

A STUDY CONCERNING CALCEMY AND PHOSPHOREMY IN COWS, IN DIFFERENT SEASONS, PHYSIOLOGICAL STATUS AND AGE

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S-a urmarit variatia calcemiei si fosforemiei la vaci In functie de sezon, stare fiziologica si vArstA. Se constata cA valorile medii ale calcemiei se gAsesc Intre 9,28±0,17 mg Ca/100 ml ser. Valorile medii ale fosforemiei se situeaza Intre 2,84 0,4 si 3,9±0,6 mg P/100 ml ser. Valorile calcemiei, dar mai ales cele ale fosforemiei sunt foarte scAzute, apropiate si chiar sub limita datelor din literatura de specialitate.

Key words: *calcemie, fosforemie, vaci de lapte*

RECHERCHE SUR LES INDICES SANGUINS CHEZ LES EQUIDES ET SUR L'INFLUENCE DE L'AGE SUR CEUX-CI

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USAMV CLUJ-NAPOCA

La publication presente les resultats des investigations concernant l'influence de l'age sur les indices sanguins qui ont ete entreprises sur un effectif de 544 equides chez lesquels on a determine 17 indices sanguins, ayant pour chaque indice 2441 determinations.

Oa a analyse la signification des difereces enregistrees entre les valeurs moyennes des indices sanguins par groupes d'age et la moyenne sur tout l'effectif et on a determine les corellations phenotypique des indices sanguins et de l'age.

Mot cle: *indices sanguins, equides*

THE MORFOMETABOLIC ASPECT OF OVIDUCT AT SILVER AND BLUE FOXES IN DIFFERENT ONTOGENIC PERIODS AND STAGES OF ESTROUS CICLE

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Samples were taken from the tubar perimeter of 32 silver and blue foxes, in the 9 months/6 years ontogenetic. The fragments were fixed in different fixative solution and they were coloured with different methods for the histological study and with chemical reactions for the histochemical and histoenzymatic study. In any ontogenic period the oviduct is constituted as an organ. In the an estrous period the microscopic images show a reduced metabolic activity which in intensified at the end of the period. In the proestrous – estrous period, the morphological modifications are accompanied by the intensification of the secretory of the tubar epithelium: MPZA glicogen, ribo-and deoxiriboprotein, lipids synthesis, intense activity of FAL.

Key word: *foxes oviduct, histochemistry, histoenzimology*

MORPHOMETABOLIC ASPECTS OF UTERUS AT THE BLUE AND SILVER FOXES DURING ANESTROUS PERIOD

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Samples were taken from the uterus of 16 silver and blue foxes, in the 9 months/4 years ontogenesis, during the anestrus period. The fragments were fixed in different fixative solutions and they were processed and coloured with different histological, histochemical and histoenzymatic technics. The microscopic images show a reduced morphometabolism of the uterus during the anestrus period, which is intensified in the late anestrus – early period.

Key words: foxes, histochemistry, histoenzimology anestrus.

MORPHOMETABOLIC ASPECTS OF UTERUS AT SILVER AND BLUE FOXES DURING THE PROESTROUS – ESTROUS PERIOD

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Fragments from uterine wall in the estrous and proestrous period were taken from 16 silver and blue foxes with age between 9 months and 4 years. The samples were fixed in different solutions as indicated in the used methods. Microscopic images show morphometabolic changes, which are increased in the estrus period induced by the higher doses of estrogen hormones. This aspect is in correlation with the preparing of a favourable medium for the implantation and development of the embryo.

Key words: foxes, uterus, histology, histochemistry, histoenzimology

MORPHOLOGICAL AND FUNCTIONAL CHANGES OF THE SOWS OVARIES AFTER WEANING AND EARLY GESTATION

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Morphological and physiological changes were followed on ovaries recovered from 25 sows in the puerperal period, at 35 days from parturition, in estrus, and 10 and 25 days from the insemination. Number of corpus luteum and ovarian follicles were recorded.

Key words: sows, ovary, corpus luteum, ovarian follicles

MORPHOLOGICAL CHANGES OF THE SOWS UTERUS AFTER WEANING AND IN THE EARLY GESTATION

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Physiological involutive changes of the uterus, during the puerperal period, have an important influence in the reload of the reproductive activity and the installation of a new gestation in sows after the weaning. Observations were done on 25 uteri from sows in preinsemination period and 15 uteri from sows in the early gestation (3 weeks after fertile insemination). In the preinsemination period weight and dimensions of uterus did not show any significant modifications. In the early gestation both average weight of uterus and diameter is doubled.

Key words: sow, uterus, morphological changes.

ANIMALE ISOLATION AND THE EFFECTS OF THIS ACTION ON BEHAVIOR AND ON YIELD PERFORMANCES

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In this work we try to demonstrate that an animal isolation has direct effects on his behaviour, which ranges among large limits, depending on quantity of existent external stimuli. The forms of behaviour manifestation are extremely varied, from aggressiveness to a general listlessness.

Following the isolation influence on yield performances, we come out that are inferior, with values that depend on species, age and on variety of external stimuli.

Key words: animal isolation, behaviour, yields performances

RESEARCHES CONCERNING THE RELATIONSHIPS BETWEEN THE HAEMOGLOBIN TYPES AND THE CARCASS TRAITS IN BROILERS-ANAK 2000 HYBRID

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The biochemical systems from blood (blood groups, haemoglobins, transferins, etc) represent an important source of information and investigation concerning the homogeneity or heterogeneity degree from an animal population, this appreciation being realized based on the frequency of the homozygous and heterozygous genotypes from the studied population. On the other side, the knowledge of the associations between the fractions of a biochemical system and the economical traits of the animals offer the possibility of an earlier selection, realized based on the fractions of the correspondent biochemical system (selection assisted by genetical markers). The results obtained by different authors (1, 2, 3, 5, 6) are sometimes in contradiction and they did not lead to doubtless conclusions concerning the correlation existent between some fraction or type of the genotype and an economical trait. However they are in attention of researchers and they hope that these researches will be extended also through the development of the new investigation techniques of molecular biology, these biochemical systems will have utility in the selection practice, in order to obtain a higher genetic progress to that one obtained by the classical selection methods.

Starting from these considerations in this paper we propose the study of the genetically structure at the locus of haemoglobins and their relationships with the carcass traits in broilers

Key words: *hybrid, haemoglobin, association, differences.*

RESULTS CONCERNING THE FEEDING INFLUENCE JT BIOCHEMICAL AND HEMATOLOGICAL PROFILE IN EMBRYO RECEIVING GOATS

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Cercetările efectuate în această direcție pe plan mondial au demonstrat că există o legătură strânsă între aportul alimentar; metabolismul substanțelor nutritive în organismul animal și asigurarea homeostaziei mediului intern prin asigurarea cantitativă și calitativă în rația furajeră a necesarului de substanțe nutritive (proteine, glucide și lipide) și a substanțelor metabolice active (vitamine și elemente minerale).

De asemenea s-a demonstrat faptul că apar grave tulburări de producție cauzate de deficiențe nutriționale. Pentru a se putea detecta în timp incipient aceste modificări, se determină în esență profilul metabolic pe baza examenului biochimic (serologic) hematologic (sanguin).

Plecând de la aceste considerații am urmărit stabilirea profilului biochimic și hematologic la capre din ecotipul local de „broască aflată în condiții de supra- și subalimentație (cu 30 % și 5 % peste și sub necesarul pentru întreținere) în funcție de starea fiziologică (gestație și negestație).

ICHTIO-TOXICOLOGICAL STUDY OF ASH AND DENSE SLURRY WATERY EXTRACTS FROM POWER PLANTS

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*The aim of this study was to test the effect of the ash and dense slurry on fish's health. We used three fish species *Xiphophorus helleri*, *Lebistes reticulatus* and *Carassius auratus gibelio*. Toxicological studies were made on three kind of extracts and we observed that watery extract of dense slurry and watery extracts from ash are un toxic and toxic in 3rd degree, respectively.*

Key words: *toxicological study, ash, dense slurry, fish.*

THE POTABILITY FEATURES STUDY OF SOME UNDERGROUND WATERS FROM WELLS SITUATED IN NW OF TIMISOARA

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Aspects regarding the smell, taste, turbidity, color, temperature and pH of water taken from four wells (F_A, F_B, F_C and F_D) situated in NW of Timisoara were analyzed. The wells depth is of 40m for F_C and over 60m for the other three. Between the monitoring period: 04.25-05.11.2000 for these indicators, seven water samples from all the four wells was analyzed. The obtained values were compared with the standard values of water potability from STAS 1342/1991, which regulates these features in Romania. Values ranging between the standard limits of potability for turbidity, color, temperature and pH were obtained and they satisfy the potability norms of STAS 1342/1991.

Key words: *underground waters, taste, smell, turbidity, color, pH.*

THE USE OF BIOTECHNOLOGIES IN THE BIOLOGICAL EPURATION PROCESS OF THE WASTEWATERS IN THE TEXTILE INDUSTRY

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On an effluent from the Textile Factory of Timisoara different ways of microbiological epuration, using an adapted active sludge for the neutralization of the synthetic dye 15-CL.24.400., were experimented. The microbiological epuration yield of the dye from the effluent in the first faze was of 60-70% so that at the end of the process it reached final values of 83-86%. The dye toxicity, though obvious for some more sensitive species (such as: Cyclops, Acineta etc.), towards major species from sludge biocenosis decreases gradually throughout the epuration process so that it disappears completely in the end.

Key words: adapted active sludge, synthetic azoic dye, epuration yield.

CONSTRUCTIONS FOR THE STORAGE AND BIOLOGICAL AND THERMAL TREATMENT OF THE PIGS FARMS SLURRY

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*Concerned about the nonpolluting recycle system of **the** waste from the pigs farms, we present a method of **treating these** substances in an underground insulated tank with aerator that offers the possibility of using the preheated water as a thermal agent for heating the weaner compartment.*

Meantime, using the warm water mixed with liquid slurry and algae cultures a rich biomass is obtained that can be fed back to others species.

Key words: storage, biological and thermal treatment

THE COMPARATIVE TEST OF INFLUENCE OF THE ENERGETIC AND PROTEIC LEVEL IN THE CHARACTERISTIC ENERGETIC CONSUMPTION OF THE FODDER TO TURCANA AND TIGAE RACE

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The work reveals the modelation of the correlation between the characteristic consumption and the proteic and energetic level of the fodder ration for the sheep. In the modelation it is calculate the statistics of the regression (the mixt the correlation between the characteristic energetic consumption, the protein, the energy of the fodder ration, the contribution of the factors and the standard error) the test of variation (the test that reveals the signification of the mathematic model) the calculation of model's numbers and of the residual values of the model (the difference between the observed value and the calculated one).

Key words: protein, feeding level, lamb.

THE INFLUENCE OF THE STRUCTURE AND ENERGO-PROTEICAL LEVEL OF FOOD ON GROWTH AND FATTENING IN TSIGAIE LAMBS

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The supply of a constant energo -proteical ratio (2.5:1 in the first phase, and 4.5 : 1 in the second phase) in unique forages mixture based on com cobs, for Tsigaiie fattening lambs determine good production results and economically high, against forage mixtures in wich the enrgo proteical ratio differs function of the corn cobs proportion in the food structure.

Key words: temporary pasture, plant nutrients, magnesium

THE COMPLEMENTARITY EFFECT OF SOME FORAGE ADDITIVES USED IN FEEDING OF WEANED PIGS

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***CAIND & NUTRIVIT Oravita*

This paper work represents the second step from an research field in which are followed the forage additives which through complementarity can rise the nutritive and bioproductive effect of mixed forages at young piglets. It was studied on 100 weaned young piglets, divided in five experimental groups, the effect of two enzymatic compounds which have as target the non-starch polygtucids (Porzyme 8100 and Enzimix) and for complementarity was used live yeast culture.

The complemetarity effect between enzymatic products and live yeast is concretised through the increase of forage intake with 7,35-15,35 % which rise the final weight mean of young pigs with 8,00-11,20 p %. In this case the feed conversion was lower with 0,38-1,92-p % than the compared groups.

Key words: forage additive, piglets, complementary effect

EFFECT OF A PROBIOTIC „PROBIOSIL”ON THE GROWTH PERFORMANCE AND HEALTH OF PIGLETS

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Tests were done using Probiosil probiotic product on piglets from 7 days of age until 63 days of age. In this period the evolution of body weight were followed and a higher body weight were recorded from the expermental group (4,44 kg), 4,47 % higher than that observed at the untreated group (4,25 kg) at 21 days of age. After this first period, differences between animals from the different experimental condition decreased and at 63 days of age, groups were equilibrated. Rates of mortality in with 12,5 %, observed in expermental group. Incidence if digestive troubles (diarhea) were 3,4 % higher at untreated anumals.

Key words: suckling pigles, probiotic, body weight morbidity.

FERIPRIVE ANEMIA TREATMENT IN SUCKLINGS PIGS THROUGH SFSM WITH FE UNDER FORM OF TABLETS

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The experiment was maddened on 36 suckling piglets. At the control group (18 piglets) was administrated 100 mg Fe³⁺ from Iron-dextran in the day one and six of life and in the experimental group (18 piglets) was administrated 100 mg Fe under poliphosphatic glass form in the day one until day six.

At the age of 21 days was concluded that didn't exist semnificative differences between groups in what concern the body weight, haemoglobin quantity and in in the case of erythrocyte number. Anyway the experimental group had recorded values with 3,2-10,2 % lower than control group.

Key words: *chelated iron, piglets, and sanguine parameters*

FERIPRIVE ANEMIA TREATMENT IN SUCKLINGS PIGS THROUGH SFSM WITH FE UNDER PASTE FROM WITH HONEY

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The experiment was maddened on 36 suckling piglets divided in two groups. The control groups (18 piglets) in which was administrated 100 mg Fe³⁺ through injection of Iron-dextran in the day one and four of life. In the experimental group the way of administration was calculated per bone and is about 100 mg Fe under poliphosphatic from with honey from the day one until the day four of life.

At the age of 21 days was observed that the both experimental group have body weights, haemoglobin levels and erythrocyte number at values very closely and didn't was recorded semnificative differences.

Key words: *chelated iron, piglets, and sanguine parameters.*

EFFECTS OF A PROBIOTIC „BACTOPROLACT” ON THE GROWTH PERFORMANCE AND HEALTH PIGLETS

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Bactoprolact (a microbial product) was tested using 83 Hampshire x Landrace crossbered piglets, from 7 to 70 days of age Bactoprolact was added in dose of 5 g/kg in the feed of 41 piglets, (E group) and the other 42 piglets received the feed without the products (M group). The average body weight at 70 days of age wassignificantly higher ($p < 0.05$) in M than in E group (13.65vs. 11.10 kg, respectively). The feed conversion ratio was lower in M (2.59) than that in group (3.09). Piglets from E group had higher incidence of digestive than those from M group (197 vs. 90 days).

Key words: *suckling piglets, probiotics, body weight, feed conversion ratio, digestive disorders.*

L'EFFET NUTRITIF ET PRODUCTIF DE LA PREPARATION "PROSIMBIONT B" SUR LES AGNEAUX DE LAIT

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On a observé l'effet nutritif et productif de la préparation "Prosimbiont B", administrée aux agneaux de lait sous deux formes de présentation: en mélange avec le aliments concentrés (L_2), pendant toute la période expérimentale (11-49 jours) et sous forme de paille (L_3) distribuée en 2 doses, à l'âge de 11 et 16 jours. Les différences qui apparaissent entre les lots, en ce qui concerne les performances de croissance et la consommation spécifique, ont été: significatives ($p < 0,035$) entre L_1 et L_2 (10,06 kg, respectivement 11,46 kg pour le gain total; 264,82 g respectivement 301,91 g pour le gain moyen quotidien) et insignifiantes ($p > 0,05$) entre L_1 et L_3 .

Mots cle: *d'agneaux de lait, des performances de croissance, additif fourrager.*

LA MODULATION DE LA COURBE DE CROISSANCE POUR LES AGNEAUX DE LAIT PAR LA STIMULATION DE FONCTION RUMINALE

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Le but de cette étude est l'estimation du poids corporel des agneaux de lait, à des différents âges, à l'aide de l'équation de Richards. La stimulation de la fonction ruminale a été réalisée par l'incorporation d'une préparation fourragère Prosimbiont A dans le mélange d'aliments concentrés. Pour moduler la courbe des valeurs obtenues, on a établi le careé médium résiduel (PMR) et les coefficients de détermination (R^2). Le plus petit PMR et le plus grand R^2 ont été enregistrés dans les lots où le mélange d'aliments concentrés avait un niveau de 18% PB ($R^2=0,9998$; $PMR=0,0205$ pour le lot 1, respectivement $R^2=0,9999$; $PMR=0,0214$ pour le lot 2).

Mots clé: *courbe de croissance, estimation, d'agneaux de lait, additif fourrager.*

MODELING THE GROWTH CURVE AT DUCKLING IN FUNCTION OF ASSUREMENT LEVEL OF TRACE ELEMENTS FROM FEED

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*Through supplementation at different levels using two trace elements source (SFMS *, SFMS **) testing the Richards model we has estimated body weight of duckling in some age period.*

*The experiment structure comprises 3 experimental groups, which have like variation parameter different level of trace elements. Using Richard model we had made 3 mathematical equation and in the same time was established the residual mean square(PMR) and the determination coefficient (R^2). The lower residual mean square and the higher R^2 was obtained at LE 3, group in which was used like supplementing source the SFMS ** and the assurements levels of trace elements was the most lower.*

Key words: *growth curve, duckling, chelated trace elements*

EFFECT OF DIFFERENT SOURCE AND ASSUREMENTS LEVELS AT TRACE ELEMENTS ON BIOPRODUCTIVE PARAMETERS AT ADULT DUCKS

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*In this experiment was used two structures of **phosphate soluble** glass with trace elements and the differences are maded through the Mn level which is the characteristic of palmipedes. The experiment was made on 60 adults duck divided in 3 experimental groups (LE1, LE2, LE3). The micromineral assurementis at the following levels: 20 mgFe, 20mgMn, 20mgZnand3mgCu; LE2-20mgFe, 8mgMn, 20mgZn, 3mgCuand LE3-10mgFe, 4mgMn, 10mgZnand 1,5 mg Cu. After parameters determination at the experimental groups was recording the decreasing of supplementing levels(LE2, LE3) which give some inferior values at LE2 and LE 3 in comparison with LE1, who have the trace elements at higher levels.*

Key words: *adult ducks, chelated trace elements, bioproductive parameters*

THE EFFECT OF DIFFERENT SOURCE AND ASSUREMENT LEVELS OF MICROELEMENTS ON BIOPRODUCTIVE INDICES AT DUCKLING

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Comparative with the recommendation values of assurance by NRC1994, in the present experiment these was reduced through use of two structure of phosphatic soluble glass with trace elements which differ in function of Mn level which has a reduced levels at palmipedes. In the experiment was used 60 duckling divided in 3 experimental groups (LE 1, LE2, LE 3). The micromineral assurancements was calculated at the following levels: LE 1-15 mg Fe, 15 mgMn, 15 mgZn, 2,25 mg Cu; LE 2 - 15 mgFe, 6 mgMn, 15 mg Zn, 2,25 mg Cu; LE3 -7,5 mg Fe, 3-mgMn, 7,5 mg Zn and 1,125 mg Cu. Micromineral assurancements through SFMSM?(which had in structure au reduced level of Mn (0,375 g / kg) has determinate a superior bioproductive parameters comparative with mineral assurancements through SFMSM * or SFMSM **at higher levels.*

Key words: *duckling, chelated trace elements, bioproductive indices*

BIOCHEMICAL SANGUW PARAMETERS AT DUCKS IN FUNCTION OF ASSUREMENT LEVEL OF TRACE ELEMENTS FROM FEED

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In the experiment was used 60 adult ducks divided in 3 experimental groups. The purpose was the effect recording of different levels of micromineral supplementing on principal sanguin parameters at adult ducks. At LE 1 the micromineral assurancement was made through phosphatic soluble glass with trace elements (SFMSM) at the following levels: 20 mgFe, 20 mgMn, 20 mg Zn, 3 mg Cu at LE1, 20 mgFe, 8 mgMn, 20 mg Zn, 3 mg Cu at LE 2 ; 10 mg Fe, 4 mgMn, 10 mg Zn, 1,5 mg Cu at LE3. Sanguine parameters recorded correspond with the standard values from literature being between limits.

Key words: *sanguine parameters, chelated trace elements, ducks*

L'INFLUENCE OF SUPPLEMENTATION LEVEL OF TRACE DNITS FROM FOOD ON INCUBATION PARAMETERS AT ADULT DUCKS

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Started with the previous researches about the incubation parameters we had made an experiment on 60 adult ducks divided in 3 experimental group (LE1, LE2, LE3). Micromineral assurements was realized through phosphatic soluble glass with trace elements at following levels: LE1 20 mgFe, 20 mgMn, 20 mg Zn, 3 mg Cu; IE 2-20 mgFe, 8 mgMn, 20 mg Zn, 3 mg Cu; LE3-10 mgFe, 4 mg Mn, 10 mg Zn, 1,5 mg Cu. Concerning of both incubation parameters (fecundity percent and eclosionabiUty) this has recorded higher values at LE 1 with 3-4,5 p% in what concerning the fecundity percent and with 8,6-16,3 p % in the case of eclosionabiUty percent.

Key words: ducks, incubation parameters, chelated trace elements

L'INFLUENCE DE LA PRÉPARATION “ PROSIMBIONT B” SUR LES MODIFICATIONS MORPHOLOGIQUES DU RUMEN DES AGNEAUX DE LAIT

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On a etudie les modifications morphologiques du rumen, induites par la préparation fourragère “ Prosimbiont B”, administrée aux agneaux de lait en 2 formes de présentation: en mélange avec le fourrage combiné, pendant toute la période expérimentale (11-49 jours) et sous forme d'une pate, partagé en 2 doses, à l'âge de 11 et 16 jours. Les images mycrosopiques relèvent, au cas des lots expérimentaux, une accélération du procès morphogénésique, exprimée par une croissance en hauteur chez les papilles ruminales, des hypoplasies de l'épithélium, la réduction jusqu'à des paraltre de la kératinisation, la multiplication du réseau vasculaire, des aspects corrélats à l'intensification de la fonction d'absorbtion et de transfert des nutriments dans la circulation générale.

Mots clé: *d'agneaux de lait, hystology; rumen.*

A PROBLEM OF OPTIMIZATION APPLYING IT TO THE NOURISHING FOOD

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The paper presents a method of obtaining the restrictions of a linear model programming from a nourishing point of view which can be solved using the simplex algorithm.

Between the substance quantities and microelements a linear dependence is proposed statistically established.

Key words: *simplex algorithm, nourishing food*

DIGESTION OF NUTRIENT SUBSTANCES FROM RATION BASED ON HAY OF LUCERNE, COMPOUND FEED AND BEET FORAGE IN COYPU ADULT MALES

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Researches were carried on 4 coypu adult males. These 3 were fed for 7 days with lucerne hay and compound feed t first period andwith lucerne hay, compound feed and beet on the second one. Each experimental period was td by an accommodation period with the new ration, for Digestibility coefficients of the OM (organic matter) was in the ration with lucerne hay, compound feed and beet (83,81%) than in ration with lucerne hay and compound. (76,10%). Digestibility coefficients established for these i of ration are closed by those from speciality literature. Key words: digestion, nutrient substances, coypu.

THE EVOLUTION OF MAGNESIUM CONTENT IN THE FORAGE REND VALUABLE THROUGH PASTURE

GH. MIHAI

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Researches realized in ecological conditions from Sighetu Marmatiei, on a temporary pasture, emphasized that the evolution of the magnesium content presents fluctuations on cycles and years. Generally speaking, in the I- II cycles or II - III cycles the content is situated under the optimal level (0,15% from DM.). In the following cycles there is recorded a light tendency of growing to a level near or just a little over the minimal optimal step. The main ecological factors that influence the magnesium content evolution are: the rain and thermic conditions, the NPK fertilization system, vegetation phase and the way of use (pasture or stimulated pasture), etc.

Key words: *temporary pasture, plant nutrients, magnesium*

LA VALORISATION DES PRAIRIES DE FESTUCA RUBRA-AGROSTIS CAPILLARIES PAR PATURAGE AVEC DES OVINS JEUNES

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U.S.M. V. Cluj – Napoca

Nos recherches (dans les Montagnes de Cindrel -"Marginimea Sibiului ") ont été menées vers la quantification de l'effet cumulé des inputs technologiques (amendement, fertilisation avec des engrais organiques et chimiques sur encencemenl) sur la végétation (Festuca nibra-Agrostis capillaris) et la façon dont celles-ci se reflètent dans le gain pondéral chez les ovinsjeunes.

Mots cle: *prairies naturelles Festuca rubra-Agrostis capillaris; 1300 m, ovinsjeunes, gain pondéral.*

RESEARCHES CONCERNING THE TEMPORARY GRASSLAND TECHNOLOGY IN DEPRESSION TG.-JIU - CAMPU MARE

I. IONESCU, M. OSICEANU, M COLA

Universitatea Craiova

*The temporary grasslands from the North of Oltenia presented **the** best harvest of an organic-mineral basal dressing is used.*

The oat can be used as protector plant at sowing.

*The best mixtures of species are formed of 2-3 graminaceae, **adapted** to the zone conditions and a leguminous plant Lotus comiculaius, which fixed 70-100 kg/ha biological nitrogen per year.*

The optimum annual fertilization is made with 100 kg/ha N, 50 P_2O_5 , 50 kg/ha K_2O .

Key words: *temporary grassland, basal dressing, protector it.*

EFFECT OF THE BIO-STIMULATORS ON THE FRUCTIFICATION DEGREE AT SOME PERENNIAL LEGUMINOSARUM

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This study evidences the influence of some bio-stimulators (Procaine, Previcur, Polimet, EDTA, AZ, Pastim, Banostim, Florisan) on the productivity elements of the seed production at some perennial leguminosarum (alfalfa, red clover, white clover, bird's foot trefoil). Our researches were undertaken in the vegetation house and also in production field. Comparing with the untreated plants, all the used bio-stimulators had a positive improvement on the fructification degree.

Key words: *Bio-stimulators, perennial leguminosarum, fructification degree.*

IMPROVEMENT OF ENVIRONMENTAL NITROGEN SYMBIOTIC FIXATION AT PERENNIAL LEGUMINOSARUM. DIFFERENT REACTION OF SOME BIRD'S FOOT TREFOIL VARIETIES AT THE ARTIFICIAL BACTERISATION

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*Nitrogen symbiotic fixation capacity at the bird's foot trefoil viewed through the total realized forage production and the total developed nodosities number by the plants, can be improved after artificial bacterisation with *Rhizobium loti* of the seeds before seeding. Our researches has showed an improvement with 5,8% of the total realized forage production and 14,8% of the nodosities number on plants, comparing with the untreated plants.*

Key words: *Bid's foot trefoil, *Rhizobium loti*, nodosities, bacterisation.*

IMPROVEMENT OF ENVIRONMENTAL NITROGEN SYMBIOTIC FIXATION AT PERENNIAL LEGUMINOSARUM. DIFFERENT REACTION OF SOME WHITE CLOVER VARIETIES AT THE ARTIFICIAL BACTERISATION

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*White clover has a reduced reaction at artificial bacterisation with *Rhizobium trifoli*, in comparison with red clover and bird's foot trefoil In average, in the first year of vegetation the bacterisation improve the realized gain with 4,8% comparing with the untreated plants, the average number of the developed nodosities being 12,7% highest between the tested varieties we underline the Carmen and Dacia varieties.*

Key words: *bacterisation, *Rhizobium sp.*, white clover.*

IMPROVEMENT OF ENVIRONMENTAL NITROGEN YMBIOTIC FIXATION AT PERENNIAL LEGUMINOSARUM. DIFFERENT REACTION OF SOME RED CLOVER VARIETIES AT THE ARTIFICIAL BACTERISATION

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*Bacterian inoculation of red clover seeds *Rhizobium trifolii* had a positive effect on the total forage production, with 9,8% comparing with the untreated model. In the same order between the studied varieties we underline the Roxana variety, which realize the highest production gain (15,3%) after bacterisation treatment.*

Key words: *bacterisation, *Rhizobium trifolii*, red clover.*

RESEARCHES CONCERNING THE BEHAVIOR OF i MARAMURES BREED STEERLINGS AT FATTEF

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**Faculty of Veterinary Medicine, Timisoara

The main behavior aspects have been studied steerlings of the Brown Maramures breed, kept free in\ During a period of 24 hours, rest represented 34%, position 23%, movement 14% while 8,5% fodder cot The resting period was especially at night (52% of \ ortostatic position in the morning (30% of the tin movement in the afternoon (22,5% of the time)

Key words: behavior, fattening, young bulls.

STUDIES ON THE FUNCTIONAL PARAMETERS OF THE FE-STOCK FARMS FOR MILK-COWS IN SOME COUNTIES IN TRANSYLVANIA

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Universitatea de Stiinte Agricole s̃i Medicind Veterinara - Cluj Napoca

The region in the center of Transylvania including the ties of Alba, Cluj, Bistrita-Nasaud, Mures, Salaj has had Mon in caising cattle. The analysis views the size of the farms on ', whole area and the farms of property as well as on each county, ring 1997 with 1999. Besides the specific features each has a general tendency to reduce the itumber of the farms ith 2,69%, the number of cows with 5,25% and the average size of 8 farms has been reduce from 1,44 cows/farms in 1997 to 1,42 in 99. We have abs structured the farms according to their size, the t dinamic beyng the 3-5 cows.

Key words: dinamic feature, size, number, farms, catties

CARACTERIZATIION OF THE MAINS FEATURES OF PRODUCTION AND REPRODUCTION AT A CATTLE POPULATION GROWTHED IN CLUJ COUNTY

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The researches have been effected in 9 agricultural units from Cluj country, with state capital, between 1988-1998, specialized in milk i cows breeding and exploitation by "Baltata Romdneasca" breed. It have been followed the mains features of milk production at the 2693 fprimiparous heads which finally achieve 7485 lactation. Also, for) emphasize the paternal effect it was structurated the effectives in 30 nily structures, and for the characterization of udder orphofunctiona.il features it have been taked in study 7 family ^Structures and 224 primiparous, at which have been analysed and itistical performed the principals features of udder.

Key words: caws, milk

GENETIC STRUCTURE AND IT EFFECT AT A ROMANIAN SPOTTED BREED POPULATION

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The researches has been effected in 10 years and 9 farms with estate capital, where it hare worked over 71 sires, from which \like structure and origin was 46,73% Austrian Spotted Breed, 25% 'jGerman Spotted, 21,43% Simmental and 7,14% half breed BR x From these, 28 bulls achieved a sufficient daughter's number ' be analysed The best production performances was obtained by lighter's of STOL-8647 bull, with 11.456 kg milk/economic life; SENATOR-6807 and KANSAS-50584 daughter's with 10.442 kg [milk respectively 10.005 kg milk/economic life.

Key words: cows, milk

THE EFFECT OF FIRST CALVING ON MILK PRODUCTION AT ROMANIAN SPOTTED BREED

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The effect's establishment of first birth over the mains zoo economics index in the way of milk production has been mode by effective structured about 2425 cows in 9 groups, between under 25 months to 46 months. Due to established age 23 months and 7 dazes from the total number ofprimiparous about 17,44% achieve the age of first birth at 30 months, 40,25% between 30-35months and42,31% over^l 35'months.

Key words: first birth, milk

LES CARACIERISTIQUES MORPFOFUNCTIONNELLES DU UNE POPULATION DE LA RACE PIE ROUMAINE

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Les recherches ont ete effectuees sur un effectif de 805 vetches de races Pie roumaine, pour lequel on a suivi les principales caracteristiques morphofonctionnelles du pis qui s' etablie en moments du lactation maxime, devant et apres la traite, en dynamique sur les cinquses lactations. Les resultates obtenu mettent en evidence une dynamique par developpement du pis jusqu 'a la cinquieme lactations avec 20-60%, plus de 70% de ce developpement se realise jusqu" a la troisieme lactation. L'he ritabilitS des caracteristiques suivies sont contemies entre 0,252 et 0,722 et les correlationsphenotypique etablies entre 0,20-0,90.

Key words: cattle, udder, milk

RESEARCHES REGARDING THE BONE SEGMENTS DYNAMICS, BOTH CARCASS AND MEAT BOUT RANGE YOUNG BOVINE ROMANIAN RED SPOTTED BREI

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The researches are effected on 304 heads youth cattle Balp. romdneasca breed, from fattening system with permanent-intensv growth, choiced in acordance with acknowledge experier, techniques. Structurated on a 13 aged and body weight groups, capitalzation for meat production is effected after 12-24 hours diet and the carcass hunking after 24 hours of refrigeration. With thh evolution, the autor establised that a bony well-balanced ui carca as 17% and below 17%has come true beginigwith 450 kg minimi body weight at 17-18 mots old These researches give emphasis superior growth rithm of flat bones side long bones and it mentioned at the same time, the existence of some bony segments which with the help of some indices permit a surer evolution bones in carcass than known methods tnprezent time.

Key words: *Baltata romdneasca, meat, carcass*

STUDY ON MICROCLIMATE CONDITIONS IN THE BARNSI FOR BULLS FATENING

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The environmental parameters in the young bulls fatten barns were generally normal in each technological phase, registered temperatures, in winter, spring and autumn, in t first phase barns, were between 4 to 11°C under the inferi limit for the comfort zone, associate with high humidity (8 88%) and relatively high speeds for air draught (0,2 -0,5 For short time periods (especially in summer) ITU calculat values for the second phase barns, indicate discomfort, becau the temperature values are to high.

Key words: *microclimate conditions, bulls fattening*

SEARCHES CONCERNING THE BEEF PRODUCTION IICES IN YOUNG BULLS OF ROMANIAN BLACK AND WHITE BREED

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Depending on age and body weight in Romanian Black | Spotted young bulls we have found a significant increase of ^principal meat production indices. According to the age of bulls, the body weigh increase (from 143 kg at 12 months to 527 kg at 15 months) and also the carcass weight (183,2 kg vs. 275,1 kg). In the same time, slaughter efficiency decrease with age (53,4% at 12 ' months, 53,1% at 15months and52,2% at 18months). Meat content of carcasses increase (77,4% at 12 months to 79,9% at 18 months), suet content increase (2,89% to 4,22%) and bones content decrease (19,71% to 16,68%).

Key words: *beef production indices, young bulls*

RESEARCHES CONCERNING THE INTERACTION GENOTYPE X ENVIRONMENT FOR THE MILK PRODUCTION IN ROMANIAN SPOTTED CATTLE

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Not all individuals react equally to the environmental differences, existing clear differences between their performances, differences owed to the presence of the interaction GxE, that leads to the alteration of the order of the individuals classification, and to a false estimation of the males for reproduction. The differences between the average values of the traits studied in different environmental conditions and also the level of the phenotypical coefficients, confirm the presence of the interaction GxE, for the traits that contribute to the milk production.

Key words: *interactions, genotype, environment, milk*

SOME ASPECTS CONCERNING THE INTERACTION GENOTYPE x ENVIRONMENT FOR SOME EXTERNAL CHARACTERS IN ROMANIAN SPOTTED CATTLE

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The study of the interaction G x E for the conformatic traits in cattle concerns the results obtained based on experiment realised on 14 families of B.R. paternal half-sis raised and exploited in two different environmental conditic classified function of the technological environment of exploit the "C" environment correspondent and "S" environment The interaction G x E was followed for three traits of conformation (body weight height and the body length) and estimated using the differences between the average values, of phenotypic correlation coefficients between the values of the genotype (family) reared in different environments ("C" and "S as well as using the interaction variance GxE.

Key words: *interactions, genotype, environment, exter and characters*

SOME PARTICULARITIES OF THE RUMINAL MICROECOSYSTEM IN CATTLE AND BUFFALOES MAINTAINED IN FARM SYSTEM

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In order to underline some particularities of the ruminal micro ecosystem and ruminal digestion, in this paper is presented the structure of the ruminal protozoa population in cattle and buffaloes, the percent of VFA from the ruminal liquid for both species, respectively. The general picture of the ruminal protozoa species and strains shows that although there exist many species of protozoa in both species, the structure of the protozoa population is stabilized and influenced by the host specie. The proportion of acetate in buffaloes being higher than in cattle, allows the alteration of the ruminal metabolism for the production of milk with a higher fat content.

Key words: *ruminal protozoa, cattle, buffalo*

PHENOTIPICAL STUDY CONCERNING THE MORPHO -PRODUCTIVE TRAITS IN HYBRID FEMALES F1 FROM THE BREEDS BALTATA ROMANEASCA AND ILANC - BLEU - BELGE AT 18 MONTHS OF AGE

T. OROIAN, A. VLAIC, V. CIGHI

USAMV Cluj Napoca

Some aspects concerning the comparative values of body eight, waist and gain weight in hybrid females F1 between the reeds Blanc - Bleu - Beige and Baltata Romdneasca Simmental at 18 months of age, are presented.

The results reflect the special combinative capacity between both studied breeds.

Keywords: *breeds, body weight, waist, hybrid F1*

COMPARATIVE STUDY OF HYBRIDS Fj BETWEEN THE BREEDS BALTATA ROMANEASCA AND BLANC - BLEU - BELGE CONCERNING SOME TRAITS OF MILK PRODUCTION

T. OROIAN, A. VLAIC, V. CIGHI

USAMV Cluj Napoca

*Some comparative aspects on lactations and betwee genetical strutures in Fj products (BBB x BR) and Bah Romaneasca Simmental type, are presented. It was studied the fa percent and the total quantity of milk, in order to emphasize **influence** of the breed Blanc-Bleu-Belge on these aspects.*

Key words: *breeds, Blanc-Bleu-Belge, Baltata romaneasca*

RESEARCHES CONCERNING THE SLAUGHTER EFFICIENCY AND CARCASS WEIGHT IN ROMANIAN SPOTTED BREED AND IN HALF-BREEDS ROMANIAN SPOTTED BREED x FRESIAN BREED

GH. NISTOR, ELEONORA NISTOR

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Meat was and it will remain an indispensable food in the human nourishment. Aspects tackled in this scientific work refers at the weight carcass, quarters weight in carcass and slaughter efficiency in the Romanian Spotted breed (which has 87,5% blood from Simmental) and in the half-breeds of Romanian Spotted x Friesian, to see which is the best age and the best breed, in which it can be to obtained the biggest quantity of meat.

Key words: *meat, carcass, breed, weight*

STUDIES ON THE RELATIONSHIP OF BODY MEASUREMENTS AND JUMPING PARAMETERS IN SPORT HORSES

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The study was carried out on 11 sport stallions with an equal level of training. Fourteen body measurements and nine angle were measure on each horse, out of each eleven body indices were calculated. Each couple, rider-horse has made three jumps over the two obstacles (an oxer of 100 cm wide and a vertical fence) raised on three heights 70, 90, 110 cm).

Spearman rank correlation was computed between the the conformation traits and the length- of the jumps.

Key words: *sporthorse, obstacles, jumping parameters*

THE MODELATION OF THE CORRELATION BETWEEN THE PERFORMANCE OF THE PRODUCTION AT THE SHEEP AND ENERGETIC AND PROTEIC LEVEL OF THE FODDER RATION

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**Statiunea de Cercetare si Productie pentru Cresterea Ovinelor Pop.Auti-Botosani*

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The purpose of this study is the achievement of a modelation of the correlation between the performance of the animal's production and the energetic and protein level of the fodder rations. We propose the achievement of an experimental methodology, which shall be availed for all the quantitative characters (influence by the protein and energetic level of the fodder rations) and for all the species. The main advantage of a model is that it allows the simulation of the experiment. The results waited for foresee the opening of new sphere of investigation (actually we want to open a new chapter in the field of the animal's nutrition) but also abreions practical implications.

Key words: protein, feeding level, model

QUALITATIVE FEATURE INCIDENCES OF THE IAMB PELTS IN THE BOTOSANI KARAKUL BREED LAMBS IN COMPARISON WITH THE POTASSIUM PHENOTYPES

GH. HRINCA, M. GROZA, I. PADEANU, O. VOIA

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The incidences of the valuable characteristics of the Iamb pelt features in the Botosani Karakul offspring are relatively equilibrated in the two potassium phenotypes (with an insignificant advantage for the HK phenotype), while the invaluable characteristics are more frequent in the HK phenotype or sometimes these characteristics are not even present in the LK phenotype. The associative aspects of the potassium phenotypes both with the morphological features of the Iamb pelts and especially with the color varieties of these lambs confer to the LK phenotype a selective advantage in comparison with the HK phenotype.

Key words: *potassium phenotype, lamb pelts*

CORRELATIONS BETWEEN THE POTASSIUM PHENOTYPES AND THE QUANTITATIVE PRODUCTION TRAITS IN THE BOTOSANI KARAKUL BREED SHEEP

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The quantitative production capacity of the Botosani Karakul sheep is higher in the lambs with HK phenotype. The differences of quantitative productions between the two potassium phenotypes are significant in lamb.

Key words: *potassium phenotype, production traits, Karakul*

HORMONAL THERAPIY INFLUENCE AT MERINOS BREED HEEP ON WOOL PRODUCTION AND ON LIFE CALVES NUMBER

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The research was performed on 200 young ewes 14-15 months of age hormonal stimulated with progesteron injenctions (10, 20, 10, 20 mg) at 3 days. Then, after 3 days 600 ui pmsg (v₁) werw inoculed on 193 zoung ewes hormonal stimulated after the seme scheme, and 0,5 ml diacetat of hexestrol inoculated ot the soma time with pmsg. At this ewes it wes followed untill 8 years of age the wool production and colves number. It is a suggestion that this treatment scheme utilization once at 14-15 months of age has no negative influence ($p > 0,05$) on wool production and calves number on all life time.

Key words: *Merinos of Transilvania breed, hormonal therapy with progesteron injections, wool reproduction activity.*

REPRODUCTIVE EFFICIENCY AND EXTRASEASON HOMONIC THERAPY COSTS ON MERINOS OF TRANSILVENIE BREED SHEEP

I. PADEANU, O VOIA, GH HRINCA, M. GROZEA, GH. CIORBA

**Statiunea de Cercetare si Productie pentru Cresterea Ovinelor PopAuti-Botosani*

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Studies were been performed on Merinos of Transilvania breed sheep, in comparative way following a few aspects like reproduction ability, human effort, hormonal therapy costs on some treatment variants: injection with progesteron at 3 days, 10, 20, 10, 20 mg and 600UI PMSG; testosteron 7,5 mg/ml and estradiol 2,5 mg/ml. Progesteron retard 2x125 mg at 5 days and 600UI PMSG; vaginal sponges Chrono-gest + 600UI PMSG; vaginal suppositorie Progestcol 10 with liofilised resorbable collagen (10 days) and 600UI PMSG. These studies suggested that through Progestcal 10 or Chronogest + 600UI PMSG utilization with minimum effort would be obtained good results in counter-season reproduction.

Key words: *Merinos of Transilvania breed sheeps, hormonal therapy.*

EVOLUTION OF WOOL PRODUCTION AND BODY WEIGHT AT SHEEP MERINOS STAVROPOL BREED

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Study were done on 4390 sheep (126 rams; 2726 sheeps; 673 young rams; 865 young femels) from Stavropol Merinos breed, imported from Rusia. Our results suggest that rams used for reproduction in thei breed, were significantly different ($p < 0,001$), comparing with Transilvanian Merinos breed, only from wool length point of view, with 3,05 cm.

Key words: *Stavropol Merinos breed, wool, body weight.*

THE FEEDING INFLUENCE DURING THE PREGNANCY HOD OF EMBRIO RECEIVING GOATS ON KIDS IN MILK FEEDING PERIOD

MARGARETA CONFEDERAT, GH. NACU, P. HALGA, D. TANASE

USAMV, „Ion Ionescu de la Brad”

Complexitatea interacțiunilor dintre factorii de mediu și evoluția lor de lungă durată face dificilă delimitarea efectelor individuale asupra pierderilor embrionare.

in contextul variației energetice și proteice a hranei, lăsmul matern pune în mișcare mecanismele responsabile de păfinerea la un nivel constant a metabolismului energetic și ptt'ic, ca mijloc de a asigura supraviețuirea embrionilor.

Nivelul de alimentație aplicat în perioada pre- și post-transfer Wnfeaza cantitativ și calitativ producția de iezi.

(compararea unor niveluri de alimentație bogate sau sărace, inițiate în perioada pre-instalării gestației și menținerii pe perioada de gestație a arată că, pentru supraviețuirea Umilor, este esențial nivelul de alimentație aplicat în perioada înfășie.

Key words: *embryo transfer, embryo survival, nutritional under nutrition, feeding flushing conditions*

FAMILY EXPLOITATION FOR GOATS IN HALF INTENSIVE SYSTEM

MARCELA SIRBU, IOANA TANASESCU

USAMV, Cluj –Napoca

The acquirement of a milk production that can satisfy the more increasing needs of the consumers, bringing income to the farmers in the same time, is possible by breeding and exploitation of the goats in modern technological conditions. The work offers to the investors a way of execution for a family exploitation of 100 goats held in half intensive system. Together with the housing areas and the paddocks, the farm includes the areas necessary for the milking machines and the storage of the forage.

Key words: *milk production, family exploitation, goats*

A WAY OF REARING THE GOATS IN INTENSIVE SYSTEM

MARCELA SIRBU, IOANA TANASESCU

USAMV Cluj – Napoca

The work presents a way for goats housing in a farm of 800 •+- 1000 animals specialized in milk production. The goats are kept in groups as large as the number of places in (he milking places; the young males are kept in collective compartments while the stud males are in individual stalls. The kids up to 45 days are artificially milk fed and kept in collective pens. The farm has also exterior paddocks for shining and exercise, areas for storage the forage, an isolation area, a pharmacy and a necessity point.

Key words; *goats, intensive system, paddock*

L'EFFICIENCE ÉCONOMIQUE DE LA MUE FORCÉE DES POULES REPRODUCTRICES PAR LA MÉTHODE "ADAS"

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Dans l'aviculture mondiale les méthodes de mue sont fréquemment abordées, dans le but expérimental et productif. Les fermiers roumains perçoivent les méthodes conventionnelles avec réticence (ils prévoient mortalité élevée), et les méthodes alternatives avec scepticisme (ils ont des doutes sur leur efficacité économique).

La méthode alternative "ADAS" est très populaire dans l'Europe Occidentale, où fonctionne une législation pour le confort des animaux de ferme.

En établissant l'efficacité économique de cette méthode en conditions expérimentales, nous préparons les fermiers roumains pour une perspective pareille, en les protégeant contre la tentation de choisir la méthode de mue selon les économies des fourrages estimées, ou le moment de la mue selon le coût des fourrages.

Mots clés: *poules reproductrices, mue forcée, coûts des fourrages, dépenses de production, efficacité économique.*

CONTRIBUTION TO STUDY OF THE INFLUENCE OF DIASEPAL TO DECREASE OF THE MANAGEMENT STRESS AND IMPROVING OF THE PRODUCTION OF MEAT IN BROILER

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A total of 1600 Robro-70 day-old meat-type chicks divided into two groups (one experimental group Ei and a control group LJ) was used. For the experimental group was used three experimental variants (V1, V2 and V3) depending of dose of administer (lower - 0.0015 g/kg body weight; average - 0.003 g/kg body weight; higher - 0.0045 g/kg body weight). For every experimental variants was used five experimental subvariants (S1, S2, S3, S4 and S5) depending of the period of administer (1-7 and 50-56 days; 1-4 and 53-56 days; 53-56 days; 1-56 days; with 3 days before action of stressing factors). The meat-type chicks raised in Romanian batteries of BP-4 type until their 56 days of life. The sedative effect of Diasepam in the experimental group, resulted into the superiority of the main productive parameters (average body weight, flock losses, economic efficiency and so on) as compared to the control group.

Key words: *stressing factors, tranquilizing substances, meat, broiler*

ECONOMICAL ASPECTS WHICH MUST HAVE BEEN TAKEN IN CONSIDERATION IN THE EXPLOITATION AND ACHIEVEMENT PROCESS OF THE COWS MILKING INSTALLATION

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The paper presents an analysis of the milking installation in the farms with a small number of cows, shows the respecting of the main parameters as: the vacuum's force at 47-50 kPa, the most propitious frequency of the throbs at 55-56 throbs / minute, the reduction of the milking time by using the most propitious frequency, time and workers economy in the milking process for the large farms and the achievement changeable machines mechanism for the milking installation.

Key words: *milking installation, milking time*

THE STUDY OF THE CONCENTRATION DEGREE ON THE BASIS OF THE ECARTE BETWEEN THE MEDIAL AND THE MEDIAN

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In this work we are going to study the concentration degree of the data obtained from 2000 families concerning the number of fowls raised in the individual using the concept of medial and median.

Key words: *fowls, medial, median*

SOME ASPECTS ABOUT USE OF PRODUCTIONS FUNCTIONS N-DIMENSIONAL IN ZOOTECHNY

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This article present a few theoretical aspects about use of productions functions n-dimensional, and even an example for practical application in zootechny.

Key words: *productions functions*

THE DEPENDENCE STUDY BETWEEN TWO CHARACTERS OF THE SHEEP BELONGING TO POLWARTH RACE USING THE CONTINGENCY COEFFICIENT

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In this work we are giving to study wether characters, the diameter of the woolen fibre and the individual washed woolen product, are or aren't dependent knowing the fact that they are uncorrelated ($p=0,01$) using the contingency coefficient.

Key words: *woollen, contingency coefficient*

RESEARCHES CONCERNING THE IMPROVEMENT OF EXTRACTION METHODS FOR FAT CONTENT FROM ANIMAL TISSUE

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In lucrarea defata sunt prezentate patru metode de extracție a grasimilor din tesut animal. Cu acest scop, a fost utilizat (esut muscular provenit de lapui de came, sacrificati la vdrsta de 56 de zile. Extractia s-a realizat utiliznd patru sisteme de extractie: eterul de petrol ca martor, precum si alte trei amestecuri de extracpe cu polaritati diferite, cloroform - metanol - apa (2 : 2 : 1, v/v), dicloretan - etanol (!: 1, v/v) si cloroform - butanol (1:1, v/v). Cel mai eficeint amestec de extracp s-a dovedit a fi eel format din cloroform - metanol - apa (2 :2:1, v/v).

Key words: *fat, mixture of solvent, extraction*

QUANTITY AND QUALITY VALUES OF FUR PRODUCTION ON NUTRIA

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*The studies undertaken approached some less clarified aspects of nutria furs in the specialized literature. If at the sacrificing of the animal, a raw nutria fur weighs 546,0 g it loses through the drying process 60% out of its **weight**, reaching a total weight of 215,8 g and an average surface of 1737,0 sq. cm. The quality of the fur production depends especially on the length and depth of fur. in comparison with the data presented in the specialized literature the results show that the corporal dimensions of the nutria population bred in Tg.-Mures are smaller but the quality of the furs is the same.*

Key words 'fur, population, and nutria.

THE PRODUCTION OF MEAT ON NUTRIA

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In the process of nutria breeding besides fur, meat is also obtained, which is less appreciated in our country. The efficiency at sacrificing (48%), the proportion of meat on the carcass (50,5%), the high level of protein (22%) of the nutria meat as well as the reduced fat content recommend it as dietetic meat for digestive diseases. Out of the analyses of the results obtained it also ensues that nutria is a species, which is proper including for meat production.

Key words: efficiency, sacrificing, carcass

VARIATION OF THE PH DEPENDING ON THE SPECIES, AGE, ANATOMIC REGION AND CONSERVATION TYPE

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The purpose of this research was to study in how much degree the meat pH is modified related to the species, age, anatomic region and type of conservation and the influence of pH on the technological quality of the meat.

Key words: pH, meat quality

THE STUDY OF THE FORMING SOAUCES OF OFFER AT THE BEEF PRODUCE IN THE MEHEDINTI COUNTRY

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For this study was used the basic methods of investigation – the analyze, the synthesis – and comparison in time and space using the thypical economic indicators. The paper present the grouping of count's localities dependening on the animals number bred at the 1000 inhabitants, the grouping of the localities according to the animal number per 100 ha, the grouping of the localities according to the flesh product achieved per inhabitant annually, the grouping of localities depending on the possibilities of insurance about consumption's needs at the animal products.

Key words: cows, economic indicators

THE STUDY OF THE FORMING SOAUCES OF OFFER AT THE MUTTON PRODUCE IN THE MEHEDINTI COUNTRY

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For this study was used the basic methods of investigation – the analyze, the synthesis – and comparison in time and space using the thypical economic indicators. The paper present the grouping of count's localities dependening on the animals number bred at the 1000 inhabitants, the grouping of the localities according to the animal number per 100 ha, the grouping of the localities according to the flesh product achieved per inhabitant annually, the grouping of localities depending on the possibilities of insurance about consumption's needs at the animal products.

Key words: sheeps, economic indicators

THE STUDY OF THE FORMING SOAUCES OF OFFER AT THE PORK PRODUCE IN THE MEHEDINTI COUNTRY

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For this study was used the basic methods of investigation – the analyze, the synthesis – and comparison in time and space using the thypical economic indicators. The paper present the grouping of count's localities dependening on the animals number bred at the 1000 inhabitants, the grouping of the localities according to the animal number per 100 ha, the grouping of the localities according to the flesh product achieved per inhabitant annually, the grouping of localities depending on the possibilities of insurance about consumption's needs at the animal products.

Key words: pigs, economic indicators

RESEARCH CONCERNING THE REPRODUCTION OF MINK CORRELATED WITH THE LEVEL OF SOME MEZOCLIMAT FACTORS BETWEEN 1992-1995

DORINA LUCIA DUMITRU

Statiunea de Cercetare si Productie pentru Animale de Blana Tg.-Mures

The researches were developed between 1992-1995 on the standard mink existing in the farm. This study aimed the exact determination of the technological phases influenced by the seasonal metabolism, in this way were determined the values of the temperature and humidity (I.T.U.) of comfort and real value for the main phases of the technological process at mink in the ecological conditions of Tg.-Mures. The calendaristic framing of the mating system, the pregnancy duration and whelping interval were correlated with the temperature and humidity (I.T.U.) and they revealed mink's seasonal metabolism.

Key words: mink, environmental factors, seasonal

GENETIC POLYMORPHISM OF MILK PROTEINS

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Genotyping k-casein and β -lactoglobulin in cattle has a very great practical and economical importance. This typing helps us to select the best animals for breeding. The cattle population analyzed for k-casein and β -lactoglobulin the genotype frequencies were of 0.154 for genotype AA, 0.769 for AB and 0.077 for BB. The BB genotype is associated with higher fat and casein content in milk. Unfortunately the frequency of this genotype is badly represented. The frequencies of genotypes for β -lactoglobulin were 0.250 for AA, 0.375 for AB and for BB 0.375, genotype with major interest.

Key words: genotyping, k-casein, β -lactoglobulin

EARLY GESTATION DIAGNOSIS AT COWS USING THE ULTRASOUND IMAGING SYSTEMS

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Early gestation diagnosis has been done by using portable ultrasound imaging system with linear array with 7.5 MHz resolution. We have studied 18 cows and heifers artificially inseminated in the course of 6 months. 21 days after insemination embryonic vesicle has 3-4 mm in diameter. At 40 days the diameter of anecogene area in uterine horns was 25 mm. Corpus luteus has had an ecogene and homogeneous structure with diameters 2.3x2.8 mm. The precision of positive diagnosis with ecography is 83.3% in interval between 21-30 days and 100% at 40 days.

Key words: gestation diagnosis, ultrasound.

NEW CRITERIA IN SELECTING OF PERMANENT DONORS

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Permanent donors were special chosen after rigorous criteria: adaptability in free stall conditions, positive answers in superovulation treatments and genotyping for k-cn and β -lg Permanent donors were superior then occasional donors. The number of embryos/collecting has increased 2.74 times and the number of good embryos/collecting increases 21.3%.

Key words: *donors, genotyping, hormones.*

NEW POSSIBILITIES IN BULLS TESTING AFTER DESCENDENTS

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In actual conditions m bulls testing is used very much space and biologic material Using identical monozygotic twin obtained through splitting each embryo in two parts or using sexed embryos split in two parts can pass these obstacles Through supeovulation every 50 days done and successive inseminations we can obtain in series identical twins with the same mother and diverse bulls. At this bulls the precision of testing after descendents will be very high.

Key words: *identical monozygotic twins, testing*

VISUALIZATION OF OVARIAN FOLLICLES GROWTH AT SUPEROVULATED COWS THROUGH ULTRASOUND TECHNOLOGY

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We have visualized the dynamic of ovarian follicle growth during the superovulation. We used ultrasound imaging system with linear array. Cows were superovulated beginning with the 10th day by using FSH (Foliotropin - Spofa). In the 12th day we have administrated 0.500 mg Cloprostenol. The diameter has been modified from 17-18 mm to 28-29 mm (during estrus). The number of small follicles (2-5 mm) increases after giving of Foliotropin and the number of middle follicles after giving Cloprostenol. Maxim diameter of follicles before the ovulation was 10-12 mm.

Key words: *superovulation, ultrasound imaging system*

ALCALINE PROTEASES ACTIVITY IN ORGANIC SOLVENTS

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The serine-proteinases (such as subtilisin type Alcalase and Savinase) maintain their proteolytic activity and stability in organic solvents with low water content (using casein as substrates). In the solvents we used (acetone, MeCN, ethyl alcohol, 1,4-dioxane), the enzymes were more or less active than in water.

Our results sustain the theory that enzymes maintain their active configuration and catalytic activity in aqueous-organic systems with different content of water. More than that, organic solvents may enhance enzyme activity and stability.

Key words: *activity, Alcalase, Savinase, organic solvents*

THE EFFECT OF BOVINE RECOMBINANT SOMATOTROPINE (rbGH) ON STANDARD MILK PRODUCTION (3,5% FAT AND 3% PROTEINE) AT COWS FEED WITH RATIONS AT DIFFERENT ENERGO-PROTEIC LEVEL

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In our work, five cows from Hlostein Fresian breed were treated with rbGH administered in dose of 500 mg/head at an interval of 14 days during a period of 120 days with purpose to record the modifications appeared after rbGH administration on protein and fat content and like consequence on standard milk production (with 3,5% fat and 3% proteine). In the first experimental period was recorded a standard milk production with 3,3% fat and 3% proteine by 5,6 kg and respectively 2,9 kg for experimental group. In the second experimental period, energy-proteic deficiency of ration made the production of standard milk difference between these two groups to decrease at all.

Key words: *dairy cows, recombinant bovine somatotropine (rbGH), standard milk production*

CARACTERIZAREA ADN – ULUI FAGULUI LAMBDA PRIN TEHNICA RFLP

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In this experiment we tried to characterise the viral genome of λ phage through RFLP technique which analyses the restriction fragment length polymorphism.

This technique emphasizes the differences or the genic similarities between individuals through visualisation at molecular level the number AND position of some restriction enzyme sites used for splitting the genomic DNA.

Key words: *lambda DNA, restriction enzymes, length polymorphism, gel electrophoresis.*

IDENTIFICATION AND VISUALIZATION OF THE ESTRO RECEPTOR LOCUS (ESR) THROUGH PCR TECHNIQUE

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The aim of this paper is to identify and characterize at the molecular level the gene from ESR locus which is responsible for the estrogen receptor synthesis from the membrane of ovofollicular cell in swine.

The specific DNA fragment for the ESR locus amplified through PCR technique and visualized in [IV] through electrophoresis in agarose gel.

Key words: *estrogen receptor gene, amplification, PCR technique*

SEPARATION AND IDENTIFICATION OF PLASMIDIAL DNA USING AGAROSE GEL ELECTROPHORESIS TECHNIQUE

T. VINTILA, MARIA MICHESCU, ANA MIC, DANIELA VINTILA, ELENA SASARMAN.

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The purpose of this paper was to identify the plasmidial DNA from Lactobacillus sp. (CMIT 1), Lactobacillus plantarum (CMIT 2) strain and to compare the plasmidial profile of them. The extracted plasmidial DNA was separated by agarose gel electrophoresis and visualised in U.V. with Ethidium Bromide (Et Br).

Key words: *lactobacillus strain, plasmidial DNA, extraction, plasmidial profile.*

MICROBIAN PRODUCT WITH ANTAGONIST EFFECT FOR SOME PHYTOPATHOGENIC FUNGI

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Yearly the diseases brought about by the phytopathogenic fungi are causing important damage in plants crops: vegetables, fruits, cereals, etc. To control we have used microbial antagonists obtained with microorganisms of genera Bacillus and Trichoderma. The obtained bioproducts were used successfully in agriculture in vegetables cultures like tomatoes, peppers, cucumbers, eggplants, etc. The effect of these microbial antagonists was studied against some species of Verticillium, Cladosporium, Fusarium, Rhizoctonia, etc. By a Plants Protection Research Institute. The microbial antagonists inhibited with 30 - 80% the development of these pathogenic fungi.

Key words : *pathogenic fungi, antagonists effect, microbial product.*

ASSESSMENT OF THE STABILITY IN TIME OF AN GENETIC TRANSFORMED MICROORGANISM STRAIN

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In this paper we try to determine the stability in time of an genetic transformed Bacillus subtilis (Bacillus subtilis Amy⁺) strain from iondustrial microorganism collection of USAMVB Timisoara, which was obtained in 1998 through α -amilase gene insertion.

Key words: *time stability, genetic transformation, α -amilase gene, Bacillus subtilis strain*

OBTAINIG SOME MARKER STRAIN OF E. COLI BY GENETIC TRANSFORMATION WITH PLASMIDIAL PGLO SISTEM

T.VINTILA, MARIA MICHESCU, ANA MIC, DANIELA VINTILA, ELENA SASARMAN

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The aim of this paper is to obtain a laboratory strain marker by genetic transformation induced to E-coli K-12 microorganism, HB 101 strain with p GLO plasmidial system. p GLO plasmid carries a gene encode for Green Fluorescent Protein (GFP) isolated from the Bioluminescent Jellyfish, Aequorea victoria, incorporated in an arabinose promoter and the gene which confer ampicilin resistance (Amp^r).

Key words: *genetic transformation, gene expresion, fluorescent protein, bioluminescent jellyfish.*

THE EFFECT OF THE REMEDY BIO R-SI ON THE TRYPSINE CONTENT IN SANGUINE SERUM FROM PIGLETS

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This study has realized on four samples of piglets during weaning and afterward in piglets creche under large-scale exploitation conditions. To the samples piglets it has been administrated the preparation Bio R-Sl, of algal origin, three times, 0,5,1.0 and 1.5 ml/head.

A positive intervention is established for this remedy on pancreas functions as well as well as for the whole organism.

Key words: *remedy BioR-Sl, trypsine, piglets, pancreas functions.*

THE CELLULAR DEDIFFERENTIATION AT THE COMMON BEET (BETA VULGARIS L.) -ULTRASTRUCTURAL ASPECTS-

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The cellular dedifferentiation has been made through the use of the cambium in the petiole and the inflorescence apices in the De Greef and Jacobs (1985) culture medium supplemented with hormones. The dedifferentiation induction is dependent on the degree of cellular differentiation of the tissue which will undergo hormonal treatment. For the initiation of an organogenous callus at the common beet it is necessary to supplement the medium base with auxines (IAA and 2,4-D acid) and with benzylaminopurine. The hormones operate at ultrastructural level, producing some modifications at cytoplasmic inclusions, the level of the plasmalemma, of the organelles (plastids and mitochondria's) and of the.

Key words: *auxines, callus, dedifferentiation, organelles.*

THE CELLULAR DIFFERENTIATION AT THE COMMON BEET (BETA VULGARIS L.) -ULTRASTRUCTURAL ASPECTS-

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The cellular differentiation at the common beet has been made through the supplementation of the De Geef and Jacobs (1985) culture medium with BAP (0.5 mg/l). Only the apices of the inflorescences are able to induce an organogenous callus at all the diploid and tetraploid genotypes. During the in vitro development, the caulines have presented normal growth and no anomalies have been signaled. The rhizogenesis is accomplished through the elimination of BAP and the supplementing of the culture medium with IAA (0,5 mg/l). Ultrastructurally the hormones induce modifications at the level of plasmalemma, of the organelles (plastids and mitochondria's) and the stimulation of their metabolic activity towards the cellular differentiation.

Key words: *auxines, callus, differentiation, organelles.*

THE EFFECT OF BOVINE RECOMBINANT SOMATOTROPINE (RBGH) ON PHYSIC MILK PRODUCTION AT COWS FEED WITH RATIONS AT DIFFERENT ENERGO-PROTEIC LEVEL

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*** Faculty of Animal Sciences and Biotechnologies, Timisoara, Romania*

In our work, five cows from Hlostein Fresian breed were treated with rbGH administrated in dose of 500 mg/head at an interval of 14 days during a period by 120 days with purpose to evedentiated of his effects on phisic milk production. Exogenous administration of rbGH had as result a different production beetwen control and experimental group by 4.2 kg, in the case of administration of a ratio with 14,55 NU and 2432 g DP. The production diference beetwen groups descrease at 2,4 kg in the second experimental period when through ratio we have 14,24 NU and 1376 DP, and in the third experimental period the difference after the 7 days treatment reappeared.

Key words: *dairy cows, recombinant bovine somatotropine (rbGH), phisic milk production*

AMILOLYTIC ENZYMES IN THE STARCH HYDROLYSIS

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*The kinetic parameters of Zulkovsky starch hydrolysis with *A. oryzae* α -amylase and *A. niger* glucoamylase were determined. These enzymes can be used in the transformation of starch to fermentable sugars with good results.*

Key words: *kinetic parameters, α -amylase, glucoamylase, *Aspergillus oryzae*, *Aspergillus niger**