (4.78% and 4.76%, respectively). In conclusion, we can state that the farm size had an influence on daily milk yield and its chemical components, due to feeding and housing technologies employed in those farms. Small farms had the highest daily milk yield and fat percentage, middle farms' milk was higher in protein and casein content, while large farms had the highest lactose percentage in the milk.

Keywords: *cows, daily milk yield, farm size, milk chemical composition, Romanian Spotted*

P2. - INFLUENCE OF FARM SIZE ON ESTIMATED BREEDING VALUES AND SELECTION INDICES IN ROMANIAN SPOTTED COWS

Bogdan-Roberto Mihuța[1], Ligia Berzava[1], Alin Bucur (Prisecaru), Silvia Erina[1], Ludovic Toma Cziszter

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Abstract
Researches were carried out on 3186 lactations obtained from Romanian Spotted cows raised in farms from Bihor County that were enrolled in official performance control scheme. According to the number of milking cows (farm size), farms were divided into three categories small (n≤10 cows), middle (n=11 to 25 cows) and large (n>25 cows). The influence of the farm size on five selection indices (general, for milk, for fitness, for reproduction and for functionality) and eight estimated breeding values (milk yield, milk fat yield, milk protein yield, age at first calving, inseminations per gestation, calving ease, longevity and somatic cell count) was determined by using One-way ANOVA. Reference population had an average ME milk production of 6028 kg with 3,67% fat and 3,28% protein, calved for the first time at 29 months and 14 days, had an average calving interval of 389 days and days dry of 51 days. Generally, the farm size had a significant influence on selection indices ($p<0.05$). Selection indices and estimated breeding values were similar between small and middle farms. General selection index and selection index for milk were significantly higher ($p<0.05$) in large farms compared to small and middle size farms, while selection indices for fitness, reproduction and functional were higher ($p<0.05$) in small and middle farms compared to large farms. Estimated breeding values differed among farms according to their size ($p<0.05$), being higher for milk yield and somatic cell count in large farms, while in small and middle farms, the values for reproduction and longevity were higher than in large farms.

Keywords: *cows, estimated breeding values, farm size, fitness, functionality, milk yield, reproduction, Romanian Spotted, selection indices*

P3 - INFLUENCE OF FARM SIZE ON SELECTED MILK QUALITY AND HYGIENE TRAITS IN ROMANIAN SPOTTED COWS

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Abstract
Researches were carried out on 1707 Romanian Spotted cows raised in farms from Hunedoara County that were under the official performance control scheme. According to the number of milking cows (farm size), farms were divided into three categories small (n≤10 cows), middle (n=11 to 25 cows) and large (n>25 cows). The influence of the farm size on the milk dry matter percentage, milk pH, urea content in milk, and milk somatic cell count was determined by using ANOVA, and lactation curve for these traits was drawn using the gamma incomplete function. Generally, the farm size had a significant influence on all studied milk traits ($p<0.01$). Dry matter percentage in milk varied from 11.6% in middle farms to 12.6% in large farms. The highest value for pH was found, on average, in small farms (6.61), while the lowest value was in large farms (6.57). Urea content of the milk Had higher values in middle farms (32.4 to 33.1 mg/100g), followed by small farms (29.5 to 32.5 mg/100g) and the lowest values were observed in large farms (28.0 to 295 mg/100g). Somatic cell count was, on average, higher in middle farms (652.33x1000), while the lowest value was observed in small farms (440.54x1000).
Key words: *cows, farm size, milk dry matter percentage, milk pH, milk urea, Romanian Spotted, somatic cell count*

P4 - STUDY ON THE QUALITY OF MILK IN ŢIGAIE SHEEP IN THE FIRST PART OF LACTATION

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Abstract
From 10 sheep, of the Tigaie breed, milk samples were collected 48 hours after parturition, 28 days after parturition (one month) and at weaning (three months). Samples were analyzed for fat, protein and DM (dry matter) content with an infrared C3 Lactoscope. The Spearman method was used to determine the correlations between the components of sheep's milk. At 28 days after parturition, compared to 48 hours, the differences are significantly lower ($p<0.05$) for fat by 5.22% and for DM by 6.17% and insignificant ($p>0.11$) for protein by 1.45%. There are significant differences ($p<0.05$) for the milk components at 48 hours and 90 days for protein by 1.97%, distinctly significant ($p<0.01$) for DM by 7.64% and very significant for fat by 6.64% ($p<0.001$). Upon weaning of the lambs, after 90 days of lactation, the correlations become intense, positive and very significant ($p<0.001$) between the content in DM and fat ($r=+0.78$) and between DM and protein ($r=+0.96$).

Keywords: *milk composition, sheep, Tigaie breed*

P5. - EVALUATION OF ENZYMATIC POTENTIALITIES OF *BACILLUS SUBTILIS* USING AS SUBSTRATE DIFFERENT ANIMAL RAW MATERIALS FEED

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Abstract
In the present investigation, the production of amylase, cellulase, and protease activity by *Bacillus subtilis* ATCC 6051a was evaluated on different raw materials (soybean meal,

peas, sorghum flour, corn) and compound feed (FC). The effect of various fermentation conditions (24-72 h) on enzymatic production through shake-flask culture (Erlenmeyer 100 mL) in optimum conditions (150 rpm, pH 7.0±0.2, 37 ◦ C) was investigated. The inoculum strain presents 1.907 optical density (OD) 600 nm with a concentration of 1.6 x 10^9 CFU/mL. The screening showed a capacity of amylase, cellulase, and protease strain production. The maximum amylase level was obtained when the strain was cultured in FC fermentation medium (13.19±0.15 U/mL), followed by corn (11.72±0.15 U/mL), peas (9.22±0.11 U/mL), soybean meal (7.29±0.19 U/mL), and sorghum (6.31±0.2 U/mL) at 72 h. For production of cellulase by DNS method, the activity was noticed in corn (4.39±0.04 U/mL), sorghum (4.05±0.02 U/mL), peas (2.94±0.06 U/mL), soybean meal (2.87±0.04 U/mL), and FC medium (1.41±0.02 U/mL). Maximum protease activity was observed after 24 h in FC (4.91±0.08 U/mL), with minimum enzyme production in the rest of fermentation media, both at 48 h and 72 h. In conclusion, qualitative analysis revealed that *Bacillus subtilis* ATCC 6051a could be successfully used for high scale production of maltose and glucose, particularly in fermented medium containing FC or corn, and have the potential for application in animal nutrition as source of feed additive.

Keywords: *enzymatic activity, shake flask fermentation, probiotic*

ACKNOWLEDGEMENTS

The present study received financial support by the Ministry of Agriculture and Rural Development through the project ADER 9.1.4.

P6. NITROGEN EMISSIONS FROM AGRICULTURE AND LIVESTOCK SECTOR, AMONG THE CAUSES OF CLIMATE CHANGE

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Abstract

This paper aimed to review the nitrogen emissions from the agriculture and livestock sector, and their impact on the environment in the light of actual global climate change picture. Agriculture and livestock sector are the main responsible for ammonia

emissions representing 80-90% of total anthropogenic emissions. About 52% of total nitrous oxide emissions are coming from agriculture and there is a strong correlation with the application rates of synthetic fertilizers. The nitrogen lost in the soil and water through leaching represent an important nitrate emission with negative effects on the environment due to acidification and eutrophication. As a result of human activity in recent decades, significant amounts of reactive nitrogen were released in the environment that have disrupted the natural nitrogen cycle. Ammonia, nitrogen oxide and nitrous oxide are emissions that contribute to air pollution and global warming, meanwhile nitrates contribute to soil and water pollution. The main causes of nitrogen emissions in the agriculture and livestock sector are represented by excessive and inefficient use of synthetic fertilizers, manure management as well as the low efficiency of nitrogen conversion into milk, meat and eggs by animals.

Key words: *nitrogen, livestock, agriculture, emission, nitrogen emission, nitrogen efficiency*

P7. - IMPACT OF DIFFERENT LEVELS OF VITAMIN D3 IN LAYING HENS DIET ON VARIOUS ASPECTS OF THE EGGS

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Abstract

An experiment was conducted to assess the impact of vitamin D3, on laying hens performances, egg yolk fatty acid profile (FA), antioxidant compounds and vitamin transfer in the eggs. For that, one hundred twenty, 34 weeks old Lohmann Brown laying hens, were allocated to completely randomized block arrangement of three dietary treatments: T1, control (C) with 2500 IU/kg vitamin D3; T2 with 3000 IU/kg vitamin D3 and T2, with 3200 IU/kg vitamin D3. All diets had identical basal diet structure containing 17.50% crude protein and 2780 kcal/kg, metabolizable energy, being isocaloric and isonitrogenous. Feed intake and feed conversion ratio were significantly ($p<0.05$) lower in T2 and T3 groups compared to T1, without any impact on average egg weight. Egg production was significantly ($p<0.05$) higher only in T2 group, compared with T1 and T3. No significant ($p>0.05$) contribution of vitamin D3 supplementation was observed on total saturated fatty acids (SFA),unsaturated fatty acids (UFA) or

monounsaturated fatty acids (MUFA) classes determined in egg yolk. From the sum of *cis* FA, significantly ($p<0.005$) higher was palmitoleic FA in T1 egg yolk compared with T2 and T3 egg yolks. On the other hand, from the total *trans* group, nervonic FA was significantly ($p<0.05$) higher in eggs belonging to higher vitamin D3 supplement groups. Total polyunsaturated fatty acids (PUFA), as well as total n-3 FA were significantly ($p<0.05$) higher in T2 and T3 egg yolks compared with T1 egg yolk, but the increase in T3 was with 43.92% higher compared with T1 yolk and with 35.51% higher compared with T2 yolk. From the antioxidant compounds, total polyphenol content, total antioxidant capacity and lutein and zeaxhantin registered slightly higher values in T2 and T3 eggs versus T1 eggs, but without significant ($p>0.05$) effect. Significantly higher ($p<0.05$) concentrations of vitamin A and vitamin E were determined only in T3 eggs compared with T1 eggs. Vitamin D3 transfer in eggs, increased significantly ($p<0.05$) in both T2 (3000IU/kg vitamin D3) and T3 (3200IU/kg vitamin D3) compared with T1 (2500IU/kg vitamin D3) eggs, as a main effect of supplemental vitamin D3 in laying hens diets.

Keywords: *egg quality, fatty acids, vitamins, antioxidants, laying hens.*

P8. - THE EFFECT OF USING PHYTOADDITIVES IN THE NUTRITION OF BROILERS (GARLIC, PEPPER, TURMENIC AND CORIANDER) ON NUTRITIONAL AND BIOPRODUCTIVE INDICES

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Abstract
The prohibition of using antibiotics in the nutrition of chicken has led to the occurence of a new category of additives knows as phytoadditives, which have antimicrobial, antioxidant, anti-inflammatory effects, as well as growth stimulation effects. Due to the contradictions in literature, further investigations are needed for the clarification of the different nutritional aspects of phytoadditives. This study was carried out by 60 broilers ROSS 308, in order to assess the effect of feed supplemented with garlic (*Allium sativum*), turmenic powder (*Curcuma longa*), black pepper (*Piper nigrum*) and coriander seeds (*Coriandrum sativum*) on nutritional and bioproductive indices of broilers. The

treatments were: a control group received no supplements and four groups that got 1% of garlic (T1), 1% turmenic (T2), 1% pepper (T3) and 1% coriander (T4). The body weight at the end of the growth period was significantly higher ($p<0.05$) in chickens from T1 (garlic) 2833.50±55.449 grams as compared to that of chickens from T0 (control) 2489.00±70.092 grams and insignificantly bigger ($p>0.05$) as compared to T2, T3 and T4. The most efficient feed conversion index was present in T3 (pepper) 1.718±0.114. Supplementing the feed with phytoadditives has led to the improvement of the bioproductive performances, the yield at slaughter and that of the chicken breast and thighs weight in the total carcass.
Key words: *broiler, phytoadditives, growth performance, casing*

P9. - SOME BODY MEASUREMENTS AND THEIR CORRELATIONS WITH THE LIVE WEIGHT OF THE BLACK TRANSYLVANIAN NAKED NECK IN THE SEMI-INTENSIVE SYSTEM

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Abstract
The growth process is complicated due to its being influenced by genetical and environmental factors. The body development in broilers can be assessed by measuring the body weight, as well as by making body measurements. By measuring the body weight, one can estimate the body weight efficiently and can also offer useful information in assessing the compliance of broilers, establishing the skills for certain productions, by determining different correlations and simple or multiple regression equations, being the best parameter for decision-making in production. During this study I analysed both the growth dynamics of broilers called Transylvanian Naked Neck (black variety) and the correlations between different body parts within this mixed breed throughout 32 weeks, on a batch of 13 specimens, in a semi-intensive system of growth. At the end of the period, the broilers "Transylvanian Naked Neck recorded a medium weight of 1796.67 grams, a body length of 19 cm, a length of the sternal caren of 12.13 cm, 7.90 cm- chest width, 9.10 cm basin width, 32.60 cm thoracic boundary, 4.32 cm shin perimeter and 11.33 cm depth of the torso. The correlation coefficients between

the measurements performed are mostly strongly positive (r> 0.8), and the body mass shows strongly positive correlations with all the measurements performed in this study.
Key words: *chicken, Transylvanian Naked Neck, body measurements, correlation*

P10 EFFICACY OF HERBICIDES ON CONTROLLING *AMBROSIA ARTEMISIIFOLIA* IN MAIZE CROP

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Abstract
Although, morphologically, maize is one of the most vigorous species, with a well-developed root system and stem, lately it has become sensitive to one particular species of weeds, namely Ambrosia artemisiifolia. With devastating effects on agriculture, on the environment and on human health, Ambrosia artemisiifolia, comonly named ragweed, is one of the most harmful invasive species. Currently, it belongs to the category of dominant weeds in some agricultural crops, which causes significant damage in production and from observations made in the maize crop, its frequency exceeds 50 individuals on a square meter. This paper presents the results of herbicides efficacy tests regarding the control of this invasive species in maize crop. The researches were carried out in the Timiș Plain, on a eutricambosoil soil type, poorly glayed, with a high fertility, due to good physical and chemical properties. Of the four herbicides applied post-emergence in maize crop, the best efficacy was obtained by Glyfos Ultra herbicide, applied in doses of 3.5 l / ha, which ensured a significant reduction in coverage, of over 90% 15 days after application, while Kideka herbicide has been situated at the opposite pole, with an efficacy arround 82%. Also, the results of the same set of herbicides applied indicate very high efficacy of Glyfos Ultra herbicide, which exceeds a percent of 98% 30 days after application, while the lowest results were obtained by the herbicide named Dicash 480 SL of approximately 67%.
Key words: *Ambrosia artemisiifolia, herbicides, maize*

P11. - RESEARCH ON THE USE OF HERBAL PRODUCTS IN THE TREATMENT OF VARROOSIS

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Abstract
Varroa destructor is a parasite that affects all stages of development of the bee family, and currently represents one of the greatest dangers in the loss of colonies worldwide. Currently, different types of treatments have been researched and administered, both synthetic products and based on natural substances. as a result in this study we made a comparison between the effectiveness of two natural treatments. As a result, in this study we made a comparison between the effectiveness of two natural treatments (Thymo Varo San and Herba Strip) compared to the same number of synthetic treatments (Varachet Forte and Scabatox), all of which are used by beekeepers to control bee infestation with the mite *Varroa destructor.* The experiment was carried out in August 2021 in Caransebeș, Romania, on a number of 40 bee families, distributed in batches of 10 families for each treatment used. The results were evaluated at an interval of 1 day, respectively 7 days after administration, and the best results were recorded in the case of the treatment with Thymo Varo San.
Key words: *bees, Varroa destructor, treatment, varroa tester*

P12 - EFFECTS OF THE USE OF ESSENTIAL OILS ON THE ORGANOLEPTIC CHARACTERISTICS OF HONEY

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Abstract
The paper presents the results of the organoleptic analysis of honey after feeding bee families with sugar syrup with addition of essential oils. The honey samples were collected from the Murani apiary, Timis County, between 29.03.2021 - 10.05.2021,

totaling a number of 135 samples. These were classified into samples collected before the administration of the sugar syrup with essential oil, samples collected after the administration of the syrup with the addition of essential oil and samples collected after the rapeseed harvest. In the sugar syrup administered to bee families, the following essential oils were used: essential oil of thyme, rosemary, basil, mint, juniper, oregano, cloves, cinnamon. The honey samples were transported, stored and processed in appropriate conditions. The organoleptic evaluation was performed in terms of taste, smell, consistency, appearance and color

Keywords: *organoleptic evaluation, honey, essential oils*

P13. - BIOENGINEERED MEAT AND IT'S POTENTIAL CONTRIBUTIONS TO FOOD SECURITY IN THE FUTURE- A LITERATURE REVIEW

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Abstract

The theoretical possibility of bioengineering meat grown in an industrial setting has long captured scientists' imagination. Almost a century after Churchill wrote that we should be growing separate parts of a chicken in a suitable medium, we still grow the whole chicken to consume roughly 68% of it. Animal farming is responsible for 15% of the global GHG emissions, but also provides income and food security for farmers in developing countries. With a predicted rise in consumption of meat, reaching 374MT in 2030, due to developing countries increased access to animal-sourced foods, the environmental impact of livestock follows an ascending trend. Can bioengineered meat break the trend while proving to be a viable product for mass consumption?

We aim to evaluate the possible beneficial contributions of bioengineered animal products to ensuring food security for a growing population, through reducing the environmental cost of animal farming for food purposes. An extensive review of the existing scientific literature reveals that currently, a thorough comparative analysis of the life cycle for conventional meat and bioengineered meat is nonexistent, therefore assumptions regarding the increased environmental benefits of shifting consumption towards synthetic meat are not yet sustained by relevant scientific data.

Keywords: *bioengineered meat, environmental impact, food security*

P14. - CHEMICAL COMPOSITION AND ANTIFUNGAL ACTIVITY OF LEMONGRASS ESSENTIAL OIL

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Abstract
Essential oils (EOs) are liquid extracts from aromatic plants with many applications in diverse industries. Lemongrass (*Cymbopogon nardus* Rendle) belongs to plants known for their many biological properties. The present study was designed to evaluate commercial lemongrass essential oil (LGEO) in relationship to its chemical composition and *in vitro* antifungal activity against four filamentous fungi of the genus *Penicillium* (*P.*) spp. (*P. expansum*, *P. italicum*, *P. aurantiogriseum*, and *P. chrysogenum*). For these purposes, gas chromatography-mass spectrometry and disc diffusion methods were used. The results from the volatile profile determination showed that citronellal (35.3%), geraniol (23.4%), β-citronellol (11.7%), citronellyl acetate (3.9%) and α-limonene (3.8%) were the major components of the EO chemical constitution. Lemongrass EO at the highest concentration (500 µL/L) exhibited the most effective ($P < 0.05$) inhibitory action (inhibition zones: 6.17 ± 0.27 mm, 4.27 ± 0.25 mm, 6.90 ± 0.36 mm, 5.90 ± 0.36 mm, respectively) against the growth of all fungi strains (*P. expansum*, *P. italicum*, *P. aurantiogriseum,* and *P. chrysogenum*) investigated. Based on the above-mentioned findings it can be seen that LGEO appears to be a promising natural agent with an inhibitory effectiveness on the *Penicillium* spp. growth and thus, it can find an application in the food industry.
Keywords: *Lemongrass essential oils, antifungal properties, disc diffusion method, volatile compounds*

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P15 - THE IMPACT OF NUTRACEUTICALS IN VARIOUS PATHOLOGIES: A REVIEW

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Abstract
The term "nutraceutical" product refers to a series of biologically active compounds, which act at the cellular level, by modifying the expression of genes and / or suppressing oxidative processes, representing a priority not only for food but also for pharmaceuticals. A number of raw materials, as well as waste resulting from the processing of certain categories of products, contain valuable molecules, such as: proteins, essential amino acids, antioxidants, dietary fiber, natural pigments or aromatic compounds, which can be extracted, processed and transformed in food or pharmaceutical products with added value. The discovery of such benefits has contributed to increasing consumer confidence in nutraceutical and functional foods around the world, with a growing interest in improving the quality of life and adopting a healthy lifestyle that prevents or reduces the risk of developing some diseases. Based on these considerations, this paper aims to review the literature on the description of substances with nutraceutical effect and their medical benefits in support of body functions and integrity as well as in increasing life expectancy.
Keywords: *nutraceutical product, food, pharmaceutical products, healthy lifestyl*

P16.- UTILIZATION OF EMULGELS AS SUBSTITUTES FOR SOLID FAT IN SWEET BUNS: RHEOLOGICAL, TEXTURAL AND MICROSTRUCTURE CHARACTERIZATION

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Abstract
In 2008, the Food and Agriculture Organization and the World Health Organization revised their recommendations on dietary fats and fatty acids to draw attention to dietary fatty acids and health outcomes. The aim of this study was to replace the solid fat (margarine) with emulgel using sunflower oil. Emulgels are obtained by the entrapment of an oily phase within a three-dimensional network built by hydrophilic molecules. The emulgels were obtained from 5%, 10%, 15%, 20% sunflower oil and 2% previously hydrated xanthan gum, as a gelling agent. The effect of replacing margarine with emulgels to determine the rheological properties of sweet bun dough was analyzed. Comparisons were made between samples obtained with the same percentage of margarine replacement and the control sample. The evaluation of the textural and microstructural characteristics of the baked product was performed by comparing the samples. It was found that the addition of emulgel in a percentage of 5-15% led to products with high specific volume and improved textural properties. By comparison, the sweet buns obtained with margarine in a percentage of 15-20% resulted in products with shell defects, with poorly developed porosity and with the microstructure that characterizes a product with major defects. The obtained results suggest that the use of emulsions in a percentage of 5-10% leads to obtaining sweet buns with better textural and microstructural characteristics than those in which the same percentage of margarine was used. The rheological characteristics of the dough with margarine and emulsifier highlighted the visco-elastic modulus at different frequencies and temperatures as well as its stretching and tempering characteristics. From a textural point of view, the core elasticity and hardness were determined by compressing a 40 mm thick slice of bun. The microstructure of the baked product shows the pore size, uniformity and its structure in section. A microstructure with small and evenly distributed pores was found in the buns obtained by adding 10% emulgel.
Key words*: porosity, emulgels, specific volume, elasticity, margarine.*

P17. SENSORY AND RHEOLOGICAL RESEARCH ON THE OBTAINING OF A NEW ASSORTMENT OF YOGURT FORTIFIED WITH VITAMIN D3

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Abstract:
The aim of this research was to obtain a new assortment of yogurt and to determine sensory and rheological characteristics so in the end to be able to see if it is accepted by future potential buyers.
The yougurt also contain vitamin D. The deficiency and insufficiency of this vitamin are recognized as a global problem with serious consequences, but a fortified yogurt with a vitamin D3 offered for adult consumption could be a lifesaver because fortification is one of the most important processes for improving the quality and quantity of nutrients in food. The yogurts were obtained using cow's milk with a fat content of 3.5% in which calcium salts were added in doses of 500-1300mg, vitamin D3 in doses of 600-2000 IU, quince puree in a proportion of 2 -10% and maple syrup in 10%. The viscosity and elastic and viscous modulus of the yogurt samples were analyzed at intervals of 1, 3 and 7 days. The sensory characteristics were appreciated by the scoring scale of experienced tasters.
Key words: sensory characteristics, quince, fortification, yogurt, maple syrup, vitamin D3

P18. POTENTIAL FOR RENEWABLE ENERGY PRODUCTION BY ANAEROBIC DIGESTION OF ORGANIC RESIDUES FROM PIG INDUSTRY

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Abstract
The organic wastes from a pig farm and an abattoir were subjected to anaerobic digestion in laboratory in order to point out the Biochemical Methane Potential (BMP) of

the sampled organic materials. The conversion of biomass to biogas was tested according to the widely accepted German standard protocol VDI 4630. Energy production potential was investigated in laboratory scale digesters to determine the methane production of organic substrates The highest methane yields were obtained in solid sludge and fatty residues generated in abattoir. If organic residues generated in abattoir are transported to pigs farm and converted on-farm by anaerobic digestion, the biogas potential is 1904895 Nm^3/y, delivering 18764 MWh of energy, which can be converted into 7506 MWh electric energy into a CHP unit of 894 kWe installed power. If to organic residues generated in the pigs farm the production of biomass generated on 200 hectare of land cultivated with a cover crop (triticale) is added and converted on-farm by anaerobic digestion, the installed power of the CHP, will be 1000 kWe delivering 8839 MWh of electricity per year.

Key words: *anaerobic digestion, biogas, organic residues, pigs industry*

P19. FUNGAL AMYLASES – STABLE BIOCATALYSTS FOR STARCH HYDROLYSIS

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Abstract

Amylases are hydrolytic enzymes used for hydrolysis of glycosidic bonds in polysaccharides. The most representative amylases with application in biotechnological industry are α-amylase (1,4-α-D-glucan glucanohydrolase, E.C. 3.2.1.1.) and amyloglucosidase (AMG) (1,6-α-D-glucan glucohydrolase, E.C. 3.2.1.3.).

The enzymes used for the hydrolysis of starch represent 30% of the world's consumption of enzymes. The complete hydrolysis of starch polymer requires a combination of enzymes. Amylase is an endoenzyme, it randomly hydrolyzes the covalent bonds in starch and leads to the formation of linear and branched oligosaccharides. AMG is an exo-glucoamylase and hydrolyzes maltose to glucose. The enzymes activity is influenced by external factors (eg pH, temperature) that may affect the protein structure of enzymes or the binding of the substrate to the catalytic site of enzymes.

The aim of this work was the study of the long-term storage stability (4°C) of two microbial enzymatic preparations, Fungamyl and AMG, produced by Novozymes by fermentation of *Aspergillus oryzae* and *Aspergillus niger* strains. The optimum pH and temperature of α-amylase and amyloglucosidase contained by enzymatic fungal preparations was determined by measuring the enzymatic activity and the specific activity over a wide range of pH and temperature. The experimental results showed insignificant changes in the functional

parameters of industrial preparations with amylolytic activity even after more than 10 years of storage at low temperatures, despite the labile protein structure of enzymes.
Key words: *α-amylase*, *amyloglucosidase*, *enzymatic activity*, *functional parameters*

P20. – TESTING THE CHELATING PROPERTIES OF CORIANDER LYOPHILISATE (*CORIANDRUM SATIVUM)* IN EXPERIMENTAL LEAD POISONING IN *CARASSIUS GIBELIO* BLOCH

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Abstract
Our study aimed to highlight the histological alterations of some tissue of Prussian carp's specimens, subjected to sub lethal Pb intoxication with and without coriander dietary supplementation. 90 Prussian carps, with weighing between 10 and 12 g were divided according to the following treatments for 21 days: C (without treatment), E1 (75 ppm Pb into water), E2 (75 ppm Pb into water+2% lyophilized coriander leaves in feed). Gill, intestine, liver and kidney were sampling and analyzed in light microscopy at the end of experiment. QuickPHOTO Micro 2.2 software has been used for the histological study. Our findings were: severe histological alterations in experimental Pb-poisoned group; coriander lyophilisate has been shown to be an excellent chelator on liver tissue and is largely able to attenuate the toxic effects of lead in the kidneys, intestine and gill.
Key words: *Coriandrum sativum, experimental lead intoxication, freshwater fish, histological alterations*

P21. THE INFLUENCE OF SOME PHYTO-ADDITIVES ON BIO-PRODUCTIVE PERFORMANCES AND THE HEALTH OF THE FARMED FISH – REVIEW

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Aquaculture is one of the most promising sectors for supporting the increasing demand for animal proteins and fats. The intensification of fish farming is used for obtaining large amounts of fish but this led to the magnifying of stressors for fish and increasing risks for disease outbreaks. Phyto-additives are reported to be good candidates for natural treatments for farmed fish that could enhance the fish health, aquaculture sustainability and the aquaculture productions. Some applications of the phyto-additives in aquaculture and the very encouraging results for the new trends related to sustainable aquaculture are reviewed in this article.
Key words: *aquaculture, fish farming, phyto-additives, disease*

P22. INFECTIOUS PODODERMATITIS OF SHEEP

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Abstract
Infectious pododermatitis of sheep or contagious pododermatitis of sheep, also known by the popular name of "sheep lame" is an infectious disease very common in sheep. This disease is present on all continents and in all countries, but the frequency is higher in areas with rich vegetation and abundant rainfall. The disease mainly affects Merino and Ţigae breeds in our country. In addition to sheep, the disease is also found in goats, but less frequently. Pododermatitis in cattle and pigs has a similar but not identical etiopathogenesis. All sheep of

all ages and breeds are receptive, but lambs and rustic breeds rarely get sick and have less severe forms of the disease. Among the existing breeds in Romania, the most sensitive to infectious pododermatitis, in descending order of receptivity are: Merinos, Karakul, Țigae and Țurcana. The incidence of the disease is higher among rams than among females. In our country, morbidity varies, depending on the factors mentioned, between 2-3% and 40-50%, but can be 100%.

Key words: *disease, epidemiological features, symptomatology, treatment*

P23. - THE STUDY OF CONSUMER BEHAVIOR AND THEIR PERCEPTION REGARDING THE ETHICS OF AGRI-FOOD MARKETING IN THE CITY OF TIMIŞOARA

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Abstract

The aim of this paper is to identify the consumer perception regarding the ethics of agri-food marketing. We used qualitative research methods to conduct this study because they determine the understanding of consumers' motives, attitudes and beliefs. For the data collection, the semi-structured interview was used, using a discussion guide.We inquired 25 people selected from the University of Agricultural Sciences. The sample size is not conclusive in the case of qualitative research, but the value of the answers from people who know the researched phenomenon. Unlike quantitative research, which analyzes phenomena at the macro level, qualitative research focuses on specific issues. The sampling was done by filtering the people who have training in the field of agri-food marketing. The reasons for using this selection criterion are that people with such training can critically interpret marketing activities and better understand the questions in the discussion guide. The respondents were between 20 and 35 years old, all of them being students.

Keywords: *study, ethics, agro-food marketing*

Section: Young people and scientific research in Animal Husbandry and Biotechnology

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