## ANNOTATION

Dzubetsky B. V., Satarova T. M., Cherchel V. Yu., Borisova V. V. The application of SNP-geno-typing for estimation of genetic parentage of maize breeding material. The results of maize analysis by the method of SNP-genotyping which permits to compare the frequencies of single nucleotide changes in the genomes of various lines are represented. It is shown that SNP-method creates the possibility to differentiate maize breeding material in genetic distances and to determine the degree of parentage of investigated lines. The recommendations on the utilization of analyzed inbreds in breeding process as initial material for initiation of populations of next screening cycles and in hybrid combinations are formulated.

**Keywords:** maize, DNA-analysis, SNP-genotyping, polymorphism, genetic distances, lines // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 3–7.

Shevchenko M. S., Shevchenko A. M., Shevchenko S. M., Shvets' N. V. Evolution of agriculture as a factor of forming of weeds phitocoenosis. The features of forming of weeds specific composition on the different stages of development of agriculture in the Steppe zone were studied. The mechanisms of adaptive capacity of weeds depending on climatic, technological factors were exposed. Principles of construction of the system of weed control and herbicides selection depending on the type of weed infestation of crops were recommended.

**Keywords:** agriculture, weeds, species, variability, corn, herbicides, efficiency // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 7–11.

Chumak V. S., Lebid' E. M., Desiatnyk L. M., Fedorenko I. E. Modern state of black chernozem and resumption paths of their fertility in crop rotations in the Northern Steppes of Ukraine. It was established that a set of crops in the rotation has a significant effect on the mineralization and accumulation of humus in the soil. In order to control the dynamics of soil fertility at crops growing it is necessary to take into account changes in the level of fertility by analyzing the content of humus in the soil.

**Keywords:** humus, crop rotation, soil fertility // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 11–14.

Tsyliuryk O. I., Gorobets' A. G., Shapka V. P. Chisel soil tilling under spring barley in North Steppe. Studied influence the different methods of basic soil tillage under spring barley on soil agro physics properties, moisture regime of chernozem, growth, development and productivity of plants, weed infestation of crops. It is established, that chiseling under spring barley creates bests conditions providing moisture plants, guarantee high yield and the highest level profitability.

**Keywords:** soil tillage, spring barley, weed infestation, fertilizers, yield, economical effectiveness // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 14–17.

Solodushko M. M. Productivity of winter and spring cereal crops in Steppe zone of Ukraine. Covered the results of studies over the years 2007–2010 on determining the productivity of winter and spring cereal crops in conditions of Steppe of Ukraine. The quantitative indicators of crop yield level of winter and spring forms of wheat, barley and triticale depending on predecessors and seeding time are discussed.

**Keywords:** winter and spring cereal crops, yielding capacity, predecessors, seeding time, climatic changes // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_{2} = 4$ . - P. 18–22.

Gyrka A. D., Gyrka T. V., Perekips'ka T. O., Viniukov O. O. Features of varietal response of spring wheat to plant protection products. By researches was established that application of plant protection products in a complex on spring's wheat crops significantly influences on increasing of crop yield of variety Kharkivs'ka 27 to 0.52 t/ha, and Kharkivs'ka 30 - to 0.69 t/ha. It's more effective to apply plant protection products in a mixture tilt 250 EC + agat 25-K + granstar 75 (in half of dose).

**Keyword:** spring wheat, varieties, pests, diseases, weeds, plant protection products, crop yield // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 22–25.

Kostyrya I. V., Gasanova I. I., Ostapenko M. A., Ostapenko S. M., Bochevar O. V. The influence of predecessors and mineral fertilizers on crop yield and quality of winter wheat grain in conditions of Prysyvashia. Results of researches for studying the influence of different predecessors and mineral fertilizers on grain yield of winter wheat and it's quality in arid conditions of Prysyvashia are

given.

**Keywords**: winter wheat, spring mustard, spring barley, predecessor, mineral fertilizers, crop yield, grain quality // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_{2} = 4$ . - P. 25–29.

Tkalich Yu. I., Shevchenko O. M., Matiukha V. L. Weed infestation and crop yield of sunflower at different tilling methods and application of herbicides. The results of studies the influence of different methods of tilling and herbicides on weed infestation of sunflower crops of hybrid Yiason and it's productivity are given. The advantage of the plowing on depth of 25-27 cm in comparison with the surface tillage and direct sowing, along with high efficiency of herbicides harnes -2.5 l/ha, dual gold -1.0 l/ha + gezagard -2.0 l/ha (tank mixture), frontier optima -1.4 l/ha are shown.

**Keywords**: primary tillage, sunflower, weeds // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 29–32.

Ilienko O. V. Formation the crop yield by pea mustache sowings under influence of fertilizers and seeding rate in the northern Steppe. Studied the effect of doses of mineral fertilizers and seeding rate on plant growth and development, the use of available soil moisture, structure indicators and grain productivity of peas mustachioed morph type.

**Keywords:** peas, mineral fertilizers, seeding rate, water consumption, structure of crop yield // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 33–37.

Kyrpa M. Ya., Paschenko N. O., Skotar S. A. By fractional separation and air-thermal heating of winter wheat seeds. The peculiarities of the impact of separation on the particle size and quality of seeds of different varieties of winter wheat. In order to improve the quality of seeds appropriate to seed separation into fractions 2,5x20 mm or more, with a mass of 1000 grains pre-seeding of more than 40 g of air-thermal heating is an effective means of increasing vigor and laboratory seed germination.

**Keywords:** wheat, seeds quality, separation, fractions, air-thermal heating // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N^{\circ}$  4. -P. 37–42.

Okselenko O. M. Agroeconomic efficiency of cultivation the varieties and hybrids of sweet corn of different maturity groups. It is established that by unit cost of production, value added and profit levels of profitability advantage has a hybrid Spokusa. Slightly smaller but high enough efficiency was growing early-maturing hybrid Vnesok SV, middle-maturing hybrids Surprise, Venilia and variety Aromatna, middle-maturing hybrid Kabanets' SV.

**Keywords:** sweet corn, variety, hybrid, maturity group, leaf area, plant height, crop yield, cost, production cost, economic efficiency, profitability // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 42–44.

Shevchenko M. C., Shevchenko S. M., Zaporozhets' L. M. Dynamics of agro-physical indexes during minimization of basic soil cultivation under cereal crops. The results of the field experiments on study the efficiency of basic soil tillage methods in a crop rotation, in the conditions of Forest-Steppe were presented. It is set that minimization of tillage is accompanied declining of productive moisture supply and increasing of hardness of soil. As a result of worsening of agro physics terms on a background the direct sowing in untilled soil the productivity of spring vetch, winter wheat, soybean and spring barley reduced on 0,30-0,63 t/ha.

**Keywords**: crop rotation, grain crops, soil tillage, plowing, no-till, moisture, hardness, crop yield // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 45–48.

Chaban V. I., Klyavzo S. P., Podobed O. Yu. The contents and distribution of microelements in corn plants in zone Steppe of Ukraine. The data on microelement composition of a grain and stem mass of the corn grown in a Steppe zone of Ukraine are summarized. The average values of trace elements in grain and corn stem mass were set. Maximal values of biological uptake absorption are marked for Zn 30.5, Cu - 11.1. The analysis of empirical curves specifies that action of the certain factors does not allow corn to realize completely potential opportunities on accumulation of the majority of microelements.

**Keywords:** corn, microelements, contents, variability // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}4. - P.48-53.$ 

Gyrka A. D., Bochevar O. V., Sydorenko Yu. Ya., Ilienko O. V., Kostyria I. V., Kulyk A. O.

Grain yield of chickpea depending on agrotechnical measures of growing in condition of Northern Steppe of Ukraine. Investigation results of influencing the seeding time, sowing methods and seeding rates on the formation the grain yield and indicators of economic efficiency of chickpea cultivation in the Northern Steppe of Ukraine are presented.

**Keywords**: chickpea, grain yield, seeding time, sowing method, seeding rate, profitability level // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 53 –57.

Kravets' S. S. Optimization the sowing methods of maize in the northern part of Steppe. It is resulted the field experiments on study the impact of sowing methods and herbicides to corn plant productivity of early-ripening hybrid of Pochaivskyi 190 MV. the power plant corn (), on the ninth performance, depending on the method of planting and caring for crops. Sowing protection system from weeds includes using the new generation herbicides of soil (Harnes) and postemergent (Stellar, Dialen Super, Task) actions and also a mechanized operations for plants care.

**Keywords:** maize, sowing methods, care, herbicides, plant productivity // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_2 4$ . - P. 58–61.

Dsiubetsky B. V., Fedko M. M., Zaplitnyy Ya. D. Adaptive ability and ecological stability testcrosses corn alternative germplasm in Western Forest Steppe of Ukraine. The estimation of the adaptive ability and ecological stability of simple corn hybrids created from the germplasm Iodent, Lacaune and Mixed are curried out. Revealed the potential of adaptive testcrosses the investigated and allocated the most optimal heterotic pattern for use in breeding work to develop advanced high-yield corn hybrids adapted to the conditions of the Western Forest Steppe of Ukraine. The greatest general adaptive ability of hybrids showed heterotic pattern Iodent×Lacaune.

**Keywords:** corn, testcrosses, germplasm, heterotic pattern, adaptive ability, ecological stability // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 61–64.

Klimova O. E. Diagnostics on resistance to drought of new line sugar corn. Covered the results of the field estimation (2010–2011 years) on resistance to drought of new line sugar corn based on drought susceptibility index and morph-biological characters. It is established the raised of genotypic environment activity in stress-resistant forms relatively with non-drought-resistant. Selected the high-productive drought-resistant samples, characterized by homeostatic productivity forming. They are recommended for use in breeding hybrids, oriented on growing in arid condition.

**Keywords:** sugar corn, lines, signs, drought-resistance, correlation, genotypic environment // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 64 -70.

Gorschar O. A. The main activators of molding and their phytotoxic action on sprouts and roots of spring barley seeds. The specific structure of activators of molding of spring barley seeds from harvesting and for one year of storage is studied. The phytotoxic effect of cultural solutions of mushrooms, with which seeds most infested the seeds: Fusarium moniliforme, Bipolaris sorokiniana, Alternaria alternata, Penicillium glandicola, Aspergillus clavatus is investigated.

**Keywords:** spring barley, molding activators, phytotoxic action // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 70–73.

Kovalenko N. P. The history of establishing the sunflower in the crop rotations of Ukraine. The history of sunflower growing is considered in the crop rotations of Ukraine. The scientifically grounded crop rotations are recommended with growing of sunflower for the large specialized agrarian economies, where is possible introduction of multicourse crop rotations, and farms, where limitation of soil tilling is required application of crop rotations with the small set of cultures and short period of rotary press.

**Keywords:** sunflower, crop history, growing, multicourse crop rotations, scientifically reasonable crop rotations, period of rotary press // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 73 –78.

Gubar O. V. Bioenergetical efficiency of pop corn grain production according to soil tillage, level of mineral nutrition and plant density. In the article the results of the field experience for establishment of the indexes bioenergetical efficiency for grain production of pop corn hybrids (Vulcan and Dniprovs'ky 929) depending on the methods of basic soil tillage, level of mineral nutrition and plant density are showed. There energy coefficient, energy content for one ton of grain, expenditure of total energy per hectare, gross and exchange energy were presented.

**Keywords:** pop corn, soil tillage, fertilizers, plant density, grain productivity, bioenergetical efficiency // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_2 4$ . - P. 78 - 81.

Zabolotnyi A. I. The influence of herbicide Trofi 90 on weed infestation and productivity of corn sowing. The results of field researches on studying of influence a soil herbicide Trofi 90 on the level of weed infestation and productivity of corn sowings are given in article. At application of 2,5 l/ha of a preparation productivity of corn almost reaches the value received in option of experience with manual weed control.

**Keywords**: corn, herbicide Trofi 90, weed infestation, productivity // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- \mathbb{N}_{2} 4$ . - P. 81–85.

Derevenets'-Shevchenko K. A. The factors of spreading and limitation of mycoflora of winter wheat grain. As a result of inspection of sowings and epifitic estimation of different varieties of winter wheat the features of saprophyte mushrooms infecting and seed damage degree were found out. Dependence of dynamics of distribution of mycoflora at fully ripe grain and during the period of biological rest, and also efficiency of chemical measures of the phitosanitare controlling was established.

**Keywords:** winter wheat, mycoflora of grain, varieties, seed treatment, contamination, germination, humidity // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 85–88.

Gyrka A. D., Viniukov O. O., Dmytrenko P. P. Determination of ecological plasticity of spring barley varieties using a graphical algorithm of analysis the yield structure elements. The efficiency of the use of different functional growth regulators of last generation with pre-sowing seed treatment and spraying spring barley plants during the growing season are investigated. It is revealed that the use of growth inciters influenced the improvement in crop patterns (length of ear, 1000 grain weight, number of productive stems and the number of grains in the ear). Application of the developed graphical algorithm of the yield structure elements helped to identify the effect of agrotechnical elements on the productivity indicators of spring barley – and therefore the environmental plasticity of its varieties when grown in specific agro-climatic conditions of the region.

**Keywords:** spring barley, varieties, growth regulators, productivity elements, graphical algorithm, crop yield // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine. –  $N_2$  4. – P.~88–93.

Kohan A. V., Len O. I., Totskyi V. M., Semiashkina A. O. Water consumption and productivity of sunflower hybrids depending on plant density. Features of water consumption and formation of productivity of sunflower hybrids were studied depending on density of plants. It is established, that most economically used a moisture hybrids Nadiinyi and Zaporizhs'kyi 28 at plants density of 40 thousand, and hybrid Sava – at 50 thousand plants per ha; the water-use ratio was accordingly 901, 981 and 953 m³/t. Optimum density of plants for hybrids Nadiinyi and Zaporizhs'kyi 28 was 40 thousand plants per ha, productivity was 3,54 and 3,26 t/ha. The hybrid Sava formed the maximal productivity (3,38 t/ha) at density of plants 50 thousand plants per ha.

**Keywords:** sunflower, hybrids, density of plants, total water consumption, water-use ratio, produc-tivity // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 94–97.

Olepir R. V. Impact of the basic soil tillage on soil physical properties at cultivation of soya. Highlighted the study's results on the effect of the main cultivation on the physical properties of the soil at soybean growing in conditions of east Forest-Steppe of Ukraine. It is established, that on chernozems typical density of arable layer was optimal regardless of the system of basic tillage. But the best structural and aggregate composition of the soil provided by subsurface plow processing.

**Keywords:** soya, basic soil tillage, density, structure and aggregate composition // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{\odot}4$ . -P. 97 –100.

Kovalenko V. P. The dynamics of alfalfa plant density depending on seeding rate and variety. Article concerns subject of alfalfa plant density depending on seeding rate and variety.

**Keywords:** cereal herbs, creeping alfalfa, seeding rate, varieties // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 100–103.

Tymofeev M. M., Zarudniak I. N, Belyts'ka O. A., Golubieva T. V. Information technologies in biogenic system of agriculture. The transition to the technologies of continuous resumption of soil fertility and the formation of stable agrobiogeocenoses in conditions of mulchelayers in biogenic system of agriculture is associated with the development of information and communication system and program

cont-rol of optimization functioning of the various levels of the organization of communities of living organisms.

**Keywords**: information technologies, biogenic system of agriculture, mulchelayer, biogenic agents, stable agrobiogeocenoses, shrubs crops, briquette // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 103–111.

Gyrka A. D., Kulyk I. O., Andreichenko O. G. Features of formation the crop yield of oats and spring barley influenced by predecessors and backgrounds of mineral nutrition. Reflects the results of research the regularity of grain productivity formation of oats and spring barley plants. It is established that their crops placed after recommended predecessors, much better respond to increasing agrochemical back-ground. Found that growing oats and spring barley after predecessor – winter wheat with preplant applica-tion of  $N_{40}P_{40}K_{40}$  + top dressing of  $N_{30}$  combined with spraying of vegetating plants by microfertilizer rea-kom allows to increase the number of productive stems per unit area and performance panicle/spike, which provides the largest grain harvest – 3.96 and 3.32 t/ha, respectively, in plants of oats and spring barley.

**Keywords:** oats, spring barley, predecessors, mineral fertilizers, grain, crop yield // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 112–116.

Konopliova Ye. L. Features of growth and development of winter wheat plants during the spring-summer growing season in the northern Steppe of Ukraine. The features of growth and development of different varieties of winter wheat plants are considered in a spring-summer period. The dynamics of accumulation of dry substance and leaf-area duration of winter wheat plants is investigational depending on a sort. Influence of biometrical indexes is certain on forming of the productivity of grain.

**Keywords:** winter wheat, phases of development, tops, leaf-area duration, photosynthesis activity, productivity of grain // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{\odot}4$ . -P.116-120.

Baranivs'kyi B. A., Ivan'ko I. A., Voloshyna N. O., Andrusyk A. V., Chegorka P. T. The analysis of phytodiversity by Basavluk river basin. The analysis of phytodiversity by Basavluk river basin of Dnip-ropetrovsk region presented in the article. There are 736 species of plants, including 60 rare and en-dangered species, and also 15 plants are included in the Red Book of Ukraine.

**Keywords:** phytodiversity, vegetation, flora, Basavluk river basin // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 120–124.

Kolesnik I. V., Barylko M. G., Bohan Z. M. Efficiency of evaluation the combinational ability and manifestation of transgression on the main quantitative characteristics of spring vetch productivity. It is conducted the evaluation of combinational ability of nine collections spring vetch samples and the frequency and degree of manifestation the positive transgression in generation of hybrids  $F_2$  on the main characteristics of forage and seed productivity. Defined the dependence between indicators of specific com-binational ability of samples and the level of relevant features in the future hybrid generations.

**Keywords:** spring vetch, combinational ability, frequency of transgression, degree of transgression, quantitative features // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 124–127.

Kulyk I. O. Water consumption of oats sowings depending on the predecessor and the level of mineral nutrition. Are given the investigational results of the influence of predecessors, methods, timing and doses of mineral and micro fertilizer applications on the peculiarity of productive moisture accumulation under oats sowings and the level of water consumption of plants.

**Keywords:** oats, water consumption, predecessors, mineral fertilizers, micro-fertilizer // Bul. of Inte of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 127–131.

Kuz'myns'kyi A. V. Resistance of corn hybrids to lepidopteran pests. In the integrated protection of plants the most radical method is cultivation of resistant to pests varieties and hybrids. Stability of 39 hybrids was studied. In the 2011 from 30 samples 12 – were excluded from further study, and in 2012 were studied 9 extra samples. Due to distribution on a limited scale of corn stem moth (on the average 1,3%) it didn't allows to differentiate hybrids on resistance to the pest. At the same time, serious damage of corn by a cotton budworm allowed to reveal different hybrids in stability. The majority

of hybrids were susceptible to damage by phytophagan -53.8% of studied hybrids, 28.2% – were evaluated as middle resistant and only 18% – to resistant.

**Keywords**: cotton budworm, corn stem moth, corn, stability of hybrids, groups of stability // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_2 4$ . - P. 132–134.

Andreichenko O. G. Productivity of hulled and naked spring barley depending on sowing rate and the predecessor in the conditions of north Steppe. There were given the results of studying of the influence of sowing rate and the predecessor on variation the elements of crop yield of naked and hulled spring barley in the conditions of north Steppe. After the predecessor of soybean the higher productivity of hulled spring barley was received at a seeding rate of 5.0 million seeds per ha, after sunflower -6.0 million, after winter wheat -5.5 million of germinable seeds per ha. After the predecessor of soybean the higher productivity of naked spring barley was received at seeding rate of 5.0 million, after sunflower and winter wheat -6.0 million of germinable seeds per ha.

**Keywords:** spring barley, sowing rate, predecessor, grain, productivity // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 135–139.

Minaylo A. A. Biodiversity of agro-landscapes: faunistic studies. The index of the average species diversity (MSA) was built on the calculations simple cause-and-effect relationships between the driving forces behind environmental change, and their impact on biodiversity. It reflects the current species diversity of the territory in terms of the potential of species diversity of much intact ecosystems within the territory. There is a possibility to evaluate the current state of biodiversity through a representative sample of insects, represented by constant and dominant species, because they, as representatives of one of the most stable classes, most accurately reflect the degree of anthropogenic impact on the study area.

**Keywords:** biodiversity, fauna, human impact, generalized species richness, ecosystems // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_2 4$ . - P. 139–142.

Kozyr V.S., Sokrut A.V., Cherniavsky S.E., Timchenko L.A. Features of use of different raw materials by production of biogas. Investigation results of efficiency use the cattle and pigs manure in a mix with vegetable raw materials are stated. Calculation of necessary power of biogas energy installations for agroformations of different standard sizes are described.

**Keywords:** biogas generator, raw materials, anaerobic fermentation, biogas, electrical and thermal energy // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 143–146.

Voloshchuk V. M., Girya V. N., Khalak V. I., Malik V. I. Feeding and meat quality of pigs of different breeding herds in the control station of the Institute of fattening pigs and APP of NAAS of Ukraine. Studied the feeding and meat quality of growing pigs of different genotypes and breeding herds in the control station of the Institute of fattening pigs and agro-industrial production of NAAS of Ukraine. Found that the best indicators of fattening and meat quality were characterized by large white offspring sired by breed and breed Landrace from LLC "Agroprime Holding" Odessa area. Compared with animals of other genotypes and breeding herds they were above the average daily live weight gain (6,17%), less than the cost of feed (10,7%), and more carcass length (3,5%), with a thin bacon at 6-7 thoracic vertebrae (22,1%). The best indicators of age reaching a live-weight of 100 kg and backfat thickness were characterized animals of SE EE "Steppe" that SE EE "9 Sichnya" Poltava region, respectively.

**Keywords:** young pigs, feeding and meat quality, breeding herd, control station feeding, feed costs, the evaluation of boars, average daily gain, backfat thickness // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine. –  $N_2$  4. – P. 146–152.

Kozyr V. S., Oleynik S. A., Denisyuk O. V., Chegorka P. T. Features of forming of feed conduct in a pair «cow-calf». Studied the ethological features of feed conduct of Ukrainian meat generate cows and their calves. Dependence of development of sapling is certain in early ontogenesis from the features of their conduct.

**Keywords**: cow, young, functional activity, live mass // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $- N_2 4$ . - P. 152–156.

Barabash V. I., Porvas N. G., Sytenko I. L. System influence of natural stabilizing selection on pheno- and genotypes of imported Holstein. The results of research of the negative influencing of

natural stabilizing selection are resulted on pheno- and genotypes of cows of Holstein breed after an exterior, interior, milk productivity, quality and chemical composition of milk, planned ways of removal their effect in the conditions of Steppe of Ukraine.

**Keywords**: Holstein, stabilizing selection, elimination, cows, genotypes, phenotypes, conversion of forages, composition of milk // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{2}$  4. -P. 156–162.

Khalak V. I., Martiushenko V. L., Kovalenko T. S. Signs of early ontogenesis repair in pigs and their further productivity depending on the class of distribution of sow-mothers on the index of BLUP. The indexes of the own productivity of repair in pigs of large white breed are investigated, signs of reproductive ability of the checked up sows, and also efficiency of animals selection in a basic herd on the index of BLUP of sow-mothers.

**Keywords:** ontogenesis, repair pigs, productivity, sow, index // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_{\odot}$  4. -P. 162–168.

Petrenko V. I., Dymchya G. G., Maystrenko A. N. Norms and feeding rations of drying-off cows and their improvement. In the article resulted data about chemical composition of forages in the conditions of central Prydniprovia with determination of separate protein factions and structural carbohydrates and adapted to the NRC system (2001), key elements of the rationed feeding the drying-off cows with high potential of productivity.

**Keywords:** forages, chemical composition, drying-off cows, rations, food value, norms // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 168–173.

Zeldina Yu. S., Sitenko I. L. Use of methods of index estimation for determining the tribal operational value of the animals. In the article reflected effectiveness of use the index method of evaluating the boars and the possibility of boars differentiation according to the level of their tribal value.

**Keywords:** pigs, estimation, early maturation, meat qualities, grading, class, index // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 173–177.

Belaya N. V., Kolbasina T. V. Comparison characteristics of antibacterial activity of some ftorhinolon preparations. Analyzed and summarized the results of monitoring the infectious diseases in poultry farms in Dnipropetrovsk, Cherkasy, Mykolayiv, Poltava regions, carried out the experimental studies on determination the sensitivity of bacterial cultures to some ftorhinolon preparations used in poultry farms to prevent and treat bacterial infections.

**Keywords:** antibacterial activity, ftorhinolon preparations, testing-culture, resistance, susceptibili-ty // Bul. of In-te of Agriculture of the steppe zone of the NAAS of Ukraine.  $-N_2$  4. -P. 177–179.