

Rozhkov A. A., Puzik V. K. Dynamics of formation of pigment substances in leaves of durum spring wheat depending on the different coenosis voltage between plants in crops // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 7–12.

The results of the three-year study (2008–2010 gg.) to determine the dynamics of the formation of photosynthetic pigments in plants of durum spring wheat varieties Kharkiv 41, depending on the different ways of planting and seeding rate are given in the article. A significant effect of the studied elements of the technology on the content of chlorophyll and carotenoids in the leaves of plants was found. The content of photosynthetic pigments was changed to a large extent at the impact factor of the seeding rate. The general regularity was to reduce the content of chlorophyll and carotenoids in the leaves of plants at effective seeding rate and optimization of the distribution of plants over the area of nutrition. The studies identified a direct correlation between the content of pigments and grain productivity of the ear of the main shoot of the plant.

Ridey N. M., Gorbatenko A. A., Pashutina O. M., Kucherchenko Y. A. Natural-resource potential of agro-ecosystems: an analysis of the conceptual and categorical apparatus, justifying contemporary interpretations // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 13–21.

The concept of different potentials in agro-ecosystems was analyzed. The natural resources potential of agricultural land was reasonably determined. The authors propose a landscape-indicator approach to the assessment of agricultural landscapes by establishing an index of their natural resource potential of the main factors of anthropogenic influence in the agricultural sphere.

Klymenko N. A., Klymenko A. N., Petruk A. N. Hydro ecological monitoring of aquatic ecosystems taking into account the current European trends in environmental activities // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 22–27.

The authors analyzed hydro ecological monitoring of aquatic ecosystems (cooling pond Khmelnytsky and White Lake) taking into account the current European trends in environmental activities. Hydro ecological monitoring of aquatic ecosystems (cooling pond Khmelnytsky and White Lake) taking into account the current European trends in environmental activities. The strategy of taking management decisions to improve the ecological status of aquatic ecosystems is offered. The system of monitoring observations and complex integrated assessments of water reservoir located in the zone of nuclear energy in accordance with the regulatory framework of the EU on the basis of a systematic approach and a comprehensive analysis of the environmental condition of the water reservoir is improved.

Tischenko V. N., Panchenko P. M., Chernyshova O. P. Identification of the sorts and breeding lines of winter wheat with respect to balanceness of quantitative characteristics using cluster analysis // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 28–35.

Identification of sorts and selection lines of winter wheat in cluster analysis allowed to distinguish genotypes of winter wheat in which quantitative characteristics have minimum Euclidean distance between them, and they show a high level of balance of major generative and vegetative signs of yield and productivity. The use of cluster analysis in the process of genotypes identification approaches us to creation of theoretical and practical model of a winter wheat sort. This winter wheat sort has favorable balance of quantitative and qualitative traits which give a great opportunity to withstand the environment and create high productivity.

Zhemela G. P., Shevnikov D. M. Photosynthetic productivity of crops of spring durum wheat depending on fertilizers and biological products // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 36–40.

The use of fertilizers and inoculation of spring durum wheat seeds by biological products positively affected on the photosynthetic efficiency of plants. Formation of wheat leaf surface depends both on the background of mineral nutrition and the use of biologocals. In areas without fertilizing seed treatment by biological products contributed to the increase of leaf area by 20.3% using polimiksobakteryn, 20.5% – diazofit, 23.9% – a mixture of these two drugs. These measures create favorable conditions for nutrition; form the optimal nutrition area of leaf apparatus and efficient photosynthetic productivity.

Shevnikov M. Y., Kulibaba M. Y. Yield and quality of soybean seeds depending on the timing of sowing and the use of biological products // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 41–44.

Yield and quality of soybean seeds depended on the timing of sowing, and on the pre-sowing treatment. Soy seed treatment with biological product Ryzogumin had positive effect for nitrogen fixation and, due to this, increased crop yield quality. In areas where the plants were treated at sowing with biological product of all three sowing dates, structural performance and weight of 1000 grains were higher. Since that the mass of 1000 seeds differed by an average of 6,4–8,6 g. Different sowing terms significantly influenced the vegetation period. The most extended was for early sowing terms and subsequently was reduced by 6–9 days.

Gluschenko L. D., Gangur V. V. Bioproductivity of typical chernozem depending on the action, the aftereffect of fertilizers on humus state in agrocenoses // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 45–48.

Long duration application of the different systems of fertilizer and basic till of soil of typical black soil resulted in differentiation of the ground cover at the level of gumus and bioproductivity. Applying of manure –10 t/ha – on a background of N₅₂R₅₂K₅₂, with the combined system of basic till of soil, facilitated the increase of grain harvest units with 1 ha of crop rotation on the 32% in relation to the unfertilized areas. Replacement of manure in the system of fertilizer of «semipolny» field rotation by by-products provided the increase of the productivity of agricultural cultures on 34%.

Trygub O. V., Ljashenko V. V. Interconnection of elements of architectonics of plants and productive descriptions at the samples of buckwheat (*Fagopyrum esculentum* Moench.) // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 49–55.

The results of learning a set of collection of samples of different eco-geographical origin during 2001–2010, the yield characteristics and morphological indices are given in the article. Taking into account the considerable genetic variety of material in the middle of each group, the conducted analysis of the got results allows to distinguish a feedstock for different directions of selection, which is the carrier of complex of economic-valuable descriptions.

Filonenko S. V. Formation of grain productivity of maize under different soil tillage // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 56–60.

The results of two-year researches of the impact of different ways of basic soil tillage, common in the zone of insufficient moisture of left-bank forest-steppe, on grain productivity of corn are stated in the article. We found that in growing corn for grain it is reasonable to use soil tillage of 37–40 cm depth at which soil gets optimal agrarian and physical properties. We noticed its deeper moisturizing during spring snowmelt and improved humidity level for culture in the second half of the vegetation season. This helps to optimize the conditions for growth and development of maize plants, especially during the dry summer period.

Kharchenko Yu. V., Kharhenko L. Ya. Source material for breeding maize // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 61–67.

110 samples of maize were studied on the Agricultural experiment station of plant growing (Village Ustymivka) during 2008–2010. According to the results of the study of the economic and biological properties of the samples a number of forms were identified, which are the sources of agronomic traits. Samples were divided into groups of ripeness. Varieties and lines with a high content of protein and starch in grain of maize were marked. To natural background samples resistant to pests and diseases were identified. Results of complex study of samples of maize on Ustymiv'ska experiment station of plant production point to the need to attract new forms, populations, lines, local varieties of local selection from different countries of the world and regions of Ukraine for consideration and inclusion in the selection process.

Gaprindashvili N. A. Change of antioxidant complex in pear fruits // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 68–72.

Influence of postharvest treatment by natural antioxidants compositions on the antioxidizing complex changes in pear fruits at the protracted storage was investigated. It is set that antioxidants compositions treatment of pear fruits slows down the oxidation and restoration processes, and regulates the non-enzymatic and enzymatic systems of antioxidants defence. The supply of tissue antioxidants, which influences on maintenance the garden-stuffs of antioxidants properties, is saved at the same time. Exogenous introduction of biogenic antioxidants of phenic

character assists these processes, supporting the power supply of cells.

Doroshkevich N. V. The use of electrophoresis for the additional estimation of new isolates of fungus *Pleurotus ostreatus* (Jacq.: Fr.) Kummer // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 73–77.

In this work the additional estimation of new isolates of the *P. ostreatus* fungus by their tolerance to electrophoresis was made. The ability of fungus to produce extracellular proteins in cultural liquid (CL) is a response reaction on carbonaceous materials of nutrient medium was determined. Relationship between quality of protein fractions on EFS of lyophilizes CL after cultivation at wort medium with the ability of fungus to accumulate biomass on liquid wort and them yield fructification on sunflower husk was established. The electrophoresis method may be used in future as the additional for characteristic of new isolates of the *P. ostreatus* fungus.

Herman N. N., Mischenko O. V. Effect of protectant of sowing seed treatment on seed quality and yield of soft winter wheat grain // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 78–80.

According to scientific research, it was found that the use of pre-treatment of wheat seeds of soft winter by bacterial substances polimiksobakteryn (150 ml/t) and diazofit (150 ml/t) and joint processing of growth regulators penant (120 ml/t) and agate – 25K (60 g/t), against fertilizing $N_{25}P_{25}K_{25}$, $N_{50}P_{50}K_{50}$, $N_{75}P_{75}K_{75}$ provides higher vigor, laboratory and field germination. According to scientific studies it was found that the use of presowing seed by treatment growth regulators Vympel (120 ml/t) and Agate-25K (60 g/t) by fertilizing $N_{75}P_{75}K_{75}$ vigor seeds 2.7%, 1.7% seed germination, survival soft winter wheat plants increased by 10.2%; by bacterial drugs: polimiksobakteryn (150 ml/t) – 9.4%, diazofit (150 ml/t) by 9.3%, that exceeds control.

Shokalo N. S. Formation of the castor crop in the conditions of transition southern part of the of the Poltava region // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 81–83.

Castor-oil plant seeds value stimulates expanding this plant growing area due to significant climate warming in Ukraine. Five-year indices of climatic conditions of castor-oil plant vegetation period in the transitional south part of Poltava region are analyzed. It is established that high temperature and adequate moisturizing during castor plant vegetation under seeding rate of 40000 items per hectare facilitated forming crop productivity of nearly 31,5 centners per hectare with oil content of more than 52 %. Obtained data confirm advisability and possibility of growing castor-oil plant in Poltava region.

Koval V. V., Natalochka V. O., Tkachenko S. K., Minenko O. V. Present condition of boron supply in soils of Poltava region // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 84–88.

The publication presents the results of long-term studies and summarizes the current condition of soil fertility of agricultural land in Poltava Region. The dynamics of providing soils of the Poltava area with the boron is ana-

lyzed and the recommendations in relation to their further stopping degradation and to renewal is given. During 2001–2010 laboratory researches detected, that content of the boron in soils of area for two last rounds of inspection did not change. According to the information of the VIII round of inspection, the average content of the boron is made by 1,05 mgs/kg of soil, against a 1,11 mg/kg in the IX round.

Gluschenko L. D., Olepir R. V., Len' O. I., Vakulenko V. M., Kotvitskiy B. B. The effectiveness of water-soluble fertilizers for the main crops in climate change // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 89–92.

Temperature and water regimes have changed over the past few years in Poltava in the weather conditions. So during the growing period of 2008–2012, an increase in the average temperature of 1.8 °C, an increase of 13.1% from the average long-term rates and a decrease in rainfall at 72.5 mm, or 23.2% was observed. The leading role in increasing the productivity of crops belongs to fertilizers. With the significant rise in price of energy and agrochemicals, foliar feeding by complex water-soluble fertilizers becomes particularly relevant. The use of this agro method in the left-bank forest-steppe zone of Ukraine with not persistent moisture makes it possible to increase the productivity of winter wheat by 25.8%, corn grain by 12.7%, sugar beet by 15.7%, and significantly improve the quality of products.

Bagan A. V. Influence of high-quality properties on the quality of winter wheat seeds // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 93–94.

Sowing qualities of winter wheat seeds of different geographical origin in the Poltava region have been investigated. Laboratory parameters of purity and germination of seeds and weight of 1000 grains have been studied. Varieties of winter wheat Podolyanka and Vasilina have been marked by the purity and germination of seeds of high first reproduction. Use of seeds of winter wheat varieties selected for cultivation in industrial conditions is recommended.

Chaika T. A. Environmental consequences of traditional agriculture // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 95–99.

The article defines the need for a new understanding of the world on the principles of morality and ethical ideals of goodness and love. The necessity of the development of the agricultural sector on the basis of socio-economic-ecological system as a result of the negative impact of traditional agricultural production on the economy, the environment and the nation's population has been grounded. The consequences of the use of GMOs and GM crops in agriculture, which necessitates the development of organic agricultural production in Ukraine, are given in the article.

Primakov O.A. The systems approach to the study of technological process of harvesting flax // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 100–105.

The article reveals the issues of a rational scheme of harvesting flax with the use of agricultural machines for

general use. The adequate selection of the necessary and sufficient technical operations for flax harvesting on new technology has been done. When choosing machines for the harvesting of flax a great attention is paid not to special flax pullers but to equipment that is used to harvest other crops, making the technology more accessible to a wide range of manufacturers.

Goncharova I. I. Reproductive and physiological parameters of heifers of beef breeds in the steppe area of Ukraine // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 106–109.

The results of living mass and reproduced ability of heifers of Znamyanskaya inbreeding type Polissya meat breed with different levels of nursing are presented. Optimum living mass and age of fruitful insemination of heifers is determined. Thus, an intensive rearing of heifers provides daily gain of 700–800 g of living mass, 385 kg in 15–16 months. The results of researches of adaptation of heifers in a pasture period are given. It is experimentally grounded, that absolute indexes which characterize the degree of adaptation plasticity of animals of this breed testify expedience of its breeding in the steppe area of Ukraine.

Nebylitsa N. S. Assessment of pigs by BLUP method in the herds breeding farm of Cherkassy area // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 110–113.

The first assessment results of young pigs of large white breed of pedigree farms of the region by BLUP method are presented. The correlation coefficients between indicators of different methods of assessment and core breeding signs, when animals are removed from the control of cultivation are defined. It is found that the rate of assessment of pigs by BLUP method is strongly correlated with the indicators of the index, the rank and evaluation by independent levels. However, higher correlation coefficients with estimated indices of the daily increase of live weight of pigs and thickness of pork fat ($r = 0,52$) and energy growth and thickness of pork fat ($r = 0,40$) is installed.

Kotsjumbas H. I., Shchebentovska O. M., Pyatnychko O. M., Chudjak M. M. The dynamics of structural changes of broiler chest muscles on early terms after slaughter // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 114–117.

The article presents the dynamics of morphological changes of broiler chest muscles after slaughter. The terms of rigor mortis development and structural changes of muscle tissue were tested in the process of broiler meat ripening. It was set that autolysis of white group of muscles is occurring gradually, but is developing quickly enough. In 4 hours after slaughter the changes, observed in muscle tissue, are typical for early stages of autolysis, achieving the maturity in 24 hours after slaughter.

Tishyn O. L., Kotsiumbas H. I. Histostructural characteristics of white rats' liver at administration of E-Selen together with Closaverm-A // *News of Poltava State Agrarian Academy.* – 2013. – № 3. – P. 118–122.

The article shows the influence of E-selenium on condition of white rats' liver at daily introduction of

Closaverm-A in therapeutic dose during 14 days. On the 7th day we observed the development of dystrophic changes together with beam structure impairment in peripheral part of particles, and on the 14th day – activation of regeneration processes, and full recovery of beam structure was observed on the 21st day after last introduction of Closaverm-A.

Perebiynis A. V., Lukyanova G. O. Influence of acaricidal herbal drugs on cellular composition of the hemolymph of bees // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 123–125.

The effect of various herbal acaricides (herb wormwood, eucalyptus leaves, smoke of horseradish root) on the body the bees, namely the cellular composition of hemolymph is studied. Treatment with the use of smoke of roots of horse-radish renders a positive effect on normalization of cellular composition of hemolymph. An amount of encytoides and platocytoides in the hemolymph of bees of the family, infested by varroatic ticks, practically corresponded to the physiological indexes after treatment. Acaricides treatment with the use of grass of wormwood and leaves of eucalyptus also had a positive effect, however it was weaker. The best effect on normalization of haemolymphogram of bees was rendered by treatment with smoke of roots of horse-radish.

Lisova N. E., Pyatnychko O. M., Maksymovych O. A., Bassarab V. P., Mykhalus G. M. Immunophysiological indices of calves under the influence of antimicrobial medicinal product Cefinel // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 126–128.

The article analyzed the dynamics of immunological and biochemical indices of calf organism at application of antimicrobial medicinal product Cefinel. The results of conducted tests showed the influence of medicinal product on cell factors of organism resistance. Received data of leucogram and protein metabolism had positive prognostic significance and showed therapeutic efficacy of Cefinel. Research has established that after the course of antibiotics to animals in the experimental calves' hemogram was normalized.

Panikar I. I. Biochemical characteristics of the formation of the piglets of the first day of life // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 129–132.

The level of many indicators of clinical metabolism, especially protein fractions in the blood serum of piglets in the «pre-colostrum» period significantly differ from that of the piglets of the first day of life fed by colostrum. Changing the parameters of protein metabolism is associated with intake of colostrum proteins. Increase of ALT, LDH levels of glucose, serum total bilirubin with a decrease of alkaline phosphatase and urea in the blood indicates a stressful condition of the body, which can be explained by a stress factor, obtained by the body during and immediately after birth.

Kravchenko S.A. Method of the bladder perfusion in ultrasonic diagnosis of urolithiasis of domestic cats // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 133–135.

Research has established that the use of perfusion of the

bladder during ultrasound can increase the informativeness of diagnosis of urolithiasis in domestic cats. Introducing isotonic sodium chloride into the bladder provides its content and improves visualization of urolites and urinary sediment. In difficult cases (stones adhesion to the mucosa, empty bladder) this method improves the efficiency of diagnosis of disease.

Rudenko A. A. The survival, predictors of cardiac death, lethality prediction in the dogs with combined mitral-tricuspid insufficiency // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 136–139.

Basing on results of the plural Cox's analysis of proportional intensities three independent predictors of a lethal outcome of illness are detected. They are: presence of pulmonary edema, sex, functional class of chronic cardiovascular failure. The effective model of a lethality prediction in sick dogs during one year of supervising, taking into account the main independent predictors, is developed. The received model is characterized by high level of self-descriptiveness (83,1 %), sensitivity (85,7 %) and specificity (77,8 %).

Zhyla M. I., Mykhaliyk O. V., Bassarab V. P., Maksymovych O. A. The influence of probiotic medicinal product probion on hematological and certain immunological indices of broilers // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 140–143.

The article presents data on the influence of probion on growth dynamics and also hematological indices of broilers on the 15th, 30th and 43rd day of application. It is found that chickens injected with the drug probion more intensively increased average daily gain and body weight. The hemoglobin level was raising, there was increase of leucocyte quantity and phagocytic activity of pseudoeosinophil(e). The biggest difference of indicators was identified in chickens fed with probiotic probion in a dose of 1 g/kg food.

Antipov A. A., Ponomar S. I., Goncharenko V. P., Miskova J. A., Koval A. Y. Efficiency of Vermik 1% solution in mixed intestinal nematosis of pigs // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 144–146.

The article presents data about spreading of swine mixed nematodosis on the farm, age dynamics and efficiency of Vermik 1 % solution. Research found that in nematosis of swine gastrointestinal channel of different age and production groups of swine, the pathogens of askarosis (EI = 50,56 %), trihurosis (EI = 10,56 %) and oesofagostomosis (EI = 18,33 %) appear most often. The efficiency of antihelmintics of macro cyclical series Vermik 1 % injection at askarosis, trihurosis and oesofagostomosis (EE and IE = 100,0 %) was defined.

Kyrylovskij S. M. Histological characteristics of intercellular components of papillary dermis of the skin of heifers of different breeds in postnatal ontogenesis // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 147–150.

Papillary dermis layer of skin of heifers has a complex heterogeneous organization of intercellular substance of connective tissue and topographically divided on

morphological characteristics of collagen, elastic, reticular fibers and basic substance on several levels. Growth of papillary dermis of heifers' skin is accompanied by internal structural transformations of papillary dermis. At an early age the differences in the architectonics of collagen network on subepidermal level of papillary dermis in various breeds of heifers are clearly seen.

Kuzmenko A. B. Organic farming as a factor of European integration of Ukraine // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 151–155.

The necessity of the development of organic farming in Ukraine, as a condition of growth of exports of agricultural products to the European Union was grounded. That at the same time ensures the preservation and reproduction of the qualitative characteristics of land resources. It is proved that the trend of demand for organic products in the European Union and the available high-quality and environmentally friendly land resources in Ukraine create the preconditions for enhancing organic production and corresponding exports. The problems hindering the implementation of the farming system and proposals for their solution were defined.

Shupik I. I. Increase of working age for women as one of the levers of influence on the macroeconomic situation in Ukraine // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 156–159.

The article is devoted to the problem of increasing the working age for women in the context of improving the macroeconomic situation in the country, because without the active use of their economic potential the country's major changes, the restoration of social justice are not possible. The factors that objectively determine the increase in the age limit for women are defined. The conformity of these modern macroeconomic reforms with the country needs is found out.

Tyagunova N. M., Gudzenko M. Y. E-tailing: nature and characteristics // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 160–162.

The article summarized and systematized approaches of domestic and foreign scientists to determine the nature of the concepts of «E-commerce» and «Internet-commerce». The authors give a definition of «E-tailing» based on the analysis of the main components of trading activities undertaken by telecommunication capabilities of the Internet: E-tailing is a form of trade, at which all activity of selling or buying, is provided by the Internet. Thus internal processes, related to organization of trading activity, can be realized by different electronic methods.

Tereshchenko I. A. Formirovanie strategic directions of increase the competitiveness of the suckling cattle breeding // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 163–167.

A complex research of the intensity of external marketing environment influence on the formation of strategic lines for improving the competitiveness of dairy cattle was conducted. The features of the development of dairy market in Poltava region and four types of the influence continuity of PEST-factors on milk producers were analyzed. According to the trends of the development of regional

dairy market and to the position of the economy and its goals formed strategic lines for improving the competitiveness will ensure a sustainable development of dairy farming in region.

Dmitrikov V. P., Padalka V. V., Protsenko A. V., Kolomeyets V. I. Processing of exhaust leaden-cadmium galvanic elements // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 168–170.

The results of researches on the reagent processing of exhaust leaden-cadmium galvanic elements and accumulators which serve as the second raw material for electrical engineering industry are produced. The features of the technological planning, ecological and economic aspects of processing, are considered. The stages of the processing of exhaust leaden-cadmium galvanic elements and accumulators are analyzed. The improved methodology is offered and the flowsheet of processing is developed.

Lykhvenko S. P., Kharak R. M. Analysis of work of arable aggregate with the tractor of MTZ-80 at the differential and blocked interwheeled drive // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 171–174.

The results of experimental research of work of arable aggregate are presented in composition of the tractor of MTZ-80 and hinge-plate plough on sandy-loam soil at the differential and blocked interwheeled drive of back bridge. It is set as a result of analysis of the obtained data that at the blocked drive tangent tractive of tractor force increases in limits from 3, 99 to 21, and 5 % as compared to a differential drive. The increase of tangent force takes place due to the increase of twisting moment on a right wheel that is in a furrow. Additional tractive force is used for overcoming of increasing force of resistance to motion of aggregate. The blocked interwheeled drive results in worsening of dirigibility of tractor and increase of expense of fuel on the average on 12 %. For maintenance of rectilinear motion of aggregate it is necessary to retain the forewheels of tractor turned to the right, thus, at the blocked drive the corner of turn of wheels increases.

Skarednov D. Yu. The chemical composition and physico-chemical properties of muscle and adipose tissue of pigs provided the use of soybean protein fodder // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 175–179.

The results of the chemical composition and physico-chemical properties of the muscle and adipose tissues of pigs fed on the diets with soya protein feed of different technologies are given: expansion as the pressure (soy protein concentrate, dry fodder – KSBSK), extraction under pressure (soybean cake), extrusion (soy extrudate). Sunflower cake is used as a control. It was found that the chemical composition and physico-chemical properties of muscle and adipose tissue of all experimental groups of pigs are at the level of normative parameters, indicating high quality pork. In the process of comparing quality indicators between the groups of analogues significant difference has not been established. However, in the muscle tissue of animals that are fed on KSBSK, the tendency of increase in the dry and organic matter, protein and energy content was observed.

ANNOTATION

Leskiv C. Y. Methods of correction of biochemical changes in the body of animals in the development of chronic nitrate-nitrite toxicoses // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 180–184.

The effects of nitrate load on the biochemical blood of pigs were disclosed, as well as methods of correction of the pathogenesis of toxicity in antioxidants were proposed. The use of methionine, fenaron and metifen at pigs in the development of nitrate-nitratin toxicity contributed to the normalization of morphological and biochemical parameters of blood of experimental pigs. Best normalizing effect on the body of pigs, which carried nitrate load metifen showed a dose of 0.9 mg/kg.

Semerunchik A. D. Changes of glucose in serum blood whey of cows during pregnancy and the postpartum period // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 185–186.

Biochemical parameters of blood serum of animals as an indicator of the body's metabolism may serve as markers of reproductive function disorders in animals. A dynam-

ics of fluctuations in the level of glucose in the blood serum during pregnancy and postpartum period in cows of all ages is given. The increasing level of glucose relative to the upper limit of physiological serum of incalvers, due to activation of energy of metabolism of the mother is determined. Reduction of glucose in the blood serum in postnatal period to physiological limits indicates return the animal to the non-pregnant state.

Goncharenko A. N. Prospects for the use of threonine in the feeding of breeding hens of domestic breeding // News of Poltava State Agrarian Academy. – 2013. – № 3. – P. 187–191.

Introduction to the wheat-corn-soybean feed during rearing (18–23 weeks) and the maintenance of breeding chickens (24–51 weeks) L-threonine to the level of 0.60 and 0.63% significantly increased body weight – 5, 4%, egg production – by 5.5%, the fertilized eggs – by 1.1%, the birth of chickens – by 2.4%, the number of hatching eggs – by 6.7% and reduces the cost of feed for 10 hatching eggs by 6.6.

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Переклад англійською: *Ірина Губіна*

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