

A B S T R A C T S

EDUCATION: PROBLEMS AND PERSPECTIVES

УДК 378:63

**A.A. Novosyolova,
G.A. Khromchenko**

**DISTANCE EDUCATION AS ONE OF IMPORTANT ASPECTS
OF AGRICULTURAL EDUCATION MODERNIZATION
(WITHIN THE FRAMEWORK OF THE BOLOGNA PROCESS)**

The studied issues of distance education enable to improve many educational courses and to enhance level of teaching in all the forms.

SCIENTIFIC DEVELOPMENTS FOR AGRICULTURAL PRODUCTION

УДК 016.608

**G.G. Morkovkin,
N.G. Deyev,
V.A. Dyomin**

INNOVATION WAY OF DEVELOPMENT IS A REAL PERSPECTIVE FOR THE ALTAI REGION

Creation and right protection of intellectual property objects is one of the most important conditions of successful economic, scientific and technical development of any region.

By the results of 2005 the Altai Region is ranked the 22nd in the country by the number of applied inventions, the 32nd by the number of applied useful models, the 27th by applied production prototypes, the 8th by applied software, and the 28th by application of all kinds of intellectual property. That indicator can be considerably improved because there is no other way to achieve stable and effective economy in the Altai Region.

AGRONOMY

УДК 633.11:321:631.526:631.559

**I.T. Trofimov,
L.V. Sokolova****EFFECT OF VARIOUS SEEDING RATES ON THE YIELDS
OF SUMMER SOFT WHEAT VARIETIES**

The paper is devoted to studies of the effect of various seeding rates on the yields of summer soft wheat varieties in conditions of temperate arid forested steppe of the Altai Region. The experiment was carried out by a standard technique in 2003. The analysis of the obtained results revealed that in the conditions of the Training Farm «Prigorodnoye» the most economically efficient for cultivation is the variety Altaiskaya 50 at seeding rate of 7,5 million seeds per ha; profitability level is 215%. For the rest of the studied varieties the optimum seeding rate for cultivation in those conditions is also 7,5 million seeds per ha.

УДК 634.743:631.52 (571.15)

**I.A. Fedotov,
S.S. Ryakhovskiy,
T.Y. Khvoina,
A.V. Shishkin****EFFECT OF VARIOUS STAND THICKNESS ON SOIL MOISTURE AND PRODUCTIVITY
OF FRUCTIFEROUS BRANCHES, AND THEIR EFFECT
ON SEA-BUCKTHORN YIELD INCREASE**

The research deals with the effects of soil moisture, total vegetative gain, shrub size, productivity of fructiferous branches, and yields in a garden with no irrigation. It is revealed that thicker plantings in a row in dry conditions have the best soil moisture availability compared to the check planting.

Structural elements of sea-buckthorn productivity in thicker plantings in a row in dry conditions, all the parameters decrease.

AGROECOLOGY

УДК 631.445.4:631.417.2(571.15)

**G.G. Morkovkin,
M.Y. Ivanova,
S.B. Tarasova,
D.A. Taylashev****CHANGE OF HUMUS FRACTION COMPOSITION OF THE LEACHED CHERNOZEMS
OF THE MEADOW STEPPE OF THE ALTAI REGION UNDER THE IMPACT
OF LONG-TERM USE AS ARABLE LANDS**

Anthropogenic impact results in change of humus fraction composition of Chernozems. The effects of intensive anthropogenic impact in the form of continuous soil use as arable lands for growing potatoes without application of fertilizers for a long time (28 years) are most strongly represented in the components of humus fraction composition which are iso-

lated at a soil test after decalcification. The humus, which is classified as a humate type for virgin leached chernozems, under the effect of long-term soil use as arable land for potatoes passes into fulvate-humate interval.

ANIMAL PRODUCTION

УДК 636.294:591.4:591.147.4

**S.P. Yermakova,
Y.M. Malofeyev,
S.N. Chebakov**

ON MORPHOLOGY OF EPIPHYSIS AND HYPOPHYSIS OF MARAL (CERVUS ELAPHUS SIB.)

The paper deals with the morphology features of incretory organs - epiphysis and hypophysis, derivatives of primary oral cavity and cerebral vesicle. Cell elements of each gland are described, their dimensions are provided. Microphotographs of various parts of maral epiphysis and hypophysis are provided.

УДК 636.294:636:612.35

**N.T. Silantyeva,
A.A. Gnemenko,
I.N. Zadorozhnaya**

GLYCOGEN IN HEPATOCYTES OF FETUSES OF MARALS AND DEER

The research results reveal that glycogen in liver of deer fetuses fills up the whole parenchyma, being located in almost all hepatocytes. Hepatocytes of maral fetuses contain less glycogen. The content of inclusions in section is diffusive, irregular. The glycogen is represented by large big lumps with small granulosity, with single disposition.

УДК 619:636.294:591.41:471.273

**A.V. Bezmaternykh,
Y.M. Malofeyev**

ARTERIES OF CHEST LIMB OF MARALS

Research of arterial bed of chest limb of marals of various age groups revealed specific peculiarities of architectonics and topography, also data on diameters, discharge angle, and lengths of those vessels. It is determined that blood supply scheme of axillary artery of marals is similar to that of reindeer, but it has some specific peculiarities related to different conditions of the habitat.

УДК 636.2.082

**A.A. Perfilov
K.B. Baymishev****REPRODUCTIVE POTENTIAL OF COWS DEPENDING ON THE LEVEL OF MILK EFFICIENCY**

To increase efficiency of horned cattle it is important to study physiological potentialities of reproductive system of high-productive cows. The results of the research revealed that by intensive milk production technology and by establishing appropriate conditions of keeping and feeding the animals it is possible to combine high dairy efficiency and normal prolificacy of cows.

VETERINARY MEDICINE AND PHARMACOLOGY

УДК 619: 636. 2:591.133.2

**O.V. Batanova,
A.A. Elenshleger****PREVENTION OF SUBCLINICAL KETOSIS OF COWS**

Prevention of subclinical ketosis is studied. Application of 0,1% KMnO_4 solution, 40% glucose and vitamin B_3 proved its effectiveness. It is revealed that accumulation of the applied preparations contribute to glucose optimisation, alkali reserve, total protein, vitamin A, value of mercury bichloride test, and improves hematopoietic function.

УДК 619:616.07:[636.082.455. 619:618.177.636.3

M.G. Khalipayev**EVALUATION OF TECHNIQUES OF PREGNANCY
AND INFERTILITY DIAGNOSTICS IN SHEEP**

It is possible to carry out diagnostics of pregnancy and infertility in sheep by the technique of solid-phase enzyme immunoanalysis (EIA) of blood serum to detect progesterone. Here, the informative test is the one with increase of the hormone level beginning with the 20 th day after insemination.

УДК 619:616.006.446.632.938

**I.M. Donnik,
Y.N. Shilova,
V.B. Shilov****INCREASE OF EFFICIENCY OF DIAGNOSTICS OF BOVINE LEUKAEMIA VIRUS
IN ECOLOGICALLY UNFAVOURABLE AREAS**

In areas of technogenic and radioactive pollution unfavourable situation by bovine leukaemia virus is connected with presence of animals with immunologic insufficiency. Researches according to condition of the immune status of the cows infected BLV and free from it have shown presence of immune insufficiency at seronegative cows and seropositive cows of unfavourable herd. Due to immunodepression at cows from territories of ecological trouble decrease in synthesis of antibodies to BLV is possible, thus the infected animals are detected only in PCR. With immune infringements, possibly, fast clinical development of leucosis is also connected.

MACHINERY

УДК 631.31

**V.I. Belyayev,
V.N. Samodurov,
S.A. Loktionov**

**RESULTS OF APPLICATION EFFECTIVENESS EVALUATION OF SKS SEEDING
UNITS MANUFACTURED BY JOINT-STOCK CO. «PAVLOVSK-AGROHOLDING»
IN THE ALTAI REGION**

The paper provides the results of tractive tests of SKS seeding units on the farms of the Region. Calculation of technical-economic parameters of the seeding units attached to Kirovets tractors, and SKS seeding units with various operational widths.

УДК 631.31

V.I. Belyayev

**EXPERIENCE OF ORGANIZATION AND CARRYING OUT RESEARCH WORK
AT THE CHAIR OF AGRICULTURAL MACHINERY
OF THE ALTAI STATE AGRICULTURAL UNIVERSITY**

The paper deals with some experience of organization of research work at the Chair; it describes main results of cooperation with mechanical engineering companies manufacturing new equipment, as well as with some farms of the Region, which introduce that machinery.

PROCESSING: TECHNOLOGIES AND EQUIPMENT

УДК 633.34:664.0:636.084

**V.I. Zemskov,
G.M. Kharchenko**

**RELIABILITY CALCULATION OF PRODUCTION LINES FOR PRESSING
AND CLARIFICATION OF SOYBEAN OIL**

The paper provides formula deduction to calculate readiness factor of a production line with blocked structure (with rigid connection of the elements). Structural arrangement of most frequently used production lines for pressing and clarification of soybean oil and readiness factor are provided, as well as performance specifications of the basic machinery. Possibility of optimisation of the production lines structure with consideration of their reliability is emphasized.

ECONOMICS AND MANAGEMENT

УДК 331

**A.I. Kolobova,
A.M. Lariontseva**

SOME THEORETICAL THESES OF LABOUR RESOURCES AND LABOUR POTENTIAL

The necessity of improvement the concepts in the labour sphere is substantiated. The essence of concepts «labour resources», «labour potential», «labour» is defined. Definition of labour potential taking into consideration peculiarities of agricultural production is proposed.

УДК 331.101.6

**A.M. Zubakhin,
T.V. Vishnyakova**

ON THE ISSUE OF LABOUR PRODUCTIVITY

In the conditions of new economic mechanisms' formation the key factor is increase of labour productivity in agriculture, as well as economy of labour, materialized in the means of production, raw materials and supplies, economy of all cumulative labour. The paper deals with the concept, economic essence, methodology issues of systemic research of labour productivity and systematic realization of the labour economy reserves.

FINANCE AND ACCOUNTING

УДК 336.647:687.411

**T.G. Gurnovich,
M.N. Vetrova**

**OPTIMIZATION OF DISTRIBUTION OF CASH FLOWS OF THE ENTERPRISES
OF THE DAIRY INDUSTRY OF REGIONAL AGRICULTURAL INDUSTRY COMPLEX**

High competition in the market of dairy products as well as limited labour, raw material and financial resources of the enterprises make the enterprises choose from range of products being in demand in the market those products that allow to get the highest profit. The basic criterion of selection the products to be produced is the value of marginal profit per unit. The technique applied by the authors allows optimising cash flows with a view of getting the highest profit.

УДК 631.162:657:336:77

V.S. Germanova

**DEVELOPMENT OF NEW ORGANIZATIONAL FORMS
OF INVESTMENT ACTIVITY IN AGRICULTURE**

Necessity of leasing application in agriculture is substantiated; advantages and ways of improvement of leasing relations at federal and regional levels are examined.

PHILOSOPHY AND POLITICAL STUDIES

УДК 1

A.F. Upravitelev

HEURISTIC OPPORTUNITIES OF COMMON SENSE

Attributes of common sense are presented: demonstrative subjectivity, naive realism, immediatism; the area of expertise of common sense in science is described: world outlook and methodological reflection of purposes and means of activity, communicative approbation and explication of the area of value of new knowledge.

УДК 1

K.Y. Akinshina

ON PECULIARITIES OF ARTISTIC IMAGE APPLICATION IN ADVERTISING CREATIVITY

Peculiarities of application of elite art images in the process of advertising creativity of are studied. The author analyses influence of various factors on application of artistic images. In particular, value of thing and environment as basic regulators of advertising creativity determining ideological-semantic transformation of an image is revealed, also conditions of creation the most effective advertising message based on artistic material of elite culture are determined.
