

ABSTRACTS

AGRONOMY

УДК 631.312

**M.L. Tsvetkov,
S.I. Gilyov,
S.Y. Obyskalov,
O.P. Dianov**

RETROSPECTIVE OF CHISEL TILLAGE IN THE ALTAI REGION

By means of retrospective analysis of the situation agri-economic and energetic expediency of the use of chisel plough PCH-4.5 for cultivation of stubble backgrounds under spring wheat in the conditions of the Altai Region is substantiated.

УДК 633«321»:631.53.04:631.333

**K.M. Musynov,
K.K. Arinov**

METHODS OF IMPROVEMENT AND MOISTURE AVAILABILITY REGULATION OF SPRING WHEAT IN NORTH KAZAKHSTAN DRY STEPPE ZONE

Seeding moisture availability of various fast ripening varieties of soft spring wheat on dark chestnut soils of the agricultural company "Aktyk" of the Akmola Region is considered. It was revealed that average early biotypes of soft spring wheat used moisture more effectively in spite of seeding dates after bare fertilized by phosphate fallow, and the second wheat after fallow – average early biotypes on sown on May 25. Bare fallow provided yield increase by 0.25-0.67 tons per ha in comparison with non-fallow forecrop. At that, the group of average early varieties in drought period of summer exceeded average later biotypes by 0.04-0.22 tons of grain per ha.

УДК 634.721:631.521

Y.M. Batmanova**PROVISIONAL EVALUATION OF INTRODUCED VARIETIES
OF BLACK CURRANT IN THE CONDITIONS OF MIDDLE URALS**

Data on varieties' studies of 24 introduced varieties during 2 years of fruiting are presented. By number of economically valuable features the following varieties were provisionally identified: Krasa Lvova, Legenda-2, Lebed, Orlovskaya Serenada, Nika, Almai, Sanyuta.

УДК 633.2

V.G. Veretennikova**SPRING AND WINTER CROPS AND THEIR MIXTURES PRODUCTIVITY IN EARLY SPRING
AND STUBBLE SOWINGS IN DARK-GREY SOILS OF THE CENTRAL BLACK SOIL ZONE**

Comparative estimation of productivity and nutrition value of spring rape, oil-bearing radish, edible pea, spring vetch and their mixtures in early spring and stubble sowings.

Crops productivity depended on the components correlation in the mixture and on the harvesting terms.

Mixed sowings of cruciferous crops had higher contents of raw protein, raw fat, exchange energy in comparison with pea-vetch-oats mixtures.

AGRICULTURAL ECOLOGY

УДК 631.4(571)

P.I. Krupkin**TYPIFICATION OF LANDS AS THE FOUNDATION OF ADAPTIVE-LANDSCAPE SYSTEM
OF AGRICULTURE**

Typification of lands of a farm using topographic and soil maps, agri-chemical cartograms was carried out. 135 working sites which were incorporated into 6 types of lands were identified. Adaptive system of agriculture is necessary for each type.

УДК 332.33(470.630)

A.V. Loshakov

**ECOLOGICAL LAND-RECLAMATION ESTIMATION
OF THE LAND-TERRACES IN THE KUBAN RIVER AREA**

The issue of degradation of land resources in the area of the Kuban river is dealt with. Substantiation of the research and the relevance of the issue is presented. The results of the research, main arrangements in prevention of degradation processes and improvement of degraded lands are provided.

УДК 332.33(470.630)

Y.V. Vitko

STATE MONITORING OF AGRICULTURAL LANDS' FERTILITY IN THE STAVROPOL REGION

Soil cover monitoring in the Stavropol Region is dealt with. Directions of the observations, control and funding of activities of agricultural lands' fertility monitoring are presented.

ANIMAL PRODUCTION

УДК 636.22/.28.03

A.I. Afanasyeva,
V.G. Oguy,
S.A. Galdak

**PRODUCTIVE AND REPRODUCTIVE FEATURES
OF THE RED STEPPE BREED COWS BY VARIOUS NUTRITION TYPES**

The research revealed that raising dry cows of the Red Steppe breed by hey type of nutrition (up to 52%) improves their reproductive qualities (waiting period is reduced, and insemination index) and productive features (milk yield, colostrum quality).

УДК 636.2.084:577.1:591.11

**N.A. Nevinskaya,
A.M. Bulgakov,
V.V. Korolyov****IMPROVEMENT OF TREATMENT EFFECT BY MASTITIS IN COWS**

One of the problems in animal production causing significant economic losses is mastitis. There is dependence between valuable nutrition and resistance of cows to latent mastitis. The analysis of the diets being used currently revealed that they are deficient in sugar with sugar-protein disproportion (0.5-0.6:1) and deficient in copper by 52.4%, zinc – 25.9%, cobalt – 74.3%, manganese – 57%, iodine – 66.3%, and vitamin D – 73.5%, that results in resistance decrease to inflammatory diseases in development of latent mastitis cases. The research revealed that improvement of metabolic level and valuable nutrition are substantiated, at high degree of reliability ($P < 0.001$), by the following blood parameters: total protein concentration – up to 31%, albumins – 66, γ -globulins – 120, glucose – 23, hemoglobin – 40, total calcium – 31, inorganic phosphorus – 45.

УДК 636.294.611

**Y.S. Gorbachyova,
N.D. Ovcharenko****BASIC MORPHOLOGIC PARAMETERS OF THE THYROID AND ADRENAL GLANDS
OF THE KULUNDINSKAYA BREED OF SHEEP AND THEIR AGE CHANGES**

Some results of research to study age dynamics of structural-functional condition of the thyroid and adrenal glands of sheep of the Kulundinskaya breed are presented. In particular, the age changes of the basic morphologic parameters of investigated endocrine glands are considered: changes of weight and linear measurements.

УДК 636.083.32(574)

S.K. Abdrakhmanov**SWINE FIXATION METHOD**

Utility model of swine fixation when taking blood from cranial cava and making abdominal operations is proposed.

УДК 636.2.082.32(083.96)

Y.Y. Lebedko

ECONOMIC USE OF DAIRY COWS DEPENDING ON NUMBER OF FACTORS

Effect of some factors (breed, linear characteristic, bulls, breeding family) on long-term productive use of dairy cows was studied. Cows of combined direction of productivity (Simmental, Kostroma) reliably exceed black-and-white cows in longevity by 0.97-0.49 lactations. Holsteinized cows yield to thoroughbred black-and-white and Simmental cows in longevity by 0.73-1.46 lactations. Long-term productive use of dairy cows is determined hereditarily, and depends on belonging to the bull-father and breeding family.

VETERINARY MEDICINE

УДК 619:616-084:616

I.D. Kolesnichenko

**QUANTUM HEMOTHERAPY IN PREVENTION
AND TREATMENT GASTROINTESTINAL DISEASES IN NEW BORN CALVES**

One of perspective methods of prevention and treatment gastrointestinal diseases of animals is dealt with.

УДК 619:615.37:612.014.482

L.Y. Topuriya,
G.M. Topuriya**EFFECTS OF NATURAL ORIGIN PREPARATIONS ON REPRODUCTIVE ABILITY
AND IMMUNE STATUS OF COWS**

Effects of Ribav and Oletim on reproductive ability and immune status of cows were studied. It is revealed that the preparations contribute to decrease of postnatal pathologies in animals, and to cellular and humoral factors of immunity.

УДК 616:616.98:578.824.11

S.K. Abdrakhmanov,
S.M. Mamadaliyev**BIOLOGICAL PROPERTIES OF EPIZOOTIC STRAIN «KORDAI»
OF AUJESZKY'S DISEASE VIRUS**

Biological properties of epizootic strain "Kordai" PK 13-99/D of Aujeszky's disease virus RK BNC used to test immunogenicity of vaccines were studied.

УДК 19.630.528.8

**N.D. Arkhipova,
N.M. Bessonova**

ACTION OF DISINFECTANTS BY TUBERCULOSIS

The studies revealed that the disinfectant dimethylsulfoxide widely used in medicine under brand name Dimexid possesses high disinfectant activity towards pathogenic mycobacteria when disinfecting animal production and processing facilities in the Republic of Altai.

ECONOMICS OF AGRICULTURAL INDUSTRY COMPLEX

УДК 636.2:631.15/.16

**A.I. Kolobova,
O.A. Kosintseva**

REALIZATION OF CONDITIONS OF INTENSIVE DAIRY CATTLE BREEDING

Relationship of competitiveness of dairy cattle breeding and its management system, scientific and technological progress, production resources use is revealed. The range of current problems of dairy cattle breeding management system in agricultural enterprises of the Altai Region is identified.

УДК 330.1:63.007

M.V. Noskova

THEORETICAL FOUNDATIONS OF HUMAN RESOURCES STUDIES IN AGRICULTURE

Not adequate studies of theoretical and practical aspects, importance for profound development of the agri-industrial complex gave the reasons for studying human resources issues in agriculture. As the result of theoretical research the data of assessment of agricultural human resources and universal methodology of its studying is presented, that will be the foundation of new effective system of agricultural human resources.

УДК 338.436.33:633.1.003.13(470.326)

**V.A. Kuryanov,
A.V. Kuryanov****MAIN DIRECTION TO INCREASE EFFICIENCY OF GRAIN PRODUCTS SUB-COMPLEX**

The carried out analysis reveals influence of economic factors on efficiency of grain production on the farms of the Tambov Region. The main factors determining efficiency of grain products sub-complex are production costs per crops area unit and sale price of 1 ton of grain.

УДК 338.436.33(470.325)

V.I. Krasnopyorov**FACTORS OF CREATION OF INTEGRATED AGRICULTURAL ENTERPRISES**

Agricultural industry complex of Russia of the late 1990-s is characterized by the beginning of intensive integration and investment processes. There goes creation of all-sufficient vertically directed systems – agri-holdings, associating the whole technologic chain from the production of raw materials to the sales. An important issue when analyzing agri-holdings' activity is motivation of non-agricultural companies investing in agriculture.

УДК 338.436.33:314:63.007(571.17)

**G.M. Gritsenko,
M.V. Noskova****INFLUENCE OF DEMOGRAPHIC SITUATION ON HUMAN RESOURCE FORMATION
IN THE REGIONAL AGRICULTURAL SECTOR**

The Altai Region as well as other regions of the Russian Federation goes through deep demographic depression caused by the conditions of the population reproduction. The latter is expressed in the phenomena describer by a term "natural movement". It refers to birth rate, mortality, family and marriage relations: marriages and divorces.

Analysis of demographic situation in the rural areas revealed that the long process of birth rate decrease accompanied by mortality increase resulted in deformation of the age structure of the rural population. Number of children and young people decreases and, naturally, number of old people increases. Therefore, the social-demographic situation worsening in the rural areas interferes in the human resource potential formation.
