

**V.V. Andrijenko, H.A. Lapenko, A.A. Dudnikov, S.I. Chornenky.** On development energyeconomical technologies in the agriculture on the modern stage // News of Poltava State Agrarian Academy. – 2006. – №4. – P.9-11.

Considered questions of condition of economic relations in agrarian industrial complex. Given guidelines of development energyeconomical technologies in the agriculture on the modern stage.

**L.F. Babitsky, V.I. Tarasenko, G.A. Lapenko.** Reduction of power inputs and increase of an overall performance of tillage machine-tractor units // News of Poltava State Agrarian Academy. – 2006. – №4. – P.12-16.

On the basis of comparison of recommended speeds of tillage machines and tools in view of type of their working bodies, acuteness of a cutting edge of blade and optimum speeds of movement of wheel tractors are offered to the recommendation on increase of an overall performance of tillage machine-tractor units.

**P.S. Bernyk, A.B. Nosykovsky.** Technological test of vibrating dryer // News of Poltava State Agrarian Academy. – 2006. – №4. – P.17-19.

This results of scientific research of drying friable materials are observed in this article. Such parameters of drying were optimized as temperature of cereal and amplitudes of it. The results are the following, we need electriciti in 3-5 minion in comparison with traditional ways of drying friable materials.

**A.I. Boyko, V.M. Savchenko.** Analytical research of monometallic serial grinder hammer's wear process // News of Poltava State Agrarian Academy. – 2006. – №4. – P.20-24.

The paper presents the mathematical analysis of monometallic hammer's wear process. The hammer's working surface radius of wear process has been determined.

**V.M. Bulgakov, I.V. Holovach, M.G. Berezovyy** Theoretical research of free lateral oscillations of the root crop fixed in soil // News of Poltava State Agrarian Academy. – 2006. – №4. – P.25-27.

The theory of free lateral oscillations of a root crop body in soil is developed at its vibrational digging up when the disturbing force from the vibrational digging out tool acts in a direction of a root crop translational motion.

**B.I. Butakov, S.I. Pastushenko, V.A. Artukh, D.D. Marchenko.** Work-hardening of details by superficial flowage with the purpose of increase of their contact durability and wear-proofness // News of Poltava State Agrarian Academy. – 2006. – №4. – P.28-30.

The results of development of methods of combination of clean and consolidating rolling-off of details by rollers are expounded. Information of researches of influencing of rolling-off by rollers is resulted on wearproofness of pair of friction and longevity of details working on crumpling at the contact loadings.

**A.Ph. Holovchuk.** The methods of mathematical model dynamical and fuel-economic eponente machines aqgregate // News of Poltava State Agrarian Academy. – 2006. – №4. – P.31-36.

Propose new methods mathematical model move-dynamic and fuel-economic exponents machines aggregate.

**O.H. Hurtovyvy, S.O. Tynchuk.** The investigation deformation manulayers plates on the absolutely hard basis for optimisieren model // News of Poltava State Agrarian Academy. – 2006. – №4. – P.37-40.

Replacement of cross-section loaded plate leaning on absolutely hard basis is offered by symmetrically attached plate. It allows to consider only unflexural deformation, to reduce amount of unknowns and the order of differentiation of settlement system

of the equations. With calculations it is confirmed efficiency of such approach.

**V.G. Dubenets, O.V. Savchenko.** The vibration of cylindrical shells from the viscoelastic composite materials // News of Poltava State Agrarian Academy. – 2006. – №4. – P.41-44.

The analysis of natural shapes and frequencies of vibration of cylindrical shells from the viscoelastic composite materials is given.

**V.P. Dudenko, L.G. Sakalo, V.M. Sakalo.** The Totals of activity on advancing automation of master schedules in agriculture // News of Poltava State Agrarian Academy. – 2006. – №4. – P.45-47.

Have described perennial activity PSAA in a direction of automation of processes in agriculture. In the fundamentals of a direction usage high frequency capacitive or magnetic sensors lies.

**A.A. Dudnikov, A.I. Belovod, I.A. Dudnikov.** The similarity of stand and operating tests of workings organs of beet haverster // News of Poltava State Agrarian Academy. – 2006. – №4. – P.48-49.

The terms of similarity of the modes of stand and operating tests of workings organs of sveklouborochnykh machines are considered in work.

**O.I. Zavgorodniy, O.V. Obikhvist.** Cleaning of seed of buckwheat on a vibration separator with small sounding boards // News of Poltava State Agrarian Academy. – 2006. – №4. – P.50-51.

Work of vibrofrictsiynogo separator on cleaning of seed of buckwheat with the simultaneous sorting is explored. Experimentally the led possibility to of leading to of seminal material to the high sowing one ratounoucu.

**O.M. Zakharchenco.** The Control of equivalent mathematical models powerfuel, ecological and economical index an engine MeMZ-245 at his feed spirits combinations // News of Poltava State Agrarian Academy. – 2006. – №4. – P.52-54.

The mathematical models which describe an engine MeMZ-245 at his feed with petrol and bioethanol as an user of fuel, air, energy and extrass of harmful matters source are showed.

**E.Y. Klymenko, V.S. Dorophejev.** Separate aspects of studing condition compounds system // News of Poltava State Agrarian Academy. – 2006. – №4. – P.55-58.

The offered organizational-technical system of process of supervision over separate building designs and constructions which provides reliable operation under condition of expenses for all actions. The resulted recommendations concerning definition of a technical condition by service of supervision over building and constructions.

**A.O. Korpach.** Features of utilization fuel ethanoe on the transport // News of Poltava State Agrarian Academy. – 2006. – №4. – P.59-62.

The road tests results of car ZAZ-1102 «Tavriya» at the feed of it engine with petrol and fuel ethanol are resulted.

**T.H. Lapenko, A.A. Dudnikov, A.I. Belovod.** To the question deformation material by processing of pressure // News of Poltava State Agrarian Academy. – 2006. – №4. – P.63-65.

The questions of finding of correlation between moving of the processed material are considered with the purpose of determination of indemnification of wear at renewal.

**A.T. Lebedev, S.A. Lebedev.** Optimization of rate of movement of tractor aggregate // News of Poltava State Agrarian Academy. – 2006. – №4. – P.66-71.

The criteria of optimization of choice of speed of tractor aggregate are grounded on productivity and economy.

**V.P. Mateychyk, A.K. Kolodijchuk.** Theoretical definition of friction parameters in hinges of tractor tracks // News of Poltava

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State Agrarian Academy. – 2006. – №4. – P.72-75.

The technique of definition of factor and the moment of friction in hinges of tractor tracks proceeding from a condition is given, that friction force depends from distributions contact pressure which results from interaction of microroughnesses of rubbed surfaces.

**S.I. Osadchiy, M.S. Vikhrova, V.M. Kalich.** Stable load moment hydrotransmission's dynamic identification // News of Poltava State Agrarian Academy. – 2006. – №4. – P.76-78.

The article includes stable load moment hydrotransmission's transfer function determined experimentally and identification methodic.

**V.I. Pastukhov.** The problem of power units in plant-grower: conformity and profitability // News of Poltava State Agrarian Academy. – 2006. – №4. – P.79-82.

The charges of resources in the mechanized plant-grower, appraised in power units, allow to develop perspective energy of and ecology saving technologies of production of vegetable goods at the high level of power profitability.

**I.L. Rogovskyy.** Regulation of preventive measures of maintenance service of agricultural machines // News of Poltava State Agrarian Academy. – 2006. – №4. – P.83-86.

In paper the results of analytical researches concerning to formation of a regulation of preventive measures of maintenance service of agricultural machines are considered.

**O.U. Romanishyn, M.L. Zaiets.** The boot for continuous sowing of farm crops // News of Poltava State Agrarian Academy. – 2006. – №4. – P.87-89.

The boot refers to a tubular-hoe type equipment designed for uniform distribution of seed over a 10 cm – strip cultivated area, to a given work depth making it possible to provide a continuous sowing with a 15 cm – row width to cause about 10 per cent increase in crop yield and reduction in mineral fertilizers cost.

**T.S. Skoblo, A.I. Sydashenko, A.V. Kharjiov.** The restoration of details with a plasma-powder method // News of Poltava State Agrarian Academy. – 2006. – №4. – P.90-92.

A plasma-powder method of the coverage causing for restoration of details is chosen In work. restoration parameters and powder composition on the basis of iron are developed. An economic effect from the inculcation of technological process is got.

**V.O. Uleksin, P.M. Kukharenko.** Expediency of the electrification of the plant-growing // News of Poltava State Agrarian Academy. – 2006. – №4. – P.93-95.

Exhaustion of the supply of mineral oil and increase in cost in cost of mineral oil products determine problematical character of further wide application to internal combustion engine and development of branches, which are based on their use. The newel-known alternative fuels don'ts solve the problems. Perspective of application to electro energy in the plant growing, that will provide stable.

**O.O. Yakovenko.** Analysis some methods of definition of the effective characteristics of composite materials // News of Poltava State Agrarian Academy. – 2006. – №4. – P.96-99.

Some methods of definition of the effective characteristics of composite materials are investigated and their comparative analysis is carried out

**E.H. Yanjutin, H.A. Medinets.** The problem of thermal conductivity for rectanqular laminate.Quantity-analitical method // News of Poltava State Agrarian Academy. – 2006. – №4. – P.100-102.

The method of thermal state determination for laminated elements of constructions is proposed. Thermal distribution along the thickness of each layer is obtained by using the method of finite differences. As an example, the stationary thermal conductivity problem for rectangular laminate is solved.

**A.Ph. Yaremenko, M.M. El'Dkhydi.** The employment of method of equilibrium of finite elements for calculation arthrotropous slabs // News of Poltava State Agrarian Academy. – 2006. – №4. – P.103-107.

The variant of method of equilibrium of finite elements (in efforts), which extends the mathematical model of A.A. Chiras is continued. It is highly general, as it lets to determine the deflected mode of the curvilinear orthotropous (glass-fibre-reinforced plastic and concrete) slabs and provide the sufficient accuracy of the results of calculation.

**V.M. Pysarenko, T.A. Sharun, A.V. Kalinichenko.** Ways of productive potential of ground increase of Poltava region // News of Poltava State Agrarian Academy. – 2006. – №4. – P.108-112.

The basic ways of improvement of quality of ground to Poltava area as a whole and at the separate agricultural enterprise are stated in article. It is submitted dynamics of organic and mineral fertilizers volumes brought during last 10 years.

**S.M. Kramarev, S.V. Krasnenkov, T.F. Yakovishina.** Ecological and hygienic problem of the soil contamination by the available forms of heavy metals // News of Poltava State Agrarian Academy. – 2006. – №4. – P.113-117.

The authors have conducted investigation with heavy metals content in the precipitation and soil. The concentration coefficient and summary contamination indices have been calculated for the man-caused polielementic soil anomalies. The recultivation methods of the contamination soil by the heavy metals available forms have been offered.

**N.M. Chekalin, V.N. Tishchenko, O.N. Shapochka.** Intraspecific genotypic competition at a common winter wheat (*Triticum aestivum* L.). 1. Competition of various winter wheat varieties on efficiency of an ear both other useful varieties and indexes // News of Poltava State Agrarian Academy. – 2006. – №4. – P.118-123.

Studied influence intraspecific genotypic competition of four winter wheat varieties on the range of useful characters and the indexes to some extent connected to efficiency. Varieties considerably differed among themselves on competitive ability to the separate characters, determined under the relation of pair and 4-componental mixes to mono crops: the greatest competitive ability on the majority of characters has shown by low-yielding early-maturity variety Dolja, the least – high-yielding variety Levada. High super indemnification was observed in mix Levada + Venus.

**H.P. Zhemela, M.I. Kulyk.** Influence agroecological conditions optimal norms of seeds sow and mineral fertilizer on the harvest and quality grain of winter wheat // News of Poltava State Agrarian Academy. – 2006. – №4. – P.124-128.

Conducted research during 2002-2005 shows that mineral fertilizers application in equal N:P:K ration 60 kg active substance per ha under optimal norms of seeds sow to increase on winter wheat yield and grain quality. Spring fertilizers considerably increased wheat yield and quality grain.

**H.M. Hospodarenko, S.V. Mashynnyk.** Features of diaqnostik spring soft by nitroqen of portable device “N-testes” // News of Poltava State Agrarian Academy. – 2006. – №4. – P.129-133.

On chornozem opodzolik on the Right-bank Forest-Steppe Zone of Ukraine ensure spring soft by nitrogen in leaf depending on dozes and times of entering of nitrogen fertilizers grow in process of improvement of humidifying in the period vegetation. By researches is established intimate corelation connection between the contents of nitrogen in leaf spring soft wheat and parameters of the portable device “N-tester” in investigation stages organogenesis, that gives the bases to recommend this device for diagnostics spring soft wheat under production conditions.

**N.K. Izhik, S.V. Skoromnyy, B.M. Zinchenko.** Utilization of

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flame and ozone for soybean seeds presowing processing // News of Poltava State Agrarian Academy. – 2006. – №4. – P.134-136.

In article are offer a five years results of studying an influence of ecological safe methods of disinfection with using an open flame and ozone for crop capacity of soybean seeds Belosnezhka sort. At using of this methods can increase a crop capacity of soybean seeds. Was determined a possibility of changing the chemical disinfection of seeds by ecological safe methods for decrease of pesticide's loading by environment.

**M.Ya. Shevnikov.** The influence of mineral fertilizers and inoculation on soybean harvest in the conditions of Dnieper left-bank of forest-steep in Ukraine // News of Poltava State Agrarian Academy. – 2006. – №4. – P.137-142.

The article deals with the influence of mineral fertilizers on the harvest of soybeans. The inoculation will be beneficial for high yield of soybeans because of symbiotic nitrogenation. The usage of N P and presowing inoculation of seeds is stressed in the article.

**V.F. Kaminskiy.** Influence of intensification factors on quality of leguminous crops // News of Poltava State Agrarian Academy. – 2006. – №4. – P.143-149.

The influence of basic elements of cultivation technology of leguminous crops on parameters of quality of peas, a soybean and a string bean is considered in this article.

**I.P. Brazhenko, V.V. Gangur, I.O. Chekrizov, L.A. Brazhenko.** Sunflower is a leading marketable crop of the Left Bank Forest-Steppe of Ukraine // News of Poltava State Agrarian Academy. – 2006. – №4. – P.150-153.

The results of long researches of Poltava Institute of Agroindustrial Production named after N.I. Vavilov on studying the intensive introduction of sunflower into the field crop rotations have been produced. It has been proved that at the high standard of farming, precise observance of requirements to crop cultivation technology on the typical black soils of the Left Bank Forest-Steppe it is possible to occupy up to 20% of the cultivated area with sunflower.

**O.V. Zorenko.** The modern condition of the work of agrarian enterprises of Dnipropetrovsk region // News of Poltava State Agrarian Academy. – 2006. – №4. – P.154-157.

The article is investigated the modern condition of the work of agrarian enterprises of Dnepropetrovsk region. The author determined the main tendencies of enterprise developments and offered the trends functioning of the agrarian enterprises for the future.

**V.P. Leontovych.** Investigation Chemical composition sugar sprouts as vegetable wastes technical industries // News of Poltava State Agrarian Academy. – 2006. – №4. – P.158-160.

It is hold complex investigation chemical composition sugar sprouts which can assist widening perspective sphere of their existence.

**A.A. Koblay, N.N. Fesenko.** Influence of supersonic radiation on the sowing quality of alfalfa seeds // News of Poltava State Agrarian Academy. – 2006. – №4. – P.161-163.

Influence of supersonic radiation on indexes of laboratory and field germination of alfalfa seeds has been studied. Optimal rate of seed treatment has been established.

**Yu.V. Belyavskiy.** Perennial analysis of spreading and dynamic of number Elateridae in agroecosystems of Poltava Region // News of Poltava State Agrarian Academy. – 2006. – №4. – P.164-167.

Here there are perennial data about spreading, composition and dynamic numbers Elateridae in different climatic region of Poltava.

**R.A. Vusatyj.** Donors of resistance to potentially hazardous stamens the causal organism eyespot // News of Poltava State

Agrarian Academy. – 2006. – №4. – P.168-170.

Results of researches concerning search of effective donors of resistance to potentially hazardous stamens the population of the causal organism distributed in Ukraine eyespot are resulted.

**M.D. Berezovsky, P.A. Vashchenko, M.Ya. Trotskyy.** Hematological indices of large white breed pigs of home and foreign selection // News of Poltava State Agrarian Academy. – 2006. – №4. – P.171-173.

Use of Large White breed pigs of Estonian and English selection has had a positive effect on changes in hematological indices – potential biological capabilities of blood increased. Half-breed sires of German selection can be used in limited quantity in order to improve meaty properties of Large White breed pigs of home selection.

**M.V. Rublenko, S.I. Danylchenko, V.V. Rukhlyada, S.I. Taranukha.** The hemostasiological ground for the use of “Gelophusin” preparation and “Laevosinum” ointment for treatment of dogs with purulent peritonitis // News of Poltava State Agrarian Academy. – 2006. – №4. – P.174-178.

It was established, that purulent peritonitis escudation in dogs contains associations of microorganisms: E. coli with Bac. subtilis, Bac. cereus, Str. megaterium, Str. species, Staph. aureus. The mykroflora was most sensible to levomytsetinum, but wasn't sensible to penicillinum, ampicillinum. It was proved, that the use of the “Gelophusin” preparation in a complex with local therapy with the multicomponent ointment “Laevosinum” at purulent peritonitis promotes healing effect along with the positive dynamic changes of fibrinolysis, metabolic of the fibrinogen, by stabilization of anticoagulative and inhibitor potential of the blood plasma.

**S.M. Kulnich.** The article present analysis of laboratory // News of Poltava State Agrarian Academy. – 2006. – №4. – P.179-181.

Represented analysis condition of milk cows on the basis DP NDH “Yuvileinyy” and results of analysis whey of blood by the animals.

**Zh.O. Peredera, N.S. Scherbakova, K.O. Yakushenko.** The Study afterface of diagnostic Echinococcus granulosus by pigs in Poltava region for period 2002-2005 // News of Poltava State Agrarian Academy. – 2006. – №4. – P.182-184.

It is showed dynamics the illness pigs on the Echinococcus granulosus in Poltava region in 2002-2005.

**B.P. Kirichko, E.B. Kirichko.** The wound close of cattle under the means antioxidant action influence // News of Poltava State Agrarian Academy. – 2006. – №4. – P.185-187.

Local and parenteral use the component of antioxidant action speed up the purulent wound close of cattle at the expense shortening the phases of the wound processes.

**V.G. Sokolov.** Features of development and structure of a bone brain at newborns, neonatal and the dairy periods of pigs // News of Poltava State Agrarian Academy. – 2006. – №4. – P.188-191.

A bone brain of bones of an axial skeleton and a skeleton of finiteness of pigs early post natal period of development was investigated. Have established laws of localization and development of a bone brain, and as features of qualitative and quantitative mutual relations of its elements.

**A.B. Boroday.** Cattle parasites monitoring on pigs of Poltava region // News of Poltava State Agrarian Academy. – 2006. – №4. – P.192-194.

The article deals with data concerning epizootic situation as to invasive diseases of cattle on the pigs of Poltava region during the period from 2001 to 2005.

**N.M. Bondarenko.** The essence aspects of “selfemployment” in the personal peasant farms // News of Poltava State Agrarian Academy. – 2006. – №4. – P.195-197.

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In the article, the essence of the category "self-employment" with respect to the personal peasant farms and the indicators system of self-employment for these farms are determined. Positive and negative sides of employment in private farms are cleared up.

**Zh.A. Petrenko.** Condition and directing effects utilization agricultural land // News of Poltava State Agrarian Academy. – 2006. – №4. – P.198-201.

The Considered influence varied factor legal, social-economic, technological and ecological nature for shaping the land-use agricultural enterprise different organizing-legal forms of the management.

**V.A. Bondarenko.** The influence of out-root additional application of microelements on the contains in fruits of variety of apple-trees Golden Delicious in the conditions of Forest-Steppe of Ukraine // News of Poltava State Agrarian Academy. – 2006. – №4. – P.202-203.

The results of influence of out-root additional application of magnesium, boron, zinc, manganese and nickel on the contains it in the apple-fruits. It is found, that with increase concentrations of elements in solutions for out-root additional application, theirs content in the apple-fruits incremented.

**V.V. Zujenko.** Pecularity of spreading Carabidae in different some tree stands succession in Poltava region // News of Poltava State Agrarian Academy. – 2006. – №4. – P.204-207.

The article deals with the peculiarities of spreading Carabidae beetles in some tree stands in Kobeliaky and Poltava district of Poltava region. Some kinds of Carabidae beetles can be found on the different levels of succession. The plots of young level of succession are beneficial for spreading Carabidae beetles on the plots, where the level of succession is old and it is important for keeping biodiversity.

**O.S. Klymenko.** Episodikal peculiarity of Setariosis of cattle in the farms // News of Poltava State Agrarian Academy. – 2006. – №4. – P.208-209.

The data of investigations about study of distribution and seasonal dynamics of Setariosis of cattle in the farms of Poltava region are given.

**V.N. Kirilenko.** Morphogenesis of the diurnal and neonatal period of pig's lungs // News of Poltava State Agrarian

Academy. – 2006. – №4. – P.210-213.

The dynamics of alveolar diameter diameter in light pigs shares in dependence on their morphofunctional status and age is ascertained. At the diurnal animals with prenatal backward in lungs the less diameter of alveolars is exposed in comparison with the analogies possessing high morphofunctional status. By the five (5) diurnal age of pigs the most intensive increase of alveolar diameter takes place, but it reaches maximum meanings at 20-diurnal animals.

**O.O. Peredera.** Pathoanatomical changes are given at experimental invasson of the rabbits by the E.stidae // News of Poltava State Agrarian Academy. – 2006. – №4. – P.214-216.

The results of basic clinical attributes and pathoanatomical changes are given at experimental invasson of the rabbits by the E.stidae. Is established, that the most significant changes concerned in a liver. In parenchyma distructive regions with formation of abscesses is established. The phenomena of hepato-lienal syndrome in splin are founded.

**Y.S. Rudchenko.** Trades marks in the balance sheet as factor of increase of investment attractiveness of enterprises // News of Poltava State Agrarian Academy. – 2006. – №4. – P.217-220.

In the article the necessity of development of effective informative policy with the purpose of increase of investment attractiveness of enterprise is grounded. The method of grant of information about the market value of trade mark in balance sheet with the purpose of generalization of information which can be substantial at estimation by the investor of the financially-property state and results of activity of enterprise is offered.

**M.V. Ivanjuta.** The influence of working surface ring on the forming of plasta ground // News of Poltava State Agrarian Academy. – 2006. – №4. – P.221-224.

The improving of construction soil-treats aggregates is a one direction energy-keeping in the vegetations. With proposed was work overfeed of rotation riding the combinations aggregates KA-4,2 to activated of executions five technological operations: is cultivations soil, cutting litter-vegetations, equalities overfeed of field, pettiest shares, closed air-waters and providing agrarian-technical conditions for formatted before-sowing of sphere soil.

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