

RESUME

Vdovychenko Yu.V., Omel'chenko L.O. EFFICIENCY OF CATTLE BREEDINGS OF SOUTH MEAT BREED IN THE CONDITIONS OF ORGANIC PRODUCTION

The results of researches in relation to the use of genotypes of the South Meat breed of cattle in the system of organic production are presented. High intensity and energy of growth of sapling is set due to pascual forages (1046-944 gr.), high nourishing (1056,6 kcal) and power (4,44 MJ) the value 1 kg of beef, a presence in meat of chemical pollution below than Limited Permissible Concentration. The economic and ecological effect of the use of the created genotypes in the system of organic production is well proven.

Admina N.H. RELATIONSHIP BETWEEN LINEAR APPRAISAL OF TYPE OF COWS AND LENGTH OF DAYS OPEN IN DIFFERENT TECHNOLOGIES OF HOUSING

Degree and direction of relationships between length of days open and some linear traits of exterior of cows' body in free housing differed from similar ones in tied housing. According to the data of all experimental heifers length of days open was weakly negatively correlated with appraisal of fore udder attachment ($r=-0.026$) and positively – with teat length ($r=+0.150$) ($p<0.05$). Under conditions of free housing in DP DG "Kutuzovka" rump width had significant negative correlation with length of days open. In tied housing the negative correlation between days open and appraisal of fore udder attachment ($r=-0.306$) ($p<0.05$) in DP DG "Gontarovka" and with rump angle in DP DG "Stepne" ($r=-0.233$) were revealed.

Buyuklu H.I. DESCRIPTION OF ANIMALS OF BREEDING ENTERPRISE «TEPLYCHNYI»

The results of inspection of breeding enterprise of cattle of Red Steppe breed of LTD «Teplychnyi» of Donetsk province are presented. It is set that the animals of herd after the level of the productivity exceed the standard of breed, the index of adaptation makes on the average -2,91 - -1,79. After measuring of the points of exterior adult cows are more high on 0,5 cm, the developed breasts the depth of which anymore on 1,3 cm have well, and width - on 4,4 cm and more long on 10,7 cm slanting length of trunk in comparison animals which are written in to the last volume of State Book of Breeding Animal of Red Steppe breed.

Vasylevskiy N.V., Eletska T. O. EFFECT OF FEEDING LEVEL ON CHANGE DIGESTIBILITY OF NUTRIENTS IN THE RATION DEPENDING ON HOW IT HAS COWS FEEDING

The paper presents the research findings of changes in digestibility of nutrients in the gastrointestinal tract of cattle fed with forage mixture in comparison with the separate distribution of forage and a mathematical model to predict these changes, depending on the feeding level. Changes in total digestibility of dry and organic matter at the feeding level from 0.51 MJ / kg DM and 0.90 MJ / kg DM are slight. At the feeding level 1,25 ÷ 1,27 MJ / kg DM there is a maximum increase in digestibility of dry and organic matter by 2% and 1% respectively. Increased feeding levels to 1.71 MJ / kg DM leads to a sharp decrease in digestibility of dry and organic matter to 4%. Method of feeding fodder affects the energy content derived from the diet of the animals. At the feeding level 1.36 MJ / kg DM feeding the same feed as the feed mixture the feeding level by 18.6%.

Vdovychenko Yu.V., Omel'chenko L.O., ??? Naydyonova V.O. THE PROBLEM QUESTIONS OF INDUSTRY OF THE MEAT CATTLE BREEDING AND SELECTION OF MEAT BREEDS OF CATTLE

The analysis of the state of industry of the meat cattle breeding is conducted in Ukraine: presence of total number of livestock of cattle and subjects of pedigree business, gene pool of breeds of beef cattle and presence of genetic resources. Reasons of the crisis state of industry and way of its overcoming are expounded in accordance with the National Program «Vidrodzhene skotarstvo».

Vysochanskyi Yo. S. GROWING OF CROSSBREED COWS OF DIFFERENT GENOTYPES

Investigated the situation in the breeding farms of different ownership forms in the presence and level of productive traits in cattle. Found that in household's mountain have 187 local cows of different genotypes of beef and combined productive direction. The highest level of milk production is characterized by a cross between the Carpathian Brown with Pinzgau and Simental of Ukrainian selection of combined productive direction.

Vorozhbyt N.M. INFLUENCE SUMMER TEMPERATURE AIR ON THE INDEXES OF BLOOD OF CALVES OF RED SPOTTED MILKING BREED

It is set that maintenance of calves to 6-monthly age in individual cottages is outdoors instrumental in an increase for them of adaptation capacities for the action of high temperatures a summer and stress resistance, that provides greater on a 1,2% increase of living mass, increase on a 3,2% economic efficiency of maintenance and growing of

calves, by comparison to control.

Huzeev Yu.V., Demchuk N.P. EXTERIOR FEATYRES OF ANIMALS BYFFALO (BUBALUS)

The results of researches of exterior features of animals buffalo (cowsand bovine) population of Ukrainian.

Dankevych E. M. MODERN TECHNOLOGIES OF PRODUCTION OF GOODS OF CATTLE BREEDING

Modern technologies of production of goods of the cattle breeding are studied and analyzed. On the example of computer-integrated agricultural enterprises of the Zhytomyr area directions of modernization of production and feature of adaptation of commodity producers to the terms of market are considered.

Dorotyuk E.M., Prudnikov V.H., Kolisnyk O.I. EVALUATION OF GROWTH AND DEVELOPMENT OF DIFFERENT GENOTYPES HEIFERS CREATED BY UKRAINIAN ANGUS MEAT BREED

The results of studying the growth and development of heifers of different genotypes generated Angus Ukrainian meat breed. The effect of genotype on growth and development of heifers is studied. Found that the new breed heifers were larger in all ancient times, and showed the best productive quality.

Dudok A. R. DAIRY CATTLE BREEDING - STATE AND PROSPECTS OF DEVELOPMENT

In the article the dynamics of development of the dairy cattle breeding is considered for 1915-2010, it is analyzed the modern state of industry, found out reasons of reduction of production of milk volumes and the ways of overcoming of the crisis state are offered.

Klopenko N.I., Rudik I.A. GENETIC FEATURES AND POLIMASTIYA POLYTHELIA IN HERDS OF DAIRY CATTLE

These results incidence of cows in the herd and polimastiya polythelia. The condition of cattle breeding plants of "Suholiske" SC AF "Matyusha" and pedigree LLC AF "Hlushky" the presence of extra teats of cows and their effect on milk production.

Kuziv M. I. GROWTH, DEVELOPMENT AND BIOLOGICAL FEATURES HEIFERS UKRAINIAN BLACK-AND-WHITE DAIRY BREED IN DYNAMICS WITH AGE

The results of studies of live weight, body sounding articles and biological characteristics of heifers Ukrainian Black-and-White Dairy

breed. It is established, that the animals are characterised by high intensity of growth, large linear body size, deep and wide chest, well-developed back of the body, proportionate and harmonious development. In the blood of heifers increased with age, hemoglobin in red blood cells, total protein content and decreased the activity of aspartate and aminotransferase. With age, the young bactericidal, and phagocytic activity lyzocymic increased.

Nazarenko V.H., Voronenko V. I., Omel'chenko L. O. IMMUNOMICROPHYLOGENESIS OF CATTLE OF GREY UKRAINIAN BREED

The results of scientific researches on determination of immunogenetic features of population of cattle of the Grey Ukrainian breed by the estimation of its structure to 52 antigens of red corpuscles 9 systems of blood types and on alleles of the multivariable system EAB are expounded. On the basis of comparative analysis with the use of row of genetic-mathematical methods the degree of homozygous, level of genetic differentiation and likeness of six contiguous generations of experimental of pure breed herd of the Grey Ukrainian cattle, is certain in monitoring researches.

Omel'chenko L.O., Dubynskyi O.L., Noskova A.M. INFLUENCE OF GENOTYPE ON INTENSITY AND ENERGY OF GROWTH OF BULL-CALVES OF SOUTH MEAT BREED OF CATTLE

Materials about influence of genotype of animals of the South meat breed on intensity, energy of growth and linear measuring are expounded. Reliable influence is set low blood genotype («stake» of heredity of zebu $\leq 37,5$ %) on the level of living mass, average daily additional weights ($R > 0,999$), and also force of influence of genotype on progress of breed on the periods of monitoring ($\eta^2 = 0,489-0,714$, $R > 0,999$). It is set that increase of energy of growth for period 2006-2011 contingently systematic work as evaluated by bulls-producers on the own productivity and quality of posterity and the use in reproduction only of bulls with the index of $V \geq 101,1$.

Omel'chenko L. O., Fursa N.M., Makarchuk R.M., Ivina-Malyarenko O.S., Yaremchuk A.I. SOME MECHANISMS OF NATURAL RESISTANCE OF COWS OF SOUTH MEAT BREED OF CATTLE

It is set that for the cows of the South Meat breed the effective mechanisms of natural resistance, which provide the maintenance of temperature homeostasis, are formed, colloid-osmotic pressure, activate the cellular and humoral factors of heterospecific resistance and provide the health of animals, high productivity and reproductive ability in the

conditions of the temperature loading.

Pysarenko A. V. EXTERIOR INDEXES OF COWS OF RED STEPPE BREED

The adult cows of modern herd of Red Steppe breed on the indexes of measuring of height in withers, oblique length of trunk, depth of breasts and circumference of shank, do not yield to the best of pure breed animals, which are written in to SBBA. High cross-correlation connection of height in the withers of adult cows of herd with the level of yield is set.

Pysarenko N. B. REPRODUCED ABILITY OF COWS OF UKRAINIAN RED DAIRY BREED IN CONNECTION WITH IMMUNOGENETIC PARAMETERS

The immunogenetic parameters of population of cows of the Ukrainian Red Dairy breed of the different reproduced ability have been investigated. Expedience of the use of alleles of EAB-lokus for the improvement of the reproduced function of cows is set.

Pishchan S.H., Honchar A.O., Hutsulyak A.S. THE LEVEL OF MILK PRODUCTION OF COWS OF HOLSTEIN BREED DEPENDING ON THEIR PRODUCTIVE AGE

The article highlighted by retrospective analysis of the dynamics of lactation milk production Holstein cows based on age and physiological activity of the organism during full lactation. The correlation analysis of parameters of milk productivity.

Salogub A.M. FOR SLAUGHTER QUALITIES OF BULL-CALVES OF DAIRY AND DUAL-PURPOSE BREEDS OF THE SUMY REGION

The results of researches from the study of slaughter and meat qualities of bull-calves Ukrainian Black-and-White and Brown Dairy breeds in age eighteen months in the conditions of the Northeastern region of Ukraine, which testify to possibility of their effective fattening are presented. The bull-calves of Symmental breed of Austrian selection were characterized of high meat qualities in correlation of anatomic parts of carcass and for slaughter output, approached after their level to the animal of meat breeds.

Stavetska R.V. CORRECTION OF MILK YIELD AND LOSS OF CALVES DEPENDING ON THE DURATION OF LACTATION

The dependence of milk productivity of Ukrainian Black and White Dairy cows on the duration of their lactation and dependence of the duration of lactation on cows reproductive dates is established. High level of milk productivity is characteristic for the cows with the duration of lactation within

301–320 days. With increasing of the duration of lactation above the optimal level (305 days) daily lost about 0,3 % of milk yield and 0,24 calves per 100 cows.

Fursa N.M. MAINTAINANCE OF GENE POOL OF THE GREY UKRAINIAN BREED OF CATTLE IN THE SOUTH OF UKRAINE

The degree of safety of natural domestic gene pool of the grey Ukrainian breed of cattle is investigational in the South of Ukraine. The level of the productivity, fecundity, development of exterior of cows of this breed in the conditions of droughty extreme climate of South Steppe of Ukraine is certain.

Khmel'nichiy L.M., Shkurat A.O., Khmel'nichiy S.L. POPULATION-GENETIC PARAMETERS OF LINEAR SIGNS OF EXTERIOR OF COWS APPRAISED ON THE METHOD OF LINEAR CLASSIFICATION

The results of linear classification of first-calf cows of Sumy into a pedigree type of the Ukrainian Red-and-White breed on an exterior type are resulted. The estimation of two leading plant-breeding herds of region witnessed intergregarious and inwardly gregarious differentiation of animals in grain to heritableness, degree of cross-correlation and phenotypical changeability of group and descriptive reasons of build and udder.

Chernenko O.I. PRODUCTIVITY AND THE RESULTS OF AN ENERGY ESTIMATE UKRAINIAN RED COW DAIRY BREED, DEPENDING ON THE FEATURES OF THE CONSTITUTIONAL

The results of study of productive qualities and power estimation of first-calf of different somatotypes are resulted. It is set that at animals of large volume somatotype the volume of pectoral department is better formed, they have the high milking productivity, higher productive index and more effective outlay energy on the synthesis of milk. The selection of animals of large volume somatotype and their power estimation will assist development of herds on the milking productivity.

Ban'kovska I.B. DEVELOPMENT OF METHODOLOGY BY M. F. IVANOV IN THE CREATION PROCESS OF UKRAINIAN MEAT BREED OF PIG (1981-1994)

The article shows the description of realization of the program of creating Ukrainian Meat breed of pigs (1981-1994) considering methodological principles of domestic breed making introduced by Academician M. F. Ivanov. The conclusion is made about the importance of breeding science sequence using these traditional approaches that can most effectively and quickly implement new ideas of the breeder.

Bezverha L.M. INFLUENCE BIOLOGICALLY OF ACTIVE PREPARATIONS ON POLYCARPOUSNESS AND MACROCARPOUS HAVE SOWS DEPENDING ON AMOUNT OF FARROW

It is set, that feeding to the sows after 3-4 farrow, on 1-3 days sexual cycle of bioactive preparation of metabolically-neurophilic action of " Glutam 1M " stipulates the increase of their polycarpousness on 18-26%%, and macrocarpous on 6,7%.

L. Voitenko, L. Vishnevsky. CONTROL OF GENETIC SITUATION IN MIRGORODSKAYA BREED PIGS

The article presents the results of multiyear studies of gene equilibrium pigs mirgorodskaya breed and determined to programmed selection of the fathers of couples using genetic methods. It is established, that among the lines mirgorodskaya breed for the period 1991-2011 years there have been significant changes in blood groups, which are conditioned by the methods of selection-breeding work, mutation, migration and gene flow. Pig breeding mirgorodskaya breed excluding the genetic distance between them adversely affect the reproductive capacity of Queens. Selection of pigs and Queens on the results of the ISSR - typing enabled us to determine the most optimal genetic distance to enhance the performance of reproductive capacity.

Herasyenko V.V. SOME PRESSING QUESTIONS OF THE MARKER SELECTION IN THE ANIMAL BREEDING

On results own and published by other authors of researches some pressing questions of the using of molecular-genetic markers in the selection of agricultural animals, mainly, pigs are considered. Possible perspective approaches come into question as evaluated by the selective value of integrated genotypes of animals on the complex of the genetic systems of marker genes and optimization of parameters of population gene pools.

Horb S.V. THE FORAGE OF SEAS RESOURCES IN THE PIGS FEEDING

The results of researches on influence of albumen-mineral addition from mussels on the productivity, digestibility of nutritive of ration, balance of nitrogen at the repair sapling of pigs, and also on reproductive qualities of sows and development of their posterity are expounded. It is set as a result of the using of new forage product, that introduction of its in the complement of rations (40 and a 80 gram/kg of the mixed fodder) increasing the productivity, to the improvement of reproductive qualities and level of mastering of nutritive of ration and strengthens intensity of flowing of processes of metabolism in the pigs organism.

Dudka O.I. FEATURES OF INHERITANCE PRODUCTIVE CHARACTERISTICS OF PIGS OF UKRAINIAN MEAT BREED

Results of investigations of the frequency characteristics and types of inheritance of reproductive traits of pigs Ukrainian Meat breed are presented. It is established that the investigated characteristic features mostly intermediate type of inheritance. The share of the influence of types of inheritance in the total variance was 60,4% multiple pregnancy, number of piglets to weaning weight, and -35,8% -52,1 nest. The effect of general and specific combining ability of lines on which the comparative analysis of genotypes for their compatibility has been determined.

Efremov D.V., Horb S.V. ALBUMEN-VITAMIN-MINERAL ADDITIONS ON BASIS OF LOCAL FORAGE RAW MATERIAL OF SOUTH OF UKRAINE FOR PIGLETS ON GROWING

The recipes of albumen-vitamin-mineral additions for piglets on growing are developed taking into account the food value of local forage raw material of South of Ukraine and its influence on the productivity, exchange processes and state of health of animals is studied. It is set that at the use of forage additions the level of flowing of processes of metabolism increases for feeding of pigs, conversion of forage is improved on unit of products, and intensity of growth of animals rises on 6-11%.

Ivin A.M. EVALUATION OF UKRAINIAN STEPPE WHITE LINES ON THE COMBINING ABILITY

The general and specific combining ability of lines to the plant reproductive qualities in a herd of pigs of Ukrainian Steppe White breed is identified. It is established, that the productivity of animals to varying degrees, depending both on general and specific combining ability. The best form, as components of combination for heterosis breeding is recommended. It was noted the most valuable line of general and specific combining ability, which combine high effects on several grounds, which will increase the productivity of animals through the use of the best combinations.

Karunna T.I. INFLUENCE OF GENOTYPE ON ANIMALS GROWTH AND DEVELOPMENT

The paper presents comparative characteristics of the intensity of growth and development of pigs of different genotypes. Found that cross pigs of Large White breed of different origin provides repair youngster higher values of intensity of formation, uniformity and stress growth, live weight and index figure compared with purebred animals. To obtain heterosis in breed recommended combination of pigs of Large White of the Ukrainian and French breeding.

Kornyat S.B. ACTIVITY OF SPERMATOZOA AT ADDITION ORGANIC SULFUR-CONTAINING COMPOUNDS IN MEDIUM FOR DILUTION SPERM OF BOARS

Studied influence of sulfur-containing compounds (recovered glutathione, cystine, cysteine and methionine) in composition and medium for dilution and storage of sperm of boars of «Ekosperm» on activity of spermatozoa. It is set that most activity of spermatozoa (81,2 - 81,7 %) after three days of incubation was in sperm of boars the diluted medium of «Ekosperm» by addition of bovine of serum albumine and cysteine or recovered form of glutathione. More low motility of gametes (66,1 - 72,0 %) is exposed at addition to medium «Ekosperm» bovine serum albumine, cystine and methionine.

Kostenko S.O., Sydorenko O.V., Dragulyan M.V. THE EFFECT OF GENE POLYMORPHISM ESTROGEN RECEPTOR AND PROLACTIN RECEPTOR IN SPERM PRODUCTIVITY BOARS LARGE WHITE BREED

Analysis of Large White boars breed by genes of prolactin and estrogen receptors are studied. The frequency of the desired genotype *BB* by *ESR* gene in boars was $0,10 \pm 0,06$, genotype *AB* - 0.76, allele *B* - 0.52. The frequency of the desired genotype *AA* gene *PRLR* - $0,29 \pm 0,11$, *AB* - 0.18, *BB* - 0.53, allele *A* - 0.38. Distribution of frequencies genotype does not match to theoretically expected under Hardy-Weinberg law. The highest values sperm productivity were observed in boars carrier genotype *BBBB*. Thus, the alleles *B* in the gene *ESR* and *PRLR* are desirable to use for the performance sperm productivity.

Krytsya Ya.P. IMPROVEMENT OF MAINTENANCE OF SOWS IN THE WORKSHOP OF REPRODUCTION

Efficiency of the use is set developed alternative technology and technological equipment for monophasic maintenance of sows in the workshop of reproduction.

The use of little expense technology of maintenance of animals on the deep long nonchanging bedding was instrumental in the increase of prolificacy of sows on 3-7%, heavy farrowing - on 10-15, living mass of piglets at will bite off - on 10-14 and to safety of issue in 2 - monthly age - on 8,4%.

Masliuk A. M. COMBINATIVE ABILITY OF LINES OF THE UKRAINIAN STEPPE WHITE BREED OF PIGS AFTER MEAT QUALITIES

Effects of general and specific combinative abilities of lines of the Ukrainian Steppe White breed of pigs after meat qualities are revealed. Possibility of their increase is set due to the use of the best combinations of structural elements. The positive effects of general combinative ability after meat qualities of some lines, both boars and sows are marked. The best variants of interlinear mating and feature on certain indexes are exposed.

Onishchenko L.V., Danylchuk M.I. SELECTION AND BREEDING WORK WITH PIGS RED BELOPOYASOY BREED

Highlights the results of years of work on the formation of highly productive gene pool of meat pigs in Mykolayv. The attention to improving the productive qualities of Red Belopoyasoy breed pigs.

Skrepets K. V. POLYMASTIA OF PIGS OF ASCANIAN TYPE OF UKRAINIAN MEAT BREED OF DIFFERENT IMMUNOGENETIC CLASSES

The results of study of possible intercommunications of index of multiteats (polymastia) of pigs of Ascanian type of Ukrainian Meat breed with the antigens of red corpuscles after locus of EAB, EAE, EAF, EAG and EAL are expounded. Findings testify to the presence of possible intercommunications between the studied plant-breeding-genetic signs.

Topiha V.S., Likhach V.Ya., Lugovoy S.I., Zagaykan O.I. USE AND IMPROVEMENT OF THE GENE POOL OF PIGS IN A LLC «TAVRIA PIG»

Productive given the quality of Ukrainian meat breed pigs (Ascania type) and the Large White breed in a foreign selection LLC «Tavria pig» Skadovsk district, Kherson region. The introduction of intensive elements of the technology allowed us to obtain good results of animal productivity. Found that in plant breeding company «Tavria pig» bred and raised these breeds of pigs that are not surpassed on the reproductive, fattening and meat quality in Ukraine. Pork industry in the economy has become profitable and competitive economies of the region and country.

Gratilo O. D., Smenov V. F., Smenova G. S. FEED PRODUCTION IN THE CONDITIONS OF THE ARID STEPPES OF THE SOUTHERN UKRAINE.

Results of long-term researches concerning the development of agricultural approaches, technologies and system of feed production for

the conditions of droughty steppe of the Southern Ukraine is expounded.

**Gratilo O. D., Smenov V.F., Smenova H.S., Petrychuk L. I.
MORPHOBIOLOGICAL ESTIMATION OF ZERNA RIPARIA OF
DIFFERENT REGIONAL ORIGIN AT GROWING ON DROUGHT AREAS
IN THE SOUTH OF UKRAINE**

The morphobiological and economic-useful signs of new varieties and seed samples of Zerna Riparia, got from different droughty regions, at growing in the conditions of boharic agriculture of South of Ukraine is studied. They are given comparative estimation after phenological, morphobiological and by productive properties. Perspective of their use in the conditions of steppe area is studied.

**Petrychuk L. I. FORMING OF HIGH-PERFORMANCE AGRO-
PHYTOCOENOSIS OF PERENNIAL GRASSES ON BASIS OF
BRITTLE SPIKE RUSH AT CREATION OF PASTURES**

The results of researches of brittle spike rush as component of high-quality grass stand pastures in the conditions of South Steppe of Ukraine are expounded. Cited data supervisions of biomorphological features, productivity and nourishing value of green fodder