#### RESUME

### Atanovska-Masliuk O. I. WOOL PRODUCTIVITY AND QUALITY CHARACTERISTICS WOOL ASCANIAN BLACKHEAD SHEEP IN EKSTREMAL FEEDING CONDITIONS

Identify indicators of wool productivity and quantitative composition of wool grease in the wool young Ascanian Blackhead sheep according to sex and type of birth in the extreme conditions of feeding have been determined. Found that, despite the low fatness animals, quantitative and qualitative indicators of wool twins and single, as rams and young ewes are quite high. Higher scoured wool was clipped from single both sexes and was 3.8 kg. Best value for fat: sweat was observed in both types of rams' birth compared with ewes. High levels of wool productivity young stock intensive type Ascanian Blackhead sheep attests to their high adaptive capacity, even under adverse conditions, feeding and housing.

#### Horlov O.I., Ivina K.A., Mokeev I.O., Shulga M.V. ANALYSIS METHODS FOR DETERMINING THE VALUE OF RAMS

Analyzed the definition of the breeding value of rams and traditional BLUP methods. The comparative assessment and establish necessary and sufficient conditions for their use.

## Hratylo O.D., Smenov V.F., Smenova H.S., Petrichuk L.I. PRODUCTIVITY OF FOOD CROPS IN RELATION TO THE USE OF BIOLOGICAL

The results of research on using the Biological nitrogen-fixing and phosphorite action are presented. Determine their effect on the growth, development and productivity of forage crops and results in yields of food crops produced in the dry climate.

### Drozd S.L. BREEDING AND GENETIC FEATURE EWES OF TAURIAN TYPE OF ASCANIAN MERINO BREED DEPENDING ON THE WOOL CLIP

Examined body weight, wool performance, physical and mechanical properties of wool ewes of Taurian type of Ascanian Merino breed, according to the clean wool clip and the correlation of coefficients between the main selection traits are presented. It is shown that the level of Merino sheep wool productivity is positively correlated with the term of their productive use.

#### Zharuk L.V. THE BREAK-EVEN WAY MANAGEMENT OF SHEEP BREEDING OF UKRAINE

The possibility of doing break-even breeding sheep of Ukraine through the use of market-based approaches to sales, optimize the cost structure and the use of state levers.

### Zharuk P.H. EVALUATION BREEDING QUALITY OF TSIGAY EWES OF SELECTION NUCLEUS OF BREEDING FARM "DONAGROLYUKS"

The results on the degree of influence of high yielding genotypes of sheep Meat-Wool Priazovsky Tsigay type on the level of productivity of the offspring. It is shown that the factor of growing lambs during the suckling period is important for the estimation of breeding qualities, and the genotype of the mother, in general, affects the formation of the phenotypic variability of traits of offspring, but in each case, it depends on the level of genetic influence of his father, his prepotent, that is, the breeding qualities.

### Iovenko V.M., Horlova O.D., Yakovchuk V.S., Letuchev V.K., Selivanov I.O., Rajko D.Yu., Denysova V.D. NEW TWO-MACHINE INSTALLATION FOR MILKING SHEEP OF LINE TYPE

The results of experimental studies on the development of a new two-machine installation for milking sheep line-type definition, its mode characteristics and indicators of the quality of the milking process are presented. Installed capacity of the plant, which is up to 120-132 head / hour, and its advantages over existing technical means for manufacturability, low metal content, and overall, fast housebreaking to machine milking sheep to the exclusion of stressful events and getting milk with bacterial contamination in accordance with the requirements of European standards. The product is protected by a patent of Ukraine № 99802.

### Iovenko V. M., Drozd S. L. MOLECULAR-GENETIC MARKERS AND WOOL CLIP OF SHEEP OF TAURIAN TYPE OF ASCANIAN MERINO BREED

Genetic features different in the size of wool clip of groups of sheep of Ascanian Merino breed are investigated. It is shown that Merino sheep with the different level of the wool productivity differ and on separate imunogenetic and genetic-biochemical markers.

### Iovenko V. M., Ivina-Malyarenko O.S. IMUNOGENETIC FEATURES OF SHEEP OF TAURIAN TYPE OF ASCANIAN MERINO BREED WITH DIFFERENT DENSITY OF WOOL

The genetic structure of groups of sheep of Ascanian Merino breed with different density of wool on molecular-genetic markers is investigated. It is shown that parameters polymorphic albuminous locuses are the objective tests of estimation of genetic features of Merino sheep depending on the size of the indicated selection sign.

## Kudryk N.A., Horlov O.I., Ivina K.A., Mokeev I.O., Shulga M.V. METHOD OF DETERMINING THE BREEDING OF VALUES RAMS BY BLUP SM

The characteristics of building mixed-model algorithm for determining the breeding value of animals by BLUP in sheep in the Microsoft Excel environment in 2003 are presented, starting with the initial form of the table data to construct the final system of linear equations, which provides estimates of breeding value of the animals. For a better perception of the presentation sequence of the algorithm is a concrete example. Based on the peculiarities of the process of reproduction in sheep, as-fixed effects (factors) and gender lines adopted animals.

### Lobachova I.V., Julinska O.S.THE EFFECT OF REPEATED TREATMENT OF EARLY POSTPARTUM EWES BY THE SHEEP PLACENTAL TISSUE PREPARATION

It was investigated the total condition, reproductive qualities and blood leucocyte counts of ewes exposed the repeated treatment with sheep placental tissue preparation at three days interval beginning at 3-5th day after lambing. Two experimental groups were formed: D1 – single lambed ewes, D2 – twin lambed ewes. Control single lambed animals were treated with placebo. The placental tissue preparation treatment caused the decrease of part of animals with the blood vaginal excretion and the quantity of juvenile leucocytes in D1group at 21th day after beginning that indicated about the weakening of bloodshed and acceleration of uterus involution. Treatment promoted improvement of reproduction parameter of single lambed ewes and may be recommend as prophylactic method for animal preparation to subsequent insemination campaign. Scheme of the tissue preparation application for twin lambed ewes requires further development.

#### Mogylnitska S.V. ESTIMATION OF MILK PRODUCTIVITY OF EWES OF ASCANIAN KARAKUL BREED

The level of milk production and the chemical compound of milk from ewes of Ascanian Karakul breed types has been studied. It is shown the

morphology of the breast. It was found relatively high dairy animals with the corresponding content of the main components of milk. Identified two forms of the udder - a bowl and a rounded, among which characterizes the cup-best dairy ewes his productivity.

# Svistula M.M., Demenska N.M., Efremov D.V., Horb S.V. EFFECT OF PROTEIN-FEEDING OF MINERAL SUPPLEMENTS FEED FROM NATURAL RESOURCES ON THE LEVEL OF PRODUCTIVITY LACTATING EWES AND DEVELOPMENT OF THEIR OFFSPRING

The possibility of use in the diets of ewes of different recipes for sheep feed additives on the basis of the organic and natural mineral protein feed resources to ensure the full feeding of animals in organic production is investigated. The use of these feeding funds increases by 8% of dairy sheep, which increases by 3% rate of growth in the suckling lambs period and allows you to get high-quality products with an organic sheep farming industry.

#### Chernomyz T.O., Lesyk O.B, Pohyvka M.V., Kolenchyk M.M. SHEEP'S MILK PRODUCTION AND PROCESSING

The data of sheep milk from ewes Bukovina types Ascanian Meat-Wool, Ascanian Karakul and Ukrainian Carpathian-mountain breeds and its processing into sheep cheese (brynza), Urdu.

### Shevchenko I. A., Lykhodid V.V., Polusov V.V. SUBSTANTIATION OF THE CONSTRUCTION OF COMPACT SCUTCHING MACHINE FOR PROCESSING WOOL

According to the analysis of recent research and publications developed the constructive-technological scheme and created the experimental model of compact scutching machine for processing wool in agricultural enterprises. States that the proposed construction of scutching machine on the results of preliminary tests provides the necessary degree of purification of polluted wool within the limits of technological requirements.

# Buyukly H.I., Buyukly M.I., Taranenko S.V., Snihivska A.I. THE DEGREE OF REALIZATION OF THE GENETIC POTENTIAL OF PRODUCTIVE ANIMALS OF DIFFERENT BREEDS IN THE CONDITION OF SOUTH OF UKRAINE

The analysis of the level of milk production of cows of different breeds in one breeding farm is conducted. Determined that the first-calving Ukrainian Black-Spotted Dairy breeds are characterized by the highest level of milk yield (6952 kg milk in 305 days of lactation). The implementation of the genetic potential productivity of dairy cattle of

different breeds in the southern region of Ukraine consist of 83...95%.

## Buyukiy H.I., Taranenko S.V., Noskova A.M. DURATION OF ECONOMIC USE OF COWS SOUTHERN TYPE OF UKRAINIAN BLACK-SPOTTED DAIRY BREED

On breeding farm of State Enterprise Experimental Farm "Askanijske" conditions of the Southern type of animal exploitation Ukrainian Black-Spotted Dairy breed ensure harmonious interaction of genotype and environment, as evidenced by the performance index of adaptation of animals (-5.07 ... -3.57). The tendencies of lengthening the duration of the economic use of cows in lactation average of 3.72 have been planned.

# Vdovychenko Yu.V., Omel'chenko L.O., Fursa N.M., Makarchuk R.M., Yaremchuk A.I. MECHANISMS OF ADAPTATION OF ANIMALS OF SOUTH MEAT BREED OF CATTLE TO EXTREME TERMS OF STEPPE AREA OF UKRAINE

It is set that the genotypes of Taurian type of South Meat breed have the formed mechanisms of adaptation to the extreme terms of steppe area (high index of thermo stableness, developed cellular and humoral factors of natural resistance), which provide maintenance of homoeostasis, health of animals, high level of the productivity and reproductive ability at the intensive thermal loading.

#### Vdovychenko Yu.V., Omel'chenko L.O., Yaremchuk A.I. PLANT-GENETIC PROCESSES IN POPULATION OF TAURIAN TYPE OF SOUTH MEAT BREED OF CATTLE DURING CONSOLIDATION

In the process of consolidation of Taurian type of South Meat breed there is a gradual increase of living mass of cows and phenotypical changeability of sign. In population there is permanent motion of genetic information, which stipulates the increase of individuals of modal class ( $M^0$ ) and plus-variant (M+). The crooked distributions of frequencies of sign differ from the classic curve of C. Gausse, but keep indoors for scopes normal distribution (6  $\bar{\delta}$ ). A homogeneous selection increases the stake of individuals of modal class and plus-variant, heterogeneous – minus-variant.

#### Guzeev Yu.V., Demchuk M.P. INDEXS FEATURES OF ANIMALS BUFFALO (BUBALUS) OF UKRAINIAN POPULATION

The performance of the indexes of build, buffaloes of the Ukrainian population are the best indicators of , massiveness and compactness of the chest and pelvis infant indices, which testifies to the genetic peculiarities of the population of Buffalo, in comparison with the investigated an array of cattle.

### Dudok A.R. DAIRY EFFICIENCY AND PRODUCTIVITY PLAYBACK CAPABILITY OF HEIFERS OF UKRAINIAN RED DAIRY BREED BELONGING TO DIFFERENT LINE

In a comparative perspective analyzed the relationship between lactic productivity and indicators of reproductive ability of cows of fist calves of Ukrainian Red Dairy breed different lines that belong to Breeding farm "Zorya". Marked more productive line of animals and established a positive relationship between age at first calving and milk production, which must be taken into account in the selection process for the improvement of the herd.

### Kitayeva A.P., Husyatynska O.O. IMPROVEMENT OF THE METHODOLOGY OF DISTRIBUTION OF NEONATAL CALVES INTO SUBGROUPS BY MORPHOLOGICAL STATUS

To improved of the methodology for the distribution of neonatal calves into subgroups by morphofunctional status. It is established the optimum distribution of calves on these subgroups: I subgroup - calves that were evaluation 86 - 100 balls, subgroup II - 67 - 85 balls.

#### Makarchuk R. M. EVALUATION BULLS HOLSTEIN BREED OF CALVES MEAT QUALITY OF DIFFERENT GENOTYPES

The results of experimental studies on the comparative study of the influence of bulls on meat quality of calves of different genotypes of the Southern type of Ukrainian Black-Spotted Dairy breed on breeding farm of State Enterprise Experimental Farm "Askanijske" Kahovka district, Kherson region are presented. It is shown that identified bulls that can improve the productivity of meat calves of this breed.

#### Omel'chenko L.O. INHERITANCE OF ALTERNATIVE SIGNS FOR ANIMALS OF SOUTH MEAT BREED OF CATTLE

Materials about the inheritance of colour for the animals of high-blood on heredity zebu ( $\geq 37,5\%$ ) of genetic subtype are presented. It is set that polymorphism of colours in posterity of bull Sanil 8 XCΠM- 753 is conditioned by influence of zebu genotype ( $\eta^2 = 0,862 \pm 0,002$ ) and display of influence of genes-modifiers which in every subsequent generation provide the increase of individuals with light colours, and also correlation of light and dark colours.

## Omel'chenko L.O., Naydyonova V.O., Dubynskyi O.L., Noskova A.M. INTENSITY AND ENERGY GROWTH OF BULLS OF TAURIAN TYPE WITH CONSOLIDATION IN SOUTH BEEF BREED

Found that when the consolidation of Taurian Southern meat type breeds significantly increases the intensity and energy of growth of calves

at the age of 7, 12, 15, 18 months. (P> 0, 99-0,999) and reducing the level phenotypic variability of traits in comparison with the level of these values for the period of testing (2008). Increasing evidence is due to the increase in the population of individuals of the modal class and plus variants.

#### Pysarenko A.V. CHARACTERISTIC OF STRUCTURAL UNITS OF GENE POOL HERD OF RED STEPPE CATTLE

The results of the analysis of indicators of productivity of dairy cows of different structural units of the herds of Red Steppe of breed are presented. The highest milk yield in the first lactation and the highest was observed in cows' lines Andalus FMI-324, Veselogo ZAN-45, Kazbek ZAN-60 Frema 17291 and Cirrus16497, and the lowest - in cows' related group Ideal 19872. According to the fat content in milk was the best animals Frema lines 17291 and Cirrus 16497. Found a better compatibility genealogical formation and determined their power of influence on milk productivity of - 22-31% (P> 0.999)

#### Pysarenko N.B. ASSESSMENT OF GENETIC PARAMETERS OF UKRAINIAN POPULATION OF RED STEPPE BREED

The results of the monitoring immunogenic four adjacent generations Taurian zone type Ukrainian Red Dairy breed are presented. A comparison of features and defined genetic structure in different periods of breeding, found an increase in the level of consolidation.

#### Pronoza O. L. ASSESSMENT OF COWS OF THE UKRAINIAN RED DAIRY BREED ON THE EXTERIOR AND AGE OF INSEMINATION

Eksteryerny indicators of cows of firstcalf heifers of the Ukrainian red dairy breed, on age of their first insemination are studied, constitution indexes are calculated.

#### Yaremchyk A. I. DEVELOPMENT HEIFERS OF TAURIAN TYPE OF SOUTH MEAT BREED

Results of analysis of development of repair heifers of high-blood and low blood subtype are brought, plant lines of Taurian type of South Meat breed in different age-related periods. It is set that the heifers of low blood subtype had higher intensity of height. At the identical terms of feeding and maintenance of heifer of the same subtype show higher energy of height, that provides in 18-mounth age of achievement of living mass 372,2 kg and standard of mating standards, and low blood are 329,4 kg.

#### Horb S.V. PRODUCTIVE ACTION IN THE NEW PRESCRIPTION BMVD DIETS YOUNG FATTENING PIGS

The results of research on the effectiveness of the use of new recipes

protein-vitamin-mineral added developed on the basis of local fodder South of Ukraine. It is established that their use in the combinations of feed for fattening pigs improves feed conversion into products with an increase of 8.12% of average daily weight gain in animals.

#### Dudka O.I. GENO-PARATYPIC DEPENDENCE AND SELECTION OF CHARACTERISTICS OF PIGS

The results of research to identify the effect of different genotypes and paratypic factors on the implementation of the reproductive qualities of pig herbs gene pool four Ukrainian Steppe White and Spotted breed. Reliable dependence of breeding traits of the studied factors is proven. The results complement the existing and introduce new elements into the theoretical and practical bases of breeding pigs are presented.

#### Yefremov D.V. EFFICACY OF THE ADDRESS PREMIXES RECIPES IN A PART OF FEED LACTATING SOWS

The results of the research with respect to the justification of the effectiveness of the use of targeted recipes premixes in feeding lactating sows are presented. It was established that the feeding of animal feed with the new feed additive-E delivers full value of animal feed, which is confirmed by high levels of productivity. In particular, increases milk production in sows, increased by 14.8% weight of the nest at weaning and 11% growth rate in piglets suckling period compared to animals fed on imported premix.

### Kyslyns'ka A.I. HISTOLOGICAL FEATURES OF STRUCTURE OF MUSCULAR FABRIC OF LITTLE PIGS OF DIFFERENT COMBINATIONS

The results of researches of histological structure of the longest muscle of the back of sapling of pigs of Large White breed of the Hungarian selection at different combinations with breeds Large White the English selection, Red belopoyasa, Landras, Dyurok and P'etren are presented. Pedigree specificity of forming of muscular fibres of experimental groups is set.

#### Mazhylovs'ka K.R. FATTENING PERFORMANCE OF PIGS AT FEEDING THEM WITH A NEW MINERAL PREMIX

To provide pigs in micronutrients in the diet is administered in an amount of salt minerals: iron - 250 mg / kg, cobalt - 140 mg / kg, manganese - 140 mg / kg, copper - 35 mg / kg, zinc - 170 mg / kg, the composition mineral premix for pigs, fully meets the needs of animals in minerals and meets the recommended standards of nursing. Feeding a

diet consisting of weaned piglets premix own production helped to improve their productivity.

### Susol R. L. PERFORMANCE OF LARGE WHITE PIGS WITH IMPROVED MEAT QUALITIES WITH REGARD TO THE DNA-MARKERS

The QTL-ESR1 and MC4R gene polymorphism in Prichernomorskiy breed type of Large White pigs with improved meat qualities, which has been developing in Odesa region, was studied. The comparison of the respective genes of the indicated genotype pigs by polymorphism was carried out, and the frequency of the QTL-ESR1 and MC4R desirable and undesirable alleles was estimated. The ESR1 and MC4R gene associations according to reproductive and fattening meat qualities of UKBP pigs with improved meat qualities was studied.

### Topiha V.S., Hrihoreva S.V. USE OF THE FOREIGN GENE POOL OF PIGS IN THE CONDITIONS OF THE SOUTHERN REGION OF UKRAINE

Results of scientific researches about use of pigs of a foreign origin of breeds are presented: Large White, Durok, Landras, P'etren in the conditions of the Southern region of Ukraine.

#### Shulga Yu.I., Chichaev O.M. ASSESSMENT OF YOUNG PIGS ON ITS OWN ASSESSMENT OF THE USE OF PRODUCTIVITY INDEX

The results of the evaluation of fattening and meat quality of Ukrainian Steppe White and Ukrainian Meat breeds of pigs in terms of rearing their own productivity, the coefficients of correlation between production traits and different evaluation index.

### Saranchuk I. I. CONCENTRATION OF DIFFERENT FORMS FATTY ACIDS IN THE TISSUES OF THE ABDOMEN OF MELLIFEROUS BEES DEPENDING ON THE ECOLOGICAL TERMS OF ENVIRONMENT

It is shown, that in tissues of melliferous bees' abdomen which are contained in ecologically polluted territories at the end of summer period there is the greater quantity of such heavy metals, as zinc, copper, nickel, plumbum and cadmium. In the above-mentioned period of year most intensive decreases the content of non-etherified of saturated, monounsaturated and polyunsaturated fat acids and, to the opposite, concentration of anion forms of the saturated, monounsaturated and polyunsaturated fat acids in tissues of abdomen of melliferous bees which are kept on the territory near coal mines and enrichment plants.