

## RESUME

### **Novostavska A.V., Svistula O.V. WORLD'S TENDENCIES OF DEVELOPMENT OF ANIMAL BREEDING**

Priority directions of development of such animal breeding branches as cattle breeding, pig breeding, sheep breeding and the dynamics of livestock population and their productivity over world's tendencies have been discerned.

### **Buyuklu H.I., Buyuklu N.I., Iovenko L.M., Taranenko S.V., Lypchenko M.M., Horelkina O.M. THE CHARACTERISTIC OF ANIMALS OF THE RED STEPPE BREED OF BREEDING ENTERPRISE "PRYMORSKYI"**

In the private agricultural enterprise "Prymorskyi" Prymorskyi region of Zaporozhye province the breeding enterprise of the Red Steppe Breed with a livestock of animals consolidated on the basic selection signs and adopted for machine milking is kept. Efficiency of the cows for the best lactation makes 4 601kg of milk, fat content of 4,17%, 192kg dairy fat, intensity of milk flow – 1,98kg/min.

### **Voronenko V.I., Nazarenko V.H., Omelchenko L.O. THE STRUCTURE OF POPULATION OF THE TAURIAN TYPE OF THE SOUTH MEAT BREED CATTLE ON ANTIGENS OF GROUPS OF BLOOD**

The population structure of the Taurian type of the South Meat Breed cattle on antigens of groups of blood is resulted. In population is revealed all 52 antigens of 9 systems of groups of blood. Frequency of blood groups factors and antigens saturation the Taurian type surpasses gene pools of commercial breeds of the South of Ukraine, an also Bison, Bison bonasus, Bos banteng and their hybrids with domestic animals on 46,5-66,1% and on antigens saturation on 49,9-67%.

### **V.I. Voronenko, V.H. Nazarenko, Yu.P. Polupan, H.I. Buyuklu, and H.I. Rukavnikova. IMMUNOGENOFUND OF TYPES OF THE UKRAINIAN RED DAIRY BREED**

The results of scientific work on definition of immunogenic status of Holsteinized, with high milk-fat content intrabreed and the Taurian zone type of cattle of the Ukrainian Red Dairy breed on the basis of research of their structure on 53 erythrocyte antigens of 9 system groups of blood and on allele of multifactor system EAV are cited. On the basis of the comparative analysis with application of some genetic-mathematical methods in monitoring researches the level of genetic differentiation, specificity and consolidation of created selection formations is defined.

### **Voronenko V.I., Omelchenko L.O., Fursa N.M., Makarchuk R.M., Naydyonova V.A., Dubynskyi O.L., Noskova A.M. THE TAURIAN TYPE OF**

## **THE SOUTH MEAT BREED IS AN INNOVATIVE SELECTIVE ACHIEVEMENT OF ZOOTECNIC SCIENCE**

The basic methodical receptions of creation of the Taurian type of the South Meat breed on the basis of interspecific hybridization, results of 50-year-old work on type animal breeding are stated. The materials characterizing a genotype, efficiency and prospects of animal husbandry of the Taurian type of the South Meat Breed – new selection achievement in meat cattle breeding are cited.

## **Demenska N.M. AN INFLUENCE OF USING IN FEEDING PREMIXES ON METABOLISM IN ORGANISM OF REPLACEMENT HEIFERS**

Results of research concerning development of new formulae of vitamin-mineral premixes for replacement heifers, using of which in feeding have a positive influence on digestibility of diet's nutrients and improve mineral metabolism, that promote increasing productive indexes by reduction of feed costs per unit of production are cited

## **Zhukorskiy O.M. FORMATION OF MEAT EFFICIENCY OF ANGUS BULLCALVES IN DEPENDANCE OF WEANING AGE**

Researches were carried out with the purpose of determination of influence of weaning of angus calves in age 4, 6 and 7 months on forming of meat productivity and for slaughter indexes. Early weaning calves had a higher average daily gain from birth to 18-months' age ( $P < 0,05$ ) than standard weaning at 6-7 months and high slaughter indexes.

## **Kobzar' R.O. AN INFLUENCE OF INTENSITY OF DEVELOPMENT OF REPLACEMENT HEIFERS OF THE TAURIAN TYPE OF THE UKRAINIAN RED DAIRY BREED ON THEIR EFFICIENCY**

The results of research concerning growth and development of replacement heifers of six genotypes of the Ukrainian Red Dairy breed and their subsequent efficiency are stated. It is established, that insufficient intensity of growth led to later terms of fruitful insemination, however was not reflected almost in dairy productivity.

## **Koval' T.P. COMPATIBILITY OF LINES AND RELATED GROUPS OF RED DAIRY CATTLE ON INDEXES OF DURATION AND EFFICIENCY OF ITS LIFE USE**

Combining of lines and related groups of Red Steppe, Angler and Ukrainian Red Dairy breeds on indexes of duration and efficiency of its life use by means of the retrospective analysis on 488 cows of Red Dairy cattle is investigated. The higher efficiency on the considered indicators of compatibility of bulls of Holstein lines and related groups with dams of Angler lines is proved.

**Makarchuk R.M. MEAT EFFICIENCY OF BULL-CALVES OF THE SOUTHERN TYPE OF THE UKRAINIAN BLACK-SPOTTED DAIRY BREED AT RAISING FOR MEAT**

Results of experiment researches on comparative studying of meat and slaughter qualities of bull-calves of different genotypes of the Southern type of the Ukrainian Black-Spotted Dairy breed on the Breeding farm of State Enterprise an Experimental Farm "Akanijnske" of Kahovka region of Kherson province are presented. It is shown that the young stock has sufficient body weight and good slaughter indexes.

**Omelchenko L.O. POPULAR-GENETIC PECULIARITIES IN INHERITING OF COAT COLOR OF ANIMALS OF THE SOUTH MEAT BREED IN DISTANT HYBRIDIZATION**

Materials of popular-genetic analysis of inheritance of color at animals of Taurian type of the South Meat Breed cattle in posterity of the Cuban zebu bull Sanil 8 are stated. It is established that "share" of influence of a genotype of the ancestor in inheritance of color at descendants averages is  $0,791 \pm 0,002$ , and color is a genotype sign with high level of difficult dominant-additive inheritance.

**Pidpala T.V. STAGES OF TANDEM SELECTION AT BREEDING OF THE UKRAINIAN RED DAIRY BREED OF CATTLE**

Results of tandem selection at breeding of the Ukrainian Red Dairy breed and its interbreed with high milk- fat content and Holstein types are cited. It is proved that tandem selection is limited by separate steps or stages, and change of characteristics of selection signs is defined by correlation connection and allows predicting results of selection in the posterior generation.

**Reznikova N.L. THE INFLUENCE OF THE BIRTH AND FIRST CALVING SEASON AT BASIC SELECTION TRAITS OF MILK COWS**

Inconsiderable significant effect of the birth and first calving season at milk production, reproductive ability and live weight traits of milk cows is revealed. The first calving season has a bit higher influence at yield, than the birth season. The highest influence is made by season at heifer's production.

**Strikha L.O AN ESTIMATION OF BULL-COWS OF THE UKRAINIAN RED DAIRY CATTLE ON AN EXTERIOR**

The exterior of bull-calves of the Ukrainian Red Dairy breed of different genotypes is studied. It is proved that in the process of forming of meat efficiency advantage of measurements and indexes have animals in the genotype with 50-75% of Holstein heredity.

### **Fursa N.M. INFLUENCE OF INBREEDING ON THE LIVE WEIGHT OF HYBRIDS OF ZEBU COWS**

Results of research of influence of inbreeding on development of the basic selected sign – live weight of cows of the Taurian type of the South Beef breed created by a method of hybridization with use of the genofund of tropical meat breed of the Cuban zebu are resulted.

### **Gerasyenko V.V. DEGREE OF VARIABILITY IN ASSOCIATIONS OF GENES OF BLOOD GROUP IN POPULATION OF SWINE OF THE UKRAINIAN STEPPE SPOTTED BREED**

The results of comparative analysis of associations in genotypes of animals on gene systems of erythrocyte antigens and some polymorphous proteins of blood serum in closed population of swine of the Ukrainian Steppe Spotted Breed in different intervals are presented.

### **Gerasyenko V.V., Shulha Y.I. USING OF IMMUNOGENETICS MARKERS FOR PROGNOSED RESULTS OF OUTBREEDING IN PIG-BREEDING**

The results of study of efficiency of outbreeding of the Ukrainian Steppe Spotted Breed sows with manufacturers of breeds Landrace, Large White, Poltava meat, Duroc and Ascanian type of the Ukrainian Meat breed are presented. The high factor of correlation between feeding qualities mongrel pigs and average degree of heterozygosis expected at them on a complex of genetic systems of groups of blood is established.

### **Horb S.V. INFLUENCE OF PROTEIN-MINERAL ADDITIVES MADE OF MOLLUSKS ON A PROCESS OF METABOLISM IN AN ORGANISM OF PIGS' YOUNG STOCK**

Results of researches concerning an influence of protein-mineral additives made of mollusks on digestibility of nutrients of a diet and nitrogen balance at pigs' young stock are stated. Also biochemical and hematological indexes of animals' blood are analyzed. It is established that use of new fodder product (40 and 80 g/kg of mixed fodder) promotes increase of assimilation of forages of a diet and strengthens intensity of metabolic process in pigs' organism.

### **Dudka O.I. INDEX ESTIMATION OF BREEDING AND ADAPTABLE ABILITY OF PIGS OF THE UKRAINIAN STEPPE SPOTTED BREED**

Results of an estimation of breeding value and adaptation of pigs of the Ukrainian Steppe Spotted breed with use of methods of index selection are stated. The calculated indexes of adaptable ability of pigs on their reproductive qualities show that the higher the level of realization of productive potential of animals the tenser their adaption process.

#### **Ivin A.M. ESTIMATION OF BREEDING BOARS BY PROBIT-METHOD**

Results of estimations of breeding boars in the conditions of breeding farm of Society of limited responsibility "Prod-Alliance" Chaplynka region of Kherson province with use of probit method for definition of total breeding value are shown. It is established that at use of this method it is possible to distribute boars on categories not only to any one selection sign which interests the selector or an average probit of all signs which are necessarily used at control fattening, but also an average probit from their any number in a combination that is the most important for concrete heard at the given level of selection.

#### **Masliuk A.M. GENETIC POTENTIAL OF REPRODUCTIVE QUALITIES OF SOWS OF THE UKRAINIAN STEPPE WHITE BREED IN A SECTION OF LINES AND FAMILIES**

Reproductive qualities and degree of efficiency of sows of five lines and eleven families of the Ukrainian Steppe White breed over seventeen years of breeding are studied. The high genetic potential of dams' efficiency of the family Lazurna and Luchysta of Aspect's line, Arsenal'na of Arsenal's line, Volna of Stepniak's line, Azbuka of Ascaniets's line is established. Record prolificacy (20 piglets) is received from Luchysta 3 702 in the third farrowing.

#### **Svistula M.M., Yefremov D.V. AN INFLUENCE OF SMALL-COMPONENT ALL-MASHES ENRICHED BY LIPID AND ENZYMES ON PRODUCTIVITY OF PIGS AND METABOLISM IN THEIR ORGANISM**

Results of effective use of lipid additions and enzymes in feeding of replacement pigs are cited. It is established that complex feeding of these fodder product in diet improves the process of metabolism, digestibility and digestion of feeding stuff and increases per 10,6% intensity of pigs' replacement young stock growth.

#### **Semenov V.V., Belenko S.O. AN INFLUENCE OF FERMENT "GLUKOLUX-F" ON HEMATOLOGIC PARAMETERS AT SOWS**

Experimental data confirm positive dynamics of increase of parameters of structure part of blood depending on consumption of PMVC by in-pig and lactating sows into which structure ferment "GlukoLux-F" has been entered. It is logical to co-ordinate it to the higher degree of digestion of food, its assimilation and transformation through blood in a muscular tissue and also dairy efficiency of sows.

#### **Topchiy L.I. AN INFLUENCE OF A SEASON ON REPRODUCTIVE QUALITIES OF SOWS OF THE UKRAINIAN STEPPE WHITE BREED OF PIGS**

The results of studying of influence of a season of a year on reproductive qualities of sows of the Ukrainian Steppe White breed in breeding reproducer of sows of closed joint-stock company "Volna" of Henichesk region of Kherson province in 2006-2008 years are cited. It is established that in winter-spring season receives progeny on 2, 0% more than in summer-autumn period. Sow who farrows in winter-spring period has better parent qualities than that that farrows in summer-autumn period.

#### **Shulha Yu.I. The UKRAINIAN STEPPE WHITE BREED OF PIGS IN THE SYSTEM OF CROSS-BREEDING**

Results of use of the Ukrainian Steppe White breed pigs as maternal and paternal forms at cross-breeding with specialized meat genotypes are cited. It is established that better indicators of prolificacy characterized animal combination of ♀the Ukrainian Steppe White × ♂the Red-Belted (11,3 piglets) and ♀the Ukrainian Steppe White × ♂the Landrace (11,1 piglets), and according the weigh of a nest mass at the weaning ♀the Ukrainian Steppe White × ♂the Landrace (180 kg). According feeding qualities advantage was received by hybrids of ×♀the Ukrainian Steppe White × ♂ the Ukrainian Meat (Ascanian type).

#### **Horlov O.I., Ivina K.A., Mokeev I.O., Herasymenko T.H., Chichaeva O.P. METHOD OF DETERMINATION OF GENETIC CORRELATION SELECTION SIGNS**

Existing methods of definition of genetic correlation are analyzed and their imperfection on the definite examples is shown. It is offered an application of particular correlation for determination of genetic correlation and the algorithms of definition of particular correlation through the plural are developed. The liner multifactor models of dependence of descendant's sign from selection signs of ancestors and mathematical apparatus of vector algebra are used in an algorithm. The algorithm is realized in the medium of database.

#### **Iovenko V.M., Prodayvoda H.O., Polishchuk V.M. FREQUENT OCCURRENCE OF GENOTYPES OF DEPENDENT SUITABILITY OF DIFFERENT GENOTYPES OF THE MERINO SHEEP OF THE TAURIAN TYPE**

Genetic structure of the Merino sheep's population of native selection on markers of high polymorphic system of transferring is investigated. Genotypes which differ by high relative vitality and suitability are revealed. It is shown that the vector of selection of certain genotypes of sheep depends on frequency of occurrence.

### **Iovenko V. M., Serbina V.O. GENETIC FEATURES OF DIFFERENT CONSTITUTIONAL TYPES OF THE SHEEP OF THE ASKANIAN FINE-WOOL BREED**

With the use of information of polymorphism of blood groups and separate transport proteins of blood the analysis of genetic features of the Merino sheep with different types of body structure is conducted and it is set that all of them are characterized by the certain distinctive parameters of molecular-genetic markers. It is shown in particular that for the delicate type of constitution one is peculiar, and for the rough type is surely the other concentration of erythrocytous antigens ( Bb, Be, Bg, Da ), alleles ( Tt<sup>A</sup>, Hb<sup>B</sup> ) and genotypes of polymorphic locuses. Thus a middle class (strong type ) which is formed as a result of stabilizing selection occupies intermediate position in a number of genetic parameters and differs by the promoted level of genetic changeability (heterozygous).

### **Moroz I.O. QUANTITY OF FAT AND PERSPIRATION AT BUCK LAMBS OF THE TAURIAN TYPE OF THE ASKANIAN MERINO BREED**

The quantity of fat and perspiration at buck lambs' wool of the Taurian interbreed type of the Ascanian merino breed with different folding and nature of animal coat at a birth is investigated. At buck lambs with different folding by quantity of fat and perspiration in wool certain differences is not revealed. Advantage of lambs without short dog hair on lambs of other experimental groups by quantity of fat in wool on 1,4...1,9% is established.

### **Polska P.I. CREATION OF MEAT-DAIRY-WOOL BREED OF SHEEP IN UKRAINE**

Results of 50-year-old research concerning creation of an intensive type of the Ascanian crossbred and the Ascaian Black-headed sheep with record indicators of meat, dairy and wool and their use as an improving genofund for bringing out of the first native Ascanian meat-wool breed of sheep with crossbred wool are stated.

### **Smenova O.V. ORDER OF CARRYING OUT OF CAPITALIZATION IN SCIENTIFIC INSTITUTION ON AN EXAMPLE OF THE ASKANIAN KARAKUL BREED OF SHEEP**

Results of carrying out of cost estimation of the Ascanian Karakul breed of sheep are stated by a method of an annual rating.

The annual rating of the Ascanian Karakul breed of sheep which makes 1, 3 million UAK, its initial cost of 29, 3 million UAK on which objects of non-material actives are enlisted on balance of the budgetary organization and award at a rate of 821 thousand UAK is defined. It is supposed to organize inventory of objects of intellectual property, to

carry out an estimation of initial cost of objects of non-material actives by method of an annual rating and statement on balance of an enterprise.

**Taranenko V.P., Musiyenko V.P. THE WAY OF PRELIMINARY DEFINITION OF COMPETITIVENESS OF INNOVATIVE PRODUCTION**

The way of preliminary definition of competitiveness of innovative production in which comparison of advantages of technical-scientific workings out of the similar direction presented in the market is offered. Advantages are defined on each indicator which characterizes scientific and technical workings out, their estimation in points on the developed scale is carried out, thus the quantity of points is established in proportion sizes of advantages of analogical indicators. Comparing scores on each working out define a rating of its competitiveness.