## **AGRONOMY**

УДК 635.21:631.8:631.559 (571.15)

Y.M. Komyakova, O.I. Antonova

#### EFFECT OF BIOLOGICAL PREPARATION ON YIELD AND QUALITY OF POTATO TUBERS IN THE CONDITIONS OF FORESTED STEPPE OF THE ALTAI REGION

The results of field experiment aimed at the study of the effect of various biological preparations on yield and quality of potato variety Nevskiy are presented. It is revealed that all application variants resulted in tubers yield gain with significant improvement of quality features: dry matter content, starch and vitamin C content increase.

УДК 635.263-152

S.V. Zharkova, Y.G. Grinberg

#### EVALUATION OF SHALLOT GENOTYPES BY THE FEATURE "VEGETATION PERIOD DURATION"

The results of Shallot types' test in the conditions of the cities of Novosibirsk and Barnaul by the feature "vegetation period duration" are presented. Differences in the plants development rates in various growing environment are determined. The types with high selection value of genotype, stable by the studied feature, are identified. The types P 135, P 54, P 1211, P 528, P 1011 are recommended for selection work as early forms.

УДК 631.1

N.A. Kirillov, A.I. Volkov

## EFFICIENCY OF RESOURCE-SAVING TECHNOLOGIES OF GRAIN CROPS CULTIVATION

Efficiency of resource-saving technologies of grain crops cultivation based on the study of agrophysical, agrochemical and biological properties of gray forest soil, phytosanitary condition of crops, quantity and quality of the yield, and economic estimation is shown.

УДК 631.53.02:631.52(571.13)

V.I. Pushkaryov, O.G. Kuzmin

# **EVALUATION OF METHODS OF IMPROVING SOWING QUALITIES OF SEEDS** IN THE STEPPE ZONE OF THE OMSK REGION

The results of laboratory and field experiments carried out in 2005-2007 in the steppe zone of the Omsk region are presented. It is shown that seed disinfectants Bunker, Dividend Star, Tobu 60 and Viall TT have inhibitory effect on coleoptile growth; that results in its length reduction from 1 to

2.5 cm. Positive action of Viall TT in root formation stimulation is revealed, the preparation provides 100 percent protection of seeds against infection and dust-brand. Tenso-cocktail stimulates growth of coleoptile and sprout, as well as additional primary roots formation in certain varieties. Variety specific character in response to magneto-impulse seed treatment is revealed.

УДК 633.31:631.53.04:631.559

Y.P. Ivanova, A.N. Yemelyanov

## EFFECT OF CULTIVATION TECHNIQUE ON THE YIELD AND FEEDING VALUE OF ALFALFA MUTABLE IN THE CONDITIONS OF THE PRIMORSKIY REGION

Alfalfa cultivation for the satisfaction of animal production needs in protein is one of effective and necessary directions of feed production in the Primorskiy Region. In the conditions of meadow brown soils of the Primorskiy Region the cultivation of alfalfa without cover crops and with the use of cover crops gives the possibility to get somewhere 30 tons per hectare of feeding stuff with high nutritious and protein value.

AGRICULTURAL ECOLOGY

УДК 631.6:626.134:627.11

T.Y. Molchanova

## POSSIBILITIES OF USE MODERN CONSTRUCTION TECHNOLOGIES TO MINIMIZE LEAKAGE LOSSES FROM A STORAGE RESERVOIR

Quantitative evaluation of leakage losses from storage reservoirs located in the Kulundinskaya zone is presented. The most economic and effective filtration-proof materials are recommended.

УДК 581.9

T.A. Teryokhina, A.A. Shorina

#### **VEGETATION OF THE CITY OF ZARINSK**

Complete list of carried plants is presented. Typical structure of the city's flora is described.

УДК 631.51:631.425.4

T.I. Pereguda, A.N. Voronin, **B.A. Smirnov** 

## **EFFECT OF AGRICULTURAL PRACTICES** ON AGRO-PHYSICAL PROPERTIES SOD-PODZOLIC MILDLY GLEYIC SOIL

Data on long-term effect of different tillage systems, fertilizers and herbicides on agro-physical indicators of soil fertility are presented. Surface-moldboard ploughing system with straw application combined with complete mineral fertilizers contributed to improvement of structural condition of soil, increase of moisture content in arable horizon and formation of crops' yield at the level of moldboard ploughing system.

#### ANIMAL PRODUCTION

УДК 631.95:636.4 V.V. Kravets

#### INFLUENCE OF ECOLOGIC FACTORS ON GROWTH AND DEVELOPMENT OF REPLACEMENT SOWS

It is proposed to form replacement sows for raising from 3 adjacent pens at 2 months' age. It is proposed to feed from the age of 4 till 6 months at higher level (2.39 feed units) and from 6 till 9 months at medium level (2.51 feed units). With that the age of the first heat decreases by 9.3 days.

УДК 636.6 A.Z. Bekkozhin

## EFFICIENCY OF HOLSTEINIZED BLACK-AND-WHITE CATTLE USE FOR MILK PRODUCTION IN THE CONDITIONS OF THE NORTHERN KAZAKHSTAN

In is shown, that Holsteinized cows (pure blood 62.5-82.5%) are characterized by greater milk yields and milk nutrients' output for a lactation, a large udder, high milk ejection rate; profitability level of milk production of high bred cows is by 3-9% higher, than with animals with pure blood less than 50%.

УДК 636.2.082.13:636.082.22(571.15)

G.D. Nekrasov. N.M. Rudishina, I.A. Sumanova

## **ECONOMICALLY VALUABLE FEATURES OF COWS OF DIFFERENT LINES** OF THE BREEDING FARM SHUMANOVSKIY

Cows of the lines Eliota 22182, S.T. Rokit 252803 and Jinas 27 are distinguished by high milk productivity and optimal reproductive abilities.

#### VETERINARY MEDICINE

УДК 619:598.2/.9:578

G.A. Fyodorova, Z.M. Reznichenko

## ORNITHOSIS OF WILD AND DECORATIVE BIRDS IN THE FOREST-STEPPE AREA OF THE ALTAI REGION

Data on bacteriological research of wild and decorative birds on ornithosis in the forest-steppe area of the Altai Region is presented.

#### TECHNOLOGIES AND MEANS OF AGRICULTURE MECHANIZATION

УДК 621.01:531.3

V.I. Poddubhiy, A.S. Pavlyuk

#### DEFINITION OF OPTIMAL DESIGN PARAMETERS FOR REDUCTION THE LEVEL OF VERTICAL FLUCTUATIONS OF A WHEELED MACHINE

The problem of definition optimal properties of elastic mounting supports of electromotor driving a wheel of a mobile machine for minimization the level of vertical fluctuations is considered. The solution of the problem allows improving dynamics, stability, controllability and comfort of a wheeled machine. To achieve that mechanic-mathematical model with subsequent realization in Matlab and mechanotronic model with use of applied package for modeling and simulation of dynamic systems CAMeL-View was developed. Optimal parameters of supports are defined, specific recommendations are proposed.

УДК 637.028

**B.S.** Tolysbayev, Y.T. Abilmazhinov

#### EFFECT OF TEMPERATURE AND HUMIDITY REGIMES ON QUALITY OF MEAT PRODUCTS

Food products before delivery to consumers pass some stages. In particular, "production" -"transportation" – "sale". Those stages are characterized by different parameters of storage regime. In this connection the problems of forecasting of storage time of perishable food are an urgent problem. Theoretical aspects of forecasting storage time of meat products are considered. Technique of storage time definition for meat products at stages "production" - "transportation" -"sale" is proposed.

O.N. Terekhova УДК 664.741.8

#### INCREASE OF EFFICIENCY OF GRAIN PROCESSING IN A MINI-MILL

Analysis of mini-mills is carried out; data on the most commonly used mini-mills in the Altai Region is presented. Some shortcomings are revealed; proposals on increasing of flour output in a mini-mill due to application of pneumo-centrifugal classification of the grain milling products are stated.

#### **ECONOMICS OF AGRICULTURAL INDUSTRY COMPLEX**

УДК 911.3:338.24 M.P. Shchetinin

#### PRECONDITIONS AND RESTRICTIONS OF THE ANALYSIS OF INFLUENCE OF REGIONAL AUTHORI-TIES ON ECONOMY OF MUNICIPAL FORMATIONS

The research is based on two initial preconditions: 1) spatial development of regional economy is the aggregate of interconnected economies of municipal formations included in its structure; 2) regulation of spatial development of regional economy is carried out by regional bodies of authority by means of participation in economic circulation. The specificity of the regional economic relations, as versions of the public relations is connected to two issues: by the limited spatial charac-

ter, their progress mainly within the borders of regional social-economic systems and their span only in one of the spheres of public life - economic, involving production, distribution and redistribution of material welfare and services. Proceeding from those three essential restrictions are deduced.

УДК 631.15/.16:338.33

Y.V. Malykhin

## THEORETICAL SUBSTANTIATION OF IMPORTANCE OF DIVERSIFICATION IN STRATEGIC MANAGEMENT OF GRAIN PROCESSING ENTERPRISES

The notion "enterprise diversification strategy" is introduced, and methodology of developing diversification strategy within the framework of the corporate strategies of an enterprise is suggested. Variants of using the matrix method for developing diversification strategy of an enterprise are considered.

УДК 339.138:664(571.15)

D.A. Neifeld

## EFFECT OF COMPETITIVE STRATEGY ON MANAGEMENT DECISION MAKING IN FOOD PROCESSING INDUSTRY

Various variants of competitive strategy of enterprises of food processing industry are considered depending on their positions in the market; certain vectors of development, factors, influencing intensity of competitive struggle, and the main categories of competitive struggle are defined as well as resulting necessary management decisions for achieving set goals.

УДК 331.1 I.N. Shevelyova

# MOTIVATION OF EMPLOYEES OF AGRICULTURAL ENTERPRISES IN THE SYSTEM OF ECONOMIC RELATIONS

The results of any production are determined by the degree of interest of each participant of labour process. The ratio of various motives influencing people's behaviour forms motivational structure of an employee. Each person has individual motivational structure. Developing programs of motivation and stimulation of work in agriculture, it is proposed to proceed from specificity of specific situation and individual features of employees being motivated.

УДК 338.431:331.108(571.15)

V.V. Solomonova

## THE SOCIAL-ECONOMIC PRECONDITIONS OF FORMATION OF LABOUR POTENTIAL IN THE AGRICULTURAL INDUSTRY COMPLEX OF THE ALTAI REGION

Formation of labour potential in the agricultural industry complex of the Altai Region represents complicated process, which is affected by the factors of external environment. Effective formation and use of labour potential require certain social-economic conditions. Solution of those problems is promoted by personnel policy of the state, which is based on strategy and principles of market relations, and is carried out at all levels with consideration of the forms of development of organizations.

УДК 338.109.4

A.M. Gadzhimagomedov, M.S. Atayev, **B.K.** Kagermanov

## EFFICIENCY INCREASE OF FUNCTIONING OF PRIVATE SUBSIDIARY FARMS AND PRIVATE FARMS BASED ON COOPERATION

In the process of establishment multi-structural economic system in rural areas based on different property and management forms an important role belongs to personal subsidiary farms and private farming production.

Current issues of development of the agricultural industry complex are considered. Theoretical, economic, social and organizational aspects of revival of Dagestan's agricultural industry are discussed as well as the issues of improving living standards of the rural population.

УДК 631.115.1: 332.132

I.P. Shalyapina, Y.V. Kalyakin

#### MAIN TRENDS OF THE DEVELOPMENT SMALL ENTERPRISES OF THE TAMBOV REGION

The place and importance of small business in the economy of the Region is defined. The priority directions of increasing economic stability of small enterprises in agriculture of the Region are revealed. Economic mechanism of interaction of subjects of small enterprise is substantiated through development of cooperation and integration.