

ANNOTATION

Cherenkov A. V., Gyryka A. D., Sydorenko Yu. Ya., Iliencko O. V., Bochevar O. V. Technological measures of increasing productivity the common spring barley varieties in conditions of north Steppe of Ukraine. The article describes results of experimental data and their analysis of the characteristics of growth, development and productivity formation of common spring barley varieties on the background of various mineral nutrition depending on seeding rate, seed incrustation by biological products. It is established, that varieties Vakula and Gelios are characterized by intense water consumption, especially in deep soil layers, which, obviously, is one of the explanations of their greater drought resistance.

Keywords: spring barley, growing technology, varieties, seed incrustation, fertilizers, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 3–8.

Kirpa N.Y. Grain storage – state and development prospects due to the increased grain production in Ukraine. The material and technical conditions and technologies in a variety of storage systems of major cereals, pulses and oilseeds were analyzed. The types of stores were characterized, stores capacity depending on the volume of grain production was determined. The effective ways and methods of safe grain storage, improving its quality and durability were established, the ways of energy saving were determined.

Keywords: grain, volume of production and storage, grain quality and durability, energy saving // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 9–14.

Tkalich I. D., Oleksyuk O. M., Tkalich Yu. I., Kulik A. O. Basic soil tillage under the field crops. The results of studies on the effect of plowing, V-chisel, surface tillage, no-tillage in four-course rotation: sunflower – corn – buckwheat – fodder beet for crop yields. It is established that the deteriorating of soil physical condition, its moisture regime, increased weed infestation or crops, crop productivity falls outbound from the plowing to no-till and increases prime cost.

Keywords: soil tillage, economic efficiency, buckwheat, sunflower, maize, fodder beet, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 15–19.

Gorobets A. G., Tsilyurik A. I., Gorbatenko A. I., Sudak V. N. Moisture provision and crop productivity at different systems of soil tillage in crop rotation. Studied influence of long term using the different systems of basic soil tillage (plowing, surface non-plow tillage) on moisture regime of chernozem and crop productivity in short-course crop rotation. Proposed the methods to increase efficiency of minimal tillage by using big quantity (4-5 t per ha) of crop residue.

Keywords: crop rotation, soil tillage, crop residue, fertilizers, moisture regime, crop production // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 20–25.

Solodushko M. M. Over-wintering features and productivity of winter wheat. Analysed the weather conditions during the several winter periods and studied their influence on winter hardiness the grain productivity of winter wheat in north Steppe of Ukraine. The close affinity between temperature regime, winter hardiness and crop yield level of the main grain crop was established.

Keywords: winter wheat, temperature regime, winter hardiness of plants, productivity // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 26–29.

Kochmarskyi V. S. Winter wheat breeding for increased winter hardiness under environments of Forest-steppe of Ukraine. The results of breeding activity in development of winter hardy forms of winter wheat. The presence of stress factors encouraged the selection of transgressive forms by this trait. Subsequently the promising lines having been selected by the combination of characters were submitted to the state variety testing and listed in the National Register of Plant Varieties of Ukraine as winter wheat varieties (Kryzhynka, Demetra, Kolos Mironivshchyny, Myroniv's'ka storichna).

Keywords: winter soft wheat, winter hardiness, frost resistance, selection, genotype // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 30–34.

Lavrinenko Yu. A., Kokovikhin S. V., Tishenko A. P. Optimization water regime of soil in the Steppe Ukraine at growing of agricultural crops with the use of laboratory equipment. The results of researches of filtration properties of soil at descending motion of water are resulted in the article. Investigations are conducted by the specially developed laboratory and field options.

Keywords: infiltration, absorption, set filtration, total evaporation, descending motion of water // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 35–41.

Yakunin O. P., Gubar O. V., Okselenko O. M. Moisture provision and productivity of food corn hybrids depending on density of planting. It is researched the stocks dynamics of an accessible moisture in a layer of soil 0–100 cm in food corn hybrids crops. For the bursting corn hybrids Vulcan and Dniprovsky 929 and the sugar corn hybrids – Spokusa, Surprise, Glamour and Kabanets SV are cited the data of three-year researches on moisture provision and the water consumption factor is calculated. The interrelation of density of food corn hybrids planting with productivity is shown.

Keywords: food corn, bursting corn, sugar corn, density of planting, moisture provision, producti-vity // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 42–46.

Shevchenko O. M., Prikhod'ko V. I., Shevchenko C. M., Швець Н. В. Technological methods of increasing the efficiency of nutrient regime management for maize. The paper presents experimental results obtained in field experiments on the effectiveness of methods of tillage and herbicides for maize. The dynamics of removal of major nutrients by corn and weeds biomass and grain are represented. Established that effective herbicides can prevent losses of 76.2 kg per ha of nitrogen, 22.6 kg per ha – phosphorus and 153.7 kg per ha – potassium.

Keywords: maize, herbicides, soil tillage, weeds, nutrition elements, phytotoxicity, corn, biomass, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 46–50.

Bochevar O. V., Lemishko S. M., Ishchenko V. A. The use of rizohumin at growing of pea in the agrocenosis of the North Steppe. It was determinated the effectiveness of the inoculation of pea seeds of leafless morphotype with the nitrogen-fixing preparation of Rizohumin separately and using the bacterial preparations, substances that regulate growth and microfertilizers.

Key words: pea, yield, rizohumin, emistim C, reakom // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 50–55.

Musatov A. G., Ischenko V. A. The influence of the elements of technology on the efficiency of growing of pea in the North Steppe of the right bank of Ukraine. There were given the results of researches of influence of micronutrient fertilizers, growth regulators and nitrogen-fixing preparation on the productivity of leafless peas. It was established that the greatest yield of 2,87 and 3,55 t per ha of the varieties of peas Kharkovskiy etalonnyi and Tsarevitch provided at application of bacterial preparation of rizogumin (200 g per ha) and growth regulator of emistim C (10 ml per ton) for the treatment of seed and the following treatment of plants with the micronutrient fertilizer reakom-R-beans (4 l per ha).

Keywords: pea, variety, crop yield, biopreparation, growth regulator, micronutrient fertilizer // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 55–59.

Savranchuk V. V., Semeniaka I. N., Maschenko Yu. V. Economic efficiency of buckwheat growing depending on using a growth regulator and microbial preparation for different fertilizing. It has been founded the reaction of buckwheat on using the growth regulator of Emistim C during a calculated norm of fertilizer and at different sowing terms and microbial preparation EM-A at different systems of fertilizing. Spraying of crops with Emistim C in the background of fertilizers at sowing on May 5 helped to earn the biggest net operating profit. Growing of a buckwheat with a cultivation of soil and crops with a microbial preparation EM-A is economically expedient on the background without the use of fertilizers and organic-mineral system of fertilizing.

Keywords: buckwheat, growth regulator, microbial preparation, term of sowing, mineral fertilizers, productivity, economic efficiency // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 59–63.

Artemenko S. F. Preseeding incrustation of soya seeds. The studies on the effect of incrustation the soybean seeds by chemical protectants, growth regulators, (bioglobin, antistress) and metal complexonates of phosphorus, molybdenum and boron in the northern Steppe of Ukraine are resulted.

Keywords: soybeans, incrustation, protectant, antistress, metal complexonates of molybdenum and boron, bioglobin // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 63–66.

Cherenkov A. V., Kostyria I. V., Ostapenko M. A., Zheliazkov O. I., Ostapenko S. M., Solonyi P. V., Samoilenko O. A. Productivity of winter wheat in Prysyvashi. The results of studies on the productivity of different varieties of winter wheat in conditions of Prysyvash. An analysis of the formation the structural elements of the harvest, depending on moisture and temperature conditions during the growth of culture after the fallow. It is established that from 2007 to 2010 the greatest yield of winter wheat soft provided Albatross Odesskiy, Kuyal'nyk, Selyanka varieties and amounted to respectively 5,80; 5,59 and 5,52 t per ha. Among the hard winter wheat harvest the most productive variety was Argonaut (5,06 t per ha).

Keywords: winter wheat, varieties, fallow, productivity of varieties, crop yield, number of productive stalks, weight of 1000 grains, weight of grain from the ear // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 66–70.

Shevchenko S. M. Seed germination and formation the morphobiological parameters of maize at minimization of soil tillage. The article presents the results of field and vegetative experiments, revealing features of the influence on the germination of corn seeds of various processing methods. Established that the agro-physical and biogenous transformation of soil lead to lower field germination and deterioration of biometric indicators of maize.

Keywords: maize, seeds, germination, soil tillage, moisture, biometric parameters, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 70–73.

Kovalenko N. P., Diadko I. I. Role of links of crop rotations with a different satiation by grain-crops in the increase of level of soil fertility. It is set that increase of part the fallow in links of crop rotations South Steppe of Ukraine instrumental in maintenance of high and permanent supplies of moisture in soil, to the accumulation of nutritives and is a good predecessor for a wheat winter and next cultures of links of crop rotation. It is marked positive influence on the improvement of the water and nourishing modes of soil of bringing of organic fertilizers.

Keywords: agricultural crops, links of crop rotations, forecrops, disposition of sown area, water mode of soil, nourishing mode of soil // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 74–79.

Pokoptseva L. O., Todorova L. V., Geras'ko T. V., Kohan A. V. The use of the multi-objective sunflower seeds optimization method for optimal variant substantiation of presowing treatment of antioxidant preparation distinol. The influence of sunflower seeds presowing treatment by preparation dis-tinol on technological safety and biochemical quality is investigated. The obtained data is processed by multi-objective optimization method on which basis is constructed ranked number and the choice of optimum variant experiment is proved.

Keywords: sunflower seeds, quality parameters, distanol, ordered series // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 79-83.

Tomashova O. L., Tomashov S. V. Changing the fatty acid composition of winter rape oil, depending on growing conditions. The results of studies of the effect of different planting dates and the application of retardants on the features of the accumulation of oil in seeds of winter rape. Established that in the conditions of Crimea after predecessor fallow obtained the higher productivity and seed quality of winter oilseed rape varieties Atlant at the second time of sowing on the background of retardant use.

Keywords: winter rape, sowing time, retardant, crop yield, oil content, fatty acid composition of oil // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 83–87.

Sereda V. I. Principles of selection in the breeding of hybrid sweet sorghum for feed. The article highlights the advantages of sweet sorghum as a forage crop in a stable food supplying. In article described the technology of growing sweet sorghum for silage, according to which problems arise for selection. Was described the effect of the biological indicators for future technological hybrid.

Keywords: sweet sorghum, breeding, silage, fodder production, hybrid // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 87–91.

Dziubets'kyi B. V., Chernomyz O. M., Zaplitnyy Ya. D. Study of economic-valuable signs of self-pollination lines of corn of embryonic plasma of Iodent, Lacaune and Mixed in the conditions of western Forest-Steppe. The results of researches are expounded on the study of 31 self-pollination lines of embryonic plasma of Iodent, Lacaune and Mixed on basic economic-valuable signs in the conditions of

Western Forest-Steppe. The result of researches was a selection of the best embryonic plasma and the best lines from these plasma for the use in plant-breeding work at creation of highly productive hybrids of corn.

Keywords: corn, self-pollination line, embryonic plasma, hybrid, heterosis, productivity, stability // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 91–97.

Kozelets G. M. Influence of the presowing application of fertilizers and growth regulators on the productivity of coriander in the north Steppe of Ukraine. It was determined the effectiveness of use the growth regulating substances and micro fertilizers when growing coriander at the pre-winter term of sowing on the background of the presowing application of fertilizers and separately. The higher level of productivity was obtained by the presowing application of fertilizers ($N_{10}P_{10}K_{10}$) combined with spraying of plants during the vegetation with the growth regulator of Treptolem (15 ml per ha) – 1.85 t per ha, that was higher than the control on 30%.

Keywords: coriander, productivity, fertilizers, treptolem, agrostimulin, emistim C, reakom // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 97–101.

Sereda I. I. Features technology of winter wheat growing after non-fallow predecessors in the conditions of north Steppe of Ukraine. This article contains the results of research aimed for understanding the formation of winter wheat productivity depending on the conditions of its cultivation. It was found the influence of predecessors (peas and sunflower) and mineral fertilizer on the productivity and quality of winter wheat grain.

Keywords: winter wheat, mineral fertilizers, predecessors, productivity, quality, economic efficiency // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 101–106.

Kostromitin V. M., Skydan M. S. The influence of nutrition system on crop yield and quality of sunflower hybrid seeds in the eastern part of Forest-Steppe of Ukraine. Resulted the data of two years (2008-2009) experiments on the influence of nutrition system on productivity of sunflower hybrids. It has been established that in varieties Oskil and Bohun the greatest crop yield was obtained at a background of intensive mineral nutrition in the variant with pre-sowing fertilizer in a dose of P_{15} and dressing complex fertilizer in a dose of $N_{30}P_{30}K_{30}$, but in hybrid Capral – at a background of intensive mineral nutrition in the variant with nitrogen application in a dose of N_{30} .

Keywords: sunflower, hybrid, fertilization, crop yield, oil content // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 107–111.

Yurkevich Ye. O., Kovalenko N. P. Crop rotation is a basic biological factor of increase of the productivity of grains and oilseeds. Determined, that the crop rotation and using a chemical measures in optimum permissible doses is one of the ways to improve the soil fertility, increase of grain production and oil and environment protection. It is recommended to introduce the scientifically reasonable crop rotations with a different satiation, correlation and placing of agricultural cultures depending on soil-climatic terms and speciality of farms.

Keywords: biologization of arable farming, crop rotation, soil protection // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 111–113.

Zheliashkov O. I., Pedash O. O., Boiko O. V., Priadko Yu. M. The influence of the main elements of growing technology on formation the productivity and grain quality of winter triticale. Resulted the investigations on study of the growing technology peculiarities of winter triticale of variety Amfidiploid 52. The effect of sowing time and seeding rate on productivity and grain quality of culture were studied. The best option provided yield 5.3 t per ha of grain with protein content 10,7% and the gluten 20,1%.

Keywords: winter triticale, sowing time, seeding rate, crop yield, quality of grain // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 114–117.

Gen' S. P. Yielding capacity of maize grain depending on fertilizing system and soil tillage. The results of the research concerning the study on effects the ways of soil cultivation and green manure combined with the application of mineral fertilizers and straw on yielding capacity of maize grain under the conditions of the Western Forest-Steppe of Ukraine were outlined.

Keywords: maize, yielding capacity, ways of soil tillage, green manure, mineral fertilizers, straw // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 117–121.

Gorschar V. I. Influence of growth regulator albite on the yielding capacity and brewing qualities of barley grain. Proved that application of albite at growing of brewing barley of Galaktik variety promoted increasing of yield level for 5,6–12,1% comparatively to control. The best indexes of brewing qualities are provided at double treatment an albite (seed and vegetative plants).

Keywords: growth regulator, herbicide, brewing barley, yield capacity, grain quality // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 121–123.

Isaenkov V. V. Efficiency of maize hybrids of various ripening groups depending on density of planting. Results of researches of influence density of planting on processes of formation the grain efficiency of different ripening group hybrids in Northern Steppe are resulted. The optimum density of planting for each investigated biotype of maize is established.

Keywords: maize, hybrids, density of planting, biometric parameters, grain yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 124–128.

Gusak Yu. V. Combining ability of middle-late maize lines of plasma Lankaster (S103). The productivity of new corn hybrids affined to plasma Lakaster (S103) was studied. The results of analysis of combining ability are resulted on a sign «productivity of grain» at recommended for Steppe zone the density of planting at 40 thousands and enhanced to 60 thousand of plants per ha.

Keywords: corn, line, combining ability, plasma Lankaster (S103), density of planting, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 128–132.

Pinchuk N. I., Derevenets' K. A., Dudka M. I., Berezovskyi, S. V. Damaging of corn plants by the pests and diseases at different harvesting time. It is established that the delay in harvesting time increases the level of stem rot infection of plants and diseases of corncobs. Harvesting time did not affect the level of damage the corn plant by corn borer.

Keywords: corn, diseases, pests, harvesting time // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 132–135.

Skrynnyk Ya. T. Technological receptions of application the complex liquid fertilizers in the system of nutrition of corn plants. Well-balanced and timely application of the foliar fertilizing in growing technology of corn allows to improve the growth, development and productivity of culture. Complex application of top dressing and plant protection from weeds provides proper phytosanitary state of sowings.

Keywords: corn, productivity, weed infestation, complex liquid fertilizers, herbicides, nutrition // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 136–140.

Romenskyi V. Yu. Influence of irrigation and mineral fertilizers on soil fertility level at growing the field crops in the South Steppe of Ukraine. In the article are shown the dynamics of basic indexes of fertility the protractedly irrigated dark-chestnut soil and productivity levels of agricultural plants depending on application of fertilizers in the seven-year grain-fodder crop rotation – "winter wheat - corn" (2008-2009) comparatively with the unfertilized array and non-irrigated analogues.

Keywords: soil, irrigation, mineral fertilizer, fertility // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 140–144.

Musatov A. G., Grigorieva O. M., Grigorieva T. M. Economic and energy efficiency of using the microbial products at growing the spring barley on ordinary chornozem. It is established a high efficiency of microbial products in spring barley sowings (Sozonivs'kyi, Stalker) in the Northern Steppe zone of Ukraine. Due to using of these products profit was 270-300 UAH per ha, and the energy efficiency of – 58-63%.

Keywords: spring barley, microbial products, economic and energy efficiency // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 145–149.

Zheliazkov O. I. Influence of growing technology measures on formation the above-ground mass of winter wheat plants in the Southern Steppe. It is established the principle of accumulation of dry matter by the winter wheat plants during the growing season in arid conditions of Prysyvashia. The highest winter wheat crop yield was formed in sowings after predecessor fallow (6.4 t per ha), at seeding

in first ten-day interval of October, but after non-fallow predecessors (spring barley and sunflower) – in the third ten-day interval of September (25.09) – 4.55 and 3.97 t per ha, respectively.

Keywords: winter wheat, absolutely dry mass of plants, predecessors, sowing time, seeding rate, crop yield // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 149–152.

Kozyr' V. S., Tiupina N. P. Productive and for slaughter qualities of bull-calves of breed Santa-Gertruda in the conditions of Steppe of Ukraine. Researches proved possibility of growing of bull-calves of breed Santa-Gertruda on meat in the steppe area of Ukraine to 30-monthly age at high profitability.

Keywords: breed, productivity of livestock, quality of meat, mineralization of bones, rank of skin // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 158–161.

Khalak V. I. Biological aspects of reproductive ability of sows as index of their adaptation. The indexes of reproductive ability of sows of large white breed (ULW-2) are investigational for period of their pedigree use, the index of adaptation and his connection is expected with basic pedigree-breeding signs.

Keywords: sow, breed, period of pedigree use, index of adaptation, connection, pedigree-breeding sign // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 162–165.

Zel'din V. F., Shavkun Yu. M. Assessment of meat productivity of pigs and quality of their carcasses. Studied the morphological composition of pig carcasses of large white breed with high performance characteristics of meat.

Keywords: sows, lean cuts, yield of meat, breeding quality assessment half-carcasses // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 165–168.

Barabash, V. I., Safronov V. V., Arshynova V. V. New method for prevention the postnatal complications in cows and calves. The article describes a new method for prevention the postnatal complications in cows and increase the vitality of newborn calves. The basis of this method is the creation of artificially fixed in cerebral structures of the brain previously unknown somatic installation by stimulation of the biologically active points (BAP) to prevent the related calving complications by the hydraulic method of acupuncture.

Keywords: cow, calves, postnatal complications, biorhythms, desynchronosis, preventing the disease // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 168–172.

Petrenko V. I. Communication of energy-protein ratio in rations, body condition of repair heifers with accumulation of protein, fat and energy in the organism at growing their from birth to calving age. In the article is resulted information about intercommunications between of soluble protein and energy ratio in rations and body condition of repair heifers, from one side, and accumulation of protein, fat and energy in their organism, from other side, at growing from birth to calving age, equations of regression for determination of amount of energy in organism are expected.

Keywords: heifer, energy-protein ratio, body condition, protein, fat, energy // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 173–179.

Logvinenko V. I. Effect of impulse current on organism of cows. Represented results of researches from the study of influencing of impulsive current on the organism of cows. Current easily measured out and is taken off. This method is safe and easy in implementation. It is established that effect of impulse current combines anaesthetizing, sedation and stimulation. Thus the state of sedation and analgesia grows proportionally to the increase of strength of electric current. The effect of sedation and analgesia disappears at once after disconnection of electric current.

Keywords: impulse current, electric stimulation, immobilization, anesthesia, cow // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 179–182.

Kozyr' V. S., Popikova T. V. Microevolutionary processes in the gene pool stock of gray Ukrainian breed in the onditions of experimental farm «Polivanovka». In article discussed the topics about the safety of the gene pool a closed local stock of gray Ukrainian cattle breeds, microevolutionary changes in breed from the genetic and breeding point of view.

Keywords: gray Ukrainian breed, gene pool, preservation, population, alleles, gene frequency, closed stock, body weight, growth, measurements // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 183–186.

Belaya O. V. Methodical positions of the estimation of exterior of cows of first lactation of red steppe breed. The parameters of linear estimation of cows of first lactation of red steppe breed are developed within the limits of 9-scored scale taking into account the international requirements of ICAR.

Keywords: cattle, breed, exterior, linear estimation, scale // *Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.* – № 41. – P. 186–190.