Kondratenko P. V., Shevchuk L. M. Perspectives of providing population of Ukraine with horticultural products // News of Poltava State Agrarian Academy. -2012. $-N \odot 3$. -P. 7-10.

The problem of balanced nutrition of Ukrainians, in particular, providing the human organism with the most important nutritive substances contained in fruits and berries has been examined. Distribution of the main fruit crops croppage concerning its usage, e.g. realization fresh and processed fruit has been carried out on the basis of the perspective programm of the horticulture development up to 2017. Taking into consideration the terms of the fruits and berries ripening and their possible storage period the monthly norms of their consuming by the person have been calculated as well as the provision of human organism with the vitamin C.

Pisarenko P. V., Moskalets V. V., Moskalets T. Z., Moskalets V. I. Agroecological aspects of microbial preparations application on the winter triticale crops // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 11-19.$

The sensitivity of the winter triticale genotypes to the microbial preparations activity has been studied. It has been noted that each variety of winter triticale differently sensitive to the activity of microbial preparations. Plant varieties AD 256, Slavetne, Jaguar, Vivate Nosivsky are more sensitive according to the productive indices in case of using both nitrogen-fixing and fosfatmobilizing microorganisms, plant varieties DAU 5 and Yaguar – using diazobakterin, variety Augusto – albobakterin.

Zhemela G. P., Shakaliy S. M. The predecessors influence on crop productivity and grain's quality of soft winter wheat // News of Poltava State Agrarian Academy. -2012. $-N_{2}$ 3. -P. 20–22.

The data about the influence of such predecessors as a bare fallow, peas and corn for silage on crop productivity and quality of soft winter wheat grain have been given. It has been noted that winter wheat grown after a bare fallow has the greatest crop productivity and the best grain quality indices. Corn for silage was the worst predecessor. An average crop productivity and grain quality was received after peas. Therefore, an important reserve of crop productivity increasing and its quality are scientifically justified choice of predecessor.

Zhemela G. P., Kuznetsova O. A. Influence of high quality properties on productivity and quality of soft winter wheat grain // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 23-25.$

Influence of high quality properties on elements of the productivity structure (quantity of productive stalks, number of grains in an ear, weight of grains from an ear, weight of 1000 grains) and forming soft winter wheat productivity has been investigated. It has been established that the greatest quantity of productive stalks, number of grains in an ear, weight of grains from it and also weight of 1000 grains of the varieties formed in the conditions of 2011. According to all indices of structure elements of productivity the variety Kolomak 5 was the best. Influence of variety on productivity is 20–25 %.

Primack I.D., Kupchyk V., Kolesnik T.V. Changes of agrochemical properties of standard black soil in different systems of main soil tillage and fertilizing in the central forest-steppe Ukraine // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 26{-}30.$

The influnce of the four systems of main soil tillage and fertilizing on the changes of agrochemical properties of standard black soil and efficiency of cultivated crop rotation has been shown. The statistically reliable increasing of humus content in the plow layer of soil in two crop rotation for a long shallow cultivation and applying into each hectare of arable land 12 tons of manure + $N_{87}P_{114}K_{114}$ has been established. In the field five-course rotation of the central forest-steppes Ukraine deep (28–30 cm) crop plowing in one field (under a second maize where manure is applyed) is recommended. Shallow crop plowing (10-12 cm) is recommended in the rest of the field.

Yarchuk I. I., Bozhko V. J., Voit V. A. Winter barley resistance to cold and productivity // News of Poltava State Agrarian Academy. $-2012. -N_{\odot} 3. -P. 31-34.$

Results of the research of winter barley reaction on the sowing terms and seeding rates depending on hydrothermal conditions of the year are given. Great attention is paid to the research of the dependence of the sowing terms and seeding rates on the winter barley resistance to cold. It has been established that variety Cinderella wintered better than the other varieties. The domestic variety Osnova had the greatest productivity in sowing in the optimal term for the subarea in the beginning of the third decade of September (22 Sept) with seeding rate 3.5 million germinable seeds per a hectare.

Pospelov S. V. Peculiarities of development of inflorescences and flowering of purple coneflower (Echinacea purpurea (L.) Moench) and pale coneflower (Echinacea pallida (Nutt.) Nutt.) in the forest-steppe of Ukraine // News of Poltava State Agrarian Academy. – $2012. - N \ge 3. - P. 35-43.$

The peculiarity of flowering of purple coneflower (Echinacea purpurea (L.) Moench) cultivar «Zirka Mykoly Vavilova» (Star of Nikolai Vavilov) and pale coneflower Echinacea pallida (Nutt.) Nutt.) variety «Krasunya preriy» (Prairie's Beauty) in the foreststeppe of Ukraine have been studied. For the first time according to many years' data in a production environment it has been established that the inflorescences formation of purple coneflower begins in May, massive flowering - in July. One plant per season forms 48.2 inflorescence with the mass of 184.25 g. The period of flowering inflorescence of the first-order lasts an average for 34 days, other orders - 33-43 days. One plant blooms up to 65 days. Pale coneflower begins the formation of inflorescences in May, a massive bloom - in June. The plant per a season forms 10.4 inflorescence with the mass of 30.1 g. Inflorescence of the firstorder flowers up to 15 days, other orders - 19-29 days. The total period of flowering plants lasts for 34-37 days. Research of biological peculiarities of flowering should be considered in the design of medical, food and melliferous agrocenosis of Echinacea. Also at that time of planning harvesting the surface mass for medicinal raw materials, regulating the efficiency and duration of flowering

Ryaba O. I. History and evolution of improved grain farming systems // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 44-48.$

The integral, historical and scientific, impartial and comprehensive analysis of the process and causes of the transition from the fallow and pasture (grass-multi-course) farming systems to the improved grain system has been carried out. The role of centuries-tillage practices, cultural and economic development, the contribution of scientists to the improvement and adoption in farming practice more progressive and adaptive to soil and climatic conditions farming systems has been shown. The attention to historical necessity of the development of the two branches of agricultural production: crop productivity and livestock in transitional farming systems is paid. It has been proved that the creator of the improved grain farming system is V. Levshyn.

Rozhkov A. A. Evaluation of the spring wheat crops development on the base of experimental phenological observations // News of Poltava State Agrarian Academy. -2012. $-N_{2} 3$. -P. 49–54.

The results of four-year researches concerning influence of cenotic factors such as (way of sowing and sowing rates) on the duration of separate development phases of hard spring wheat plants are given. The influence of a cenotic factor characterized by different variations of experimental factors during the interphase periods in plants' development has been proved in the experiments. Under

weakening cenotic stress in row plants sowing and less experimental sowing rates accelerated plants development phases from sowing time to bushing and also during interphase stage from tubing to flowering was observed. With this, the above mentioned variants showed a longer plant development period from full germination to tubing and from flowering to wax ripeness.

Kolisnyk I. V., Barylko M. G., Kolisnyk A. V. Agro-ecological aspects of the plant-breeding using samples of spring vetch of Poltava State Agricultural Experimental Station collection // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 55–59.

The results of long-term work about fundamental study of plantbreeding and agro-ecological value of samples of spring vetch of Poltava State Agricultural Experimental Stations collection are given in the article. Sources of economic-valuable signs are distinguished. The prospects of using macro and microsymbiontes co-operation are preliminary found out. Possible ways of using both crop and some varieties of domestic selection are outlined in developing biological agricultural system elements the with the aim of improving nitric plant feeding and protection of their rootage from soil patogens negative influence.

Shokalo N. S. Crop capacity and quality of castor plant seeds in Poltava region // News of Poltava State Agrarian Academy. $-2012. - N_{2} 3. - P. 60-61.$

Significant climate warming on our planet made possible to expand growing area of castor plant (valuable oil crop) (Ricinus communis L.) in Ukraine. Influence of climatic conditions upon castor plant growth in transitional south part of Poltava region is analyzed. It is established that high temperature and adequate rainfall during castor plant vegetation in experiment under seeding rate of 40000 items per hectare facilitated to forming crop capacity of nearly 15 centners per hectare. Mass of 1000 seeds was 270.2 g; oil content was more than 52 %. These indices ensured castor plant crop capacity of 7.8 centners per hectare.

Kulyk M. I. The influence of growing conditions on the quantitative parameters of switchgrass (Panicum Virgatum L.) in the first vegetation year // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 62-67.$

The article investigates the suitability of growing switchgrass on degraded soils with the aim of obtaining the raw material for biofuel production. Phenological observations during the growth and development of the first year plants were performed. Quantitative parameters (height and stand density) of different varieties and their interrelationship for biomass production depending on row spacing were evaluated.

Bilityk A. P., Garbar L. A., Cyganchyk S. M. The influence of cultivation technology elements on winter wheat productivity under conditions of western Polissya of Ukraine // News of Poltava State Agrarian Academy. -2012. $-N_{2}$ 3. -P. 68–71.

The influence of sowing terms and seeding rates on formation of winter wheat varieties productivity under conditions of western Polissya of Ukraine has been studied. The obtained results shows that the highest yield of winter wheat varieties on sod-podzolic soils on background of $N_{60}P_{60}K_{60}$ was formed with sowing of Zolotokolosa variety at 30.09 and seeding rate 5 million vital seeds per hectare – 6.48 t/ha and Smuglyanka variety with sowing at 10.10 and the same seeding rate – 6.32 t/ha. The best grain quality was obtained with sowing of Smuglyanka variety at 20.10 and Zolotokolosa variety – 10.10.

Romanchuck L. D. The peculiarities of 90 SR accumulation in ukrainian polissya soils long after chernobyl disaster // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 72-75.$

The paper presents the results of the investigation of the soil contamination density of 90 Sr in Zhytomyr district which is classified as a radionuclide – free territory as in Korosten and Narodychi districts which suffered as a result of the Chernobyl disaster. Our investigations proved that the density of 90 Sr and 137 Cs

fallout in the districts of the Northern Ukraine testify to considerable differences in the contamination levels. Thus, the contamination density in Zhytomyr district was on on average 1,4 kBq/m², and in Narodychi district the density reached 30,3 kBq/m². **Dychenko O. Yu.** Intersystem method of predicting the mass

reproduction of sugar beet main pests // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 76-80.$

Historical information about mass reproduction of sugar beets main pests in the Left-bank Forest-steppe of Ukraine (name of kinds, years of mass reproductions in space and time) are given. On the basis of intersystem method of prediction algorithms of mass reproduction of sugar beet main pests, namely cutworml, beet webworm, cabbage moth and weevil are developed. And also prognosis of beginning the next flashes of their quantity on the period to 2018 year is developed.

Bagan A. V. Phenol influence on winter wheat grain quality // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 81-82.$

118 soft winter wheat varieties of different geographical origin are analyzed by grain quality indices. The varieties are divided into groups depending on grain coloration with the help of phenolic test. The level of manifestation of grain quality indices of winter wheat varieties according to groups of phenolic test is established. The 5th group varieties with better grain quality are selected. It is established that winter wheat varieties Levada, Zolotokolosa, Remeslivna, Harus are valuable sources for getting selecting material of high quality.

Ivanytska I. O., Senenko N. B., Sanzharevska O. I. Soil and artesian water reseach in the private sector of Poltava (dendropark area) // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 83–86.

The results of the complex experimental research of soil samples and main physical-chemical characteristics of decentralized water supply selected in the center in Poltava (Dendropark area) are given. Analysis of influence of water-soluble soil component on this aquifer is conducted. The investigated water does not meet the physiological needs of the human body has been proved on the basis of results and comparison them with the requirements established by State Sanitary Regulations and Standard. Conclusions about regular control of soil and drinking water quality and improvement for using by population are drawn.

Senenko N. B., Chala N. V., Romanovich I. S. Reseach of the content of soil and graund water contaminants in the village of Ivanivka, Karlivka district, Poltava oblast // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 87-90.$

Complex research of soil samples is done and the main physicalchemical indices of water samples from centralized and decentralized water supply in the village of Ivanivka, Karlivka district, Poltava oblast have been determined. Soil state is defined like degraded gray soil which requires regular organic fertilizer applying. Analysis of influence of water-soluble soil component on the given aquifer has been conducted. Water quality discrepancy of centralized water supply to human physiological needs has been proved, and decentralized water supply does not meet the requirements of State Sanitary Regulations and Standard.

Birta G. A., Burgu Yu. G. Meat and fat productivity of pigs // News of Poltava State Agrarian Academy. $-2012 - N \ge 3 - P.91-95$.

Pigs of domestic and most foreign breeds, and also their crossbreeds are characterized by high precocity and suitability for all types of fattening. At the intensive fattening to 6–7 monthly age pigs have 100–120 kg of live weight, costs on 1 kg of liveweight gain are not more than 4,5 feed unit. Pigs which during the row of generations unsystematic bred in the conditions of bad feeding have such live weight only in age older than one year at an the expense of 1 kg of live weight gain 8–10 feed units and more. Meat of such pigs is rough, with the thick layer of hypodermic fat. With the improvement of feeding and terms of maintenance their precocity increases, but at the same time remains lower than animals' which were systematically selected on higher precocity and high output of meat and which were bred in the conditions of the valuable feeding and proper maintenance.

Ryzkova T. M., Vassilyev V. S., Goncharova I. I., Livoschenko I. M. Dispersity of milk fat under the influence of iodidecontaining supplements in the goat ration // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 96-101.$

The results of influence of hydrous creep-feeding on the technological peculiarities of goat milk and in particular on the dispersity of fat globules have been shown in this article. During milk testing of goats, which had some additional creep-feeding such as «Elamin» and potassium-iodine in their ration it has been determined that a fat component has higher dispersity of fat globules thatincreases milk assimilability by human being. Goat milk which contains iodine components becanse its not needed to conduct homogenization.

Vasileva O. O. The rational and long term use of pedigree cocks in the selection of hen of egg direction productivity // News of Poltava State Agrarian Academy. $-2012. - N_{\rm P} 3. - P. 102-104.$

The problem of expedience and efficiency of the use of two- and three-year cocks in the selection of bird of egg direction productivity with cell technology of maintenance and in the system of artificial insemination has been researched. Sperm quality of cocks does not change with the age, reproductive capabilities of old cocks and indices of incubation qualities of eggs at the use them in the system of artificial insemination are not diminished. Egg productivity of daughters, got from the cocks of the first year, substantially lower, than from daughters, got from 2–3-years-old cocks. It is recommended to use old cocks very limitedly and, mainly, on groups of multipliers of clean lines for an increasing desirable genotypes in the flock. Cocks in age of 2–3 years are fully estimated on genetic and reproductive parameters and their use in breeding of egg bird increases the selection effect.

Postil Y. O., Protas N. M. Optimization Of Pigs Herd Turn In An Agricultural Enterprise With Using Of Mathematical Design // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 105-107.$

In this article the features of application of mathematical design methods for optimization of pigs herd turn on the example of agricultural enterprise of LTD «Savinci» Mirgorodsky district of Poltava area with the use of COMPUTER and program Microsoft Excel are considered. The model of optimization of pigs herd that allows to plan the necessary initial quantity of population of pigs on the end of year and motion of population for a year between sexualage-old by groups by building on has been developed.

Paliy A. P., Zavgorodniy A. I. Influence of bactericidal concentrations of disinfectant preparations «DZPT-2» and «Ekocid C» on the ultrastructure of mycobacterium // News of Poltava State Agrarian Academy. -2012. $-N_{\odot}$ 3. -P. 108–111.

The substantial ultrastructure changes in the cells of atipical mycobacterium of *M. kansasii, M. gordonae, M. xenopi, M. flavescens* after influence of aldehydic disinfectant «DZPT-2» and oxygen preparation «Ekocid C» have been established by electronic-microscopic researches. A difference in operations disinfectant preparations on microbal cells, that is related to the features of mechanism of active-operating substances activity which are included in their composition is marked. It is established that disinfectant preparations in the bactericidal modes destroy mycobacterium due to the creation of irreversible changes of their submicroscopic organization.

Shkromada O. I. An estimation of bactericidal properties of complex metallic disinfectant // News of Poltava State Agrarian

Academy. - 2012. - № 3. - P. 112-114.

The data on research of bactericidal action of complex metallic disinfectant are given in article. Phenolic factor which expresses the relation of concentration of solutions of investigated substance to concentration of phenol that defines in an equal time interval at identical temperature equivalent temperature disinfectant effect was defined for this purpose. Albuminous index, an indicator of decrease in activity of a disinfectant in the presence of fiber was also defined. As a result of researches it is established that, bactericidal action complex metallic disinfectant is stronger than bactericidal action on processed surfaces during contact with albuminous substances, but in that case its efficiency decreases in 2,92 times. That is considered at installation of effective concentration of working solutions KMD.

Ulko L. G. The study of embryotoxic and teratogenic properties of the drug Oksiprol // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 115-121.$

The article presents data about the embryotoxic and teratogenic properties of the drug «Oksiprol». It is established that intramuscular injection of the drug «Oksiprol» female rats at a dose of 0.1 ml/kg at 1–6, 6–16 and 16–20 days of pregnancy does not have embryotoxic and teratogenic effects on embryos. The essential difference between the fecundity of females experimental and control groups is not established. The average number of fetuses per female in the experimental and control groups ranged from 9,1 to 9,6. Infant rats, obtained from the experimental females were viable and kept up with control ones in growth and developmen.

Pisarenko I. I., Pisarenko of P. I., Pisarenko I. H., Luk'yanenko I., Panchenko W. A., Pisarenko Y. G. Ecologo-economical efficiency of the green manure usage // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 122-126.$

The results of studies of economic efficiency green manured crops are given. It has been determined that the biomass cost of holy clover, vetch winter, buckwheat, sweet clover reaches from 500 to 3000 hrn. per hectare. Cost of nutrients (NPK), accumulated in the biomass ranged from 1000 to 2500 thousand per hectare. The total economic impact of green manured crops in Poltava region, which is from 1500 to 6000 thous. per hectare has been calculated.

Pomaz Yu. V. The modern state and directions of small enterprises in Poltava oblast // News of Poltava State Agrarian Academy. $-2012. - N_{\text{P}} 3. - P. 127-131.$

The modern state is investigated in the article, the dynamics of basic indices of small enterprises development in Poltava oblast is analysed. Activity of local-authority is examined in relation to the increasing efficiency of small enterprises activity. The problems of small enterprises development in Poltava oblast are revealed. The directions of these problems decisio are defined. The small enterprise sector, as the meaningful element of development of market economy of Poltava oblast grows into an important stabilizing factor, possible mean of solving complicated economic and social problems.

Shyiann N. I. Cover of Expenditure in Milk Production at Agricultural Enterprises: the Stale and Factors of Formation // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 132–136.

The actuality of the problem of increasing the expenditure cover level during the process of milk production and the possible ways to solve it have been elucidated in the work. The influence level of sale price and cost priceof a production item on the level of expenditure cover at Ukrainian agricultural enterprises which produced and sold milk in 2010 has been determined by using grouping methods. The existence of a close feedback between indicators of cows productivity and the unit cost of production has been proved. Existence of dependence in 2010 between the price and cows productivity, which vary in the same direction-are increasing. **Fastyvets N. P.** Experience of the marketing strategies realization in agricultural activities of enterprises // News of Poltava State Agrarian Academy. -2012. $-N_{2}$ 3. -P. 137–141.

The theoretical aspects of the marketing strategies development and their improvement on the basis of rational approaches, the possible combinations of implementation and experience of their realization at modern agro-industrial enterprises in Ukraine are considered. Formation of the marketing strategy is a significant and complex stage of research. Development of strategic marketing principles should be based on the system approach that meets the compliance of the objective economic laws, especially the supply and demand trends, and the object of planning. Marketing strategies are specified by defining the principles of behavior of all market participants and the establishment of the general line of the company.

Dmitrikov V. P., Padalka V. V., Protsenko A. V., Kolomeets V. I. Technology of processing exhausted leaden-zinc galvanic elements // News of Poltava State Agrarian Academy. – $2012. - N \ge 3. - P. 142-145.$

According to the results of laboratory researches of technologies of processing exhausted leaden-zinc galvanic elements and accumulators the ecologically safe chart of their utilization is offered. The stages of investigational chemical processes and results of their transformations which take place at the complex processing of exhausted accumulators are given. The improved methodology and chart of technological process utilization of leaden-zinc sources of current with the use of existent and standard equipment for the processes of processing chemically active reagents is offered.

Kiva O. V., Stasuk T. A., Hodursky V. E. Development of method of emitter application on the electrodes of gas-discharge lamps with preliminary heating // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 146-147.$

The method of emitter application on the electrodes of gasdischarge lamps by dipping them in the emitter suspension with preliminary heating has been developed. Experimental studies were carried out on electrodes of DRL-250 lamps on study the effect of preliminary heating on emitter weight gain, applied on the electrode and the degree of filling electrode internal cavities with emitter on the base of which the technology of emitter application on the electrodes of gas-discharge lamps with the preliminary heating has been offered. The article also gives the results of experimental tests and obtained the comparative characteristics for methods of applying the emitter on electrodes in HID lamps with the preliminary heating **Hryhoryeva O. V., Vasuta V. B., Vasuta V. V.** Methodical approaches of determining necessity in specialists with higher education // News of Poltava State Agrarian Academy. – 2012. – $N_{\rm P}$ 3. – P. 148–152.

The problems of determining necessity in specialists with higher education in modern economical conditions and activity of higher school on training specialists are considered in the article. It has been underlined that today in Ukraine the calculation of necessity in specialists with higher education is not done, that results in structural disproportions in training specialists of higher qualification. Basic factors that must be taken into account at forming necessity in specialists with higher education have been considered for overcoming indicated problems. The method of calculating standard for determining necessity is offered.

Boiko I. A. Adaptation of Ukrainian legislation to european one in the field of quality management by underground water // News of Poltava State Agrarian Academy. -2012. $-N_{2}$ 3. -P. 153–158.

The comparatively-legal analysis of legislation of European Union (farther - EU) and Ukraine in concerning realization of the principle of sustainable development in the process of quality management of drinking-water and protection of underground water resources.has been carried out. The process of formation, modern state and progress of regulation of legal relationships in the management by groundwater

have been shown. Certain aspects that must be taken into account in the process of perfection of control system by water resourceshave been defined; recommendations on harmonization of legislation of Ukraine in the field of groundwater with the EU are given.

Ponomarenko S. V. Features of cabbage moth development (Mamestra brassicae L.) on the cultivated cabbage in the Poltava area // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 159-161.$

The cultivated cabbage occupies a leading place among vegetables. In all regions of growing it is annually damaged by pests, as a result without effective measures harvest loss is 30–70 %. Complex of pests cruciferous has about 300 kinds, among them there are ten kinds of specialized pests. The problem of features of development and long-term seasonal dynamics of quantity of representative of cultivated cabbage leaf beetles thar is cabbage moth in the Poltava area has been investigated.

Shershova S. V. Biological activity of extracts of Echinacea pale depending on the temperature // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 162–166.

The biological activity of extracts of pale coneflower (Echinacea pallida (Nutt.) Nutt.) at the different temperatures was investigated. The adaptive effect of extracts of pale coneflower at the temperature 10 $^{\circ}$ C and 15 $^{\circ}$ C was proved. Testing extracts at +20–25 $^{\circ}$ C after 24 hours in the most dilutions retarded growth of roots of barley, but after 48 hour had growth-stimulating effect only at high concentrations (about 15.71 %). It has been established that the temperature 30° C extract slightly stimulated the test system at concentrations of 10^{-2} – 10^{-4} % (+5,02–7,46 %) at the first dimension and at a dilution of the extract 10^{-6} – 10^{-8} % (+5,15–11,34 %) after 48 hours. It is concluded that extracts of pale coneflower contains biologically active substances, whose activity depends significantly on the exposure temperature.

Shkurko V. S. The influence of weather conditions, predecessors and fertilizers on the yield of brewer's barley varieties // News of Poltava State Agrarian Academy. -2012. $-N_{\odot}$ 3. -P. 167–170.

During the four-year study it has been established that conditions of growing years have the greatest influence on the yield of brewer's barley. Fertilizers are the most important controlled factors. Provision of barley plants with fertilizers N30P30K30 leads to the sigficant yieldincrease, regardless of its predecessor. Varieties properties also have a significant impact. A significant interaction between predecessors and varieties characteristics, predecessors and fertilizers, varieties and fertilizers, the magnitude of the influence depends on growing conditions has been established. The use of fertilizers Nutrivant Plus brewer's barley results in slightly lower yield (0.58–0.61 t/ha).Proper selection of varieties even further can bring 0.26–0.37 t/ha.

Hoysyuk L. W. Influence of variety (hybrid) on the productivity and biochemical indexes of vegetable marrow in the conditions of south part of western Forest-Steppe of Ukraine // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 171-173.$

The problem of biochemical composition of vegetable marrow variety of Chaklun and hybrids of Mostra F1 and Sungroom F₁ is considered, sowing of which was conducted in the first ten-day period of May after according to the chart of placing plants 70x70 sm. The content of dry matter, sugar, vitamin C and nitrates is analysed in the fruit of vegetable marrow. The analysis of the productivity of variety and hybrids of vegetable marrow in the conditions of south part of western Forest-Steppe of Ukraine is also given. It has been established that the hybrid of vegetable marrow Sungroom F1 was the most productive (87,65 t/ha) as a result of researches.

Stezhko A. V. Ecological assessment of the heavy metals content in soils in Zhytomyr region // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 174-176.$

One of the most common soil contaminants are heavy metals. They enter in the soil as a result of anthropogenic factors, one of which is human activity. On agricultural lands in private ownership over 60 % of crop production is grown, so the analysis of heavy metals in these areas is very important. This work presents the results of researches of the heavy metals content in the arable soil layer which was selected from the private farms of the village Volitsa, Zhytomir region.

Zubenko V. V. Pigs productivity depending on intensity of boar and sows growth in the breeding period // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 177–178.

The results of researches on the study of the productivity of pigs of large white breed depending on homo- and heterogeneous combination of boars and sows of different growth intensity in the period of their breeding. It has been established that the intensive breeding positively influences on their reproductive abilities, and also on growth and saving litter in the suckling period. Difference between I and IV experimental groups was 37,3 a pigling. It is recommended to use boars and sows of the intensive breeding.

Svintitskaya K. V. Sanation of vivarium air with a help of ultraviolet emission // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 179-181.$

The possibility of using ultraviolet bactericidal irradiator of closed type «Fiolet-T04» for sanitization in the poultry's accommodation in bird's presence hasben shown. Optimal operating conditions of this irradiator and its use for the sanitization of the poultry's accommodation have been determined. It is The substantial disinfectant effect of this irradiator on the general germ pollution in the poultry-houses (quantity of the microorganisms decreased by 28 %) and absence of the bad influence on the poultry have been also determined. Poultry safety was **V**. Grounding of veterinary prevention and permanent prevention on rabbit farms // News of Poltava State Agrarian Academy. -2012. $-N_{2} 3$. -P. 182–185.

Based on the literature review and personal research on methods for assessing the impact of confounding factors on the rabbits health the plan of general veterinary prevention (GVP) of rabbit farms for developing specific veterinary technology of rabbit breeding products has been offered. The plan includes significant new demands as progressive technology, welfare of rabbits maintenance systems, balanced nutrition with valuablel feed, grounds of species selection and breeding work with herd. Based on the proposed plan GVP started correction of breedingg technology, maintenance and breeding rabbits in Ukraine in «Ecokrol» Volochynsky district, Khmelnytsky region.

Semenova A. Yu. Economic management mechanism of agricultural enterprise: theoretical and methodological aspect // News of Poltava State Agrarian Academy. $-2012. - N \ge 3. - P. 186-190.$

The essence and the structure of the economic management mechanism of agricultural enterprise is considered. The conclusion has been made on the basis of generalizing different approaches concerning term «economic mechanism» and its specifics – economic methods of management which function basing on giving and refusing material (financial) reward. At the same time they leave freedom of making choice of behavior variants for the

management object and just create conditions stimulating to achieve the set goals. The necessity of creating economic management mechanism in competitive environment is stressed.

Marenichenko V. V. Anti-crisis management in small and medium business // News of Poltava State Agrarian Academy. $-2012. - N_{\odot} 3. - P. 191-193.$

Actuality of study in crisis management system for small and medium business in Ukraine has been substantiated. The major advantages of small and medium enterprises have been analyzed. Studied Anti-crisis measures which should be introduced at the state level have been studied. The most vulnerable areas of the business where you want to apply measures of prevention and resist the crisis have been discovered. Influence factors on the decline of small and medium enterprises and the system of anti-crisis measures, as a mechanism for increasing the efficiency of the enterprise have been determined.

Zinchenko T. V. Strategy essence of development financiallycredit relations in the production // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 194–197.

Essence of strategy concept of development financially- credit relations in the production defined as the totality of norms, directions, methods and rules of functioning set on thelong term period in the process of forming, distribution and using financial resources, that will provide the stable functioning of production, its high competitiveness with the purpose of strengthening enterprise position on the market, increases of capacity for a survival in the conditions of market instability. Essence of concepts «strategy», «development» and «financially-credit relations» have been considered. The values of development strategy of financially-credit relations for functioning production have been determined.

Pohilenko N. M. Infrastructure of the agricultural consulting in the Republic of Kazakhstan: experiences for Ukraine // News of Poltava State Agrarian Academy. -2012. $-N_{\odot} 3$. -P. 198–201.

The results of the study concerning the conditions and experiences of the formation and organization of the spreading system of agricultural knowledge and information in the Republic of Kazakhstan have been given. The structure of consulting support of the agriculture producers in accordance with information and advice, analytical marketing, information technologies and exhibition and fair activities has been considered. The conditions of the development of spreading system of agricultural knowledge and information in the Republic of Kazakhstan with the possible adaptation to the conditions of Ukraine have been generalized.

Marievska M. U. Particularities of material and technical basis of the farms in Poltava oblasta in the epoch of free entrepreneurship (1861-1917) // News of Poltava State Agrarian Academy. – 2012. – Nº 3. – P. 202–206.

The components of the material and technical basis of the cottages in the Poltava region in the second half of the XIX century and at the beginning of the XX century have been analyzed from the point of view their impact on the competitiveness of the small commodity producers in the specific historical conditions, which had been formed on the territory of the Naddniprjanska Ukraine after the abolition of serfdom in 1861.

Формат 60х90/₈. Ум. друк. арк. 28. Тираж 100 пр. Зам. № 253. Видавець і виготовлювач: Полтавська державна аграрна академія. Адреса: 36003, м. Полтава, вул. Г. Сковороди, 1/3. Свідоцтво суб'єкта видавничої справи ДК № 2174 від 26.04.2005