

THE BULLETIN

of Izhevsk State Agricultural Academy

Theoretical and practical journal

№ 1 (34) 2013

ADAPTATION OAT CULTIVATION TECHNOLOGY

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Generalized extensive experimental material on the adaptation of technologies of cultivation of different varieties of oats planting. Examine the role of each element of the technology in the formation of the yield in the conditions of the Middle Ural.

Key word: oat; grade; adaptive technology; abiotic conditions; seed dressing; methods of sowing; methods of care; methods of cleaning.

INFLUENCE OF THE PRESOWING WORKING OF SEEDS ON PRODUCTIVITY AND QUALITY OF OATS KONKUR

T.N. Ryabova – Post graduate Student

M.A. Strizhkova – Student

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The presowing working of seeds by extracts from the sprouts of winter wheat, rye, by the mixture of microcells, by pickle and with the combination of pickle with the microcells provides obtaining the larger productivity of grain with the best qualitative indeves.

Key words: oats; presowing working; productivity; quality of grain.

THE FORMATION OF THE PRODUCTIVITY OF OATS KONKUR DEPENDING ON THE PERIOD OF SOWING

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Sowing oats Konkur within the earliest possible period ensures the greatest productivity due to the thickness of productive stems and mass of the seeds of plant.

Key words: oats; the period of sowing; the productivity.

THE INFLUENCE OF STANDART OF SOWING ON THE PRODUCTIVITY OF OATS KONKUR

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The greatest productivity of oats 2,65 t/ha is formed with the standard of the sowing of 6 mln. the pieces of germinating seeds on 1 ga with the thickness of the standing of productive stems to the harvesting - 365 pcs/m² and mass of grain from the whisk 0,76 g.

Key words: oats; the standard of sowing; productivity; the structure of the productivity.

SELECTION OF HIGH-YIELDING, ADAPTIVE VARIETIES OF OATS IN ULYANOVSK RESEARCH INSTITUTE

Z.K. Stoletov, V.G. Zakharov, O.G. Mishen'kina

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The result of the last years of collaboration Ulyanovsk Agricultural Research Institute and the Moscow Research Institute has been the creation of 3 varieties of oats complex uses of: Jumping, Derby Trotter and approved for use in the production.

Key words: oats Jumping; oats Derby; oats Trotter.

ECONOMIC AND BIOLOGICAL EVALUATION OF ACCESSIONS OF OATS SOWING

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According to the results of the evaluation 7 selection of rooms oats planting in the conditions of the Udmurt Republic is allocated by the complex of economically - valuable features three rooms - CSI 9 (Dun), the CSI 10 and CSI 27.

Key words: oats plantin; breeding patterns; productivity; the structure of the yield; grain quality.

THE FORMATION OF THE YIELD OF GRAIN OATS GUNTHER DEPENDING ON SOWING NORM

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L.A. Malyh – Student
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Sowing oats with the norms of sowing 5, 6 and 7 million pieces viable grains of seeds per 1 hectare contributed the highest productivity of grain – 2,69-2,82 t/ha. The decrease of sowing norm of up to 4 million pieces of viable grains of seeds per 1 hectare or increase it up to 8 million pieces of viable grains of seeds per 1 hectare reliably reduced seed productivity by 0.26 and 0.23 tonnes/ha, respectively.

Key words: oats planting; variety; crop yields; the structure of crop yields; the quality of the grain.

NEW GRADES OF OATS OF SELECTION OF THE MOSCOW SCIENTIFIC RESEARCH INSTITUT OF THE AGRICULTURE «NEMCHINOVKA»

A.D. Kabashov, Z.V. Filonenko, L.G. Razumovskaya
Ulyanovsk Research Institute

The short characteristic is provided in article removed in laboratory for the last five years of new grades of oats.

Key words: oat; variety; adaptation.

THE ACTUAL DIRECTIONS IN OATS SELECTION AT THE PRESENT STAGE

A.D. Kabashov, R.Z. Mamedov, Ya.G. Leybovich
Ulyanovsk Research Institute

In article topical issues of selection of oats on biochemical indicators and on resistance to the most harmful diseases of oats are discussed.

Key words: oat; protein; resistance; diseases; variety.

OATS IN THE AGRYZ REGION OF THE TATARSTAN REPUBLIC

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In the municipal area of Agryz Tatarstan necessary can increase the area of cultivation of oats, because oats are sown phytosanitary quency of cereals and its possible placement at the end of a rotation.

Key words: oats; yield; grade; Los 3; Allure; the area.

A.I. ZOLOTAREV. MAJOR LIFE MILESTONES

A.M. Lentochnik – Doctor of Agricultural Sciences, Professor
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Professor Zolotaryov A. I. was plant protection scientist. He worked in Izhevsk agricultural Institute (Academy) and headed of the Chair of plant protection and agricultural microbiology, studied lupin's diseases and defended candidate's thesis. After that conducted original research causes loss of winter crops, which was the basis of successfully defended doctoral thesis.

Key words: Zolotaryov A. I.; plant protection scientist.

THE SCIENTIFIC LEGACY OF A.I. ZOLOTAREV - BASED ON ADAPTIVE TECHNOLOGY OF CULTIVATION OF WINTER CROPS

I.Sh. Fatykhov – Doctor of Agricultural Sciences, Professor
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The scientific legacy of A.I. Zolotarev Infection rot of winter cereals and justification of measures to deal with it is the basis for the development of adaptive technologies for winter crops.

Key words: winter grains; winter rye; winter wheat; damping off disease; snow mold; seed treatment; fungicide.

PRODUCTIVITY OF VARIETY O WINTER RYE IN CONDITIONS OF MIDDLE URALS

A.V. Milchakova – Candidate of Agricultural Sciences, Assistant Professor
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Researches, conducted for the study of varieties winter rye in 2012 year showed that grains productivity varied from 2,60...5,43 t/ga. The highest yields were at varieties Pamyati Kunakbaeva (5,43 t/ha) and Parom (5,29 t/ha).

Key words: winter rye; variety; productivity; yield structure; grain quality.

RESPONSE OF WINTER WHEAT CULTIVARS TO ABIOTIC CONDITIONS OF MIDDLE URALS

N.I. Mazunina – Candidate of Agricultural Sciences, Assistant Professor
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Izhevsk State Agricultural Academy

Research conducted in 2011 showed that all varieties of winter wheat showed high and very high hardiness. Wintering ranged from 88 to 95%. The highest yields were at varieties Zhemchyzina Povolzhya (3,16 t/ha) and Saratovskaya 17 (3,05 t/ha), which is up 0,53 and 0,43 t/ha.

Key words: winter wheat; variety; grain yield; yield structure.

COMPARATIVE PRODUCTIVITY OF VARIETIES OF WINTER GRAIN CROPS IN TERMS OF MIDDLE URALS

N.I. Mazunina – Candidate of Agricultural Sciences, Assistant Professor

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Researches, conducted on study site of Izhevsk State Agricultural Academy for the study of varieties winter barley in 2009 year showed that grains productivity varied from 1,5...3,7 t/ga and has given way on 1,0...3,8 t/ga relatively of the productivity to winter rye Falenskayja 4 (st 1).

Key words: winter barley; winter wheat; winter rye; variety; productivity; yield structure; grain quality.

COMPARATIVE PRODUCTIVITY OF WINTER GRAIN CROPS DEPENDING ON CLEANING TERM ON THE AVERAGE THE CIS-URALS

I.V. Batueva, S.L. Eliseev, N.N. Yarkova

Perm State Agricultural Academy

Comparative productivity of winter grain crops (rye, wheat, triticale) depending on cleaning term is presented. Indicators of formation of density and efficiency of plants of winter grain crops are given.

Key words: yield, term grades, rye, wheat, triticale

COMPARATIVE PRODUCTIVITY OF WINTER RYE AND WINTER TRITICALE CROPS IN INTERMEDIATE URALS

J. S. Peshina, E. D. Akmanaev

Perm State Agricultural Academy

The results of studies on the effect of the type of use of winter rye and winter triticale in intermediate crops. It was revealed that in the Urals triticale productive than rye.

Key words: winter rye; winter triticale; yield; productivity; intermediate crops.

FORMATION OF RED CLOVER SEED YIELD DEPENDING ON THE WAY SEEDING

L.I. Auhadieva – Post graduated Student

M.F. Amirov – Professor

Kazan State Agricultural University

Seeding method and presowing seed treatment with a biological preparation have great influence on seed productivity of meadow clover. Investigations have been made on grey forest soils of Predkamy Region. Biological preparation “Biogumat” favoured the increase of meadow clover seed productivity as follows: row seeding method – 7,6%, each second row seeding method – 9,8%, band seeding method – 13,6%. Band seeding method appeared to be more effective the last 2 years.

Key words: meadow clover; presowing seed treatment; seeding methods; seed productivity.

AFTEREFFECT OF COVER CROPS THE FORMATION CLOVER SEED CROP

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M.F. Amirov – Professor

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Influence of cover crops on the formation of meadow clover yield remains in the following years. Investigations have been made on grey forest soils of Predkamy Region. The yield productivity of clover seeds in 2010 is comparatively inconsiderable: sowing without a cover crop – 90 kg, sowing under a cover of spring wheat – 146 kg, sowing under a cover of barley – 123 kg, sowing under a cover of annual grasses – 98 kg per hectare. Sowing of meadow clover under a cover of spring wheat and barley have been more effective the last 2 years.

Key words: meadow clover; sowing under a cover of other crop; yield productivity.

WEATHER EFFECT ON THE PRODUCTIVITY OF FIELD CROPS ON FARMS AGRYZ MUNICIPAL DISTRICT OF TATARSTAN

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In the district of the Republic of Tatarstan Agryz to obtain stable yields of crops is necessary to expand the area of planting of winter rye as a country-dashed culture, as well as to provide a stable high production of potatoes to the cultivation in irrigated areas.

Key words: weather conditions; crop yield; field crops.

EFFECT OF MATURITY OF WINTER CROPS ON GRAIN QUALITY IN THE CIS-URALS

O.S. Tihonova – Candidate of Agricultural Sciences, Assistant Professor

I.Sh. Fatykhov – Doctor of Agricultural Sciences, Professor

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As a result of studies it is established that the optimal period for sowing winter grain crops is set during the second decade of August. During this period of sowing was formed grain with higher kind.

Key words: sowing date; winter rye; winter wheat; winter triticale; wheat; nature.

EVALUATION OF SELECTION MATERIAL OF WINTER TRITICALE

T.A. Babaytseva – Candidate of Agricultural Sciences, Assistant Professor

I.V. Sterkhova – Post graduate student

K.S. Kunavina – Student

Izhevsk State Agricultural Academy

This article describes the results of studying of selection material of winter triticale in the control nursery. Breeding sample 78/07 has many of valuable qualities and interesting for the selection.

Key words: breeding sample; nursery; yield; winter hardiness; valuable properties.

INTRAVARIETAL VARIABILITY OF WINTER TRITICALE IZHEVSK 2

T.A. Babaytseva – Candidate of Agricultural Sciences, Assistant Professor

Izhevsk State Agricultural Academy

The article is devoted to the study of the morphological structure of varieties-population Izhevsk 2. Were revealed within the structure morphotypes varieties, determined by their share in shaping productivity, set the method of selection for seed production.

Key words: sort-population; the structure varieties morphotype; the method of selection.

INTERMEDIATE CULTURE IS THE OPPORTUNITY TO INCREASE THE PRODUCTIVITY OF CROP ROTATION

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O.V. Esenkulova – Candidate of Agricultural Sciences, Associate Professor

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The most productive link crop rotation is «winter rye for green forage, the intermediate millet - winter rye grain», in which the collection of fodder units amounted to 7,07 thousand fodder units./ha, it is by 3.14 thousand fodder units/ha. (80 %) exceeds the control and at 1.22 fodder units/ha. (20 %) more than the collection of the link to the intermediate sowing of cereal-pea mix. The level of profitability amounted to 66 % above the control.

Key words: intermediate culture; millet seed; cereal-legume mix; crop rotation productivity.

FORMATION OF POTATO HARVEST EARLY VARIETIES DEPENDING ON THE WAY LANDING

A.N. Zhuravlev – Student

V.P. Vladimirov – Doctor of Agricultural Sciences, Professor

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The results of the comparative evaluation of methods of planting early varieties of potatoes on gray forest soils of the Republic of Tatarstan. The studies found that the most effective way for planting early maturing varieties is to plant in the combs. Compared with a smooth landing, this method has provided higher yields on the sort of Arosa at 2.26, 2.26 Latona, Ukama by 1.98 t / ha.

Key words: potato; varieties; method of planting; yield; starch content; the collection of starch.

PRODUCTIVITY AND QUALITY OF POTATO TUBERS VARIETY SPRINT DEPENDING ON THE APPLICATION OF GROWTH REGULATORS SILK

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The reaction of the new early-maturing varieties of potatoes Sprint making foliar growth regulator Silk. Found that the use of the drug for non-root Silk make a dose 5-15 ml ai / ha. Increased leaf area at 4,0-5,8 thousand m²/ha, the yield of tubers per 2,41-5,51 t / ha,

the starch content in the tubers at 0.3-0.8%, vitamin C at 0.3-0.4 mg% and reduced the spread of late blight on plants to 44,7-56,1%, the nitrate content in tubers of 6 ,8-15, 0 mg / kg. The most effective was the introduction of a three-fold growth regulator foliar Silk (in the budding stage and 2 times every 10 days) dose of 15 ml ai./ha.

Key words: variety; dose; leaf area; yield; quality of tubers; net income; profitability.

INCREASE OF WEAR RESISTANCE OF HAMMERS GRAIN CRUSHERS

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Considered the drawbacks of the existing structures of grain crushers, identified possible ways to address them, with the purpose of increase of the resource. Noted the need to increase the wear resistance of the hammers grain crushers, as well as the analysis of existing methods. A new technology of creation of wear-resistant coatings on working surfaces of hammers by the method of high-speed laser melting powder materials. The method allows to obtain coatings of borides with the adhesion strength close to the strength of the substrate material with thickness from 0.5 to 2 mm.

Key words: hammer crusher; hammer; wear resistance; resource; selective laser sintering; and cover.

GEARING IN A MECHANISM FOR THE PROCESSING OF AGRICULTURAL PRODUCTS

A.S. Kanayev – Candidate of Technical Sciences, Assistant Professor

L.Y. Lebedev – Candidate of Technical Sciences, Professor

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Possibility of application of gear gearing as a constructive element of processing of agricultural production is considered. Conditions of theoretical and practical application of cogwheels with new elements are offered. Dependences for calculation of the key geometrical and power parameters of gearing are given.

Key words: gear, calculation, geometry, power parameters, processing of agricultural products.

LAMPS AND LIGHTING FIXTURES FOR THE GREENHOUSE OF THE UDMURT REPUBLIC

N.P. Kondratieva – Doctor of technical sciences, professor
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The object of the study is irradiation facilities used for plants growing in the frame area. The aim is to increase the efficiency of the LED irradiators. The paper examines the LED characteristic and its advantages and disadvantages. The main advantage is the ability to regulate both the intensity of the total luminous flux and the change of the spectral composition at the expense of the regulation of the LED radiation intensity in the various light ranges.

Key words: radiation, range, LED, intensity, efficiency.

BUSINESS ENTROPY

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Similarly to the ideas of thermodynamics on the static entropy it is proposed to apply the concept of business quality entropy with the help of which it is possible to evaluate the critical limits of consolidated superpower business structures. The probable formation processes of a business structure are correlated via the entropy of random variables in it.

Key words: thermodynamic probability; statistic entropy; business entropy; entropy of a random variable.