МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ МИКОЛАЇВСЬКИЙ НАЦІОНАЛЬНИЙ АГРАРНИЙ УНІВЕРСИТЕТ

ВІСНИК

АГРАРНОЇ НАУКИ ПРИЧОРНОМОР'Я

Науковий журнал

Виходить 4 рази на рік Видається з березня 1997 р.

Випуск 1 (93) 2017

Економічні науки Сільськогосподарські науки Технічні науки

> Миколаїв 2017

Засновник і видавець: Миколаївський національний аграрний університет.

Свідоцтво про державну реєстрацію КВ №19669-9469ПР від 11.01.2013 р.

Збірник включено да переліку наукових фахових видань України, затвердженого наказами Міністерства освіти і науки України від 13.07.2015 р. №747 та від 16.05.2016 р. №515.

Головний редактор: В.С. Шебанін, д.т.н., проф., академік. НААН

Заступники головного редактора:

І.І. Червен, д.е.н, проф. І.П. Атаманюк, д.т.н., проф. В.П. Клочан, к.е.н., доц. М.І. Гиль, д.с.-г.н., проф. В.В. Гамаюнова, д.с.-г.н., проф.

Відповідальний секретар: Н.В. Потриваєва, д.е.н., проф.

Члени редакційної колегії:

Економічні науки: О.В. Шебаніна, д.е.н., проф.; Н.М. Сіренко, д.е.н., проф.; О.І. Котикова, д.е.н., проф.; Джулія Олбрайт, PhD, проф. (США); І.В. Гончаренко, д.е.н., проф.; О.М. Вишневська, д.е.н., проф.; А.В. Ключник, д.е.н., проф.; О.Є. Новіков, д.е.н., доц.; О.Д. Гудзинський, д.е.н., проф.; О.Ю. Єрмаков, д.е.н., проф.; В.М. Яценко, д.е.н., проф.; М.П. Сахацький, д.е.н., проф.; Р. Шаундерер, Dr.sc.Agr. (Німеччина)

Технічні науки: Б.І. Бутаков, д.т.н., проф.; В.І. Гавриш, д.е.н., проф.; В.Д. Будак, д.т.н., проф.; С.І. Пастушенко, д.т.н., проф.; А.А. Ставинський, д.т.н., проф.; А.С. Добишев, д.т.н., проф. (Республіка Білорусь).

Сільськогосподарські науки: В.С. Топіха, д.с.-г.н., проф.; Т.В. Підпала, д.с.-г.н., проф.; А.С. Патрєва, д.с.-г.н., проф.; В.П. Рибалко, д.с.-г.н., проф., академік НААН; І.Ю. Горбатенко, д.б.н., проф.; І.М. Рожков, д.б.н., проф.; І.П. Шейко, д.с.-г.н., професор, академік НАН Республіки Білорусь (Республіка Білорусь); С.Г. Чорний, д.с.-г.н., проф.; М.О. Самойленко, д.с.-г.н., проф.; А.К. Антипова, д.с.-г.н., проф.; В.І. Січкар, д.б.н., проф.; А.О. Лимар, д.с.-г.н., проф.; В.Я. Щербаков, д.с.-г.н., проф.; Г.П. Морару, д.с.-г.н. (Молдова)

Рекомендовано до друку вченою радою Миколаївського національного аграрного університету. Протокол № 7 від 28.02.2017 р.

Посилання на видання обов'язкові. Точка зору редколегії не завжди збігається з позицією авторів.

Адреса редакції, видавця та виготовлювача: 54020, Миколаїв, вул. Георгія Гонгадзе, 9, Миколаївський національний аграрний університет, тел. 0 (512) 58-05-95, http://visnyk.mnau.edu.ua, e-mail: visnyk@mnau.edu.ua

© Миколаївський національний аграрний університет, 2017

ЕКОНОМІЧНІ НАУКИ

УДК 633.1:338.43

THE SUNFLOWER OIL MARKET OF UKRAINE AND ITS DEVELOPMENT

V. Klochan, doctor of economic sciences, professor

I. Bezpyata, associate professor, PhD

N. Zingaieva, assistant

Mykolayiv National Agrarian University

The article analyzes the current status of the national market of sunflower oil, evaluates the balance of national economic interests, agricultural and manufacturing production and domestic consumption, and outlines the challenges facing the oil-processing industry at the present stage of development. The ways to overcome the identified problems and the prospects of further development of the market of sunflower oil in Ukraine are selected.

Key words: sunflower oil, oil-processing industry, exports, consumption fund balance, global market.

Formulation of the problem. In recent years the relationships between Ukrainian and world sunflower oil market is getting tighter due to the deepening of the international division of labor and Ukraine's entry to the world leading oil producers and exporters. National demand on sunflower oil is only 10-15%, the remaining 85-90% is exported.

The problems of the agricultural sector, the current trend of price conjuncture of world food resources, lack of government attention to the problems of the sector create a foundation for crisis in the provision of food, including sunflower oil.

Analysis of the recent researches and publications. Such scholars as Bronin O. V., Domashenko U. V., Pocket S. V., Karpenko A. V., Mytchenok A. A. and Nikitchyn D. A., Osadchyk V. I., Petrov V. M., Plast S. I., Waterside A. A. Prysyazhnyuk S. V., Szeged S. A., Supihanov G. B. and others paid attention to the problem of development of sunflower oil of Ukraine. However, the analysis and development of oil-processing

industry at the present stage of economic development require additional coverage.

Aim of the study is to assess the current state of development of the national market of sunflower oil, the balance of economic interests, agricultural and manufacturing production and national consumption and to identify the problems facing the oil-processing industry at the present stage of development and ways to overcome them.

Presenting main material. Food security requires maintaining an appropriate level of food self-sufficiency, which involves the use of state support for national agricultural producers and import control measures in order to protect their own producers from foreign competitors.

Sunflower oil, even in the financial crisis remains highly profitable and competitive products on both national and foreign markets. Its production and sales can help solve the problem of food security and its export-economic security, that is important in current conditions.

Ukraine continues building up capacities for processing sunflower, which make it possible to process up to 15 mln. tons of seeds. In Ukraine there are twenty largest factories that produce over 80% of the total production of sunflower oil in the country. Latifundist.com (National ahroportal) together with analysts ARgroup presented the top 10 producers of sunflower oil in Ukraine. The position of the company in the ranking was determined according to their market share. It should be noted that in the ranking of the six leading companies operating in the Southern region LLC "Kernel" (Mykolaiv region) (1st place ranking (28,4% share roar), JSC "Cargill" (Kherson region) (5th place - 5,3%), "Bunge" (Mykolaiv region) (6th - 4,4%) of "Delta Vilmar SND" (Odessa region) (8th - 3,5%), Glencore International AG (Odessa region) (9th place – 2,9%), "Noble Resorsyz Ukraine" (Kherson) (10th place - 2.9%) [4]. Each of these major operators has its own strategy. For example, "Bunge" is oriented on the national market that is why they are rapidly developing their brands packaged refined oil and other products. The company "Cargill" exports abroad, the lion's share of produced crude oil, "Kernel" swept "Olsids Group" and became the largest producer and exporter of sunflower oil, focuses its activities on both domestic and foreign trade sectors [5, p. 118].

Such concentration of refining capacity is explained by favorable climatic conditions of Southern region for growing sunflowers and access to seaports for fast export of finel products.

Despite the increase in refining capacity and oil production, including sunflower, decrease oil consumption fund, indicating the need to assess the efficiency of oil and fat sub country and the Southern region in particular (Table. 1).

Table 1
Fund of oil consumption, thousand tons

	2011 y.	2012 y.	2013 y.	2014¹y.	2015¹y.	2015¹ y. in % to	
						2011 y.	2014¹ y.
1	2	3	4	5	6	7	8
Ukraine							
Fund of oil consumption, thousand tons	625,3	590,5	603,5	561,2	525,1	84,0	93,6
An oil consumption of on one person for a year, kg	13,7	13,0	13,3	13,1	12,3	89,8	93,9
South region							
Fund of oil consumption, thousand tons	68,7	66,0	66,1	64,5	62,4	90,8	96,7
An oil consumption of on one person for a year, kg	14,7	14,1	14,3	13,8	13,2	89,8	95,7
Mykolaiv area							
Fund of oil consumption, thousand tons	18,9	17,9	18,0	16,8	15,6	82,5	92,9
An oil consumption of on one person for a year, kg	16,0	15,2	15,4	14,4	13,4	83,8	93,1

1	2	3	4	5	6	7	8
Odessa area							
Fund of oil consumption, thousand tons	35,1	34,0	33,8	33,8	33,8	96,3	100,0
An oil consumption of on one person for a year, kg	14,7	14,2	14,1	14,1	14,1	95,9	100,0
Kherson area							
Fund of oil consumption, thousand tons	14,7	14,1	14,3	13,9	13,0	88,4	93,5
An oil consumption of on one person for a year, kg	13,5	13,0	13,3	13,0	12,2	90,4	93,8

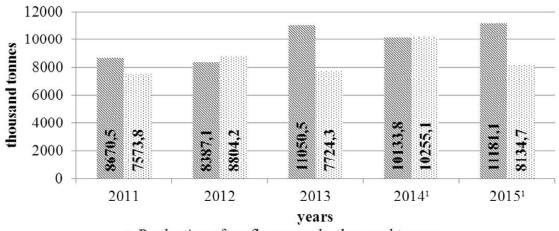
^{*} It is built by an author on the basis of Government service of statistics of Ukraine data [2] 1 Cited data without the account of the temporally occupied territory of Autonomous Republic of Crimea and part of zone of realization of anti-terror operation.

The table shows that the downward trend in oil consumption on average in the southern region coincides with the trend in Ukraine as a whole. In the region, oil consumption per day decreased from 14,7 kg in 2011 to 13,2 kg per person per year in 2015. In the context of regional areas we have to reduce consumption: in the Mykolaiv region - from 16,0 kg to 13,4 kg in the Odessa region - from 14,7 kg to 14,1 kg in Kherson region - from 13,5 kg to 12,2 kg, respectively in 2011 and 2015.

In relation to indexes on Ukraine, then a consumption grew short from 13,7 kg in 2011 to 12,3 kg on one person on a year in 2015. It is necessary to notice that in 2015 of consumption of oil dissatisfies to the set norms of man feed, that presents 13 kg on one person for a year. Disparity is observed on the Kherson area in 2015 (12,2 kg). Reduction of consumption on one person took place on a background reduction of general fund of oil consumption.

This tendency testifies to the economic crisis in a middle country, when through a substantial price advance on sunflower-seed oil of population it began to limit itself in her consumption that testifies to unbalanced of population feed. In order to estimate balanced of industry will analyse data on a production and processing of sunflower in Ukraine and South region in particular (fig. 1 and 2).

In 2015 on Ukraine the record amount of sunflower seed – 11,2 million tons was mine-out. But here comparatively with a previous year the volumes of his processing grew short on 21%. In the cut of the South region there is the same tendency: most production of sunflower seed volumes were in 2015 (2,2 million tons), but here in a financial year comparatively with a previous year reduction of his processing took place on 20,7%.



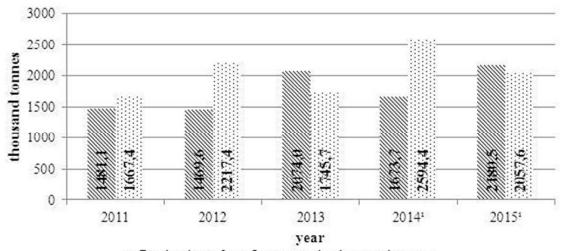
- Processing of sunflower seeds, thousend tonnes

Fig. 1 Dynamics of sunflower seed production and processing in Ukraine*

*Is built by an author on the basis of Government service of statistics of Ukraine data [2] 1 Cited data without the account of the temporally occupied territory of Autonomous Republic of Crimea and part of zone of realization of anti-terror operation.

Also, in 2012 and 2014 the volumes of seed processing exceeded production volumes both the Ukraine and South region in particular. It was due to the fact that the most processing plant of American company "Kargill" in July, 2014 stopped working and it was to redo in other places near the 1 million tons of sunflower. Besides, at the end of 2015 company "Bunge" completed the

construction of new oil processing plant in Mykolaiv marine trade port. Power of sunflower oil production plant – 2,4 thousand t. of oil seed on twenty-four hours. Accordingly, a competition at the market increased considerably. In fact in order to turn the investments inlaid in these objects, it is needed on a maximum to load powers from processing. In this case, some companies will force to extend geography of purchases of sunflower seed, increasing the cost of commodity delivery.



N Production of sunflower seeds, thousend tonnes

Processing of sunflower seeds, thousend tonnes

Fig. 2 Dynamics of production and processing of sunflower seed is in the South region*

*Is built by an author on the basis of Government service of statistics of Ukraine data [2] 1 Cited data without the account of the temporally occupied territory of Autonomous Republic of Crimea and part of zone of realization of anti-terror operation.

Market analysts explain the fact of oil production decline as a result of raw material suggestion deficit and taking into account inhibition of agro producers sales in a hope on a price advance, part of enterprises stopped processing and decided to conduct repairs, during which they planned to form a raw material supply for providing of loading of production capacities at the end of oil-bearing season 2015/16 marketing year.

From Government service of statistics data, beginning from 2014 the supplies of sunflower seed on beginning of period (on January, 1) had a tendency to the decline that entailed the slump of processing, but on January, 1, 2017 the supplies of

sunflower seed in Ukraine presented 6503,2 thousand tons, that almost on 32% more than upon the same date by a year before [2]. It allows to forecast, that the volumes of sunflower processing will increase, if the producers of sunflower will not restrain the sales of the products. A most competition in this situation will be companies with good logistic (to make the way between raw material and ports shorter), with a good infrastructure (more places of commodity acceptance - more possibility to buy raw material), with the good financing (percents on hryvnya credits present to 25% on a year, if producers force to take credits under such high percent, then will earn banks in such case, but not agrarians), with a good modern equipment (as usual, important coefficients on the booty of oil from the sunflower seed, and also energy efficiency), with possibility to finance a harvest, companies that will be able to redo soy and beet will get additional possibility to load the enterprises.

In rating of producers and exporters of sunflower-seed oil Ukraine on the first place (table. 2, fig. 3)

Table 2
Production of sunflower-seed oil volumes in the world and rating of countries after them*

	2011/2012 MY		2012/2013 MY		2013/2014 MY		2014/2015 MY			lt
Country	Country thous.	rating	thous. tons	rating	thous. tons	rating	thous. tons	rating	Total	Result
Argentina	1565	4	980	5	934	5	1135	5	19	5
China	348	7	476	7	481	7	466	7	28	7
European Union	2800	3	2544	3	3190	3	3190	3	12	3
India	205	8	220	8	210	8	120	10	34	8
Kazakhstan	119	10	117	10	133	10	125	9	39	10
Russia	3552	2	3117	2	3851	2	3570	2	8	2
Turkey	718	6	769	6	845	6	725	6	24	6
Ukraine	3967	1	3635	1	4750	1	4325	1	4	1
USA	149	9	196	9	197	9	166	8	35	9
Other countries	1160	5	1026	4	1203	4	1241	4	17	4

^{*} It is built by an author on the basis of European union statistical service data [7]

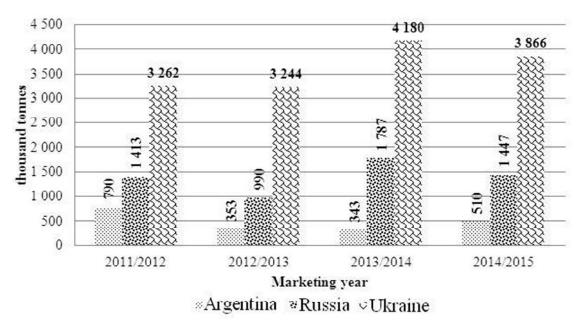


Fig. 3 Dynamics of sunflower-seed oil export volumes in the world*

On the experts estimations, 2014/2015 marketing year was exported almost 90% (3866 thousand tons are from 4325 thousand tons from the volumes of home oil), that laid down more than 60% of world export of sunflower-seed oil [1].

Geography of sunflower oil export from Ukrainian production broadens constantly. Sunflower-seed oil is exported in 90 countries of the world. The main consumers of Ukrainian sunflower-seed oil are remained by India, China, European Union and Africa. It should be noted that the last years there is a global decline of world prices on oil. Thus, at the beginning of season 2016/2017 marketing year there is an unique situation in Ukraine, when export prices go down on sunflower-seed oil, and purchase prices on the sunflower seed at the internal market remain at stably high level are 370 - 380 doll. of the USA/ton. A hryvnya equivalent made 9000 - 9700 hrn.s/ton. But this standard of prices appeared not just and a market quickly enough corrected prices on a new harvest to the level 10 000 - 10 800 hrn.s/ton.

At the export market the cost of sunflower-seed oil at the beginning of September went down to 760 doll. of the USA/ton on the base of FOB, but all participants of market consent, that

^{*} It is built by an author on the basis of European union statistical service data [7]

it too low and sunflower-seed oil of the Ukrainian origin in the world market is underestimated. Therefore already from middle of September prices on sunflower-seed oil began to grow in a price and attained \$790 of the USA/ton on the base of FOB. In future, we expect that a market is stabilized and a cost of sunflower-seed oil will be near to \$790 - 800 of the USA/ton on the base of FOB [6]. An unstable situation at the currency market force an agricultural commodity producers to hold the sale of raw material, (in particular, seed of sunflower) in expectation yet higher prices.

At the beginning of 2015 in Verkhovna Rada of Ukraine there was the registered bill № 1837 from 26.01.15 about making alteration in Law of Ukraine "On the rates of the exported (export) duty on the seed of some types of oil-bearing cultures", that envisaged of abolition an exported (export) duty on the seed of sunflower [3]. Abolition of the exported (export) duty on the seed of sunflower and mass export of source of raw materials of industry enterprises not only will not give additional receivables to the budgets of all levels, and, vice versa, will result in the stop of considerable part of enterprises of Ukraine oily-fatty industry, especially enterprises of the small and middle powers located in small district cities and settlements through a decline in a production and export of oil, as a result workplaces will be lost and considerably a receivables will grow short in the state budget.

Incredibly effect the change in tax laws – abolition of the so-called special treatment will influence to the market from the in payment of VAT agro producers. It, first of all, will change the structure of grain trading from Ukraine. On sunflower-seed oil, from the point of view of sales, compensation of VAT will not influence on the whole, but a price will change, rules of playing the market, attitude of farmer toward a sale.

According to new tax rules a farmer must to pay VAT in a budget recover "oxygen" to the shadow market of seed. The so-called shallow "dairies" that before bought raw material for a farmer for cash can not survive the competition of – foremost from the point of productivity view: their level of oil booty and cleaning quality strongly yield to the effective middle or large plant that works with the observance of all production standards. Thus for

a farmer, actually, there will not be sense to sell off products for cash. It, in the end, substantially will revitalize a market and will do it transparent. For today the shadow market of seed is estimated to 2 million tons, and it very quite a bit in the conditions of cutthroat competition of processors for raw material.

Conclusions. Without regard to all political and economic negative, on the certificate of experts, annually the Ukrainian agricultural sector grows the production of crops and hence, and consequently, and an export increases. To begin going out on the new level of development, we need to search new markets accordingly. For example, the new is conquered by the Ukrainian agribusiness the market of China already bought 14 % our sunflower-seed oil. The increase of the presence at the market due to enlargement of enterprises gives an opportunity to the home producers to dictate the terms both at the market of raw material and at the market of the prepared products, and, accordingly, to regulate profitability of production and reduce influence of competitors.

By another method of oily-fatty enterprises survival at the high-competition internal market there is creation of own source of raw materials a complex for loading of present powers from processing of oil-bearing cultures on enterprises. Also the further process of integration of the Ukrainian oil-bearing market in world is set before producers by a pressing question, in our case problem, upgrading and competitiveness of oily-fatty products. As, it must the Ukrainian enterprises that are most producers and world exporters of oily-fatty products have the opportunity to compete not only in quality of products but also at price. It envisages a permanent improvement and optimization of productive processes for the increase of production efficiency and decline of prepared unit cost.

References:

- 1. Апетити переробників соняшника зростають, ринок чекає дефіцит сировини [Електронний ресурс]. Режим доступу: https://msb.aval.ua/news/?id=24934
- 2. Офіційний сайт Державного комітету статистики України [Електронний ресурс]. Режим доступу: www.ukrstat.gov.ua.
- 3. Підлити олії в бізнес: що чекає олійно-жирову галузь у 2016 році [Електронний ресурс]. Режим доступу : http://forbes.net.ua/ua/opinions/1410322-pidliti-oliyi-v-biznes-shcho-chekae-olijno-zhirovu-galuz-u-2016-roci

- 4. Топ 10 производителей подсолнечного масла [Електронний ресурс]. Режим доступу: http://latifundist.com/rating/top-10-proizvoditelej-podsolnechnogo-masla
- 5. Турчановський А. О. Стан та перспективи розвитку переробних підприємств олійножирового підкомплексу АПК / А.О. Тупчановський // Збірник наукових праць ВНАУ. 2013. \mathbb{N}^9 2 (77). С. 113-122.
- 6. Шаймухамєтова В. Соняшник 2016 [Електронний ресурс] / В. Шаймухамєтова. Режим доступу: http://www.milkua.info/uk/post/sonasnik-2016
- 7. Eurostat [Електронний ресурс]. Режим доступу: http://ec.europa.eu/eurostat

В. В. Клочан, І. В. Безп'ята, Н. Є. Зінгаєва. Ринок соняшникової олії в Україні та перспективи його розвитку.

У статті проаналізовано сучасний стан розвитку вітчизняного ринку соняшникової олії, проведено оцінку балансу економічних інтересів держави, сільськогосподарської та переробної сфер виробництва та внутрішнього споживача, а також окреслено проблеми, які постали перед олійнопереробною галуззю на сучасному етапі розвитку. Визначено шляхи подолання визначених проблем та перспективи подальшого розвитку ринку соняшникової олії в Україні.

Ключові слова: соняшникова олія, олійнопереробна галузь, експорт, фонд споживання, баланс, світовий ринок.

В. В. Клочан, И. В. Беспятая, Н. Е. Зингаева. **Рынок подсолнечного** масла в Украине и перспективы его развития.

В статье проанализировано состояние отечественного рынка подсолнечного масла, проведена оценка баланса экономических интересов государства, сельскохозяйственной и перерабатывающей сфер производства и внутреннего потребителя, а также обозначены проблемы, стоящие перед маслоперерабатывающей отраслью на современном этапе развития. Определены пути преодоления определенных проблем и перспективы дальнейшего развития рынка подсолнечного масла в Украине.

Ключевые слова: подсолнечное масло, маслоперерабатывающая отрасль, экспорт, фонд потребления, баланс, мировой рынок.

3MICT

ЕКОНОМІЧНІ НАУКИ

V. Klochan, I. Bezpyata, N. Zingaieva. The sunflower oil
market of Ukraine and its development3
І. І. Червен, С. І. Павлюк. Роль агрохолдизації у соціально-
економічному розвитку сільських територій України14
О. І. Котикова. Індикація екологічного стану
сільськогосподарського землекористування в Україні:
соціальний блок26
Ю. В. Ушкаренко. Особливості формування економічного
потенціалу підприємств у сучасних умовах
Ю. А. Кормишкін. Система показників та чинників
ефективного розвитку аграрного підприємництва47
А. Грек. Сучасний стан матеріально-технічного забезпечення
сільськогосподарських підприємств Київської області 61
А. Ю. Стренковська. Теоретичні основи організаційно-
економічного механізму розвитку будівництва в сільській
місцевості72
СІЛЬСЬКОГОСПОДАРСЬКІ НАУКИ
Л. К. Антипова. Поглинання елементів живлення бур'янами
залежно від технологій вирощування люцерни насіннєвого
призначення79
Г. М. Господаренко, С. П. Полторецький, В. В. Любич,
Н. В. Воробйова, І. Ф. Улянич, М. М. Капрій.
Характеристика твердості та міцності зернівок пшениці
спельти залежно від сорту та лінії86
В. В. Рогач, О. В. Кушнір, В. В. Плотніков. Вплив
рістстимуляторів Вітазиму та б-бензиламінопурину на
морфогенез та продуктивність перцю солодкого95
О. Л. Рудік, І. М. Мринський. Продуктивність льону олійного
за впровадження технологій подвійного використання
культури102

S. Lugovoy, S. Kramarenko, S. Galimov. Genetic
polymorphism of the red white belted breed pigs based on
microsatellite markers113
В. М. Волощук, В. М. Герасимчук. Показники мікроклімату
у відділенні для дорощування поросят залежно від способу
вентилювання приміщення120
О. І. Петрова, О. М. Сморочинський, Р. О. Трибрат.
Використання яловичини, одержаної від тварин різних
вагових кондицій для виробництва ковбас129
А. В. Лихач. Реалізація поведінкових актів холостими
свиноматками різних генотипів136
В. А. Кириченко, С. П. Кот, К. В. Скрепець. Зв'язок
молекулярно-генетичних маркерів з класністю овець 144
О. С. Крамаренко, І. В. Довгопола. Особливості генетичної
структури південної м'ясної породи худоби за локусами
мікросателітів ДНК: TGLA53, TGLA122, TGLA126 TA TGLA227 151
А. О. Погорелова. Вплив температурного та світлового
режимів утримання на формування статі у кролів
спеціалізованих м'ясних порід164
ТЕХНІЧНІ НАУКИ
O. Kyrychenko. Simulation of electromagnetic field
characteristics for metal conductive buses with rectangular
cross-section
М. В. Дубницька. Систематизація методичних підходів до
отримання тривимірної інформації про водні об'єкти 181
Д. О. Захаров. Сучасний стан застосування електрофізичних
методів бактерицидної та інсектицидної обробки зернової
продукції