### SUMMARIES

Bazaliy V.V., Boichuk I.V., Larchenko O.V. Ecological and genetic foundations of the adaptive selection of small grain crops (an overview of literary sources)

The paper features a concept of raising the efficiency of small grain crop selection based on the study of the impact of trait heritability and variability, correlation and regression analysis of quantitative characters and adapatability, environmental factors and growing technologies on the adaptive potential of varieties and hybrids.

**Key words:** heritability, variability, correlation, regression, adaptability, variety, hybrid.

### Brutik O.A. The results of strain testing of a new water melon hybrid resistant to fusarial wilt

The article presents a new early water melon hybrid *Mandrivnyk* with a 60-day period between sprouting and the beginning of maturing. An average fruit weight is 5.0-5.5 kg, fruit index is 1.0, skin thickness is 1.5 cm. Rainfed productivity is up to 35 t/ha. Dry matter content in the fruit amounts to 10.5%. Tasting score – 4.1 points. The variety is relatively resistant to fusarial wilt.

Key words: water melon, fusarial wilt, hybrid, productivity.

### Vozhegova R.A., Lavrynenko Yu.O., Kokovikhin S.V. Economic and energy aspects of the optimization of the technology of growing seed corn under irrigation in the southern Ukrainian steppe

The study highlights the problems of growing the seeds of simple corn hybrids on irrigated lands in southern Ukraine. The research results show that the highest economic and energy efficiency is obtained under the conditions of the optimal water supply, application of growth regulators, and plant stand of 70-90 thousand per ha.

**Key words**: corn, seed production, irrigation mode, growth regulators, plant stand, economic efficiency, energy estimate.

# Drozd I.F., Lyakh V.O. Variability of oil flax plant hight under different sowing time in the Carpathian area

The article provides the results of studying the variability of plant hight of varieties and breeding-valuable samples of oil flax sown under two different time modes in the Carpathian area in 2009-2011. It analyzes the character of changes in this index depending on the genotype, sowing time and seasonal conditions. The study iidentifies samples with maximal and minimal expression of the "plant hight" trait, and those with stable and unstable expression of the trait in different sowing periods and cultivation years.

**Key words:** plant hight, variability, sowing time, cultivation age, Carpathian area, oil flax.

# Dudnyk A.V. Principles of predicting mass reproduction of the main pests of winter wheat in Ukraine

The paper presents the results of research into the mass reproduction of the most widely spread and harmful insects for winter wheat, and substantiates causes of their population cycles in Ukraine.

Key words: pests, mass reproduction, many-year population dynamics.

### Yeshchenko V.O., Kalievs'kyi M.V., Naklyoka Yu.I., Martyniuk I.V. Minimalization of basic soil tillage under spring crops, and farming ecologization

The article provides data on the accumulation of spring stores of moisture in the one-meter-deep layer of soil, on the density indices in the upper 30-cm layer and its texture and nutrient availability, as well as on the weediness and productivity of sugar beet, spring barley, spring rape and oil flax crops when ploughing is replaced by subsurface cultivation or when both tillage methods are used at a reduced depth.

**Key words:** humus, nutrients, autumn ploughing, subsurface cultivation, soil density, soil texture, available moisture, yielding capacity

### Kiver V.Kh., Onoprienko D.M. Fertigation efficiency under programming corn seed yields in the Ukrainian steppe

The research results show that the combination of irrigation and fertilizer application (fertigation) is an effective way of saving energy and material resources, as well as of the reduction of labor input, fuel and explicit costs, and raising corn seed yields in the zone of the Ukrainian steppe.

Key words: corn seed, yield, irrigation, fertilizer.

### Kokovikhin S.V. Organizational aspects of the management of the innovative development of irrigation amelioration in southern Ukraine

The article features the results of studying the organization and management of production processes on irrigated lands of southern Ukraine. It proposes ways of enhancing the efficiency of irrigated land use through joining small farmers into associations of water users, which will make it possible to use irrigation facilities most effectively, provide proper maintenance and repairs of local irrigation systems.

**Key words**: irrigation, production process organization, agricultural producers, irrigated lands productivity

### Kokovikhin S.V., Shepel' A.V., Pysarenko P.V., Pilyars'kyi V.G. The modelling of evapotranspiration indices of sugar beet for the optimization of irrigation modes under the conditions of southern Ukraine

The study highlights specific features of average daily evaporation of water from different soil layers under sugar beet cultivation depending on meteorological characteristics of the years and according to the vegetation period and calendar dates. Correlation and variation analyses made allow establishing statistical links and developing dynamic models.

Key words: sugar beet, average daily evaporation, hydrothermal conditions, variation, correlation, model.

### Kokovikhin S.V., Shepel' A.V., Pysarenko P.V., Pilyars'kyi V.G. Economic and energy substantiation of technology elements of growing irrigated sugar beet in southern Ukraine

The paper examines economic and energy efficiency of applying irrigation, mineral fertilization and dressing in sugar beet cultivation. It shows high economic efficiency and energy expediency of furrow irrigation (every other furrow) together with the background nutrition and two foliar applications of fertilizers during the vegetation period.

**Key words**: sugar beet, irrigation, ferilizers, profit, profitability, bulk energy, energy efficiency index

### Knysh V.I., Lashchevs'ka l.M. Anti-erosion technology of water melon cultivation

The article considers the results of developing an anti-erosion technology of water melon cultivation on sandy loam soils of southern Ukraine. It shows that the highest yields (30.4 t/ha) are obtained on plots with an interrow space of 280cm, plant nutrition area of  $3m^2$  (pattern 280×110cm) and fertilization at a  $\frac{1}{2}$  rate of the recommended dose applied locally + the cover crop.

**Key words:** water melon, wind erosion, cultivation technology, growth conditions, yielding capacity, economic efficiency.

### Knysh V.I., Pavlova S.L. Strain technology of growing rainfed water melon in southern Ukraine

The paper presents research data on the development of a strain technology of growing a new highly productive rainfed water melon variety *Khersons'kyi* under the conditions of the southern steppe. The technology elements provide a plant nutrition area of  $2.5 \text{m}^2$  and local fertilization at a rate of  $\frac{1}{2}$  of the recommended dose of mineral fertilizers (N<sub>30</sub>P<sub>45</sub>K<sub>30</sub>).

**Key words:** water melon, strain technology, mineral fertilizers, plant nutrition area, yielding capacity, fruit quality, economic efficiency.

# Lebedev S.M. Agroecological substantiation of models for the prediction of the development and reproduction of *Lobesia botrana Den. et Schiff* pest generations

The study provides data on the dependence of the development of pest generations of grape-berry moth in vineyards of the flat-steppe Crimea on abiotic factors: average daily temperature of the air, precipitation, relative air humidity, and also leaf surface area of the vine. Based on these data, it develops mathematical models for predicting phytophag development that allow optimizing the number and promptness of pest control measures for a specific grape variety.

Key words: grape-berry moth, mathematical prediction model, grapes.

### Lymar A.O., Voloshyna K.M. A method of getting grafted transplants of water melon

The article features the results of developing a method of getting water melon transplants. It shows that the best matrix for grafting water melon on the 3-4<sup>th</sup> day

after sprouting is big-fruit pumpkin and lagenaria. When it is grafted on the 9-10<sup>th</sup> day, the highest survival rate (91%) is on the luffa matrix.

Water melon plants grafted on lagenaria were the most developed according to biometrical characteristics and provided the highest yield of 82.7-85.7 t/ha depending on the grafting time.

**Key words:** water melon, matrix, grafting period, cultivation method, growing technology, yielding capacity, economic efficiency.

### Maidanyuk V.O., Kholodnyak O.Γ. The results of marrow squash breeding in southern Ukraine

The paper looks at the results of five-year-long field tests aimed at the development of new marrow squash varieties; it presents data on the study of the yielding capacity, productivity, biochemical characteristics and phenological phases of the vegetation period of competitive and pedigree samples on the seed-plot.

**Key words:** marrow squash, selection, variety, yielding capacity, productivity, economic efficiency.

### Mel'nyk N.Yu. Expanding the genetic potential of pumpkin through distant hybridization

The article provides the results of research into the development of new fertile forms of pumpkin through distant hybridization that possess new valuable characters for C.maxima, C.moschata, C.pepo.

**Key words:** hybrid, interspecific, intergeneric, pumpkin, big-fruit, cushaw, hard-skin, gene pool.

## Naumov A.O. Irrigation modes for table carrot grown on loam sandy soils of southern Ukraine

The article considers the results of field tests of the comparative effect of different irrigation modes on the productivity, biochemical and economic indices of carrot cultivation on loam sandy soils in southern Ukraine.

Key words: table carrot, irrigation mode, productivity, economic efficiency.

## Netis I.T., Onufran L.I. Soil water regime under spring barley cultivation in the southern Ukrainian steppe

The study examines the soil water regime under spring barley cultivation and its changes under the influence of climate and growing conditions.

Key words: spring barley, water regime, soil, climate, variety, fertilizers.

## Novyts'kyi G.I., Noskova O.Yu., Storchak M.V. Ecologically safe alfalfa coated seeds

The paper considers a technology for getting coated seeds. The research design was to study an improved ecologically safe technology for planting seed preparation. The improved technology allows obtaining high-quality planting alfalfa seeds at minimal costs.

Key words: coating, technology improvement, alfalfa, seed, seeding rate.

### Opryshko N.O., Yashchuk V.U., Chabanyuk Y.V. The impact of biological and chemical drugs on the population number dynamics of the causal agent of root rot of cucumbers

A series of model tests at the artificial infectious background shows that Biopolycid, a biological drug on the basis of the antagonistic bacterium, its combined application with Phosphoenterin, a biodrug based on the phosphate-mobilizing bacterium, as well as a new chemical drug Ecoton effectively suppress the population of F. oxysporum, the causal agent of root rot of cucumbers; in this case the antifungal effect of the drugs introduced into the soil is more evident in the rhizosphere and rhizoplan of cucumbers than in the soil without plants.

**Key words:** antagonistic bacteria, phytopathogenes, root rot, biodrugs, biological effectiveness.

# Pichura V.I. A technique for spatial and time modeling of agrochemical characteristics of reclaimed soils with the application of GIS- and neurotechnologies

The article presents a technique, algorithm and results of spatial and time modeling of agrochemical characteristics of reclaimed soils till 2015 using modern methods of smart artificial neuron networks and GIS-technologies (the case study of the Kherson region).

**Key words:** soils, agrochemical indices, methods, modelling, prediction, neuron networks, GIS-technologies.

## Ryabinina N.P., Lavrenko S.O. Programming and prediction of the yield of transplant tomatoes

The article provides the results of mathematical analysis of experimental data on the yield of transplant tomatoes depending on the method and depth of the basic soil tillage and nutrition background.

**Key words:** transplant tomato, basic soil tillage method, cultivation depth, nutrition background, regression, correlation, model.

### Tymchuk S.M., Martynyuk M.M., Pozdnyakov V.V, Antsyferova O.V., Tymchuk D.S. Genetic variety of field crops of Ukraine according to the main indices of granular starch quality

The study reveals a wide range of genetic variability of field crops of Ukraine according to the main characteristics of granular starch quality; identifies a positive correlation between starch granule size and starch content in the grain and a negative correlation between starch granule size and the content of amilose in starch. It shows that pea and maize mutants with high amilose content manifest a specific tendency toward the formation of deep radially located cracks on the surface of starch granules.

**Key words:** field crops, genetic variety, content and fraction composition of starch, starch granule size.

### Ushkarenko V.O., Silets'ka O.V. Aggregate and efficient water consumption by old age alfalfa depending on the cultivation conditions

The paper addresses the results of a three-year study of aggregate water consumption by old age alfalfa as a single crop, in combination with sown fodder criops, and at the background of nitrogen-phosphorus nutrition ( $N_{45}P_{30}$ ,  $N_{90}P_{60}$ ).

**Key words:** old age alfalfa, sown crops, nutrition background, aggreagate water consumption, water consumption coefficient.

### Ushkarenko V.O., Tyshchenko O.P., Kokovikhin S.V. Optimization of rice irrigation modes using instrument measurements of the water balance elements in the Crimean Autonomous Republic

The article presents the results of research on the water balance of rice in rice systems of the Crimean Autonomous Republic. It proves the advantages of an instrument method using evaporators. This method makes it possible to optimize rice irrigation modes and significantly reduce irrigation water consumption per yield unit.

Key words: rice, irrigation mode, water balance, evaporation, yielding capacity.

### Khaskhachykh M.V. The impact of plant stand and sowing method on the productivity of sunflower hybrids cultivated as a stubble crop in eastern Ukraine

The article focuses on the research results on determining the efficient plant stand and sowing methods for different sunflower hybrids of home selection grown as a stubble crop. It proves the advantages of using *Lyman* and *Derkul* hybrids with a plant density of 90 thousand /ha and a narrow-row seeding method.

**Key words**: sunflower, stubble crops, leaf surface area, yielding capacity, oil yield, factor ratio.

#### Yarchuk I.I. On the definition of the term 'frost resistance of plants'

The article discusses modern approaches to the hardening of plants, provides some definitions of the word 'resistance', and proposes its own interpretation of the term 'frost resistance of plants'.

Key words: frost resistance, hardening of plants.

### Gryshyna L.P. Improvement of the methods of assessing the breeding value of boars-sires in the pedigree stock

The study assesses the breeding value of big white boars-sires according to productive characteristics of their daughters considering their mothers' productivity. This method is designed to test sires in homo- and heterogeneous selection variants according to daughters' productivity.

The research results show the expediency of using neutral-type sires for the improvement of intrabreed lines and types, whereas comparative and dominant types suit for being used in crossing and hybridization for enhancing the manifestation of the heterosis effect according to productive characters.

**Key words:** prepotency, boars-sires, phenotype, pedigree type, heritability, reproductive characters.

### Pelykh V.G., Levchenko M.V. Timeliness of the research into the compensatory growth in pig beeding

The study explores specific features of the compensatory growth of pigs since its realization in the course of biological development favors a greater body weight at fattening or when rearing young replacement animals.

**Key words:** meat-making breeds, compensatory growth, formation intensity, litter evenness, stress factors, specific features of growth, negative factors

### Khvostyk V. P. The assessment of egg production in geese by growth intensity parameters

The study uses growth intensity parameters to assess egg production increments in geese of a different genetic origin. The index of egg production uniformity, average daily and relative values of egg production increment, and the index of tension of egg production increase can be viewed as additional characters in the improvement of egg production in geese.

**Key words:** geese, egg production, intensity of egg production formation, index of egg production uniformity, average daily and relative values of egg production increments.

# Chernomyz T.O., Lesyk O.B., Pokhyvka M.V. Some questions of the improvement of Ukrainian mountain-Carpathian sheep

The paper considers the current state of Ukrainian mountain-Carpathian sheep on pedigree farms in Bukovyna and discusses some ways of improving the productivity of local sheep.

It shows the efficiency of using producers of the Bukovyna type of the Askanian mutton-wool sheep with crossbred fleece for the improvement of the fleece type and color, for increasing wool yield, live weight and milk production.

The research results prove the expediency of a wider use of the gene pool of the Bukovyna type of the Askanian mutton-wool sheep for the improvement of moun-tain-Carpathian sheep.

**Key words:** mountain-Carpathian sheep breed, Bukovyna type, Askanian mutton-wool sheep, hybrid sheep, wool, course fleece, semi-course fleece, live weight.

### Andrusenko I.I., Zadnipryanyi K.O. The problems of resource protection and conservation in the zone of efficient irrigation in Ukraine

The study substantiates the expediency of saving irrigation water at the initial state of the vegetation period – till the end of grape flowering – and using it in the period of intensive growth of bunches and grapes. It considers the efficiency of moistening not the whole one-meter-deep soil layer but only its most fertile surface area, and determines parameters of drip irrigation rates on transported weakly eroded soils and black soils of the eastern coast of the Crimea.

**Key words:** grape, energy saving, drip irrigation, water consumption, irrigation rates.

### Boiko P.M. Methodological approaches to the management of nature reserve territories of the Kherson region

The paper substantiates the necessity of transition from classical management of nature reserve territories of the Kherson region to the modern strategy of forming the National ecological network of Ukraine.

Key words: Kherson region, nature reserve fund, econetwork, management.

### Golovashchenko M.F. Choosing an improvement cutting strategy when forming artificial coniferous pine forest ecosystems in the steppe zone

The study presents the results of research into the impact of different improvement cutting strategies on the growth, wood accumulation, hardiness and marketability of 40-year-old artificial pine plantations.

**Key words:** artificial pine forests, improvement cutting strategies, standing timber, growth, stock, hardiness, marketability.

# Koziy M.S., Sherman I.M., Semenyuk S.K. Prospects of using a method of dioxane dehydration in histological research on the development of the muscle tissue of fish

The study highlights methodological aspects of applying innovative methods in the histological monitoring of the development of aquaculture objects. It also presents the results of histological examination of the muscle tissue of Cyprinus carpio. The article brings up the question of the necessity of using histomorphological data in assessing the impact of different feeds on the interior characteristics of fish.

**Key words:** histological method, nucleus, white muscle tissue, red muscle yissue, muscle fiber, endomesium, connective tissue.

### Korniyenko V.O., Pylypenko Yu.V., Lobanov I.A. Morphological characteristics of the *Abramis brama* stock in the Lower Dnieper area

The paper provides the results of many-year research on determining the morphological status of the Lower Dnieper bream stock; it identifies the levels of morphological affinity of separate local bream groupings in this area of water.

**Key words:** bream, stock, groupings, commercial fishing areas, morphological characters, variability.

# Shakhman I.O. Characteristic features of water resources of the Ingulets river under the conditions of irrigated farming

The study presents mathematical models of the waste run-off. It evaluates statistical parameters of the river run-off under the conditions of economic activities (irrigation at the expense of the local run-off and donor rivers).

Key words: river run-off, irrigated farming

### Shevchenko V. Yu., Neznamov S. O. Productive and destructive processes in breeding the stocking material of carp fishes for planting in the Lower Dnieper water area

The article considers the main parameters of breeding the stocking material for its planting in the Lower Dnieper area at the Kherson research and production fish hatchery (three-year-research data). It highlights the tension of the hydrochemical and hydrobiological regimes of the ponds, determines parameters of productive and destructive processes and their impact on the breeding and biological indices of yearlings rearing. It also proposes ways of optimizing technological measures.

Key words: fish stock reproduction, yearlings, crop, destruction.

# Beregova V.V. Agricultural insurance in Ukraine as a tool for risk management

The study analyzes the results of insurance against risks in the agricultural sector and substantiates the expediency of applying crop insurance.

**Key words:** agricultural insurance, insurance market, agricultural risks, insurance payments, agricultural crops, risk coverage.

### Bilousov O.M. The current situation and trends in the development of foreign economic activity in the agricultural sector of the Kherson region

The paper analyzes the current state of the export-import activity in the Kherson region and foreign economic prospects for the development of its agricultural sector in particular.

**Key words**: foreign economic activity, export-import potential, agricultural products, regulatory policy.

# Botvina N.O. The tools of financial policy as to increasing the ecologization of the agricultural sphere

The study examines the instruments of financial policy as to higher ecologization of the agricultural sphere, monitors existing problems in the context of today's economic environment, makes an attempt to substantiate ways of enhancing the efficiency of financial policy in the ecologization of the agricultural sector according to current demands and challenges.

Key words: financial policy, monitoring, ecologization, agricultural sector.

### Gavrylova Yu.O. Organizational and economic principles of the development of finance and credit infrastructure of the agro-industrial complex

The study identifies major problems, their causes and prospects for the development of the finance and credit infrastructure of the agro-industrial complex (AIC).

**Key words:** infrastructure, agro-industrial complex (AIC), finance and credit service, agricultural market, credit resource, agricultural credit co-operation.

#### Gusyatyns'kyi M.V. Information support for innovative development

The paper addresses and generalizes the questions of information support for innovative development. It underlines that an important condition for such development is an innovative strategy of regional development and a higher innovative production potential based on the system interconnection of resources and stimulating mechanisms.

**Key words:** innovations, innovative development, information support, innovative strategy.

### Dobrulya O.O. The use of indices of production and business activity in dayto-day management

The article evaluates the use of indices of production and business activity in dayto-day management and proposes measures to improve the process of management in agricultural enterprises.

Key words: management, production and business activity, day-to-day management, managerial accounting.

### Karpenko N.G. – Directions of government financial support for agricultural production

The study looks at some specific features of state budget support of agricultural production and constituents of forming the economic mechanism of government regulation. It identifies the main problems of financing agricultural producers and determines the main indices that influence the efficiency of resource utilization by agricultural enterprises. The paper analyzes subsidies and subventions as a way of government support for agricultural producers in Ukraine and proposes a new model of agribusiness regulation.

**Key words:** financing, subsidies, subventions, compensation, agricultural production, competitiveness, efficiency, prime cost, price, profitability, profit.

### Kiselyov K. Yu. In assessing the competitiveness of the enterprise competitiveness

This article explores the concepts and categories of the theory of competition. Determined that central to the theory of competition takes the concept of "competitiveness", which most closely connected with the notion of competitiveness.

**Key words:** analysis, evaluation, competition, competitive sustainability, competitiveness.

### Kocherga M.M. Directions of forming a system of comprehensive ecological audit of rural territories

The study substantiates an approach to the formation of a system of ecological audit of rural territories based on the comparative analysis of the main directions of the development of this procedure as a comprehensive form of control which considers ecological standards and their reflection in financial and economic indices in the sphere of agricultural production.

Key words: ecological audit, rural territories, agricultural producers, system, complex.

### Morozov R.V. Theoretical and procedure approaches to the organization of strategic planning of the integrated development of the rice production industry

Based on the system approach, the study investigates the problems of the organization of strategic planning of the integrated development of the rice production industry. It focuses on the main stages of strategic planning and considers procedure approaches to the elaboration of the strategic plan of the integrated development of rice production. Key words: management, strategy, strategic planning, development, rice production.

Mokhnenko A.S. New forms of financial management in faming businesses

The paper explores specific features of financial management in faming businesses, and identifies the main sources of agribusiness funding.

Key words: faming businesses, financial management, factoring, franchising

# Norkina O.M. Methodological aspects of the assessment of regional investment attractiveness (the case study of the Kherson region)

The paper looks at the current approaches to the formation of the investment strategy on the regional level. It presents a technique for an overall assessment of regional investment attractiveness according to a system of indices that reflect the macroeconomic situation, social and economic development, investment, engineering and transport infrastructure, market situation, and local government support for regional business.

Key words: investment; investment strategy; regional development.

### Orlenko O.V. Major trends in the formation of the grain market

The article reveals a number of the most urgent and common problems of the formation of the competitive grain market, and examines specific features of the mechanism of government support for the agricultural sector of Ukraine. It identifies the main directions of enhancing the efficiency of the grain market.

Key words: grain crops, government support, agricultural production, competitiveness.

# Potravka L.O. Synergetic aspect of structural transformations in Ukraine's economy

The study determines a need for taking a synergetic approach to the transformation of Ukrainian economy. It features the results of research into the sectoral structure of the gross national product (GNP) of different countries of the world and Ukraine. The article also substantiates the economic consequences of structural disproportions of the national economy.

Key words: synergy, synergetic economy, transformation, national economy.

## Pushak Y.Y., Strychak G.V. The concepts of national, economic and food safety and their interrelation

The paper analyzes separate scientific and theoretical approaches to the understanding of the concepts 'national safety, economic safety, and food safety'. It presents structural levels of forming national and economic safety of a country.

Key words: safety, national safety, economic safety, food safety, safety levels, state.

## Rudik N.M., Rudik O.L. The problems of rural population employment of the Kherson region and ways of their solving

The study identifies and analyzes organizational and economic problems of the employment of the rural population, and proposes measures to solve them.

**Key words:** demographic reproduction, employable population, coefficient of natural decrease in population, business activity of population, employed, self-employment, market and government regulation of employment, employment concept.

## Rusnak A.V., Prospects for the improvement of a system of management of the development of rural territories

The paper analyzes the institutional provision for the development of rural territories, and substantiates prospects for the improvement of the system of management of their development.

**Key words:** rural territories, management, local government, public organizations, rural territorial communities, rural population.

### Rusnak A.V., Ignatenko M.M. Special features of agricultural taxation according to the Tax Code

The study identifies and analyzes changes in agricultural taxation according to the new Tax Code of Ukraine; in particular, it considers special agricultural and value added tax treatment.

**Key words:** taxation, agricultural activity, fixed agricultural tax, value added tax (VAT), tax code, taxation system.

### Skrypnyk S.V. The current state and problems of the efficiency of the economic activity of Ukrainian agricultural enterprises

The article analyzes the results and indices of the performance efficiency of agricultural enterprises, considers the problems of their effective management, and identifies ways of their solving through production intensification taking into account the current level of market relations.

**Key words:** agricultural enterprises, agricultural sector of economy, production, sales, efficiency, profitability, unprofitability,

# Sobchenko A.M., Pylypenko K.A. Urgent questions of fixed agricultural taxation

The study considers specific features of collecting a fixed agricultural tax from agricultural producers. It determines standard registration rules for the payers of the fixed agricultural tax, its rates, and provides a required list of documents. It shows advantages and drawbacks of the system of the fixed agricultural taxation and presents a model of an alternative taxation system for Ukraine's agriculture.

**Key words:** fixed agricultural tax, agricultural commodity producers, production, lease, farming lands, money value, land plot.

## Stefanyuk S.V., Marmul' L.O. Government regulation of the labor market and its improvement

The study looks at the labor market as a social sphere that forms demand for manpower and its supply, and influences all sectors of the national economy. The market regulates what, how much and for whom to produce and how many human resources are needed. The article shows that the government regulation of the labor market through the deman-supply mechanisms does not solve the problem of unemployment but requires improvement.

Key words: market, work, work force, human resources.

### Surnina K. S. The necessity of using analytical procedures for confirming the validity of financial statements of an enterprise

The study identifies seven prerequisites for the formation of financial reporting of businesses, determines the scope and complexity of analytical procedures from a simple comparison of numbers to the application of complex statistical programs.

**Key words:** financial reporting, audit, prime cost, audit procedures, analytical procedures.

#### Tanklevs'ka N.S., Golovych N.M. Genesis of scientific views on the economic safety of business

The study examines scientific views on the understanding of the economic safety of business. It substantiates key statements as to the development of the concept under study and outlines the directions of genesis in the interpretation of the economic safety of business.

Key words: economic safety of business, development directions, genesis, functional elements.

## Tranchenko L.V. The current state of the formation of money income of the rural population in Ukraine

The study determines a system of indices that characterize the level and dynamics of money and aggregate income of households. It examines the main constituents of the social and economic mechanism of forming the income of rural population based on the statistical data on households. The article also identifies major factors influencing the level of income of the population in a market economy.

Key words: incomes of rural population, wage, wage structure, wage index, living standard.

## Fedorchuk O.M., Morozov R.V. The prediction of demand in material and technical resources for agricultural enterprises

The study generalizes and systematizes theoretical and procedure approaches to the prediction of demand in material and technical resources for agribusinesses. It also investigates methodological principles of solving the problem of forecasting demand in material and technical resources for agricultural enterprises.

**Key words:** economics, material and technical resources, discriminant analysis, modelling, production factors.

### Shepel' I.V. The improvement of accounting and control of material assets in agricultural formations

The paper reveals the essence of intracompany control of material assets and its role in their preserving, efficient accounting and proper customer-oriented assessment. It also develops a comprehensive method of control of material assets, which includes stage-by-stage control of the reproduction process as well as the regulation of the elements of material assets.

Key words: material assets, raw materials, materials, stocks, agricultural formations, cost regulation, control.

Krinitsyn V.V., Kovalenko S.A., Mikheyev Ye.K. Technological decisionmaking in agrosystems. *P.2 Intellectual and technical features of creating a system of support in technological decision-making (SSTD)* 

The paper looks at typical methodological and applied problems of creating a system of support in technological decision-making (SSTD) in farming. It proposes practical approaches to identifying a range of tasks and a general algorithm of their solving.

The methods and practical approaches proposed can be applied to a considerable number of crops provided insignificant algorithm, program and information transformations are made to meet the requirements of specific objects.

**Key words**: algorithmization, simulation, information, models, parameters, decisions, systems, technology, management.