

ABSTRACTS

AGRONOMY

УДК 635.64:631.559:631.8

O.I. Antonova,
N.I. Zudilov

FORMATION OF TOMATOES' YIELDS AND THEIR QUALITY BY APPLICATION NEW LIQUID ORGANIC FERTILISERS

Issues of the Buyan-Boyets tomato variety yield increase in conditions of the Per-vomaiskiy District of the Altai Region are considered in view of application peat-humic fertilisers "Panatseya" and "Talisman" and chitinous fertiliser "Artemia".

УДК 633.11<321>631.543

F.M. Strizhova,
V.G. Bokova

EFFECT OF BUCKWHEAT SOWING TECHNIQUES ON THE YIELDS IN CONDITIONS OF TEMPERATELY ARID FORESTATION STEPPE OF THE ALTAI REGION

As the result of the carried out research it is shown that sowing techniques and biological features have significant effect on the yields of buckwheat varieties. Higher yields are formed by wide-row sowing technique.

УДК 633.11«321»:631.543.1:57.017.32

Y.N. Titov

FORMATION OF SPRING WHEAT GRAIN QUALITY DEPENDING ON THE FORECROP

It is shown that in conditions of temperately arid forestation steppe of the Altai Region spring wheat cultivation on fallow as a forecrop compared with wheat as a forecrop allows to increase essentially protein contents in grain. Responsiveness of the varieties to growing conditions' improvement depends on their genotypic features.

AGROECOLOGY

УДК 631.436

S.V. Makarychev

LAND IMPROVEMENT AND THERMALPHYSIC STATE OF SOILS OF THE STEPPE AND FOREST-STEPPE ZONES OF THE ALTAI REGION

Chemical and biological land improvement of saline and acid soils of various natural-climatic zones of the Altai Region promotes improvement of their thermalphysic state.

УДК 631.41:631.445.41:631.445.52+553.25

I.T. Trofimov,
N.P. Chizhikova

CHEMICAL-MINERALOGICAL STRUCTURE OF CHERNOZEMS AND SALINE SOILS OF THE FORE-ALTAI PROVINCE

As for mineralogical structure of the investigated soils, minerals with rigid structures, providing low exchange capacity prevail. Hydromicas cause high K_2O content in silt fraction. Dioctahedron type of micas-hydromicas quite resistant to weathering indicates possible potassium deficiency in those soils.

УДК 632.954

A.V. Ilyin,
V.I. Panichek,
L.K. Yatsenko

FEATURES OF GRAMICIDES APPLICATION FOR BARLEY

In 2004, 2005 plants of barley were treated with gramicide Puma Super 7.5%, EMV, 1.0 l/ha at tillering stage. As the result the barley varieties Anna, Bakhus, Zolotnik, Luka, Omskiy 86, Omskiy 87, Omskiy Bare-Grained 1, Partner were not affected by the preparation; the varieties Annabel, Adonis, Anton, Vulkan, Zevs, Omskiy 91, Parma, Priazovskiy, as well as Ratnik, Signal, Simon, Sokol, Kharkovskiy 99 revealed some growth delay, which then was quickly over; the varieties Valet, Nikita, Chelyabinskiy 99 revealed strong supression which was observed up to harvesting.

УДК 634.721/.724;634.776.7:631.544.75 (571.1/.5)

**V.V. Kandaurova,
V.F. Severin****PROTECTION TREE BELT AS AN IMPORTANT FACTOR
OF FRUITING IMPROVEMENT OF CURRANT IN VARIOUS GARDENING ZONES
OF WESTERN SIBERIA**

The research was carried out in 1975 with varieties 'Primorskiy Chempion' and 'Golubka' with the use of multi-row wind-proof tree belt, and in 2006 with varieties 'Zabava', 'Ksyusha', 'Mila', 'Sharovidnaya', and 'Rita' under effect of double row common birch tree belt. It is shown, that the tree belts affect shrubs' growth and leaf formation, weight of berries and yielding capacity. The conclusion is drawn, that tree belt should be of open planted structure, and the width of garden's square should not exceed 100 meters.

ANIMAL PRODUCTION

УДК 636.39:612.018

A.I. Afanasyeva**EFFECT OF PROLIFICACY ON HORMONAL STATUS
OF GOATS OF THE GORNOALTAISKAYA DOWNY BREED**

The research carried out on pregnant goats of the Gornoaltaiskaya downy breed revealed that the level of adrenocortical hormones, of hormones of thyroid and sexual glands is affected to certain extent by multiple pregnancy of the animals. The goats pregnant with two fetuses have higher level of the investigated hormones in blood serum, than the single fetus goats, that confirms high functional activity of the former.

УДК 619:636.52/58:591.2:636.084

**V.P. Fedotov,
M.P. Solodovnikov****BEAK AGGLUTINATION IN HENS WITH PULVERULENT FRACTION OF THE FEED**

Observation was carried out on the poultry farm "Pavlovskaya", the Pavlovsk District of the Altai Region. The case of beak agglutination in hens was recorded in November 2004.

The theoretical version of the authors that the reason was the floury feed was confirmed by further experiments. When hens are watered by nipple waterers, the moistening of the mouth cavity is not sufficient to fully remove the pulverulent feed from it.

УДК 636.4.04

O.Y. Rudishin,
Y.N. Simoshina,
P.Y. Grabilov,
K.Y. Luchkin

**APPLICATION OF PROBIOTICS SEPARATELY AND COMBINED WITH SORBENT
IN THE DIET OF YOUNG FINISHING PIGS**

Application of a microbiological preparation "EM Agro Ob" separately and combined with a sorbent (activated charcoal) contributed to increase viability of young pigs by 6-10%, and to increase growth intensity by 12-40% due to normalisation of young pigs' digestion, accompanied by optimisation of intestines microflora structure on background of gastrointestinal tract contents detoxication.

УДК 636.2.084:636.088

N.I. Shevchenko

**EFFECT OF BUCKET-REARING PERIOD REDUCTION AND EARLY INTRODUCTION
OF BEET PRESSCAKE INTO THE DIET ON MEAT EFFICIENCY OF CALVES**

The investigated factors (reduced bucket-rearing period and early introduction of beet presscake and molasses into the diet) essentially affected formation of meat efficiency of Simmentalized calves being fattened for beef up to the age of 20 months. Their carcasses were graded as the first category on fatness. The highest slaughter yield was recorded among the animals of subgroup II – 58.1%.

УДК 636.5.002.5

A.M. Bulgakov,
L.M. Gavrikova

**EFFECT OF IODINE STARCH IMPLANTATION ON NATURAL RESISTANCE LEVEL
OF BROILER CHICKEN**

Increase of the level of natural resistance to inflammatory diseases is an urgent task of commercial poultry farming. The research on the effect of iodine starch solution injections on natural resistance level to inflammatory diseases and efficiency of broiler chicken is presented.

TECHNOLOGIES AND MEANS OF AGRICULTURE MECHANISATION

УДК 631.31

V.I. Belyaev,
V.M. Shishov

TECHNICAL SUPPORT OF ENERGY- AND RESOURCES SAVING TECHNOLOGIES IN THE ALTAI REGION

Analysis of the condition of tractor fleet of 50 kN class in the Altai Region and of perspective models of "Kirovets" tractors was carried out. Comparative evaluation of foreign tractors of 300 B.H.P. class is given, along with comparative analysis of domestic and foreign tractors. Measures on technical and technological re-equipment of the production are proposed.

УДК 621.317.39

Y.V. Kandrin,
V.A. Tsymbalist,
O.V. Tsymbalist

INDUCTIVE CONVERTER OF LINEAR MOVEMENTS FOR BAND THICKNESS CONTROL

Substantiation of a possibility of inductive converter application for measurement of rubber band thickness is presented.

УДК 636.03:631.36 (075.8)

S.N. Zykovich

IMPROVEMENT OF FEED PALLETS PRODUCTION TECHNOLOGY

The proposed feed pallets production set-up allows to reduce the number of technological processes, to save all nutrients of forage crops, to reduce intensity during preparation of forage, to increase up to 50% utilisation of rough forage, and to reduce production costs, energy and metal consumption of the feed production operation.

ECONOMICS OF THE AGRICULTURAL INDUSTRY COMPLEX

УДК 631.162:336.2

**L.I. Kirkeyeva,
Y.N. Kushner**

TOLLING: BUSINESS ACCOUNTING, TAX OPTIMISATION

In present-day conditions for enterprises engaged in processing of raw materials it is considered economically effective to enter contracts of tolling of joint activity on reciprocal terms. Tax optimisation of such sort of relations is substantiated by the case study, and intended to implementation under condition of the legislation observance.

УДК 631.15/16:332

**O.G. Shalagina,
N.I. Kalashnikova**

ORGANISATION OF RATIONAL LAND MANAGEMENT

The complex of economic, agronomic and ecological measures of rational use of arable land is considered.

УДК 332.33.008.2:37

**L.M. Tatarintsev,
V.L. Tatarintsev**

AGRICULTURAL PURPOSE LANDS' MANAGEMENT IN A MUNICIPAL FORMATION

The complex of measures to create an effective system of agricultural purpose lands' management in a municipal formation is dealt with.

УДК 65.01(075.8)

V.V. Zhdanov

THE FACTORS AFFECTING ORGANIZATIONAL-ECONOMIC MECHANISM OF PAYING CAPACITY PROVISION

The factors of organizational-economic mechanism of paying capacity provision of an economic entity are dealt with, as well as precondition of insolvency of internal and external character.
