

# ABSTRACTS

## AGRONOMY

УДК 633/635:631.53.048(571.15)

A.P. Drobyshev,  
S.P. Zhukov,  
I.A. Fedotov

### **EFFECT OF STRIP DRILLING WIDTH ON SPRING WHEAT YIELD FORMATION IN THE CONDITIONS OF THE PRIOBSKAYA FOREST-STEPPE OF THE ALTAI REGION**

Spring wheat drilling with strips' width of 8 cm has significant advantage over strips' width of 12 and 16 cm; the optimal seeding rate in the conditions of the Altai Priobye is 5.5-6.0 mln viable seeds per hectare.

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УДК 633.1:632.51:632.954.025.8:571.15

A.A. Kondratyev

### **RESISTANCE OF OAT GRASS (AVENA FATUA L.) TO FENOXAPROP-P-ETHYL IN THE CONDITIONS OF THE ALTAI REGION'S PRIOBYE**

Resistance of weed plants to herbicides remains one of the major problems of crop protection. Resistance of oat grass (*Avena fatua* L.) to Fenoxaprop-P-Ethyl was studied at regular application of that herbicide. It is revealed, that there are species resistant to that herbicide.

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УДК 631.582:631.581(571.1)

V.L. Yershov,  
V.V. Goremykin

### **EFFECTIVENESS OF CROP ROTATION LINKS WITH BARE AND SEEDED FALLOWS IN THE FOREST-STEPPE OF WEST SIBERIA**

Data on aftereffects of various types of fallows and tillage systems on soil fertility elements, the yields of winter rye and spring soft wheat in West Siberia is presented.

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УДК 632,768.13:632.95

G.G. Sadovnikov,  
G.Y. Stetsov

### **PEA WEEVIL AS A NEW PEAS PEST IN THE ALTAI REGION**

From the beginning of the 21st century pea weevil (*Bruchus pisorum*) has become the main pest of peas in the Altai Region. Its biological features, distribution, harmfulness were studied, and measures of pest control were developed.

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**AGRICULTURAL ECOLOGY**

УДК 631.43

**A.B. Umarova,  
O.A. Samoilov,  
A.A. Kokoreva****TEMPERATURE OF MODEL SODDY-PODZOLIC SOILS IN THE CONDITIONS  
OF LARGE LYSIMETERS OF MSU**

Temperature distribution of model soils in large lysimeters of MSU (Moscow State University) is considered. It is shown that at the depth of 20 cm soil moisture and soil temperature are not affected by the lysimeters' walls, uniform lateral distribution over the lysimeters' square is observed. Effect of soil profile structure on the temperature dynamics is revealed.

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УДК 553.641+631.811.2

**T.N. Chernositova****EFFECTIVENESS OF APPLICATION OF PHOSPHORITE-SILICATE POWDER  
OF THE EVGENYEVSKOYE DEPOSIT AS A PHOSPHORUS FERTILIZER**

Effectiveness of phosphorite-silicate powder (RFSM) of the Evgenyevskoye deposit of the Tyndinskiy District of the Amur Region was studied. It is revealed that on meadow chernozem-like soil non-activated RFSM increased the phosphorus mobility during the 2nd and 3rd years of action; however chemically activated by sulphuric acid RFSM in ratio 1:0.5 (RFSM 1) and 1:1 (RFSM 2) increased phosphorus mobility during the 1st year of action. In field experiment enriched RFSM in the 1st year reduced yields of corn for grain by 0.12 t/ha, but in the 2nd and 3rd years increased yields of soybeans and wheat by 0.14 and 0.24 t/ha correspondingly compared to the check plots.

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**ANIMAL PRODUCTION**

УДК 636.52/.58.084.087.69.612.3

**S.S. Lee,  
Y.A. Lunev,  
O.A. Lee,  
Y.N. Pshenichnikova****PHYSIOLOGICAL ASPECTS OF DIGESTION OF ARTEMIA CYSTS BY LAYING HENS**

In the process of physiological experiment digestive organs of laying hens of commercial flock were investigated. The hens were fed cysts of Artemia Salina at the rate of 4 and 10 percent of the basic diet.

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УДК 636.2:611-018.5:636.085/087

**N.I. Shevchenko,  
L.N. Cheremnyakova,  
S.Y. Buzoverov****CLINICAL CONDITION AND DYNAMICS OF MORPHO-BIOCHEMICAL BLOOD COMPOSITION  
OF LACTATING COWS BY UREASE INHIBITOR APPLICATION IN THE DIET**

Clinical condition and dynamics of morphologic and biochemical blood indicators of lactating cows were studied when the cows were fed extruded feed and amido- concentrated supplements both in pure form and treated by urease inhibitor (3% solution of acetic acid). The best indicators of clinical condition and dynamics of blood indicators were revealed in animals of groups IV and V; it can be explained by higher level of metabolism in animals' of those groups, nutrients in their diets were in optimal ratio.

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УДК 576.895. 7

**T.K. Makatov****SPECIES COMPOSITION AND ECOLOGY OF BLOOD-SUCKING MIDGES  
(DIPTERA, SIMULIIDAE) OF THE NORTH-EAST OF KAZAKHSTAN**

Data on species composition and quantitative ratio of blood-sucking midges of the Pavlodar Irtysh Region is represented. Aspect species and seasonal course of their quantity are indicated.

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**TECHNOLOGIES AND MEANS OF AGRICULTURE MECHANIZATION**

УДК 65.015.13:658.512

**G.S. Sidorov****EVALUATION OF OPERATION EFFECTIVENESS  
OF THE SYSTEM OF SPECIALIZED TECHNICAL SERVICE OF MACHINERY**

Based on system approach methodology of optimization of basic functional parameters of the system of specialized technical service of machinery is indicated. The efficiency function is presented. Stochastic model of harvesting is used. Examples of calculation of some parameters of the system of specialized technical service of machinery operation are considered.

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**ECONOMICS OF AGRICULTURAL INDUSTRY COMPLEX**

УДК 338.431:303.43:330.131.7

**V.A. Kundius,  
V.V. Tsvetkov,  
N.F. Vernigor,  
T.S. Belikova,  
A.M. Dyakov,  
M.G. Kudinova,  
O.Y. Ovcharenko,  
A.V. Sibiryakov****STRATEGIC MODEL AND MECHANISMS OF SOCIAL-ECONOMIC DEVELOPMENT  
OF AGRICULTURE OF THE ALTAI REGION IN CONDITIONS OF RISKS**

Strategic model and mechanisms of social-economic development of agriculture of the Altai Region in the conditions of risks are dealt with. Those are the results of scientific research under the RFN Grant, the State Contract # 06-02-60207 of 05.July, 2006. Features of functioning, the tendency of development of agricultural industry complex of the Altai Region as social-ecologic-economic system with application of SWOT techniques of analysis, processes of integration in the agricultural industry complex of the Altai Region, a problem of social-economic development of agriculture of Altai are proved. Variants of perspective parameters of agricultural industry complex of the Region are presented based on calculations of multiple economic-mathematical model, priority and calculations of effects of investments' multiplication and development of branches of agriculture of the Altai Region. Substantiation of structural changes and representation of strategic model and mechanisms of social-economic development of agricultural industry complex of the Altai Region is presented, theoretical aspects of forecasting of risks and mechanisms of their prevention in agriculture are given.

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УДК 63:631.164.23

**S.A. Korennov****LEVEL OF SOCIAL AND ECONOMIC DEVELOPMENT  
OF RURAL TERRITORIAL FORMATIONS AS A FACTOR OF THEIR INVESTMENT APPEAL**

Quantitative evaluation of cause-and-effect relations in social and economic development of rural territorial formations of the Altai Region is presented. Correlation and dependency of investments amount in the fixed capital of rural territories on the level of their development is revealed.

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УДК 331.5 (571.15)

**O.G. Shalagina****STATE OF EMPLOYMENT OF RURAL POPULATION IN THE ALTAI REGION**

The state of labour market of the Altai Region, the main trends of the work to increase employment of the population of the Altai Region are considered.

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УДК 338.28

**I.A. Dolzhenko****IMPROVEMENT OF THE TOOLS OF STATE SUPPORT OF INNOVATION ACTIVITY**

The main methods of state support of innovation activity applied in Russia are considered. Evaluation of complexity, consistency and effectiveness of state regulation of science and innovation sphere is carried out, new tools of state innovation policy are summarized and analyzed.

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УДК 33

**O.A. Selyunina****LEGISLATIVE FOUNDATION OF STATE POLICY ON COUNTERACTION OF SHADOW ECONOMY, GUARANTEEING ECONOMIC SECURITY**

Topicality of the study is caused by the following fact that criminalization of economy in the Russian Federation, rates of growth and scales of shadow economy has turned to one of main threats of national security. There is a challenge of preventing, overcoming and development of criminal economic policy. Unfortunately, the state in its economic policy does not pay enough attention to legislative foundations on counteraction of shadow economy, guaranteeing economy security.

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УДК 631.115.11

**Y.A. Pekhutova****STABILITY AND EFFECTIVENESS OF PERSONAL SUBSIDIARY FARMS OF THE POPULATION**

Stability of one of the categories of agricultural commodity producers – personal subsidiary farms of the population, is considered. Some indicators which were used to evaluate that category's stability are presented. The analysis of development dynamics and effectiveness indicators revealed that personal subsidiary farms because of some reasons is an unstable category. The ways to increase their stability are indicated.

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**MANAGEMENT**

УДК 331.108.2

**O.V. Kozhevina,  
Y.Y. Kruk****MOTIVATION AS THE KEY MANAGERIAL COMPETENCE**

Considerable attention is paid to advanced foreign models and approaches to motivation of the staff, increasing its production and creative activity. Some motivation aims and priorities of the leading international companies are thoroughly analyzed; as the result recommendations and proposals are made to form an organization's staff policy directed to efficient connection "manager-subordinate-manager".

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УДК 657:631.11:636.5

**Y.V. Kashinskaya,  
L.I. Kirkeyeva****MANAGERIAL ACCOUNTING IN POULTRY PRODUCTION**

The basic provisions regarding managerial accounting in poultry production are revealed. Managerial accounting definition, the purpose of managerial accounting, and objectives of managerial accounting relating to poultry production are presented.

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