

International Scientific Conference on the Fifth Technological Order: Prospects for the Development and Modernization of the Russian Agro-Industrial Sector (TFTS 2019)

Advances in Social Science, Education and Humanities
Research Volume 393

Omsk, Russia
15 October 2019

Editors:

**Oksana Shumakova
Vladimir Shamanin**

**Natalya Gavrilova
Victor Stukach**

ISBN: 978-1-7138-0284-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2020) by Atlantis Press
All rights reserved.
Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press
Amsterdam / Paris

Email: contact@atlantis-press.com

Conference Website: <http://www.atlantis-press.com/php/pub.php?publication=tfts-19>

Printed with permission by Curran Associates, Inc. (2020)

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

ASSESSMENT OF CHANGES IN WATER USE INDICATORS IN THE AGRICULTURAL SECTOR IN THE SOUTH OF WESTERN SIBERIA.....	1
<i>Zhanbolat Tusupbekov, Natalia Ryapolova, Victoria Nadtochyi</i>	
THE INFLUENCE OF A RESOURCE AND COMPETENCE CENTRE ON THE MULTIFUNCTIONAL DEVELOPMENT OF AGRICULTURE	5
<i>Oksana Shumakova, Olga Kryukova, Olga Kosenchuk, Tatyana Mozherina</i>	
IMPROVED CONTROL OF PORTAL WASHING UNIT FOR AGRICULTURAL MACHINES BASED ON THE IMPLEMENTATION OF NEURAL NETWORK TECHNOLOGIES	13
<i>Anton Shimokhin, Andrey Zabudsky, Vladimir Chervenckuk, Maltseva Evgenia</i>	
BUSINESS GAMES AS A TEACHING STRATEGY FOR DELIVERING A PRACTICE-ORIENTED COURSE IN MATHEMATICS AT AGRICULTURAL UNIVERSITY.....	18
<i>Olga Korchinskaya, Irina Ivanova, Natalia Shchukina, Marjana Mendziv</i>	
AN ADVANCED BIOTECHNOLOGICAL TREND–PRODUCTION OF SOFT CHEESES BASED ON MILK OF VARIOUS TYPES OF FARM ANIMALS IN THE ALTAI REGION.....	25
<i>Natalya Gavrilova, Elena Schetinina</i>	
USING REMOTE SENSING METHODS IN PRECISION AGRICULTURE.....	29
<i>Gulnara Bikbulatova, Elena Kupreyeva, Lilia Pronina, Marat Shayakhmetov</i>	
THE INFLUENCE OF METHODS OF INTENSIFICATION IN AGRICULTURE ON THE ALGAL FLORA OF LEACHED CHERNOZEM	34
<i>Natalia Voronkova, Lidiya Bashkatova, Natalia Balabanova, Marina Sklyarova</i>	
INDICATORS OF SOCIAL SECURITY IN ASSESSING THE EFFECTIVENESS OF THE IMPLEMENTATION OF SOCIAL POLICY IN THE OMSK REGION.....	39
<i>Elena Dmitrenko, Anna Remizova, Oleg Blinov</i>	
HUMAN CAPITAL AS A FACTOR OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS OF KAZAKHSTAN	46
<i>Abilmazhin Ayulov, Irina Savchenko, Baurzhan Karimov, Yuliya Maul</i>	
AGRICULTURAL EDUCATIONAL CLUSTER AS A MECHANISM OF SUCCESSFUL INVESTMENT IN HUMAN CAPITAL.....	50
<i>Larisa Obedkova, Tatiana Opeikina, Natalia Korobkina, Anna Belikina</i>	
ADVANCED SPECIALIZED FOODS PRODUCTION TECHNOLOGIES WITHIN THE FRAMEWORK OF FOODNET.....	54
<i>Olga Stryabina, Vladimir Vikulov, Dina Ryabkova, Yuliya Diner</i>	
DECOMPOSITION OF THE PROCESS OF DEVELOPING A METHODOLOGY FOR MANAGING THE SUSTAINABLE DEVELOPMENT OF NATURAL-ANTHROPOGENIC COMPLEXES IN RURAL AREAS	59
<i>Dmitry Nardin, Svetlana Nardina</i>	
PELVIC ULTRASONOGRAPHY AND UROGENITAL NERVE ULTRASTRUCTURE IN FUR ANIMALS	64
<i>Vladimir Telenkov, Gennady Khonin, Sergey Meleshkov, Maxim Koshkarev</i>	
IMPROVING HUMAN CAPITAL COMPETITIVENESS IN RURAL AREAS OF KAZAKHSTAN	69
<i>Bahyt Zhunussov, Abilmazhin Ayulov, Baurzhan Karimov, Adilbek Jussupov</i>	
METHODICAL APPROACHES TO DETERMINING THE LABOR POTENTIAL QUANTITY AND MANAGEMENT	74
<i>Elena Khrapova, Natalya Kalinina, Yulia Shlyapina, Dinara Gazizova</i>	
ASSESSMENT OF THE AGROECOLOGICAL STATE OF LONG-TERM IRRIGATED MEADOW-CHERNOZEM SOIL.....	81
<i>Yulia Aksenova, Natalia Nevenchannaya, Vasiliy Boiko, Artem Timokhin</i>	
MODERNIZATION OF THE SOCIAL SPHERE IN TERMS OF THE DEVELOPMENT OF THE SYSTEM OF PRESCHOOL EDUCATION OF CHILDREN IN RURAL AREAS	86
<i>Elena Golova, Dinar Baetova, Olga Zaitseva, Yuriy Novikov</i>	
DEVELOPING SOFT SKILLS IN VETERINARY STUDENTS IN THE ESP CLASS: TEACHING APPROACHES AND STRATEGIES	92
<i>Irina Kulamikhina, Zhanbota Esmurzaeva, Maxim Marus, Oksana Zhbikovskaya</i>	
EFFECTIVENESS OF SOYBEAN INOCULATION WITH INDIGENOUS SYMBIOTIC CULTURE IN THE YENISEI SIBERIA	97
<i>Sergey Khizhnyak, Andrei Churakov</i>	

BIOTECHNOLOGICAL POTENTIAL OF BACTERIAL AGENTS IN MODERN CONDITIONS OF CULTIVATION OF AGRICULTURAL CROPS	101
<i>Roman Kamenev, Sergey Guzhvin, Vladimir Turchin, Alisa Sevostyanova</i>	
ASSESSMENT OF THE EFFECTIVENESS OF THE USE OF BIOLOGICAL PRODUCTS OF ASSOCIATIVE NITROGEN FIXATION IN POTATO CULTIVATION	105
<i>Alexandr Cheremisin, Olga Khamova, Nadezhda Dergacheva, Elena Tukmacheva</i>	
ADVANTAGES OF GROWING AND STORAGING OF ORGANIC APPLES	110
<i>Marina Nazarko, Vladimir Lobanov, Gennady Kasyanov, Irina Romanets</i>	
INFLUENCE OF PHYSICAL AND MECHANICAL PROPERTIES AND CONDITION OF BARLEY GRAIN ON DAMAGE DURING MECHANICAL PROCESSING	116
<i>Victor Trotsenko, Andrey Zabudsky</i>	
REQUIREMENTS FOR QUAIL PRODUCTIVITY FOR DETERMINING THEIR VALUATION CLASS	121
<i>Yakov Royter, Alexey Kavtarashvili, Viktor Buyarov, Lidiya Lazarets</i>	
METHOD FOR EVALUATION OF THE ECONOMIC EFFICIENCY OF USING TRACTORS IN THE COURSE OF IMPLEMENTATION OF A NEW MAINTENANCE METHOD IN FARMS OF THE OMSK REGION	126
<i>Sergey Prokopyov, Olga Myalo, Alexander Golovin</i>	
SULFUR ROLE AND TRACE ELEMENTS IN A CHELATED FORM IN THE POTATO CULTIVATION	131
<i>Oksana Starovoitova, Viktor Starovoitov, Aleksandra Manokhina, Hikmet Nasibov</i>	
BIOLOGICAL METHOD FOR PREVENTION OF AVIAN BACTERIAL DISEASES	136
<i>Svetlana Lysko, Marina Zadorozhnaya, Olga Suntsova</i>	
ORGANOLEPTIC, PHYSICO-CHEMICAL AND PALYNOLOGICAL PROPERTIES OF HONEY IN THE WEST SIBERIAN REGION OF RUSSIA	141
<i>Ekaterina Kornienko, Michail Zabolotnykh, Igor Yakushkin, Anastasiya Nadtochii</i>	
HISTOARCHITECTONICS OF RETINA OF CHICKEN EMBRYOS IN ONTOGENESIS	145
<i>Oksana Dmitrieva, Anna Kozlovskaya, Nadezhda Shcherbakova, Alexander Shutenkov</i>	
STANDARD OF LIVING AND QUALITY OF LIFE OF RURAL POPULATION IN THE OMSK REGION	149
<i>Olga Zaitseva, Dinar Baetova, Elena Golova, Oksana Kozlova</i>	
THE SYSTEM OF DOMESTIC FOOD AID TO VULNERABLE SEGMENTS OF POPULATION: SOCIAL NUTRITION, ORGANIC FARMING, INFRASTRUCTURE	155
<i>Victor Stukach, Olga Dolmatova, Natalya Starovoitova, Olga Evdokhina</i>	
MODIFICATION OF PROTEIN PRODUCTS FROM SESAME SEEDS BY THE COMPLEX ACTION OF THERMODYNATURATION AND EXTREMELY LOW FREQUENCY ELECTROMAGNETIC FIELDS FOR OPTIMIZING FUNCTIONAL PROPERTIES	160
<i>Natalia Bugayets, Anastasia Kaloeva, Sergey Usatikov, Igor Tereshchenko</i>	
ECOLOGICAL BASES OF ETHIOLOGY AND THERAPY OF HEMOLYTIC ANEMIA IN CATTLE DURING PIROPLASMOSIS	165
<i>Mirzabek Zuhrabov, Siyadat Khaibulaeva, Svetlana Abdulhamidova, Svetlana Chuburkova</i>	
THE ENVIRONMENT-FORMING ROLE OF PERENNIAL GRASSES IN AGRICULTURE OF THE FOREST-STEPPE OF WESTERN SIBERIA	169
<i>Vasiliy Boiko, Natalia Voronkova, Artem Timokhin, Natalia Balabanova</i>	
FACTORS OF FORMATION AND DEVELOPMENT OF HUMAN CAPITAL IN RURAL AREAS	173
<i>Evgenia Sokolova, Tatyana Zakharova</i>	
MONITORING OF THE OCCURRENCE AND DISSEMINATION OF ANTIMICROBIAL RESISTANCE IN SALMONELLA STRAINS BY THE GEOGRAPHIC INFORMATION PROGRAM QGIS	177
<i>Anna Zabrovskaya, Ivan Khakhaev, Vladimir Kuzmin</i>	
METHOD OF INCREASING BIRD ADAPTATION IN THE EARLY STAGES OF EMBRYOGENESIS	182
<i>Tatyana Kolokolnikova, Andrei Dymkov, Sergey Borisenco, Alexey Kavtarashvili</i>	
METHODOLOGY FOR DETERMINING THE FILTRATION PARAMETERS OF DRAINAGE BEDDING DURING ENGINEERING SURVEYING	186
<i>Irina Ushakova, Yulia Korchevskaia, Irina A. Trotsenko, Tatyana Kondrateva</i>	
THE IMAGE OF A CIVILIZED MAN IN A MODERN CULTURE	190
<i>Zhumageldy Kenispaev, Vladislav Vakaev, Vladimir Markin, Natalia Serova</i>	
THEORETICAL DESCRIPTION OF CARYOPSIS SEGMENT MOTION IN FEED GRAIN SHREDDER WITH CURVED CUTTING ELEMENTS	194
<i>Uakhit Sabiev, Evgeny Demchuk, Vladimir Myalo, Alexey Soyunov</i>	

VIRAL LOAD DISTRIBUTION OF CUCUMBER GREEN MOTTLE MOSAIC VIRUS IN LEAVES	198
<i>Kirill Plotnikov, Valeriya Ryabinina, Alevtina Khodakova, Natalia Blazhko</i>	
OPTIMIZATION OF FUNCTIONAL PROPERTIES OF SESAME SEED PROTEIN PRODUCTS BY THERMAL DENATURATION.....	201
<i>Natalia Bugayets, Anastasia Kaloeva, Sergey Usatikov, Igor Tereshchenko</i>	
EXPERIENCE OF LAND DISPUTES' RESOLUTION IN THE OMSK REGION	205
<i>Vadim Badera, Olga Dolmatova, Irina Tsypolenkova, Elena Kuryachaya</i>	
EFFICIENCY OF FOLIAR FEEDING WITH ZINC AND COPPER CHELATES OF SPRING SOFT WHEAT IN THE CONDITIONS OF THE SOUTHERN FOREST-STEPPE OF THE OMSK IRTYSH REGION	208
<i>Igor Bobrenko, Valentina Popova, Natalia Goman, Alexander Gaidar</i>	
THE EFFECT OF OPENER FOR SOWING AND FERTILIZING AT DIFFERENT DEPTHS ON THE QUALITY AND YIELD OF SPRING WHEAT GRAIN.....	212
<i>Maksim Checusov, Alexander Kem, Evgeny Demchuk, Anatoly Shevchenko</i>	
DEVELOPMENT ISSUES AND PROSPECTS OF MILK PROCESSING ENTERPRISES	216
<i>Elena Yudina, Sergey Konovalov</i>	
DYNAMICS OF IMMUNOLOGICAL PARAMETERS OF CATTLE INFECTED WITH LEUKEMIA VIRUS AND ITS CORRECTION WITH BETULIN-BASED MEDICATION	220
<i>Aleksandr Krasikov, Vasiliy Vlasenko, Valentina Pleshakova, Irina Alekseeva</i>	
SMALL EGG DIAMETER AS A SELECTION CRITERION OF BROILERS	224
<i>Andrei Dymkov, Ekaterina Rehletskaya, Aleksandr Maltsev, Elena Chaunina</i>	
ISSUES OF DRINKING WATER SUPPLY AND POSSIBLE SOLUTIONS ON THE EXAMPLE OF GORKOVSKY DISTRICT IN OMSK REGION	228
<i>Irina Ushakova, Yulia Korchevskaia, Irina A. Trotsenko, Tatjana Kondrateva</i>	
NATURAL ORIGINS OF HUMAN CONSCIOUSNESS	234
<i>Zhumageldy Kentispaev, Vladimir Razumov, Nina Skosyreva, Sharaf Davlatmurodov</i>	
THE MODERNIZATION OF THE MULTIFUNCTIONAL AGRARIAN SECTOR AND DEVELOPMENT OUTLOOKS IN THE REGION.....	238
<i>Olga Kosenchuk, Oksana Shumakova</i>	
ANALYSIS OF DIVERSITY OF REINDEER RUMEN BACTERIA INVOLVED IN THE CELLULOSE DECOMPOSITION	244
<i>Larisa Ilina, Valentina Filippova, Elena Yildirim, Kasim Laishev</i>	
EVALUATION OF NATURAL RECREATIONAL RESOURCES AS AN INFORMATION BASIS FOR SUSTAINABLE DEVELOPMENT OF THE TERRITORY	249
<i>Svetlana Komarova, Valentina Scherba</i>	
PATHOMORPHOLOGICAL CHANGES IN THE ORGANS AND TISSUES OF ANIMALS DURING ACUTE INTOXICATION WITH NEONICOTINOIDS CONTAINING NITROSO OR CYANO GROUP	255
<i>Taras Gerunov, Marina Gonokhova, Tatyana Boyko, Vladimir Gerunov</i>	
MODERN PRACTICES FOR THE CULTIVATION OF LEAF VEGETABLES IN HYDROPONICS.....	260
<i>Anna Kling, Vladimir Pashek, Vladimir Kumpan, Yuri Konoplyov</i>	
PRODUCTION PROCESS MODELING AS A WAY OF INCREASING EFFICIENCY OF POULTRY INDUSTRY IN THE SVERDLOVSK REGION	264
<i>Tatjana Lukashenok, Ivan Solovyov</i>	
FUNCTIONAL AND TECHNOLOGICAL PROPERTIES OF COMPOSITE MIXTURES BASED ON BEAN PROTEIN-CARBOHYDRATE MATRIX (BPCM)	269
<i>Inna Simakova, Maxim Maradudin, Anna Veber, Victoria Strizhevskaya</i>	
EFFECT OF PRE-SOWING SEED TREATMENT ON THE YIELD AND QUALITY OF SOYBEANS IN THE SUBTAIGA OF WESTERN SIBERIA	273
<i>Alena Krasovskaya, Tatyana Veremey, Alexander Stepanov</i>	
NEW PROMISING VARIETIES OF CULTURES BRED BY OMSK AGRARIAN SCIENTIFIC CENTER.....	277
<i>Oksana Yusova, Petr Nikolaev, Vadim Yusov, Akimbek Asanov</i>	
FEATURES OF WATER EXCHANGE OF PINUS NIGRA SUBSP. PALLASIANA IN CONDITIONS OF SOUTHERN COAST OF CRIMEA	284
<i>Oleg Ilnitsky, Yuri Plugatar, Andrey Pashtetsky</i>	
THE USING OF DIGITAL TECHNOLOGIES IN SIBERIAN DAIRY FARMING.....	289
<i>Irina Ivanova, Irina V. Trotsenko, Olga Lebedenko</i>	
SEARCH AND ISOLATION OF MICROORGANISMS FROM THE RANGIFER TARANDUS RUMEN POSSESSING MYCOTOXIN BIODEGRADATION POTENTIAL AND CELLULOLYTIC ACTIVITY	294
<i>Elena Yildirim, Larisa Ilina, Timur Duyashev, Dmitiy Sobolev</i>	

SYMBIOTIC EFFICACY OF VARIETY-SPECIFIC STRAINS OF NITROGEN-FIXING BACTERIA ON SOYBEAN VARIETIES OF OMSK SELECTION	300
<i>Lyudmila Omelyanyuk, Akimbek Asanov, Alyona Karmazina, Oksana Yusova</i>	
CARBONYL DERIVATIVES OF PROTEINS—AS MARKERS OF FREE RADICAL PROCESSES IN DAIRY PRODUCTS	305
<i>Valeriy Vysokogorskiy, Galina Kryshkina, Oksana Lazareva, Natalya Strelichik</i>	
FEATURES OF ARTERIAL BLOOD SUPPLY TO THE KIDNEYS AND THE OVIDUCTAL MAGNUM IN PEKING DUCK	309
<i>Anastasia Dikich, Marina Pervenetskaya, Lyudmila Fomenko</i>	
RESEARCH OF MINERAL FERTILIZERS DISTRIBUTION AT KVU-12 UNIT OPERATION AT DIFFERENT WORKING MODES	313
<i>Dmitriy Kuzmin, Vladimir Myalo, Olga Myalo, Dmitriy Rozbah</i>	
IMPROVING THE PRESERVATION METHODS OF QUALITY CHARACTERISTICS DURING LONG-TERM STORAGE OF BREAD	316
<i>Natalia Zavorohina, Natalia Pankratieva, Nadezhda Goncharova</i>	
THE INTERRELATION OF INFORMATION SYSTEM CHARACTERISTICS AND PARAMETERS OF CONTROLLED PROCESSES	319
<i>Grigory Redreev, Anastasia Luchinovich, Vladimir Chervenchuk, Anatoly Sorokin</i>	
THE "URTICOSTIM" PHYTOCOMPOSITION'S IMPACT ON THE HEMATOLOGICAL AND IMMUNOLOGICAL STATUS OF EXPERIMENTAL ANIMALS	323
<i>Valentina Veretennikova, Tatyana Boyko, Vasily Vlasenko, Vitaliy Shitikov</i>	
EFFECT OF VEGETABLE FATS ON THE QUALITY AND SAFETY OF FOOD PRODUCTS	327
<i>Irina Ivkova, Ekaterina Zubareva, Michail Zabolotnykh, Irina Zhidik</i>	
SPECIAL FEATURES OF BIOLOGY, TECHNOLOGY AND ECONOMIC EFFICIENCY OF LONG-FIBRED FLAX CULTIVATION IN THE SUBTAIGA ZONE OF OMSK REGION	332
<i>Alena Krasovskaya, Albina Mansapova, Tatyana Veremey, Elena Yudina</i>	
MOTIVATION AS A FACTOR IN THE FORMATION OF HUMAN CAPITAL IN RURAL ENTREPRENEURSHIP	339
<i>Elena Avlasovich, Olga Gefner, Marina Vasyukova, Olga Kuznetsova</i>	
PROSPECTS OF USING OF GENETIC POTENTIAL OF TRITICUM TIMOPHEEVII FOR DURABLE DEFENSE OF COMMON WHEAT FROM LEAF RUST	344
<i>Lyudmila Plotnikova, Violetta Pozherukova, Ekaterina Novikova, Olga Mitrofanova</i>	
LEGUMINOUS CROPS AS A VALUABLE PRODUCT IN FUNCTIONAL NUTRITION	349
<i>Nina Kazydub, Svetlana Kuzmina, Svetlana Ufimtseva, Olga Kotsyubinskaya</i>	
FORMATION OF SUSTAINABLE LAND MANAGEMENT BASED ON LANDSCAPE PLANNING IN THE MIDDLE IRTYSH AREA	354
<i>Irina Khorechko, Marina Veselova</i>	
RESEARCH RESULTS ON COAGULANT IMPACT ON THE USED MOTOR OIL RE-REFINING	360
<i>Evgenia Maltseva, Leonid Keruchenko, Anton Shimokhin, Sergey Zakharov</i>	
SUBSTANTIATED SCREENING OF FUNCTIONAL INGREDIENTS FOR EXTENDED SHELF LIFE OF FERMENTED MILK PRODUCTS	364
<i>Natalya Gavrilova, Natalya Chernopolskaya, Sergey Konovalov</i>	
DIAGNOSIS OF POTATOES'S REQUIREMENTS FOR NITROGEN FERTILIZERS ON CHESTNUT SOILS OF NORTHERN KAZAKHSTAN	368
<i>Serik Abeuov, Yuri Ermokhin, Olzhas Shoykin, Victor Kamkin</i>	
POLYMORPHISM OF HAPLOTYPES OF BOVINE LEUKEMIA VIRUS	372
<i>Natalia Blazhko, Sultan Vyshegurov, Alevtina Khodakova, Sergei Loginov</i>	
ECOLOGICAL TESTING OF RICE VARIETIES OF KUBAN AND FOREIGN BREEDING IN CONDITIONS OF REPUBLIC OF ADYGEA	377
<i>Ruslan Dzhamirze, Nadezhda Ostapenko, Sergey Garkusha, Natalya Chinchenko</i>	
ADDITIVE-POLYGENIC INHERITANCE OF REPRODUCTIVE SYSTEM DISEASES IN HOLSTEIN COWS IN SUBPOPULATIONS	382
<i>Victor Kuznetsov, Galina Revina, Lyubov Astashenkova</i>	
DEVELOPMENT OF AN INTEGRATED TECHNOLOGY FOR MILK PROCESSING WITH THE PRODUCTION OF FUNCTIONAL DAIRY PRODUCTS AND BIOTECH PRODUCTS FOR FOOD AND PHARMACEUTICAL INDUSTRY	387
<i>Kseniya Starovojtova, Lyubov Tereshchuk, Marina Tarlyun, Irina Dolgolyuk</i>	
DYNAMICS OF CUCUMBER GREEN MOTTLE MOSAIC VIRUS ACCUMULATION AND ITS ASSOCIATION TO THE DISEASE MANIFESTATION	393
<i>Valeriya Ryabinina, Sergey Pashkovsky, Kirill Plotnikov, Eugeniya Gordienko</i>	

EFFECT OF ANTIVIRAL DRUGS ON THE PHYTOSEIULUS PERSIMILIS ATH.-H. ACARIPHAGUS.....	396
<i>Sergey Pashkovsky, Darya Gerne, Aleksandra Zenkova, Valeria Kurochkin</i>	
CHANGES IN THE STATE OF CELL MEMBRANES OF AN ANIMAL ORGANISM AGAINST THE BACKGROUND OF THE PROTECTIVE EFFECT OF ANTIOXIDANTS UNDER CONDITIONS OF HIGH TEMPERATURE.....	400
<i>Elena Nechaeva, Olga Bdyukhina, Tatyana Mitsulya</i>	
BIOTECHNOLOGICAL METHODS FOR INCREASING THE EFFICIENCY OF MARKET EGG PRODUCTION	406
<i>Inna Korscheva, Elena Chaunina</i>	
ANALYSIS OF GEODETIC LATITUDE CALCULATION ALGORITHMS USING CHORD METHOD	411
<i>Pavel Medvedev, Anatoly Uvarov, Alexander Garagul</i>	
DEVELOPMENT OF SPRING WHEAT SPROUTS AFTER CHEMICAL SEED TREATMENT	415
<i>Svetlana Chibis, Lyudmila Krotova, Ekaterina Beletskaya</i>	
FEATURES OF THE KEFIR PRODUCTION TECHNOLOGY USING WHOLE WHEAT OF GREEN BUCKWHEAT FLOUR.....	419
<i>Mikhail Schetinin, Zoya Khodyreva, Olga Musina, Elena Schetinina</i>	
MICROECOLOGICAL APPROACHES TO THE PROPHYLACTIC CORRECTION OF DYSBACTERIOSIS MICROBIOTA IN THE GASTROINTESTINAL TRACT OF DUCKS.....	423
<i>Nadezhda Lescheva, Valentina Pleshakova, Natalya Zolotova, Tatyana Lorengel</i>	
IMPACT OF MULTIPLE FORMS AND APPLICATION METHODS OF NATURAL ZEOLITE ON POTATO YIELD INCREASE	428
<i>Lilia Bikkina, Vladimir Ezhkov, Elena Prishchepenko, Mansur Yarullin</i>	
THE USE OF REMOTE SENSING METHODS TO STUDY THE ECOLOGICAL STATE OF AGRICULTURAL SOILS	433
<i>Natalya Parkhomenko, Alexander Garagul, Marat Shayakhmetov</i>	
REDUCTION POTENTIAL OF MEAT, DEPENDING ON THE CURING COMPOSITION.....	438
<i>Irina Patrakova, Galina Gurinovich, Olga Myshalova, Olesya Salishcheva</i>	
DEVELOPMENT OF MANAGEMENT SYSTEM OF THE LAND AND PROPERTY COMPLEX OF A CITY AS AN ENSURING MECHANISM FOR ITS SUSTAINABLE DEVELOPMENT	442
<i>Yuri Rogatnev, Valentina Scherba, Tatyana Filippova, Marina Veselova</i>	
CHANGE IN THE AGROPHYTOCENOSIS OF HULLESS BARLEY DEPENDING ON THE ELEMENTS OF CULTIVATION TECHNOLOGY.....	447
<i>Andrey Gladkikh, Nikolay Rendov, Ekaterina Nekrasova, Svetlana Mozyleva</i>	
EVALUATION OF MICROBIOLOGICAL PREPARATIONS' EFFECT ON THE PROPAGATION OF INTRODUCED SPECIES OF TREES.....	450
<i>Ekaterina Gorb, Galina Barayshchuk</i>	
INVESTIGATIONAL STUDY OF GRAIN SEPARATOR OPERATION WITH CYLINDRICAL SHAKER SCREEN OF IMPROVED ORIENTING ABILITY	455
<i>Vladimir Koval, Maxim Begunov, Alexey Chernyakov, Alexander Yatsunov</i>	
Author Index	