

SUMMARY

Vogegova R.A., Lavrinenko Yu.A., Kokovikhin S.V., Morozov A.V., Morozov V.V. Modern being and prospects of development of irrigation in the South Ukraine

The questions of the modern being and prospect of development of irrigation in the Kherson Region and on the South Ukraine are considered in the article. Measures on renewal of irrigation, increase of his economic efficiency and ecological safety are offered. Organizational-economic directions of increase of efficiency of the use of the irrigated earths are set on state, regional and local levels.

Key words: irrigation, areas requiring irrigation, irrigation norms, volumes of watering, economic efficiency.

Stashuk V.A., Rokochynskyy A.M., Granovskaya L.M., Vozhehova R.A. History of development and efficiency of rice irrigation systems in Ukraine

Shows the historical aspects of the construction of irrigation systems and rice field rice cultivation development in Ukraine. The effectiveness of the use of rice irrigation systems by existing environmental problems paddy soil irrigation systems and proposed environmental and reclamation measures to improve soil and efficiency of rice irrigation systems.

Key words: irrigation, areas requiring irrigation, irrigation norms, volumes of watering, economic efficiency.

Bazaliy V.V., Gamayunova V.V., Pankeev S.V., Karashchuk G.V. Evaluation of grain quality of winter wheat varieties under irrigation in the south of Ukraine under the influence of mineral fertilizers

The results of studies on the effect of high-quality features and agro-ecological factors on grain quality of winter wheat and durum.

Key words: winter wheat, variety, nutrition background, harvest, grain quality.

Vogegova R.A., Pisarenko P.V., Malyarchuk M.P., Kovalenko A.M., Kovalenko E.E. Products process control of agricultural cultures in the conditions of irrigation.

The basic results of long-term researches of Institute of the irrigated farming on the questions of stable conduct of agriculture on the irrigated earths of south of Ukraine are generalized in the article and lighted up.

Key words: soil, agricultural cultures, structure of sowing areas, mode of irrigation.

Goloborod'ko S.P., Dymov O.M. State and ways of organize of agrolandscapes in Danube's region of Ukraine

The influence of global climate changes to contemporary state of agricultural grounds in Danube's region of Ukraine is shown in the article. Practical recommendation on use of irrigated lands and ways of organize of existent agrolandscapes in Ukrainian Danubic are cited.

Keywords: climate, precipitations, evaporation, water consumption, agrolandscape, irrigation, organize.

Kovalenko A.M., Koutz G.M., Kovalenko O.A. Fitosanitary state of sowing and nourishing mode of soil in the crop rotations of short rotary press on the

irrigated lands

Results over of influence of correlation and alteration of cultures are brought in four- and two crop rotations on the irrigated lands on the impurity of sowing, dynamics of nourishing elements and amount of microorganisms, taking part in transformation of nitric connections to soil.

Key words: crop rotation, weeds, microorganisms, nitrates, mobile phosphorus.

Zayets S.A., Netis V.I. it is water Consumption of grain-crops and soy from the terms of water supply

In the articles cited data about the water consumption of winter wheat, winter-annual barley, corn and soy in different on the weather terms of years researches and background of water supply. It is set that on the irrigated earths of south of Ukraine soy used most of moisture on forming of unit of harvest - 1453 m³/т, while a corn most economy consumed moisture - 356 m³/т, that contingently her high productivity. A rate-of-flow on forming of 1 т grain of winter wheat and winter-annual barley in the conditions of irrigation accordingly was 531 and a 513 m³/т.

Key words: irrigation, water supply, water consumption, wheat winter-annual, barley winter-annual, corn, soy.

Vogegova R.A., Pisarenko P.V., Melnik M.A. Irrigation of soy in the south steppe of Ukraine

In the article there are the are lighted up basic results of long-term researches of Institute of the irrigated farming on the questions of total water of consumption and evaporation of soy depending on of high quality composition and terms of moistening.

Key words: soil, soy, the mode of irrigation is total water of consumption, evaporation.

Malyarchuk N.P., Pisarenko P.V., Mishukova L.S., Malyarchuk A.S., Kotelnikov D.I., Nizhegolenko V.M. Efficiency of the minimized methods of basic treatment and sowing in preliminary untilled soil at growing of corn on the irrigated earths

Results over of two-year experimental researches are brought on the study of influence of methods dump, безотвального and sowing in preliminary untilled soil on agrophysics properties of top-soil and productivity of corn.

Key words: corn, method of treatment, No - till, irrigation, closeness of addition, permeability to water, productivity.

Michalenko I.V., Naydenov V.G., Nigegolenko V.M. Photosynthesis indexes of hybrids of corn depending on the groups of ripeness and terms of sowing

In the area of South Steppe at the optimum mode of irrigation and feed of plants of corn it is possible to conduct the supper early sowing of hybrids of corn of different groups of ripeness. Hybrids most suitable to the early sowing with genetically determined steady to the cold (Tendra, Bistrtsa).

Key words: corn, productivity, hybrids, photosynthesis indexes.

Hlushko T.V., Voytashenko D.P. Productivity and quality indicators of change under the influence of corn biologicals in southern steppes of Ukraine

The paper presents the results of investigations formation yield and quality of grain maize hybrids of different maturity groups based on treatment plant biological products.

Key words: hybrid corn maturity group, biologicals, yield and grain quality.

Bazaliy V.V., Mrinskiy I.N., Ursal V.V., Gontaruk V.T. Photosynthesis activity of plants of the sunflower on the irrigated areas of hybridization

The analysis of indexes of leaf surface area and photosynthetic potential of sowing of maternal lines of sunflower at its growing on the irrigated areas of hybridization of South Steppe of Ukraine is conducted in the article. On results researches the advantage of the use of the Cx-2011A line is led to second term of sowing and densities placed of plants 60 thousands per ha.

Key words: sunflower, term of sowing, density of placed plants, area of leaf surface, photosynthesis potential.

Vogegova R.A., Oliynik O.I. Productivity of sorts of rice depending on hydrothermal and agrotechnical factors at growing in the conditions of south of Ukraine

In the article the results of researches are presented on the study of productivity of sorts of rice depending on sort-change at their growing in the conditions of the South Steppe of Ukraine. Are set the optimum parameters of model of highly productive sort of rice, which have high productivity and firmness against unfavorable factors.

Key words: rice, sorts, productivity, regression, economic-biological signs.

Grabovsky P.V. Agroecological aspects of regulation of a water mode of the soil at cultivation of wheat of firm winter Ukraine in the conditions of the South

Results of researches are given in article concerning dynamics of productive stocks and deficiency of moisture, indicators of total water consumption and daily average evaporation, their influence on productivity of culture.

Key words: wheat winter, productive moisture, deficiency of moisture, total water consumption, daily average evaporation, productivity.

Vozhehova R.A., Vasilenko R.N., Voytashenko D.P., Shatalova V.V. Production of varieties and hybrids of winter rape in southern Ukraine

The results of studies on the seed production of varieties and hybrids of winter rape under different sowing in Southern Ukraine. Defined most productive variety of domestic breeding and hybrid foreign selection.

Key words: winter rape, sowing term, productivity, yield meal oil.

Pilyarsky V.G., Kazanok A.A. Effect of hybrid and plant density on the productivity of sugar beet under irrigation

The paper describes the results of studies on the performance of the production process of sugar beet plants (leaf area, the dynamics of accumulation of above-ground and root crops), depending on the composition of the hybrid and plant population. The effect of the studied factors on the yield and quality of sugar beet

Key words: beet sugar, hybrids, plant density, fertilizer, phenological indicators, average daily gain, leaf area, wet weight.

Luta Y.A., Malyshev V.V., Stepanov Y.A. Water use and productivity of onions under drip irrigation in the conditions of the South Ukraine

The results of researches by influence of ways to assign irrigation and fertigation on water use and productivity of onion plants under drip irrigation in the conditions of the South Ukraine.

Key words: onions, method of appointment of irrigation water, fertigation, productivity.

Bidnyna I.A., Vlaschuk O.S., Kozyrev V.V., Tomnytskiy A.V. Influence of microbial preparations on the productivity of barley spring and corn in the conditions of irrigation of south of Ukraine

Results over of influence of microbial preparations are brought on maintenance of elements of feed in dark-chestnut soil and productivity of barley spring and corn. It is set that their application on a background bringing of $N_{90}P_{60}$ assisted the improvement of the nourishing mode of soil and increase of the productivity of cultures, and similarly to the increase of recouplement of mineral fertilizers by the increase of collection of forage units.

Key words: mineral fertilizers, nitrogen-fixing and phosphorus-fixing bacteria, dark-chestnut soil, maintenance of nitrates, mobile connections of phosphorus and potassium, barley spring, corn.

Lyamar' V.A., Voloshina K.N. Features of forming of rootage of plants of graft water-melon at tiny irrigation

The results of researches of features of forming of rootage of plants of graft water-melon are resulted at tiny irrigation. It is set that in the conditions of tiny irrigation, relative distributing of rootage on the type of soil of the scion-rooted and graft water-melon identically. An about 98% root mass of plants is concentrated in a topsoil. And consequently, the optimum depth of moistening at growing of water-melon at tiny irrigation is a layer of soil 0-30 see.

Key words: water-melon, subgraft, rootage, method of growing, technology of growing, productivity.

Pashtetsky V.S. Zhenchenko K.G., Prikhodko A.V. The influence of the individual nature of adverse events in the formation of grain crops in the Crimea

The data of adverse effects of natural phenomena associated with strong winds on the development of crops. Shows the status of forest plantations shelterbelts and their ecological significance in the Autonomous Republic of Crimea.

Key words: droughts, soil erosion, shelterbelts, agroecology, fertility, yield.

Marushchak A., Zakharchenko L. Productivity of the rice and quantity of the by-product influence of fertilization and seeding rates

The article provides the results of research into the effect of different fertilization and seeding rates on the productivity of the rice and quantity of the by-product (straw, husk).

Key words: rice, variety, fertilization rates, seeding rates, productivity, straw, husk, energy yield.

Tronza G., Tomashova O., Tomashov S. Path melioration and management of alkaline soils dry steppe zone of Crimea

Salt and alkaline soils of Crimea – a key provision of agricultural expansion on the peninsula with the rational choice of reclamation. The paper discusses possible ways of melioration saline soils and alkali soils of Crimea. A possibility of using highly characterized soils in rice growing. Major role in driving sodium and magnesium from the soil absorption complex played calcium compounds that come with irrigation water and crop residues from rice, barley and alfalfa in the process of mineralization.

Key words: melioration of soil, salt licks, rice crop rotation, desalinization.

Khomyak P.V., Zalevska M.P., Porudiev V.O. Peculiarities of growing of winter wheat on southern chernozems of Steppe of Ukraine

The results of researches on study of influence of predecessors and doze of mineral fertilizers to productivity of varieties winter wheat. It is Installed that high productivity in condition of southern Steppe on intensive background are characterized sorts Kuyalnik and Kosovitca. The most productivity was provide at accomodation of wheat on black fallow, introduction by autumn under cultivation $N_{30}P_{60}$, at period of reconstruction spring vegetation N_{60} surface and at period of shooting N_{20} radical ways.

Key words: winter wheat, varieties, predecessor, productivity, fertilizers, grain.

Sheludko A.D., Markovskaya E.E., Repelevskii E.V. Efficiency of defence of the irrigable sowing of soy from leaf-eating

To the article the results of researches are driven on the study of specific composition of leaf-eating совок on the irrigable sowing of soy of south Steppe of Ukraine and efficiency of insecticides in a fight against them. The best efficiency of defence is got in the variant of Корарена 20, to. p. with the norm of expense of preparation 0,15 l/ha, that assisted optimization of the фитосанитарного state of sowing of soy during a month and maintenance from the losses of 0,73 t/ha of grain at the productivity of culture of 4,02 t/ha.

The reliable protecting of the irrigable sowing of soy from the complex of leaf-eating and pratal moth was provided by insecticide Boreas of к.с. with the norm of expense 0,14 l/ha.

Key words: soy, irrigation, insecticides, efficiency, Koragen, Boreas.

Demchenko N.V. Sowing, as a factor regulating performance winter rape

The article provides an overview of the literature concerning productivity of winter rape, depending on the time of sowing.

Key words: Rape winter, yield, sowing date, productivity.

Kozyrev V. V. Agrophysical soil properties depending on the mode of irrigation, tillage and timing of phosphogypsum in growing soybeans

The results of the study changes agrophysical properties of dark brown soil for growing soybeans under irrigation south of Ukraine and a complex ahromelioryatnyh methods for their improvement.

Key words: soybean, tillage, irrigation regime, dark brown soil density structure, porosity, permeability.

Voronyuk Z.S., Zaitseva A.A. Efficiency rice crop ro-

tations with different saturation of their grits crops

The article presents the results of studies on the implementation of the rice crop rotation of grits crops – soryz, stubble crops of millet and buckwheat. As predecessors, these cultures did not reduce the yield of rice. An increase in grain yield of unit area under crop rotation by 15.1-16.3%, net income - by 7.0 - 13.1%, improving profitability by 3.2 - 8.3% was observed.

Key words: crop rotation, grits crops, rice, soryz, millet, buckwheat, stubble crops, economic efficiency.

Kovalenko A.M., Timoshenko G.Z. Productivity of plants of pea of withoutleaves morfotypa depending on the agrotechnical measures of growing in the conditions of south Steppe of Ukraine

The brought results over of researches in relation to influence of bacterial preparation of "Rizobofit" and microfertilizers of "Ekolist Universal" on the productivity of plants of pea of withoutleaves morfotypa in the conditions of the natural moistening of south Steppe of Ukraine.

Key words: pea, withoutleaves, bacterial preparation, microfertilizer, productivity.

Konaschuk A.P., Kolpakova L.S., Klyauz M.A. Technology Features corn for grain in the southern steppes of Ukraine

Place your material in this article about the importance of corn in grain farming country and the world as feed, food and industrial crop. And as the technology of growing corn in the arid conditions of the southern steppes of Ukraine.

Key words: grain production, corn, crop rotation, fertilizers, irrigation rate, cleaning.

Bulygin D.O. The impact irrigation variety and density soul soybean Aratta and Danaya sort on process accumulation dry and wet organic matter

In the article are resulted the results of studies on the reaction of new varieties for different types of irrigation regimes and density of standing plants.

Key words: soybean, mode of irrigation, total water consumption, yield, density of standing plants.

Almashova V.S. Voytashenko D.P. Effect of seed treatment with boron, molybdenum and ryzotorfinom Pea in the water under conditions of balanced nature

The paper presents the results of studies on the impact of seed treatment with microelements and bacterial preparations on water Pea depending on sowing time. Installed and presenting indicators of total water consumption, water consumption rate is calculated Pea, which is due to increased crop productivity decreased to study ways to 17-20%, indicating a more rational water consumption for the formation of the crop.

Key words: pea vegetable, water consumption, water consumption factor, trace elements, sowing.

Morozov V.V., Bulygin A.I. Decision of problem of forming of the optimal water-salt mode of irrigable earth in the conditions of Краснознам'янського of array

Results over of researches of forming of the water-salt mode of Краснознаменського of irrigable array are brought on a background vertical drainage. For a winter wheat the optimal are certain humidity of soil, layer of moistening and reclamative mode. Conformities to law of change of the water mode and physical and chemical properties of livery soils are set in case of change of operating of the system "Irrigation is vertical

drainage" conditions from project(1989 - 1992) to the modern terms limit resources in unstable economic terms(2003-2005) and further direction of their development спрогнозировано. Principles of optimization of the water-salt mode of soils are set forth in the conditions of Краснознамянского of irrigable array.

Key words: irrigation, drainage, water mode, soil.

Tishchenko E.D., Tishchenko A.V., Chernichenko M.I. About the salt tolerance of alfalfa

Shows the results the study of salt tolerance, in general, including alfalfa. The estimation of breeding material for salt tolerance. The most salt tolerant alfalfa variety include Hope. Created synthetic populations most resistant to salt stress, which are used in practical breeding.

Key words: alfalfa, salt tolerance, salinity types: chloride, sulfate, chloride-sulphate.

Tomnitsky A.V. Nourishing mode dark chestnut soil in growing chickpeas with different doses of fertilizers

In the article the results of field mouse studies on the effect of different doses of mineral fertilizers on the nutrient status of dark chestnut soil in growing chickpeas, shows the dynamics of nitrate content and a decrease in fixed interphase periods of chickpeas, calculated balance of nutrients in the soil.

Key words: dark chestnut soil, chickpeas, doses of fertilizers, nitrates and mobile phosphorus and potassium balance of nutrients.

Malyarchuk A.S. Efficiency of methods and depth of basic treatment of soil at growing of rape of winter in the conditions of South Steppe Ukraine

The results of three-year experimental researches are presented on the study of influence of methods and depth of the dump and differentiated systems of basic treatment of soil, on the agrophysics state of arable layer and productivity of rape winter.

Key words: rape winter, method of treatment, irrigation, closeness of addition, permeability to water, productivity.

Lyashevskiy V.I. Dependence of total evaporation from rice with a temperature of air for the terms from conditions of Crimea

In the article there are the resulted results of analytical researches of dependence of total evaporation from rice from temperature of air for the zone of rise-sow of Crimea.

Key words: rice, temperature of air, total evaporation.

Zhuykov A.G. Agrotechnological aspects of the system of basic treatment of soil as to component zonal technology of growing of mustard of black in the terms of South Ukraine

In the article the results of experimental researches of the system of basic treatment of soil are resulted under mustard black as to component zonal technology of growing of culture in the conditions of Steppe. It was concluded that the most appropriate system of basic soil is plowed fields improved system, method - plowing with coulters to a depth of 24-26 cm during the II half of October - first half of November, as such, it provides the best performance agrophitocenosis phytosanitary conditions, shows the effectiveness of the agricultural practices as slotting soil with a view to improving the conditions of formation of its water regime.

Key words: black mustard, the main tillage, the phytosanitary condition of sowing, seed yield.

Yeremko L.S., Totskiy V.M. Mineral nutrition as one of the significant factors of increasing sunflower productivity

The results of the studies to determine the effect of different doses of mineral fertilizers on sunflower seeds productivity and quality are showed.

It is determined that in conditions of the left-bank forest-steppe zone at cultivation of sunflower hybrids Nadiyniy and Sava the application of mineral fertilizers with a doses of active substance $N_{60}P_{90}$ is the most appropriate, that enhances the level of seed yield and oil productivity to 3.47 t per ha and 1552 kg per ha, 3.46 t per ha and 1512 kg per ha respectively.

At cultivation of hybrid Zaporizhskiy 28 the most effective doses of mineral fertilizers is $N_{30}P_{40}$. This agrotechnological method allows to increase seed and oil productivity of hybrid to 3.33 t per ha and 1467 kg per ha respectively.

Key words: sunflower, mineral fertilizers, productivity, oil content in seeds.

Pashtetskiy V.C. The use of aquatic resources is in the agrarian production of Crimea

This general estimation of efficiency of the use of the irrigated earths is in Crimea. Drawn conclusion, that an increase of efficiency of the use of the irrigated earths is one of ways of increase and maintenance of water resources potential of rural territories.

Key words: irrigation, agricultural cultures, productivity, economic efficiency.

Polenok A.V. Forming of the productivity of sowing of rice depending on the elements of technology growing in the conditions of South steppe of Ukraine

In the article present results of experiments on influence of mineral fertilizers, tillage and previous crop on rice yield.

Key words: rice, crop rotation, weediness, yield, economic efficiency.

Tselinko N.I., Dovbush O.C., Korshun A.A. The effect of microelements on sowing qualities of rice and seeds

The results of research of the effect of trace elements on yield and quality of rice grains are shown. We found out that the processing of plants with microfertilizers improves technological characteristics of rice (1,000 grains, glassiness, fracture, Hulled), which in general improves the quality of products.

Key words: micro fertilizer, fracture, glassiness, scarious, rice, weight of 1000 grains.

Morozov O.V. Estimation of the modern state of irrigable soils of the Kherson area

Estimation of the modern state of irrigable soils of the Kherson area that is typical on naturally - to the climatic and aquicultural terms for the region of Dry Steppe of Ukraine, showed that harvests of agricultural cultures of the last years - mainly are the result of exhausting of natural fertility of soils. The basic way of fertility-improving of soils is scientifically is the reasonable system of technologies of growing of agricultural cultures taking into account the requirements guard of environment.

Key words: irrigation, soils, fertility, guard of environment.

Polenok A.V., Vozhegov S.G., Skydan V.A. The influence of growing technology elements on soybean yield in rice crop rotations

The paper the data on the cultivation of soybeans in rice crop rotations. It has been established that greatest grain yield of soybean is formed on the fertilizer dose $N_{30}P_{20}$ against plowing.

Key words: soybeans, fertilizer, tillage, crop rotation of rice.

Maydebura O.P., Vozhegova R.A., Gudkov I.N. Migration of radionuclides on irrigated soils of the south of Ukraine

The tendency to increase migration of ^{90}Sr in the environment is noted. The migration opportunity of ^{90}Sr on irrigation soil shows a tendency to increase, directly ^{90}Sr , ^{137}Cs instead, becomes a major water pollutant radiation. In irrigation farming that leads to accumulation of this radionuclide in irrigated soils and agricultural products pollution.

Key words: radioecology, ^{90}Sr , radio nuclides, accumulation factor, the permissible levels.

Vishnevskaya J.S. Effect of fertilization on plant stand density of oils flax, content and output fibers

Found that the highest yield of fiber grade Kivika 0.95 t / ha, sort of bluish orange - 0.65 t / ha, formed a variant of the level of fertilizer $N_{30}R_{60}K_{90} + N_{15}$. Fiber for the system of fertilization was also the highest 19 and 13, 2% respectively varieties. The final stand density in a variety Kivika was 315 pieces/m². Quality bluish orange secured density 284 pieces/m².

Key words: elements of technology, flax oil, grade, level of fertilizer, fiber.

Dzyubetskiy B.V., Bodencko N.A., Zaplitniy Ya.D. Basic economic-valuable indexes of testcross corn of different geterozis models in the conditions of western Forest-steppe of Ukraine

The results of researches on the study of testcross six different geterozis models on indexes are expounded «productivity of corn» and «harvest humidity of corn» in the conditions of western Forest-steppe of Ukraine. The geterozis models lowadent h Laukon are selected, Mixed h Ayodent and Ayodent h Mixed, as most effective in the selection of high-yield hybrids of corn of adapted to the terms of the given area.

Key words: corn, testcross, embryonic plasma, geterozis model, productivity, humidity of corn.

Vasilyuk P., Vozhegova R., Orlyuk A., Bazaley G., Usik L. National heritage in breeding is variety of winter soft wheat Blago

A new variety of winter soft wheat Blago has yield potential 9,0-10,0 t/ha, which is realized on the irrigated lands of south region, in areas of the forest-steppe and woodlands of Ukraine. Refers to genotypes universal use: high adaptive ability allows the use of both unirrigated and irrigated lands. Balanced by the complex of valuable commercial traits.

Key words: winter soft wheat, variety, yield, quality, adaptivity, stability.

Dzyubetskiy B.V., Fedko N.N., Il'chenko L.A. The results of environmental strain testing of mid-and srednepozdnh corn hybrids of different types and models of heterosis

The results of four years of research on environmental Variety Testing and middle-srednepozdnh maize samples. Explored and illuminated displays patterns of breeding and agronomic traits that determine the adap-

tation to the conditions of the steppe zone of Ukraine in the hybrids based on their type and model of heterosis.

Key words: maize, hybrid, grain yield, heterotic model.

Lavrynenko Yu., Balashova G., Kotova E., Dobrynina K. Effect of plant growth regulators, temperature and size of the tubes on the rate of potato tuber varieties Tiras in culture *in vitro*.

The results of studies on the effect of plant growth regulators, temperature and size of the tubes on the induction of micro bulb potato culture *in vitro*.

Key words: growing medium, plant height, number of internodes, micro tubers, temperature, growth regulator.

Klubuk V., Borovik V., Baranchuk V., Osiniy M. Evaluation of soybean breeding material for increased adaptive capacity to adverse environmental factors

The paper highlights the effectiveness of selections breeding soybean samples in order to create new varieties for nepolyvnyh growing conditions and under irrigation, the adaptability to adverse environmental factors.

Key words: soybean, cultivar, adaptive capacity, recruitment, performance.

Luta Y.A., Kobylina N.A. The effectiveness of the method of gamete selection when creating a new selection of a tomato

The results of studies on the effectiveness of the method gamete selection for resistance to high temperatures to create a new selection of a tomato. The experimental data on the effect of high temperatures on tomato pollen, the study of fruit set obtained by hybridization using pollen treated by high temperatures, estimates for the influence of temperature processing pollen on economically valuable traits in hybrids F1.

Key words: breeding process, gamete selection, pollen fertility, hybrids.

Celinko N.I., Vozhegov S.G., Celinko L.N. Efficiency of the use of factorial trait «amount of grains in a main panicle» on the increase of the productivity of rice varieties

The most of the best plant-breedings numbers which on the productivity exceeded a standard or were at level with him, identified on a sign amount of grains in main panicle at intensity of selections 5% and areas of feed 15x15 see - 50% at diminishing of area of feed the stake of perspective numbers diminished on 10%.

Key words: rice, efficiency, selection, identification, authentication, productivity, trait.

Grigorochuk N.F., Yakubenko E.V. Potential and adaptability of soya varieties of the IOC UAAS

Modern directions and tasks of selection of a soya which are directly connected with separate soil-climatic zones of crops of a soya, high-quality adaptability and significant genetic potential. Highly productive grades which are brought in the State register of grades of plants of Ukraine. The new grades of soya is transferred to studying of grades.

Borisova V.V., Cherchel V. Yu., Dzyobetskiy B. V., Satarova T.N. Bioinformative description to the genome of corn in connection with conducting of the SNP- analysis of selection material

For the analysis of selection material of corn by the method of odnonucleotidnogo polymorphism DNC description is given to the genome of this culture on ma-

materials of computer databases and the location of 384 SNP-markers of panel BDI-III is described on the areas of the chromosomes (*bins*) limited by measles markers. It is shown, that the middle closeness of localization of SNP-markers BDI-III makes 5,36 Mbp. Markers are located on all chromosomes of corn and relatively evenly covered all genome.

Key words: Corn, genome, chromosome, bin, SNP-marker, genetic card.

Chernichenko I.I., Chernichenko E.A., Balashova G.S. Potato varieties selection for using of spring breeding in irrigation conditions in South of Ukraine

The results of research yielding of potato varieties of domestic selection for using of breeding in irrigation conditions for springs planting in yang harvesting and biological harvesting.

Key words: potato, varieties, yielding, yang harvesting, biological harvesting.

Petkevich Z., Shpak D., Shpak T., Formation and composition of rice educational collection

The paper presents the results of the formation of the education collection of rice in Institute of rice, which contains the most valuable gene pool sample as to morphological characters. Among gene pool's accessions: the rice - *Oryza sativa* L. is represented by the subspecies *subsp communis* Guct., *prol. japonica*, *indica*, *subsp. brevis* Gust. The collection includes 54 specimens, demonstrating the diversity and the specificity of the varieties and forms of rice. The educational collection is recommended for the use the training programs and the courses of breeding and botanics.

Key words: educational collection, formation, gene pool, sample, sources of valuable traits, subspecies, diversity.

Kornienko S.I., Lyuta Yu.O., Kosenko N.P, Kornienko S.I Yield and quantity of mother beets depending on the technological methods at growing under drip irrigation

Research has shown that yield increases of mother beetroots at sowing in mid-June is due to the increase in the average weight of roots, quantity of standard and queen cells shtekling increases respectively by 12,4 and 8.0%. When sown in early July are formed by age young roots that are more valuable planting material. Adding the estimated fertilizer application rates $N_{150}P_{75}$ contributes a substantial increase in the standard mother beetroots 20,0 thousands of pieces per hectare (10,1%) compared with the control (without fertilizer) – 197,50 thousands of pieces per hectare. The increase in density from 400 to 500 thousand units per hectare increases the yield of standard roots from 202,5 to 217,5 thousands per hectare (7,4%) and queen cells shtekling with 121,0 to 166,0 thousands of pieces roots per hectare (37,2%).

Key words: beetroot, mother beetroots, queen cells shtekling, drip irrigation, quantity of mother beetroots.

Tselinko N.I., Korshun A.A., Dovbush E.S. Influence of fractional composition of seed rice field germination.

The results of studies on the impact of the fractional composition of seed rice crop performance and yield. Found that the increase in the field germination of rice seeds significantly influenced by its fineness and uniformity.

Key words: rice, sowing rates, germination, seed.

Lachine M.V., Marchenko T.Y., Lavrynenko Y.O. Options volatility structure characteristics cob corn hybrids of different maturity groups under irrigation

The paper presents the results of research settings variability characteristics structure cob corn hybrids of different maturity groups under irrigation. It is shown that the more stable yields display as actual and potential, in terms of irrigation hybrids were characterized Medium and late groups. Maximum yield was recorded in the middle of hybrids. Based on the data obtained shows that Medium and late maize hybrids under irrigation for the manifestation of high yield stability have certain advantages over ripening hybrids.

Key words: corn, irrigation, variable, hybrid, plug structure, maturity group.

Mikhaleiko I.V., Lavrinenco Yu.A., Vlashuk A.N. Ruban V.B. Organizational-economic aspects of the optimization technologies of growing corn hybrids on the irrigated lands of South Ukraine

The results of researches on establishment of economic efficiency of growing hybrids of different groups of ripeness depending on the terms of sowing are resulted in the article. It is set, that from the economic point of view the best results are provided by the use of term of sowing on April, 30 and at growing of the Bistritsa hybrid.

Key words: corn, hybrids, terms of sowing, irrigation, group of ripeness, economic indicators.

Ushkarenko V.A., Filipova I.M. Economic efficiency of growing *Silybum marianum* on the irrigated lands of South of Ukraine

The results of researches on determination of economic efficiency of elements of the growing technology *Silybum marianum* spotted on the irrigated lands of South Ukraine are resulted in the article. It is set, that from the economic point of view it is most expedient to conduct ploughing on a depth 20-22 cm, to sow the plants with space between rows 60 cm at the end of March and apply the mineral fertilizers by the dose $N_{90}P_{90}$.

Key words: *Silybum marianum*, till of soil, width of spaces between rows, terms of sowing, mineral fertilizers, economic efficiency.

Kokovikhin S.V., Larchenko O.V., Donets A.A., Drobitko A.V. Design of component elements of the growing technologies of agricultural crops with the use of in-formative facilities

Practical recommendations on the use of the CROPWAT 8.0 program for organization and planning irrigation are resulted in the article, optimizations of the irrigation regime, abbreviation of unproductive expenses of watering water, receipt of high level of harvest, the greatest economic and power efficiency.

Key words: irrigation, program, module, climatic indexes, graph of watering.

Fedorchuk M.I., Makuha O.V. Economic evaluation of technology growing of the *Foeniculum vulgare* at introduction in the conditions of the South Steppe of Ukraine

In the article the economic evaluation of growing technology of the *Foeniculum vulgare* is represented in the droughty terms of South Ukraine and expedience of introduction of culture in a new Region is grounded. The possible channels of sale of seeds of *Foeniculum*

vulgare are analyses, measures with the purpose of successful realization of the produced products are offered.

Key words: *Foeniculum vulgare*, cost of gross products, expenses, prime price, net income, level of profitability.

Konaschuk I.O., Kokovikhin S.V., Kirichenko N.V. Tool of transfer of innovation on technologies of the irrigated agriculture in the conditions of South Ukraine

The examples of the forming databases of innovative technologies of the irrigated agriculture with the use of modern informative facilities are resulted in the article. The necessity of introduction of modern innovative developments is proved, optimizations of technologies of growing, introduction of production co-operation.

Key words: innovation, tool, irrigated agriculture, technologies of growing, database.

Bulayenko L.M., Verdish M.V. Features of water account on irrigation systems of south of Ukraine

The article reviews the questions of commercial water account in irrigation systems of southern Ukraine. It presents data on the existing water account systems. The results of the Industry accounting program for off-farm water network for the period 2009-2011 on the water management system in irrigation zone enterprises are analyzed.

Key words: Water accounting, facilities for water account, ultrasonic flowmeters, wateruse, pump station.

Kovalenko A.M., Novohigniy N.V. Economic efficiency of the use of microfertilizer of «Ekolist – U» on the wheat of a hard spring in the conditions of

the natural moistening South Steppe of Ukraine

The results of economic evaluation of growing of wheat hard spring on livery soils in the conditions of the natural moistening depending on application of fertilizers, microfertilizers and chemical defence of plants.

Key words: a wheat hard springs, fertilizers, microfertilizers, chemical defence, prime price, net income, profitability.

Skydan M. The economic and bioenergetic efficiency is estimate agrotechnical elements of growing sunflower hybrids of different groups depending in the conditions of the eastern part of the Forrest-Steppe

The paper the data on the influence of an nutrient background on economic and bioenergetic efficiency growing of sunflower hybrids of different groups depending. It has established that the a most cost-effective was growing medium hybrids Bohun and Carpal. The hybrid Carpal scored the biggest factor energy efficiency.

Key words: sunflower, hybrid, productivity, norm of sowing, signup, economic efficiency, net income.

Revtyo O.Ya. The economic efficiency of growing of corn on grain depending on agrotechnical receptions

The article presents results influence the primary method of tillage, background power plant density and technologies of care for the crops of major economic indicators of the effectiveness of maize cultivation in the south of Ukraine.

Key words: maize, soil tillage, fertilizers, treatment technology, net income, prime price, level of profitability.