## CUTANEOUS MUCI NOSIS AND MASTOCYTOSIS IN A SHAR-PEI

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Key words: mucinosis, mastocytosis, dog

## SUMMARY

A 9-year-old shar-pei was presented because of a recurrent dermatologic condition. Skin biopsies revealed an idiopathic (primary) cutaneous mucinosis that initially responded to corticosteroids. The condition reappeared 2 years later and subsequent biopsies revealed a mast cell tumor in some of the skin sites previously diagnosed with mucinosis.

# THE HEART RATE - PHYSIOLOGICAL MARKER IN ASSESSING THE WELFARE OF SPORT HORSES DURING TRAINING

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Key words: horses, training, welfare

#### SUMMARY

Research monitored the induced response of some physiological welfare indicators in sport horses during training. We assessed the stress intensity during training by measuring the variations of heart rate levels. The horses included in the study were grouped in: untrained (A1 n: 6) and trained (A2 n: 8).

Physiological responses differed between the two groups, even if the training programme they underwent was the same. The heart rate levels increased in untrained horses compared to the trained ones but we recorded an increase of their levels in the latter when repeating the exercises during the monitored period.

Horse training may be regarded as stressful under certain circumstances thus leading to a depreciation of their welfare depending on the exercises taken, training intensity and animals' physical condition.

# BODY CONDITION SCORING WITH ROMANIAN BLACK PIE DAIRY COW

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Key words: body condition scoring, dairy cattle, energy balance

### SUMMARY

Body condition scores provide an indication of the energy status of dairy cattle. Sudden changes in body condition scores allow to detect health problems in the herd.

Essentially, body condition scoring provides an objective indication of the amount of fat cover on a dairy cow. The body condition scores of cows presented an significant augmentation (P<0,01) at  $t_5$  (140<sup>th</sup> day of study) compared to  $t_0$  (first day of study). 7 cows of 35 (20%) presented a clinical mastitis but was not observed significant repercussions over the body condition score. The peak of lactation was not obvious that in 8 cows of 35 (23%), but the statistic test showed not an association between the body condition score and the dairy production. Thin cows in a negative energy balance are unable to perform at maximum capacity in the herd. The improvement in nutritional status should improve milk production of the cow as well as health performance of the animals.

# PROGRAMS AND METHODS USED FOR FELINE RETROVIROSIS SURVEILLANCE IN ROMANIA

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Key words: Feline leukemia virus, Feline immunodeficiency virus, surveillance, epidemiology, diagnostic SUMMARY

The goal of this paper is to implementing the concepts of programs and methods used in surveillance and diagnostic of Feline leukemia virus and Feline immunodeficiency virus in all Romanian areas. In diagnostic of FeLV and/or FIV infections the most used methods are the immunological methods, with special interest for in-clinical test: immunomigration test, rapid immunoenzymatic test, and sometimes IFA. The Veterinary Clinic Laboratory should be implemented almost two diagnostic tests for FeLV. For complementarities both tests need to have high values of sensibility and specificity, different principles of work, and preferably to search different types of antigens (e.g. ELISA and IFA). For FIV control at this moment it's used only rapid tests (immunomigration test, rapid immunoenzymatic test).

# ASPECTS REGARDING THE MORPHOLOGY OF THE NASAL CAVITIES IN OSTRICH (STRUTHIO CAMELUS)

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Key words: nasal cavities, ostrich, nasal conchae

SUMMARY

Dissection was made on 6 ostrich heads, from different age groups, which have been previously preserved in formalin 10%. Let followed in the main the nasal cavities then it was described the peculiarity of each nasal concha. It was studied the manner of making of the ophthalmic nerve and training branch of the trigeminal eye and acestreia it relationship with the eyeball.

# DIAGNOSIS OF MITRAL VALVULOPATHIES IN DOGS

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Key words: mitral valvulopathies, insufficiency, dog, echocardiography,

### SUMMARY

Mitral valvulopathies are often diagnosed in small breed dogs (Pekinese, Teckel, Chihuahua). Morphopathological lesions are of mixomatous type and evolve as a mitral insufficiency syndrome. In large breed dogs, mitral insufficiency represents the succession of changes of mitral ring geometry and evolves in the dilatative cardiomiopathy syndrome. Mitral stenosis is rarely diagnosed in animals, being very often the effect of congenital heart malformation.

There is a clinical and paraclinical diagnosis of mitral valvulopathies. The clinical diagnosis could be established using the auscultation: systolic murmur at heart appex, on the left side in the case of mitral insufficiency.

Ultrasonography is the method of choice in the diagnosis of mitral insufficiency. The characteristics of distrophic valvulopathies are: left ventricular and atrial enlargement, wall and septal hypertrophy, thickening of the mitral valve leaflets, elevated parameters of function and hyper dynamic wall and septal motion.

The diagnosis is completed by electrocardiography and Rx exam.

## HISTO- AND ULTRASTRUCTURAL STUDY CONCERNING THE GLANDULAR FORMATIONS OF THE PROVENTRICULAR WALL IN COTURNIX COTURNIX JAPONICA

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Key words: proventriculus, glands.

## SUMMARY

In this study we observed a series of ultrastructural aspects concerning the proventricular glands in the japanese quail (Coturnix coturnix japonica), approaching the particularities of their cells.

This work insists both on the structural details in the simple tubular gland of the proventriculus mucosa and on the compound tubular proventricular gland that can be found deep in the proventricular wall.

In the simple tubular glands a single type of cells that present numerous mucous granules towards the apical pole have been identified while in the compound tubular proventricular glands two types of cells were observed: some resembling to conical, parietal cells found in mammals and another type of large cells with abundant rough endoplasmic reticulum and polyribosomes.

# ACTUAL ASPECTS IN MIXOMATOSIS EVOLUTION

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Key words : mixomatosis, rabbit, epidemiology, morpho-clinical aspects

#### SUMMARY

Myxomatosis is usually spread by biting insects (fleas, mosquitoes) carrying the Myxoma virus, but sometimes, direct rabbit-torabbit spread can occur. This way was mainly seen in a French respiratory strain of the disease. Is well-known that the classic form of myxomatosis is evolving in non vaccinated rabbits or, if the disease occur in vaccinated rabbits, the disease is usually less severe. In the last eight years, myxomatosis in rabbits population from Bucharest and Ilfov county area show new morpho-clinical and epidemiological aspects of disease. In the last years, in pet rabbits the disease often progresses more slowly and death occurred in only 50-60 % of clinical cases.

# INACTIVATED VACCINE-APPROPRIATE FOR IBDV PROPHYLAXIS ON YOUNG REPLACING CHICKENS

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Key words: vaccine, ELISA, infectious bursal disease

## SUMMARY

The aim of present work was to demonstrate the opportunity of using inactivated vaccines in IBDV prophylaxis. The experiments were made using 7 groups of young replacing chickens (n=10). Three of these 7 groups were vaccinated using Gumboro Vaccine Nobilis 223 E, a live vaccine administrated at day 14 of life, trough oral via, in drinking water, and three other groups were vaccinated subcutaneous using an inactivated oil three valent vaccine against Newcastle disease, egg dropping syndrome, and IBDV. We also used a control group that remained unvaccinated. Serum antibodies titers values were determined using ELISA kit IDEXX Laboratories, Inc. Westbrook, ME, 04092 USA.

The results obtained had demonstrated that the inactivated vaccine produced a raise of antibodies titers and the means obtained at 7 and 14 days post vaccination were: 2699 and 3729 for a single dose administration, 3166 and 3871 for two doses respectively 3374 and 3994 for three doses. For the live vaccine, the mean values obtained were: 270 and 754 for a single dose administration, 976 and 607 for two doses respectively 1456 and 542 for three doses.

We consider that it's appropriate to use inactivated vaccines for IBDV prophylaxis.

# COMPARATIVE RESEARCH REGARDING BOVINE EMBRYO SEXING USING THE POLYMERASE CHAIN REACTION (PCR) AND THE FLUORESCENT IN SITU HYBRIDIZATION (FISH)

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Key words: bovine, embryo, sexing, PCR, FISH

## SUMMARY

The purpose of this paper was to evaluate the results obtained for bovine embryo sexing using the polymerase chain reaction (PCR) and fluorescent *in situ* hybridization (FISH) and to compare them in order to decide which of the two methods is more accurate and yields better results while necessitating less effort. We took into consideration the pregnancy rate obtained after the transfer of biopsied embryos, the percentage of correctly sexed embryos evaluated at birth (when the predicted sex was compared with the actual sex of the newborn) as well as other characteristics related to the difficulty of the method, expenses and suitability to a minimally equipped laboratory. We concluded that the polymerase chain reaction is the most accurate and suitable method for sexing preimplantation bovine embryos, being in the same time easier to perform than the fluorescence in situ hybridization.

## HACCP PLAN DRAWING UP IN A FISH PROCESSING AND PRODUCTS UNIT

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Key words: fish, HACCP system, monitoring

### SUMMARY

The European regulation requires from all food processors in the food industry to document and implement a management system for food safety- HACCP (Hazard Analysis and Critical Control Points) (Savu C. 2004, Codex Alimentarius CAC/RPC1-1969 rev.4:2003).

The most laborious and important phase of the implementation of HACCP system is the drawing up of the HACCP plan (Carmen Petcu 2006, SR EN ISO 22000:2005).

In a fish processing unit for "Roes salad" and "Marinate fish" products we have found the most important threats (microbiological, physical and chemical) at all levels of production (storage, sorting, cleaning, washing, salting maturation, and delivery).

# ANATOMICAL OBSERVATIONS CONCERNING BLOOD SUPPLYING AND INNERVATING OF THYROID AND PARATHYROID IN CATTLE

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Key words: blood supplying, thyroid, parathyroid, cattle

### SUMMARY

Thyroid gland in cattle has two flattened bulbs and reunited through an isthmus. Blood supplying is realized by caudal thyroid artery (constantly emphasized in studied individuals) and cranial artery, the main thyroid blood vessel. Arteries also realize parathyroid blood supplying. Both arteries are collateral of common carotid artery. Capillary net is very rich and has many anastomosis. Veins are satellite to arteries being tributary to internal jugular vein.

Somatic innervating is made up of the vagus sensitive fillets and of the first ventral pairs of cervical rachidian nerves. Sympathetic innervating depends on orthosympathetic cephalic ganglion. A thyroidan branch detached from recurrent nerve was emphasized. Inervation realizes the stability, vaso-motility and glandular secretion.

# HISTOLOGICAL AND ELECTRON MICROSCOPY FEATURES IN LOCAL MUSCULAR BIOCOMPATIBILITY OF TI-NI ALLOYS COATED WITH OXIDES AND POLYMERS – ACUTE AND CHRONIC EXPERIMENTAL MODEL IN RABBIT

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Key words: Ti-Ni alloy, oxides, polymers, biocompatibility

### SUMMARY

9 healthy rabbits were used in this experiment. The Ti-Ni implants were 15/4/0.2 mm medium sized. 9 different types of implants were used for testing: Sol-gel 0 (Ti-Ni), Sol-gel 1 (Ti-Ni coated with TiO<sub>2</sub>), Sol-gel 2 (Ti-Ni coated with SiO<sub>2</sub>), Sol-gel 3 (Ti-Ni coated with ZrO<sub>2</sub>), P<sub>1</sub> (Ti-Ni coated with poly (DL-lactide-co-glycolide – DL(PLG), P<sub>3</sub> (Ti-Ni coated with DL-lactide – DL(PLA), P<sub>4</sub> (Ti-Ni coated first with TiO<sub>2</sub> and second with DL(PLG), P<sub>5</sub> (Ti-Ni coated first with ZrO2 and second with DL(PLG) and P<sub>6</sub> (Ti-Ni coated first with SiO<sub>2</sub> and second with DL(PLG). The rabbits were prepared for surgery, followed by two incisions of skin, subcutaneous connective tissue and fascia on the left and right side of lumbar region. Two UV sterile implants from the same type were introduced into the muscle without surgical incision. The surgical wounds were sutured, followed by postsurgical treatment. Body temperature was measured twice-a-day. Ten days later, the first implant was recovered together with skin, subcutaneous connective tissue and muscle, 1.5 cm around the implant. The second one was removed in the same manner 60 days from the first surgery. X-ray investigation was performed after the first surgery and before the second and the third one. The implants were removed from the samples, tissues being submitted for routine histopathology and electron microscopy. Acute and chronic local reactivity induced by the metallic implants generate no clinical signs revealed by a normal range variability of body temperature. Acute experiment exhibited variable degrees of local reactivity (granulation tissue and inflammation). The most powerful inflammatory reaction was encountered in implant coated with  $DL(PLG) - P_1$ , the lowest being recorded in  $DL(PLA) - P_3$ . A moderate short-term tolerance was recorded in implants coated with oxides and polymers, the implant coated with oxides being less tolerated. Local reactivity in chronic experiment was expressed by the collagen capsule around the implant. The highest long-term tolerance was recorded in Ti-Ni coated with TiO<sub>2</sub> - Sol-gel 1 and implant coated with SiO<sub>2</sub> and DL(PLG) - P<sub>6</sub>. The second group of tolerance in chronic experiment was represented by thick capsule, poorly populated with fibrocytes recorded in Ti-Ni - Sol-gel 0, Ti-Ni coated with SiO<sub>2</sub> - Sol-gel 2 and Ti-Ni coated with DL(PLG) - P<sub>1</sub>. The lowest long-term tolerance (thick capsule, highly populated with fibrocytes) was recorded in TiNi – DL(PLA) – P<sub>3</sub>, TiO<sub>2</sub> DL (PLG) - P<sub>4</sub> and TiNi ZrO<sub>2</sub> DL(PLG) – P<sub>5</sub>.

# THE IMMUNE STATUS EVALUATION OF CPV AND CDV WITH DOGS BY AGE GROUPS

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Key words: Viral enteropathies, dog, immune status, veterinary epidemiology, diagnosis

### SUMMARY

Considered rather an activity peculiar to quantitative research and evaluation mainly in the specialised laboratories, the immune status of certain infectious entities is at this point a parameter customarily used in the treatment of pets based on quick diagnosis tests. In this paper, we are going to present the results of immune investigations of etiologic agents of canine parvo-virus (CPV) and of the Carré disease (CDV). The 372 animals were investigated using the same tests of clinical examination and the same kits of immune diagnosis (ImmunoComb®, Biogal). 26 per cent of the 78 dogs aged under 3 months have tested as lacking immunity and 41 per cent immunised, the rest presenting different digestive or nervous clinical signs. 1.12 per cent out of the 89 dogs with ages between 3 to 6 months have tested as lacking immunity and 65 per cent immunised, the rest presenting different diges between 7 to 12 months have been immunised and 26 per cent have been diagnosed as CPV or/and CDV positive. 80 per cent out of the 91 dogs with ages between 2 to 6 years old have been immunised and 20 per cent have been diagnosed as CPV or/and CDV positive.

# THE THERAPEUTIC VALUE OF SOME BIOLOGICAL PRODUCTS USED IN THE CANINE DISTEMPER VIRUS VACCINATION – A CLINICAL STUDY

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Key words: Canine Distemper Virus, vaccination, therapy, biological products, infectious disease

### SUMMARY

The Carré disease constitutes itself as a disease of maximum importance for the Romanian pet clinics. Although the immunoprophilactic programmes are usually recommended by practicing veterinarians, there are still owners ignorant or resistant to the yearly immuno-profilactic programmes for dogs. For this reason, Romania maintains itself on the list of countries in which the therapy of the Carré disease is a standard activity. In this clinical study, there will be a succinct presentation of the vaccine-therapy per lots of dogs in different evolution stages of the Carré disease. Our results confirm the efficiency of the vaccine therapy restricted to individuals with a high risk of exposure or in the first evolution phases of the disease and the inefficiency of the vaccine therapy in the case of dogs at the nervous stage.

## SELENIUM LEVELS IN WHOLE BLOOD SERUM IN RUMINANTS LIVESTOCK IN TELEORMAN COUNTY

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Key words: selenium, whole blood serum, bovines, ovines

## SUMMARY

Our study had as an objective the dosage of selenium in whole blood serum of ruminants livestock as a means of assessment of the state of normality or the lack of the element. 340 samples sampled from ovines and bovines have been submitted to analysis from different parts of Teleorman county. The dosages were done using the fluorimetrical method with 2,3-diaminonaphthalene. All of the 140 samples collected from bovines resulted with values lower than 0.07 ppm. The 200 samples collected from ovines had values lower than 0.09 ppm. The obtained results pointed out a selenium deficiency in both species which were subjected to analysis.

## EXPERIMENTAL INFECTION WITH PANTROPIC CANINE CORONAVIRUS INDUCES PANLEUKOPENIA IN DOGS: A FLOW CYTOMETRIC STUDY

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Keywords: dog, coronavirus, panleukopenia, flow cytometry

#### SUMMARY

Canine coronavirosis are usually associated to enteric disease, although a fatal disease associated with highly pathogen strain of CCoV has been recently reported. Experimental infections with this strain reproduced fatal disease and showed a drop in leukocyte and lymphocyte counts within 1 week from infection. In the present report the shift of leukocyte subpopulations followed experimental infection with pantropic CCoV is evaluated by flow cytometry. On blood samples taken before infection and after 3, 5 and 7 days the percentages and absolute counts of cells positive to CD3, CD4, CD8, CD21 and CD14 were evaluated and compared with result of haematology, and evaluation of viraemia and fecal viral shedding. Results showed that, in spite of minimal viraemia, a rapid drop in all leukocyte subsets occurred, followed by a trend towards basal values at day 7. The same results were found for platelet and neutrophil counts, even if neutrophilia persisted, but not for erythocytes. The results suggest that CCoV directly induce apoptosis in all leukocyte subsets as well as in platelets with only minimal bone marrow depression. This could lead to immunosuppression that can predispose infected dogs to other associated diseases of viral or bacterial origin.

## WILDLIFE CHALENGES I: BROWN BEAR ANESTHESIA PROTOCOL

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Key words: Bear, intubation, anesthesia, protocol

## SUMMARY

This paper presents a protocol of inhalatory anesthesia used for a Brown Bear: *Medetomidine* + *zolazepam-tiletamine* for premedication (Domitor<sup>®</sup>- Zoletil <sup>®</sup>) followed by maintenance with isofluran .The bear was suffering of an old traumatic cataracta. In the past he was used and abused by his owner and than saved by the people from Zarnesti Bear Sanctuary. The plan was to release him in Zarnesti Bear Sanctuary after the intervention. This article will discuss the protocol used for inhalatory anesthesia of this bear, the risks and measures of safety to apply during this type of interventions.

# THERMOGRAPHICAL (TG-DTG) ANALYSE OF *EUPHORBIA* / β - CYCLODEXTRINE EXTRACT COMPLEXES

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Key words: *Euforbia cyparissias*, β-cyclodextrine, complexes, TG-DTG,

### SUMMARY

 $\beta$ -cyclodextrine ( $\beta$ -CD), corresponding to 0.5 mmols  $\beta$ -CD was weighted and dissolved in 4 ml distilled water at 50°C. *Euphorbia cyparissias (Cypress spurge)* raw concentrated extract ethanolic solution was added over the cyclodextrine solution stirring continuously for 0.5 hours, the whole solution being agitated for an additional 15 minutes. The obtained complex was then chilled for 4 hours and stored for 12 hours in refrigerator at 4°C. The formed suspension was filtered, washed with 1ml of 96% ethanole and dried.

For thermo-gravimetric (TG-DTG) analysis of the obtained complexes a TG 209 NETZSCH thermogravimeter was used in nitrogen athomsphere.

Temperature programme was between 20-550°C with 10°C/minute heating speed. Data acquisition was done with programmes TG *Netzsch-209-Acquisition Soft/ 2000* programme and respectively, data processing with *Netzsch Proteus-Thermal Analysis* <sup>ver.4.0/2000</sup>.

The pure  $\beta$ -ciclodextrine TG analysis denoted an 11.7% mass loss to 100°C, loss rate accrued to 76.3% in 100-500°C temperature intervals, with  $\beta$ -ciclodextrine's decomposition.

In the case of *Euphorbia* T5/ $\beta$ -CD (5%) raw extract complex, the mass loss was lower than 8.9%, until 225°C, being registered 2.8% mass loss, probably corresponding to the encapsulated bio-active's compounds decomplexing phase.

A similar behaviour was recorded for *Euphorbia* T10/ $\beta$ -CD (10%) raw complex, until 100°C, mass loss being of 8%, between 100 and 225 °C of 2.9%, with a total mass loss of ~78%.

In the case of *Euphorbia* T5/T10/ $\beta$ -CD concentrated extracts complex, the mass loss until 100°C was up to 11.9% and between 100 and 225°C was under 1%.

These facts can be translated as being a loss/degradation of initial complexed bioactive compounds and a good behaviour for Euphorbia  $\beta$ -CD extract complexes with gradual release, therapeutically adequate, of contained bio-principles. The results bring new data about pharmaco-chemical resourcefulness of *Euphorbia cyparissias*, the research being fully justified through the therapeutic multiple valences, but yet unclear known of this plant.

# OBSERVATIONS REGARDING THE INFLUENCE OF SOME FACTORS UPON THE MAIN BODY INDICATORS AND ENERGETIC ABILITY IN LIPITAN BREED

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Key words: Lipitan, body indicators,

## SUMMARY

The present researches were carried out during 2004 - 2008 and they proposed to underline the dynamics of the growth process of youngsters in Lipitan breed, reared in Sâmbăta de Jos.

These will allow the knowledge of some useful aspects regarding the youth rearing technology and also the Lipitan horse breeding in this unit, so this breed could become a good breeder for the local horse population.

# COMPARATIVE RESEARCHES REGARDING SOME QUALITATIVE FEATURE OF WOOL IN MEAT AND DAIRY POPULATIONS OF MERINOS DE PALAS

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Key-words: fiber diameter, fiber length, meat and diary population.

### SUMMARY

The present research has as aim to emphasize the possibilities of using two new sheep populations, a meat and a dairy one, for wool production. It is known the fact that nowadays this production has not a great importance but this character could not be neglected. It is very important to create meat and dairy populations by the local ones due to their adaptability. The present research underlines better results for the main qualitative features in a Palas Merino breed sheep.

# THE INFLUENCE OF L-CARNITINE ON THE EFFORT ADAPTATION CAPACITY OF THE ROMANIAN RACEHORSE

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Key words: stamina, L-carnitine, racehorse, hematological and biochemical indices

#### SUMMARY

Physiological stress (reproduction, intensive muscular effort) as well as pathological conditions (infections) increase the need for selenium and L-carnitine. The physical effort represent a motor solicitation, well defined in its coordinates. The organisms have certain abilities to effort resistance that depend on: individual, health condition, training or disfunctions of the organs and tissues involved in internal medium homeostasis.

There have been performed clinical and laboratory investigations on Romanian sport horses of 4-5 years old, trained every day for 40-50 minutes. The training consisted in step, gallop, trot for 3 days/week, 3 days included jumps and 1 day rest. The L-carnitine supplementation consisted in the introduction of 1671,90 mg carnitine/horse/day in the diet for 7 days consecuively, the recommended oral dose being of 4000 mg/day/horse.

Clinical and laboratory investigations were done at the beginning of the experiment, after 7 days from L-carnitine administration, before and after training. Clinical investigations concentrated on the evaluation of horses facies, command response reactions, body temperature, pulse and respiration. The hematological and biochemical investigations were done on blood samples taken by jugular vein punction. There have been evaluated direct erythrocyte indices and derived erythrocyte indices; leukocytaemia; biochemical parameters investigated were: proteinaemia, albuminaemia, globulinaemia, GOT, GPT, PAI enzymes, uremia, tocopherolemia, calcium, magnesium and phosphorus.

As a consequence of L-carnitine oral administration on the Romanian sport horses for 7 days there have been noticed increases of respiration frequency, pulse and body temperature as compared with the values obtained before training. Haematological indices revealed increases of: MCV, MCH and MCHC, erythraemia, hemoglobinaemia, hematocrit and leukocytaemia decreases. Biochemically there were recorded increases of: albumin, ratio A/G, GOT, GPT, ratio GOT/GPT, uremia and cholesterol, while proteinaemia, globulinaemia, tocopherolemia, calcium, magnesium and phosphorus decreases.

Investigations of behaviomal, functional, hematological and biochemical parameters of the Romanian racehorses with dietary Lcarnitine supplementation, in doses of 1671,90 mg /horse/day, for 7 days, revealed the importance of thoroughly and long term studies in order to justify the L-carnitine administration involument in the increase of the adaptation to effort ability and sport performances.

# THE HUȚUL HORSE AND THE LUCINA STUD FARM, SUCEAVA COUNTY, ROMANIA

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Key words: Lucina stud farm, huţul horse

SUMMARY

In Romania this race is grown in the mountainous sides of Rădăuți, in Câmpulung, in a smaller portion in Neamţ, Sighetul-Marmaţiei and Bistriţa-Năsăud. In ancient literature very few data about the Huţul horse can be found. Gassebner describes the development of the Huţul stud farm from Lucina in 1856-1897; the way of growth, the farm's effective, the mating stallion and those in the storehouse. In a study travel, Ch. Wendling visited the Huţul stud farm from Lucina, where he found the best selectionized material. The Huţul of oriental origin is 120-134 cm tall, has a straight or snub profile, expressive, big eyes, small, wide head, with small ears, plentiful tuft, short, large neck, barge croup, solid feet.

In 1869 there has been a change in the development plan of the whole stud farm at Rădăuți and thus, in 1872 the stud farm was completely closed down. The fact that the Huţul horse was indispensable for the people living in the mountainous regions, and, on the other hand, ascertaining that a lot of Huţul horses were sold in England, France and Hungary, determined the Ministry for Agriculture to refund the stud farm in 1877.

Once the First World War started, the whole stud farm at Rădăuți, and also the stud deposit were moved in Austria at Waldhof. The Huţul studs form the deposit were used as supmerhorses and partly for covering. After the end of the war the stud farm and some of the studs remained in Austria only until 1922, when it was closed down.

# HISTOCHEMICAL OBSERVATIONS OF INTESTINE SEGMENTS IN NUTRIA (MYOCASTOR COYPUS)

## A. DAMIAN, Antonia ODAGIU, C. LISOVSCHI

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Key words: intestine segments, nutria, histochemical observations

## SUMMARY

A number of 10 nutria (Myocastor coypus) cadavers from private farms of Cluj, sacrificed as a necessity, were studied. Besides the morphological observations were also performed some histochemical, and histoenzymological observations at duodenum, jejunum - ileum and colon level, in order to emphasize some indices concerning the cytoplasmatic basophily of enterocites, RNA presence, absorption process, and also secretion product of caliciform cells.

## BIOMETRICS RESEARCH ABOUT THE MUSTELLA VISSON TRUNK REGION

### A. DAMIAN, C. LISOVSCHI, G. PREDOI

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Key words: nursery mink, trunk region, biometrics research

### SUMMARY

Researches concerning the nursery mink trunk region has a big importance because it shelters some vital organs, and also for the fur assessment. This study had been taken anatomical and biometrics observations about the trunk region on a sample of 20 animals.

# KINEMATIC VARIABLES USED FOR DESCRIBING DIFFERENCES BETWEEN NORMAL DOGS AND DOGS WITH OSTEOCHONDRITIS DISSECANS OF THE STIFLE

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Key words: kinematic, videography, dog, osteochondritis.

### SUMMARY

In this study we tried to identify the locomotory changes induced on hind limb joints by osteochondritis dissecans (OCD) of the stifle in large common breed dogs. The 3D analysis system was a videographic one, based on reflecting markers. In dogs with surgical induced OCD subtle changes in flexion / extension angles dynamics were noticed. Also, the apparition of differences in velocity and angular acceleration variation curves were observed in dogs with OCD. Kinematic analysis results demonstrate that OCD at stifle is associated with changes in coxofemoral, femorotibial and tarsal joints motions.

# TOPICAL IVERMECTIN IN THE TREATMENT OF OTOACARIOSIS IN CATS TRATAMENTUL OTACARIOZEI LA PISICĂ CU IVERMECTINE TOPICE

**DEGI J., CRISTINA T. R.** Facultatea de Medicină Veterinară Timișoara

**Cuvinte cheie**: ivermectin, topical, otacarioză, pisică **Key works**: ivermectin, topical, otoacariosis, cats

## SUMMARY

The purpose of this clinical study was to observe the efficacy of the topical (pour-on) formulation of ivermectin in the treatment of Otodectes cynotis in naturally infested cats.

The extra-label formulation of ivermectin most commonly used in dogs and cats for the treatment of endoand ectoparasites is the injectable propylene glycol based product (Ivomec for cattle, sheep, and swine, Merial). More recently, a 0.5% alcohol-based topical ivermectin formulation has become available for the control of endo- and ectoparasites in cattle (Ivomec Pour-on for cattle, Merial).

# ANTIMICROBIAL SUSCEPTIBILITIES OF BACTERIAL ISOLATES FROM FELINE OTITIS EXTERNA

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Key works: bacterial isolates, antimicrobial susceptibilities, otitis externa, cats

## SUMMARY

Otitis externa has a multifactorial etiology, and bacteria play an important role in otic disease. Most of the bacteria incriminated in ear infections, including *Staphylococcus, Pseudomonas, Escherichia,* and *Proteus* species can be recovered on occasion, usually in small numbers from healthy ears. Clinical signs, such as an exudate in conjunction with the isolation of a particular bacterial species in large numbers, are of significance in most cases and may indicate the presence of a pathogen (2).

Many practitioners treat otitis externa on the basis of their clinical impressions and an examination of a stained smear of the exudate. If the smear shows only gram positive cocci, they may use a drug that is likely to be effective against staphylococci, streptococci, and enterococci. If the smear shows gram-negative rods in large numbers, they need to consider that the rods represent multi-drug resistant strains of *Pseudomonas aeruginosa*. However, if data on culture and sensitivity are collected appropriately and continuously, they can serve as a basis for empirical therapy.

# **RELEVANCE OF CYTOLOGICAL INVESTIGATION IN DIAGNOSIS OF HEPATOPATHIES IN ABATTOIR SLAUGHTERED SWINE AND RUMINANTS**

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Key words: hepatopathies, cytology, swine, ruminants

### SUMMARY

The aim of the present study is to emphasize hepatic cytological features in abattoir slaughtered swine and ruminants and also to assess the degree of morphological integrity of liver or hepatic lesions using cytological investigation.

60 pigs, 20 cows and 60 labs were subjected for this study. All animals were clinically healthy, the carcasses and organs being considered proper for human consumption. Liver imprints were submitted for cytological investigation (May Grünwald Giemsa stain). Cytological investigation aimed to assess morphological integrity of hepatocytes and identification of cell populations different from the original hepatic structure.

The liver of lambs exhibited the most obvious and serious cytological abnormalities, being followed by swine (moderate features) and bovine (discrete features). Hepatocytes morphology was slightly affected in all studied species. Inflammatory population was consistently represented by eosinophils and lymphocytes. The imprints of liver sampled from swine and lambs revealed trophozoits of *Toxoplasma gondii*.

# ASSESSMENT OF DENTAL PLAQUE AS A MAJOR RISK FACTOR FOR COMPANY CARNASIERES

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Key words: periodontale diseases, dental plaque

## SUMARRY

The assessment of the dental plaque allows identifying the animals with risk for development periodontal disease. The experiments were done on dog and cats. A chromatic method was applied to evidence the dental plaque (Ronddels Blue Kit). The method allows to differentiat the recent plaque from a mature plaque by different coloration. The evaluation of dental plaque was done by the plaque index value (Dumitriu, 2006). The investigated animals under an year rarely presented dental plaque but all the others showed it. The index dental plaque was between 1 and 3 and has depended on oral hygiene application.

# PARTICULARITIES OF THE ROLE OF THYROXINE IN THE DIGESTIVE EXOCRINE HOMEOSTASY OF THE HEN

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Key words: experimental hipothyroidism, experimental hyperthyroidism, metabolism of digestive tissues, pancreatic juice, hen

## SUMMARY

In this paper it was searched the effects of both experimental hypothyroidism and hyperthyroidism on the main gut tissue metabolism and on the flow and composition of pancreatic juice in hen. Experimental hypothyroidism was induced by thyrozol treatment and hyperthyroidism by thyroxin (Merk Euthyrox) administering. Pancreatic juice flow and composition were measured before and following 15 days of treatments. Simultaneously, the metabolic activities of the digestive intestinal mucosa and pancreatic tissues were searched by measuring the activity of some key metabolic enzymes (ALT, AST, GGT, LDH and AP). Both experimental hyperthyroidism and experimental hypothyroidism induced important modifications of the metabolism of the searched structures, including important modifications of the pancreatic juice flow and composition. Hyperthyroidism induced an increase of the pancreatic juice flow and protein content, amylase and trypsin activities and an increase of the ALT and AST activities, both in the digestive mucosal tissue and pancreatic tissue. Experimental hypothyroidism induced a decrease of the pancreatic juice flow and a decrease of protein content and trypsin activities in pancreatic juice, but not a decrease of amylase activity. As well as in hyperthyroidism, the experimental hypothyroidism induced an increase of the activity of transaminases in pancreatic and gut tissues, but the values were lower by comparing with the thyroxine treated group. The activities of GGT, LDH and AAP showed an increase in both, thyroxine and thyrozol treated groups.

# ASPECTS CONCERNING THE DIAGNOSIS OF MICROSPORUM RINGWORM BY DIRECT MICROSCOPIC EXAMINATION OF THE SAMPLES IN CATS

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Key words: diagnosis, direct, microscopic, cats.

## SUMMARY

Dermatophytosis is a medical term used to designate a fungal infection of the superficial layers of the skin, nails and hair. The etiological agents of the dermatophytosis in animals are the fungi of the *Trichophyton* and *Microsporum* genera. In felines, superficial mycosis is produced by *Microsporum canis, Microsporum gypseum, Trichophyton mentagrophytes* and, more rarely, by other genera (*M. persicolor, T. verrucosum, T. terrestre*). During the last years, there were no more cases of favus reported in felines. A proper therapy and the prevention of dermatophytosis are based on a correct diagnosis of the disease. There are multiple methods and techniques that may be used for making a diagnosis of such diseases: Clinical Examination, Fluorescence Test, Microscopical Examination of Pathological Samples, . Examination of Pathological Samples by Seeding on Selective Culture Media, Histopathologic Examination, Biological Testing, Biochemical Examination, Haematological Examination and Leucocytogram.

# THE IMPACT OF LEAD ACETATE ON SOME MARKERS OF EVELOPMENTAL TOXICITY IN FEMALE RATS (BODY WEIGHT, LITTER SIZE, LITTER WEIGHT UNTIL WEANING)

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Key words: female rats, lead, developmental toxicity

## SUMMARY

The study carried out on 32 white Wistar pregnant female rats divided in four groups, three experimental exposed to 50 ppb (maximum admitted level by Romanian Low 485/2002), 100 ppb, 150 ppb Pb and one C that received tape water not containing laed, pointed out the lead developmental toxicity: significant lower body weight at the end of pregnancy period comparative to C group and in inverse correlation, not significant, to exposure level; significant decrease of litter weight comparative to C group and in inverse correlation, significant, to exposure level. The significant decrease of litter weight comparative to C group and in inverse correlation, significant, to exposure level at birth, 7, 14, 21 days of life emphasized lead developmental toxicity too.

# THE DIAGNOSIS IN CEREBRAL PROIFERATIVE PROCESS IN DOGS USING MAGNETIC RESONANCE IMAGING

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Key words: MRI, cerebral process, dogs

## SUMARY

With a view to diagnose the cerebral proliferative processes at dogs, besides the clinical and radiological examination, it is used as the most modern imgistic technique, the image by magnetic resonance (IRM) (1, 2). This is an imagistic method for complex diagnosis, safe and non-invasive (3). In this study, there are described several pathological entities found at cerebral level present at 4 dogs with clinical signs of ataxy, astasia, walking in circle, opisthotonus, epileptic crisis and sight disorder.

# MAGNETIC RESONANCE IMAGING IN CANINE BONES TUMORAL PATHOLOGY

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Key words: IRM, tumorale pathology, dog.

## SUMMARY

In veterinary pathology tumors are very often and the general simtomatical picture of sick animals can very easy lead to diagnostical errors and confusions. The Imagistical resurch plays a very important part in the diagnostic process beeing esential in the preterapeutical fase for the early diagnostic of tumors and stage but also in the postterapeutical fase-determining the tumoral recidivates. The magnetical resonance, as it is not very old in clinical use, especially for veterinary use, it is, due to the high tisular contrast that gives the possibility of obtaining sections in all three dimansions, the most supperior tehnic of imagistic diagnosis in the case of tumors. Its target is to detect, describe and stage the lesions in the tumoral pathology.

# HELICOBACTER INDUCED GASTRITIS IN DOGS

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Key words: gastritis, helicobacter, endoscopy, gastroscopy

## SUMMARY

In this study we followed patients with repeated episodes of gastritis and after endoscopic (gastroscopic) exams the diagnosis of Helicobacter induced gastritis was made. After applying treatments borrowed from human medicine, the dogs did not relapse anymore, their general status improving considerably.

# THE USE OF LASER THERAPY FOR OSTEOPHYTOSIS IN DOGS

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Key words: laser therapy, osteophytosis, dogs

## SUMMARY

A study regarding the beneficial effects of Laser therapy on 10 dogs, of different breeds and ages, which have been diagnosed with osteophytosis using radiologic techniques, has been made. Laser therapy has been associated with neurotropic medication as well as generally administrated Anti-inflammatory drugs. In all cases improvements in the comfort and clinical state of the animals have been recorded.

# CORTICOTROPH-PRODUCING PITUITARY MACROADENOMA AND MALIGNANT PHEOCHROMOCYTOMA IN A DOG: CLINICO-PATHOLOGICAL FINDINGS AND FOLLOW-UP

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Key words: pituitary macroadenoma, pheochromocytoma, adrenal medulla, sympathetic paraganglia, catecholamines.

## SUMMARY

A 13-year-old Vizla dog, was referred because of a problem of polyuria and polydipsia (PU/PD), polyphagia, and weight loss. A complete diagnostic work-up allowed to diagnose a pituitary dependent hypercortisolism (PDH) due to an ACTH producing pituitary macroadenoma. A medical therapy was started and than a transsphenoidal hypophysectomy (debulking) was successfully performed. The dog survived in a good general condition for 13 months and than spontaneously died. The necropsy revealed no recurrence of the pituitary tumor and the presence of a malignant pheochromocytoma in the right adrenal gland. The combination of PDH and pheochromocytoma could be a coincidence, however, a possible connection between the two diseases can not be excluded.

# THE TOPOGRAPHY AND THE TRAIECT OF THE TEETH ROOTS IN THE ALVEOLI OF THE DOG

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Key words: teeth, alveolus, dog.

### SUMMARY

To avoid accidents in the endodontical treatments the veterinary odontology requires precious anatomical informations about the positions of the teeth in the alveoli.

The traiect of the dental roots in the upper and lower dental arches and their topographical relationship with the surrounded bones are different, depending of the type of the bone.

The study of female genital apparatus brings anatomical additional informations.

The references in the veterinary literature present only the descriptions of each type of tooth (Barone, 1984, Nickel et al. 1995, König, 2004) and in the humane medicine do not correspond because of dental arch conformations and type of mastication (Bratu et col., 1991, Peeyer, B. 1968).

# TOLTRAZURIL TREATMENT FOR THE CONTROL OF BROILER COCCIDIOSIS

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## SUMMARY

The AA. reported the effect of a therapeutic medication with toltrazuril on control of coccidiosis and broiler performance in absence of coccidiostat medicated feed. A total of 250.000 broilers of three different poultry farms were treated with toltrazuril at 7mg/BW daily in the drinking water at 19 and 20 days of age. Oocysts monitoring in the feces starting from the first week of age has been carried on at weekly intervals till the slaughter. The toltrazuril single treatment controlled coccidiosis and oocysts shedding that dropped at 35 days of age. Our results further indicate that in case of early coccidiosis challenge the treatment should be anticipated between 10-14 days in order to avoid early coccidiosis damages.

# ARCHAEOLOGICAL STUDIES ON THE BONE MATERIAL IN DWELLINGS OL-5, THE POROLISSUM ARCHAEOLOGICAL COMPLEX

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Key words: archaeological studies, bone pieces, dwellings OL-5, Porolissum

## SUMMARY

Over investigation aimed to perform a complete study of the bone pieces discovered at Porolissum, the OL-5 dwelling. Measurements and determinations of the bone pieces catalogued 833 – took to species differentiation: 482 horned cattle, 48 horse, 42 meat-eaters, 201 ovicaprinae, 53 pigs and 7 birds. Then, we differentiated each species according to age, sex and established the morphoprductive type of these species. The bone pieces were categorised as domestic litter, discovered in the OL-5 dwelling.

# TOPOGRAPHY OF THE RECEPTORS AREAS OF PERIOSTEUM BONES OF PELVIC AUTOPODIUM IN CATTLE

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Key words: periostal nervous system, encapsulate receptors, capsulate receptors, afferent innervations, receptors zones (arise).

## SUMMARY

The investigations were done on the periostal nervous system of the pelvic autopodium at bovines, collected in butchery from 8 animals clinically healthy. Through macro-microscopic and microscopic researches was found that the periosteum of bones pelvic autopodium presents a receiver for the termination in the form of free moustache, arborizations, balls or neuroplasmatic plates. The capsule forms of receptors are of the type of corpuscles Vater-Pacini, Golgi-Mazzoni and Krause formations. Encapsulate and capsulate nervous formations are grouped in receptors areas becoming an important source of afferent innervations that transmits the information related to the periosteum by higher nervous formations. The topography of receptors areas for each bone is specific.

# CARTILAGE HEALING IN THE DOGS: COMPARATIVE STUDY OF SURGICAL THERAPY WITH HYDROXYAPATITE-COLLAGEN SCAFFOLDS LOADED WITH CANINE AND HUMAN MESENCHYMAL STEM CELLS

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**Key words:** dog, mesenchymal stem cells, cartilage healing

#### SUMMARY

The study was made on healthy common breed dogs on which, under general anesthesia, cartilage defects were made. For treatment were used scaffolds with hydroxyapatite-collagen support loaded with chondroblasts obtained by canine or human mesenchymal stem cells cultivation. Evaluation of the healing process was made by clinical exam, using x-Ray and by arthroscopy. Hydroxyapatite-collagen scaffolds loaded with chondroblasts obtained by cultivation from canine mesenchymal stem cells represent an efficient method for articular cartilage defect treatment. The data obtained by imagistic methods on group treated with chondroblasts derived from human mesenchymal stem cells revealed that these cells are improper to be used on dogs for articular defects treatment.

# INFLUENCE OF DENTAL IMPLANT MICROSTRUCTURE ON THE OSTEOINTEGRATION IN THE DOGS

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Key words: dental implants, microstructure, osteointegration

## SUMMARY

The purpose of this study was histological evaluation of dental implants osteointegration depend on surfaces microstructure osteoconduction and osteoinduction different features. The study was made on five different types of dental implants - cylinder thread implants, self-tapping screw implants, acid etched self-tapping screw implants, hydroxyapatite plasma sprayed self-tapping screw implant - inserted in the upper and lower jaws on common breed dogs.

## TISSUE REACTION AT THE INTERFACE OF LOADED DENTAL IMPLANTS IN DOGS

**C. IGNA, M. SABĂU, Monica ŞEREŞ** Faculty of Veterinary Medicine Timisoara,

Key words: tissue reaction, dental implants, metalo-ceramic crowns, dog

## SUMMARY

The purpose of this study was to evaluate the stability of metalo-ceramic crowns induced by tissue reaction at the interface of loaded dental implants in dogs. Dental crowns were fixed on five types of titanium alloy dental implants and their mobility was tested using Periotest<sup>®</sup>.

# THE INFLUENCE OF EQUILIBRATION TIME ON DOG SEMEN CRYOPRESERVATION

Violeta IGNA, Mihaela HANGANU, Camelia TULCAN, C. MIRCU, G. OTAVĂ, Renate KNOP, H. CERNESCU, V. ARDELEAN

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Key words: dog semen, equilibration, semen cryopreservation

## SUMMARY

Five sperm-rich fraction of the ejaculate from five dogs were collected, examined, extended with Triladyl Canine and cryopreserved. For equilibration stage six different times between 30 minute and five hours were used. The results of the present study indicates that 4 hour equilibration time is optimal for canine semen, extended in one step (direct extend with glycerol- containing extender) and cooled for an hour.

# **EVALUATION OF SOME DIAGNOSIS METHODS IN CRYPTOSPORIDIOSIS**

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Key words: efficacity, diagnosis methods, Cryptosporidium;

## SUMMARY

In this paper we evaluate the efficacity of some usual and immunological diagnosis methods of cryptosporidiosis. The samples, diarrheic and non-diarrheic, from 35 calves were examined for the presence of cryptosporidiosis by: direct faeces smear, Ziehl-Neelsen staining modified by Henriksen, rapid test for detecting C. parvum (BIO K 155 –Bio-X Diagnostics, Belgium), direct imunoflourescence and ELISA double-sandwich test (BIO K 070–Bio-X Diagnostics, Belgium). We concluded that all the five methods used allow the identification of *Cryptosporidium spp*. oocysts. Based on the results obtained, in case of a clinical infection indicated by the faeces aspect, it is recommended to use the direct smear method or Ziehl-Neelsen staining for a certain diagnosis. If there is any doubt about the diagnosis, it is indicated to use a method with high efficacy like direct imunoflourescence or ELISA. The ELISA method can diagnose asymptomatic cases with elimination of oocysts.

# APPLICATIONS OF MOLECULAR BIOLOGY IN VETERINARY PARASITOLOGY: ACTUALITIES, ADVANTAGES AND PROSPECTS

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Key words: molecular biology, PCR-based methods, parasitology, parasitic disease

## SUMMARY

Molecular biology techniques are increasingly used in almost all areas of research interest, and are having a substantial impact both in fundamental (systematics, epidemiology, ecology, and population genetics) and applied (diagnosis, and control) fields of veterinary parasitology.

In this paper we briefly discusses some of the usefulness of molecular techniques, especially of the PCR-based procedures, with emphasis on tools used for molecular identification of parasitic species, as well as for improving diagnosis and control of the parasitic diseases.

# HISTOPATHOLOGICAL ASPECTS IN SKIN AND GILL INFESTATION AT RAINBOW TROUT (ONCORHYNCHUS MYKISS) WITH ICHTHYOBODO NECATOR

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Keywords: Rainbow trout, *Ichthyobodo necator*, histopathology

## SUMMARY

Rainbow trout (Oncorhynchus mykiss), from intensive farm was detected with macroscopical external parasites on the skin. At the examination of the skin surface of the young trout, was observed the presence of an abundant mucus, the operculs wide open and the slow swimming.

Histological examination identified the parasite Ichthyobodo necator anchored on the surface of the skin and gills. At the gills, was observed the fusion of the secondary lameles and at the skin was observed a pavimentous pluristratified epithelium, with enlagerd mucous cells, oedema of the derma and the abdominal ribbed muscular tissue.

## HISTOLOGICAL RESEARCHES REGARDING TISULAR REACTION AFTER THE IMPLANT OF SOME POLIMERICS

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Key words: Polimerics, implant, histological researches.

### SUMMARY

The researches has shown the evolution of the tisular tissue in contact with polymeric materials with possible applications into the protetics and implants industry. Was used 4 rats batches and were performed comparative analyses achieving hypodermic implants. In vivo testing of the tisular response has demonstrated the appearance of a conjunctive capsule with variable dimensions which is correlated with the hypodermic tissues reactivity. To all of the polymers types, the inflammatory reactions was reduce and was observed only at the beginning of the experiment. The attenuation of this fact after a while of the exposing, indicate a good local tolerance of those implants, with small variations between diverse types.

# MOLECULAR BIOLOGY TECHNICS FOR IDENTIFICATION AND QUANTIFICATION OF SOYBEAN EVENT GTS 40-3-2 IN NRL FOR GMO IN IDAH

### Florentina LEAU, HANDAN COSTE, ŞT. NICOLAE, Irina OLARU, Iulia ZYBACZYNSKI, Ioana CONSTANTINESCU, Georgeta DIACONU, Mirela BOŞNEAG Institute for Diagnosis and Animal Health

Key words: genetically modified organism (GMO), soybean event GTS 40-3-2, PCR

### SUMMARY

A genetically modified organism (GMO) is an organism containing genetic material which has been produced outside of the organism's body or possessing genetic material which has been modified in a way that does not occur under natural conditions, neither by means of cross-breeding nor natural combination.

The soybean line GTS 40-3-2 (Roundup Ready soy) was developed to allow for the use of glyphosate, the active ingredient in the herbicide Roundup®, as a weed control option for soybean. This genetically engineered soybean variety contains a glyphosate tolerant form of the plant enzyme 5-enolpyruvylshikimate-3-phosphate synthase (EPSPS) isolated from the common soil bacterium, *Agrobacterium tumefaciens* strain CP4 (CP4 EPSPS). The glyphosate tolerance trait has since been transferred into more than one thousand commercial soybean varieties by traditional breeding techniques. The proposed use of genetically modified soybeans was the production of animal feed or human consumption (mostly oil, protein fractions, and dietary fibre).

# MYELOGRAPHY, EXAMINATION METHOD FOR LAMENESS DUE TO SPINAL CORD INJURIES IN DOG AND CAT

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Key words: myelography, spinal space, contrast medium

## SUMMARY

Myelography is a valuable method for the examination of spinal cord injuries due to trauma, disk prolaps or neoplasia in cat and dog that express motility or sensitivity disorders. The common practice uses the L4-L5, L5-L6 spaces for injecting the contrast medium into the subarachnoid space in lumbar area. The study reveals that currently in Ilioara Animal Hospital the use of L6-L7 or L7-S1 is common and the results are good, the access is easy and with few side effects using iohexol compounds as contrast medium.

# SOME OBSERVATION OF THE TISSUE REACTION IN DEEP OF TRANSPONDER'S IMPLANT IN FARM ANIMALS

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Key words: animals, microchip implant, tissue reactivity.

### SUMMARY

Pilot studies concerning the choosing of a possible microchip implant zone were accomplished in farm animals, by testing the reactivity and the capacity of the deep fibrous tissue to fix and include the transponder. In this study the development in the time of a specific reactivity of tissue it was investigated in swine and bovine, regarding also the glass cover integrity of the device. It was observed that The reactive response of the host tissue of connective fibrous fascia, and periostal type provide a good response for the foreign body encapsulation in the case of deep implant of transponder in farm animals. It was also note that after concluding the formation of the connective capsule which surround and isolate the foreign body, the eventual fragmentation of the glass cover and the presence of the glass chips in the case of *intra-vitam* accidentally broken transponder generates a new local fixation process at the innerside of the mature connective tissue.

# VASILE GHEȚIE – ROMANIAN PERFORMER IN THE INVESTIGATIVE SCIENCES OF FORENSIC (MEDICO-LEGAL) TYPE

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Key words: history, forensics, precursor personality, researches.

### SUMMARY

In a very particularly context of the progress in veterinary medicine, in parallel with the pregnant tendency of a human medicine orientate towards his social side and marked by the necessity of a polidisciplinar and international collaboration, take place the professional training of an erudite veterinary surgeon – the future great anatomist Professor Dr. Vasile Gheție.

During the years 1954-1977 a lot of scientific papers with famous signatures in the field of anthropology were published in synthesis in scientific journals of the time or in prestigious international Congresses, in base of scientific data offered by Professor Vasile Ghetie. Other the researches activity concerning the anthropology and veterinary paleopathology, accurate study of comparative anatomy, comparative ostheogenesis and species identification have successful complete his life activity in the field of forensic investigative sciences.

# OCULAR BIOMICROSCOPY – NORMAL ASPECTS OF THE CANINE ANTERIOR OCULAR SEGMENT

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Key words: biomicroscopic examination, conjunctiva, cornea, iris, lens

## SUMMARY

Biomicroscopia este una dintre cele mai uzuale și mai complexe metode de examen ocular. Prin biomicroscopie se pot aborda toate structurile oculare la o mărire suficientă pentru aprecierea aspectelor normale și patologice.

Biomicroscopia constă în examinarea pe principiul iluminării focale laterale puterea de mărire fiind de 40-100 de ori. Cu ajutorul biomicroscopiei se pot examina: conjunctiva bulbară și palpebrală, marginea liberă a pleoapelor, suprafața corneei și toate straturile acesteia, suprafața irisului, aspectul umorii apoase, suprafața și conținutul cristalinului, corpul vitros și fundul de ochi.

În patologia oculară veterinară cunoașterea aspectelor normale de biomicroscopie sunt importante în realizarea unui etalon de diagnostic pentru afecțiunile globului ocular.

# ESTABLISHING POLICIES & OBJECTIVES OF THE QUALITY MANAGEMENT SYSTEM IMPLEMENTED BY S.C. MEDEUS & CO PRODIMPEX S.R.L.

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Key-words: quality, policy, objectives, meat products

## SUMMARY

Nowadays, given the conditions of the dynamic economic environment, marked by deep and spectacular changes, the companies are continously trying to maintain their gained market quota and to break into new markets, in this case, the quality having a decisive role (SR EN ISO 22000:2005, 2005; Savu, 2004).

The highest management of SC Medeus & Co Prodimpex S.R.L., establishes the company policy regarding quality and quality objectives, promoting them to increase acknowledgement, motivation and implication of all employees.

Medeus&CO goal is to develop and deliver high quality products in the context of employees and consumers health protection, to satisfy the clients' requirements, as well as those of authorities and other interested parties and to continously improve the efficiency of Quality Management System. The policy regarding quality and food safety is coordinated with the general policy of MEDEUS&CO and provides the frame for establishing and analyzing the objectives and targets for the company's quality and food safety (SR EN ISO 9000:2001).

There are **strategic objectives** established (at company's level) and **processes objectives**, from which result **specific** objectives at department/relevant jobs level. The objectives are established <u>by phase</u>, on terms: short, medium/long. For each objective, the responsible departments establish actions, fulfillment methodology and the level of fulfillment methodology (Quality Manual, SC Medeus & CO Prodimpex S.R.L., 2008).

# MICROSCOPICAL CRITERIA OF EVALUATION OF HEPATOPATHIES AND MYOPATHIES DIAGNOSED IN ABATTOIR SLAUGHTERED RUMINANTS

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Key words: hepatopathies, myopathies, bovine, ovine

## SUMMARY

This present study considered light and electron microscopy investigations in liver and skeletal muscle sampled from abattoir slaughtered bovine and ovine. Clinically healthy animals were examined before and after slaughtering, according to standardized veterinary method. Gross investigation was followed by sampling for: histological investigation of liver and skeletal muscle, transmission electron microscopy (TEM) of liver and serological investigation with ELISA for IgG anti - *Toxoplasma gondii* antibodies. Most of the grossly diagnosed hepatic lesions had a parasitary etiology in both studied species (hepatitis induced by *Dicrocelium lanceolatum*). Histopathologically, a score was applied for assessment of degree of liver injuries. 70% of ovine presented medium and severe hepatopathies, associated with acute and subacute inflammatory reaction. Bovine hepatic lesions were milder, 20% of cases exhibiting medium hepatopathies and 80% with minor hepatopathies or normally featured liver. Chronic evolution and focal disposal of lesions explain the reduced alteration of hepatic parenchyma.

Comparing the findings, the most obvious features concerning integrity of striated muscle fibers were recorded in ovine. 70% of cases presented a massive infection with *Sarcocystis spp.*, associated with focal necrosis of striated muscle fibers featuring hyaline degeneration. Anti - *T. gondii* antibodies had not been identified in bovine, 24% of ovine being positively diagnosed.

# RESEARCHES CONCERNING SOME HEAVY METALS CONCENTRATION IN FISH MUSCULATURE AND IN BIOTOPE: TARNAVA MARE RIVER

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Key words: fish, water, heavy metals, admitted limits

### SUMMARY

Heavy metals toxicity is a result of their binding with important intracellular enzymatic system or certain cell membrane component. Water quality has an important role in fish both qualitative and quantitative development and fish is an easily digestible aliment, with specific taste qualities, being used with good results in sick peoples' alimentation.

Researches have followed establishing the lead, cadmium and zinc concentration in both water and fish samples harvested from three sections of Tarnava - Mare River.

The level of heavy metals was determined by using atomic absorption spectrophotometry.

Results interpretation for water samples was made according to Ministry of Environment and Water Management Order no. 161/2006 and for fish samples according to National Sanitary Veterinary and Food Safety Agency Order no. 975/2005 for lead and cadmium residues and to Health Ministry Order no. 975/1998 for zinc.

The researches led to the following conclusions:

- Tarnava Mare water pH is adequate for fish life;

- Heavy metals concentrations in water samples were for lead below the admitted limit, for cadmium over the admitted limits by 1.2-1.8 times and for zinc by 1.6-3.08 times;

- In fish muscular tissue, lead recorded exceeding by 1.19-2.74 times, cadmium by 2.02-5.87 times and zinc has not recorded exciding in any of samples;

- the toxicity of studied heavy metals is caused by their cumulative effect and their binding with important intracellular enzymatic system or certain cell membrane components.

# RESEARCH REGARDING THE RELEVANCE OF COMPUTER TOMOGRAPHY IN THE DIAGNOSIS OF EPILEPSY

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**Key words:** dog, epilepsy, computer tomography

### SUMMARY

Computer tomography (CT) can be used for the diagnosis of cerebral neoplastic diseases, development anomalies, inflammatory, degenerative and vascular diseases. The examination of cerebral tissue by CT was done on 14 dogs with idiopathic epilepsy. The CT examination of the patients showed normal seriated immages of the cerebral parenchyma for 9 patients, internal hydrocephalus in 2 dogs and cerebral atrophy in other 2 patients. Also we report general cerebral atrophy and specifically the atrophy of the frontal lobes in a Mioritical Shepherd dog.

## RESEARCHES REGARDING THE GENETIC PARAMETERS COMPARISON OF SOME PRODUCTIVE CHARACTERS IN TWO LYING HEN LINES

Iuliana NEAGU, C. CULEA, Dana TAPALOAGA, Ileana PAUNESCU Faculty of Veterinary Medicine, Bucharest

Key words: variance, heritability, genotypical correlation, phenotypical correlation, environmental correlation.

#### SUMMARY

This study presents a double interest because it permits the establishing of the genetic causes of the correlations among characters and it also creates the possibility to establish the level of some character improving will provoke simultaneous or in time changing to some characters.

# RESEARCHES REGARDING SELECTION SUBSTITUTION POSSIBILITIES ON INDEPENDENT LEVEL BY INDIRECT SELECTION.

Iuliana NEAGU, C. CULEA, Dana TAPALOAGA, Ileana PAUNESCU

Faculty of Veterinary Medicine, Bucharest

Key words: genetic progress, multiple correlation, character

## SUMMARY

The independent levels method is preferred due to its economic efficiency, when the characters in the objective are not known at the same time. The advantage is the fact that it permits the elimination of the weak individuals when their performances are known, so the expenses are low.

Its applying has to establish for every character, independently one by another, a minimum performance which has to be done by a candidate for being retained. The retained ratio for every character has to be done having in view the relative importance of the characters, their heritability and the correlation between them.

The diminishing of the genetic progress for a selected character with other characters was focused as soon as the selection on many characters was supposed [1,2,3]. The first papers in the classical special literature mentioned that in the case of selection on

independent levels of n characters in the same generation, when the correlation among them is zero, for each only  $1/\sqrt{n}$  of the generation effect is obtained from selection only that character.

Some authors gave a more general solution taking into consideration the size of the correlation between characters, supplementary noting that if n>2, the simple correlation has to be replaced by a multiple correlation. So, there was not commented the annual selection effect by involving the modifications associated to the general interval.

Taking into consideration such effects the question is if the selection objective simplification by replacing the selection on independent levels with an indirect selection will be a better solution to maximize the genetic progress of such selected character with other n-1 characters.

# ASSESSMENT OF RIPENING INDUCED BACTERIOLOGICAL CHANGES IN DIFFERENT ROMANIAN TRADITIONAL CHEESES

Mara NICOLAESCU, C. SAVU Veterinary Medicine Faculty of Bucharest,

Key words: bacteriological quality, traditional cheeses, ripening.

### SUMMARY

Four types of raw milk traditional cheeses (brined cheese, kneaded cheese wrapped in natural membrane, kneaded cheese wrapped in fir bark and fermented, pressed, smoked cheese) were subjected to ripening and analyzed every 30 days for 3 months, for coliforms, *E.coli*, coagulase-positive staphylococci, *B.cereus, Salmonella spp.* and aerobic plate count (APC). After 3 months of ripening, the contamination levels of all 4 cheese types met the European processing hygiene and food safety standards in order. Further studies are necessary to investigate the effect of ripening on the safety of more types of traditional raw milk cheeses.

## SOME OBSERVATIONS ON THE VARIANTION OF GLYCAEMIA IN NORMAL AND PATHOLOGICAL CONDITIONS OF PIGLETS.

Gheorghe OŢELEA

## SUMMARY

A survey of 195 piglets was carried out with the aim of studying the variation of glycaemia in normal and pathological conditions. During the suckling period glycaemia fell at 21 days of age and rose again at weaning age. After weaning, glycaemia rose gradually to 115mg/100ml at 110 days of age.

In piglets showing clinical signs of hypoglycaemia, the average glycaemia was 28,1mg/100ml but it could be brought back to normal as soon 3 hours after intraperitoneal administration of glucose. In hypothrepsic piglets hypoglycaemic values were found only in the suckling period. In piglets with diarrhoeic syndrome the average value of glycaemia was 33,8mg/100ml, hence rather pronounced, while in bronchopneumonic piglets the drop in glycaemia was more moderate, the average value being 54,02mg/100ml.

# BIOTEHNOLOGIILE DE REPRODUCTIE SI BIODIVERSITATEA LA ANIMALELE DE FERMA

## M.Th.PARASCHIVESCU<sup>1</sup>, A.T.BOGDAN<sup>1</sup>, M.PARASCHIVESCU<sup>2</sup>, G.F.TOBA<sup>1</sup>, Judith IPATE<sup>1</sup>

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Keywords: biodiversity, animal population, breed improvement, artificial insemination, and embryo transfer.

## SUMMARY

In farming biodiversity is given by the number of populations (breeds and strains) inside of the genetic species. Populations are groups of animals with closed reproduction. Natural populations are the biological species which are support of genetic information species. Their closed reproduction is due to molecular and behavioural means. In farm animal population reproduction is closed by artificial means, the most important of them being the herd book for cattle, the stood book for horses and the flock book for sheep or pigs. Reproduction biotechnologies could act in speeding up creating new breeds and strains or transferring the existing ones in other locations, since they are increasing the fertility of males (AI) or females (MOET). On the other hand the cryogenic techniques preserving embryos developed by embryo transfer procedures are giving the possibility to preserve "ex situ" for a very long period of time and unchanged the genetic information of a whole population. Conserving deep frozen semen is a way to preserve the genes of a population as well. Somebody has to apply one or other reproduction biotechnologies related to the status of the population in case. In case of active population the biotechnologies producing genetic progress are applied. For the population in danger is recommended to preserve from the beginning embryos and semen. In case of vulnerable populations there is clever to choose the most suitable reproduction biotechnologies. More advanced biotechnologies as IVF, transgenic or cloning techniques could be convenient as well. In cattle using direct embryo transfer authors have obtained up to 58.33% from well conditioned receptors. Also in cattle the number of collected embryos has get up to 14, with one washing. The washing interval was reduced up to the next natural oestrus. Synchronizing oestrus in heifers has the same good results as in cows. At least in cattle biotechnologies of reproduction can help very much conservation of the biodiversity in farm animals. But in farm animals crossing is the hardest enemy of the biodiversity and in this respect artificial insemination can be used in a wrong way and become harmful.

## **TESTING OF SOME VACCINES AGAINST PIG PLEUROPNEUMONIA**

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Key words: pig pleuropneumonia, vaccines

## SUMMARY

In this paper are presented the results of our researches concerning immunoprophylactic effect of the same vaccine antiA.pleuropneumoniae,

The best ELISA titers were obtained, in order, with the attenuated live vaccine containing TM 501 strain with Diluvac forte and with the inactivated vaccine Pneumosuivac B (S.N. Pasteur Institute S.A. Bucharest), followed by the vaccine Porcilis®APP (Intervet) and inactivated autovaccine with alum as adjuvant.

# THE COMPARATIVE MORPHOLOGICAL ASPECTS OF THE FEMALE GENITAL APPARATUS IN EQUUS CABALLUS DOMESTICUS, EQUUS ASINUS DOMESTICUS ȘI EQUUS MULLUS

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Key words: equine, female genital apparatus.

## SUMMARY

The three species Equus caballus domesticus, Equus asinus and Equus mullus belong to the same equine family, and the differences between these animals consist on the size, weight and aptitudes, being used both, as a work animals and as pet animals.

The study of female genital apparatus brings anatomical additional informations.

# RISK IDENTIFICATION AND EVALUATION IN THE TEHNOLOGICAL PROCESS IN ORDER TO OBTAIN SOME FISH PRODUCTS

## **EXAMPLE 1** Carmen Daniela PETCU<sup>1</sup>, C. SAVU<sup>1</sup>, 1 - University of Agronomical Sciences and Veterinary Medicine Bucharest

Key-words: risk, fish products, identification risk

### SUMMARY

There are many risks associated to food products that can harm the human health. Each year, millions of people from the entire world suffer from some kind of "food poisoning". Uncontrollable use of chemical substances in agriculture, contamination of the environment, the use of unauthorised additives can contribute to the increasing of the food risks (Savu et. al., 2004).

The risk's analysis involves identifying certain measures in the operations which are critical to the safety of the food products (Codex Alimentarius CAC/RPC1-1969 rev.4:2003). Thus, it is necessary the implementation of the effective procedures of food products control; the monitoring of the control procedures; the periodic revision of the control procedures.

Identifying the risks in the obtaining process of some fish products is realized by the food safety team - HACCP, designated for each processing unit (Carmen Petcu, 2006). The risks are identified for all the stages of the technological process, and at their evaluation it is taken into consideration the obtaining technology of the analyzed product.

The documentation regarding the risks identification way, for each technological step it is realized under tabular form for two types of products: processed fish and marinated fish. This stage is necessary for the correct identification of control critical points and the adequate identification of all possible risks. For the success of an efficient analysis it is necessary to have the alimentary "science" knowledge. An inadequate risk analysis can lead to the elaboration of an inadequate plan of measures (SR EN ISO 22000:2005).

# CONSEQUENCES OF POTASSIUM DICHROMATE INTAKE ON SOME PARAMETERS OF ENZYMATIC PROFILE IN FEMALE RATS

## Snejana PETROVICI, Alexandra TRIF, Eugenia DUMITRESCU Veterinary Medicine Faculty Timisoara,

Key words: chromium VI, rats, AST, ALT, ALP

### SUMMARY

The study carried out on 32 white Wistar adult female rats, divided in three experimental (E)groups, exposed for three months to 25ppm Cr - LOAEL (E<sub>1</sub>), 50ppm Cr - 2 X LOAEL (E<sub>2</sub>), 75ppm Cr - 3 X LOAEL (E<sub>3</sub>) and one control (C) group that received tape water not containing chromium, pointed out: significant increase, over maximum physiological limit, of AST level comparative to control group and in direct correlation, significantly, to exposure level, significant increase, over physiological limits, of ALT level, comparative to control group and in direct correlation, significantly, to exposure level and significant increase, over physiological limits, of ALT level, comparative to control group and direct correlated, significantly, to exposure level.

## INTERRELATION BETWEEN THE EGGSHELL QUALITY AND THE LAYING HENS BREEDING SYSTEM

Monica PÂRVU<sup>1</sup>, Cristina Ioana ANDRONIE<sup>1</sup>, Elena POTECEA<sup>1</sup>, Corina Aurelia ZUGRAVU<sup>2</sup>, A.

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Keywords: eggshell quality, laying, breeding system

## SUMMARY

It was study the interrelation between the eggshell quality and the breeding system of Albo and Roso laying hens. The birds were breed in conventional cages, at the floor and the traditional system. The following parameters were determined: egg weight, eggs surface area, height and shape index, breaking strength, the percentage of eggshell and shell thickness. There were significant differences observed at hens maintained on the ground (floor and the traditional system) to their breaking strength ( $p \le 0.01$ ) and shell thickness ( $p \le 0.05$ )

# MATHEMATICAL MODELING OF THE PROCESS OF SYNTHESIS BODY OF MEAT CHICKENS

## Monica PÂRVU<sup>1</sup>, R. BURLACU<sup>2</sup>, Ioana ANDRONIE<sup>1</sup>, Corina Aurelia ZUGRAVU<sup>3</sup>, Violeta SIMION<sup>1</sup>, Carmen BERGHEȘ<sup>1</sup>

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Keywords: mathematical modelling, broiler, corporal synthesis

## SUMMARY

*In vivo* experiments on broilers were conducted in order to elaborate a mathematical model for body synthesis, the experimental data being processed with Gompertz time functions and linear functions. The experiment used 166, Ross 308 day-old chicks through an experimental period of 42 days. The broilers received diets according to the growth period (1 - 14, 15 - 28, 29 - 42 days). The dietary energy and nutrient supply for group 1 (control) were according to the recommendation of Ross Breeders. The birds had free access to the feed. Group 2 received 90% and group 3 received 80% of the amount of feed received by group 1; the dietary energy supply was 90% in group 4 and 80% in group 5, also related to group 1. Mathematical modelling was used to evaluate the evolution of the body chemical composition (water, protein and lipid content), starting from the protein content at hatching.

# ELECTRONIC THESES AND DISSERTATIONS IN THE CONTEXT OF THE OPEN ACCESS TO SCIENTIFIC INFORMATION

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\* University of Agricultural Sciences and Veterinary Medicine Bucharest

Key words: information resources, digital archiving, open access, electronic work editing

### SUMMARY

The functions of the University's Specialized Library are entailed by the necessities of the users'community to whom it belongs tostudents, professors, researchers – the documentary function here being essential. In this regard, the development of the collections is one of the most important activities in the University's Specialized Library, which a primordial mission: the orientation, the study, the bibliographic and documentary notification, inside the institution in higher education. It is recommended that the university to consider the electronic theses and dissertations (ETD) a requirement, this aspect will be a good opportunity for the library to offer a wide spectrum of issues to the users. ETD initiative can improve the access to scientific information resources, library can gain from associated services, can become better stocked digital information space in the university.

# THE IMPACT OF POTASSIUM DICHROMATE (CR VI) ON SOME MORPHOLOGICAL BIOMARKERS OF REPRODUCTIVE TOXICITY IN MALE RATS

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Faculty of Veterinary Medicine Timisoara

Key words: chromium VI, rat, reproductive toxicity, biomarkers

### SUMMARY

The study carried out on 28 adult white Wistar male rats, divided in four groups: three experimental (E) and one control (C). Rats from E group were given potassium dichromate (Cr VI) in drinking water (25, 50, 75 ppm Cr) for three months, pointed out: significant decrease of body weight at the end of exposure period comparative to initial body weight; decrease, with different degrees of significance, of testicular absolute and relative weight comparative to control group and in inverse correlation to exposure level; significantly for absolute and relative weight comparative to control group and in inverse correlation to exposure level; significantly for absolute weight and for relative weight comparative to control group and in inverse correlation to exposure level, significantly for absolute weight and for relative weight comparative to control group and in inverse correlation to exposure level, significantly for absolute weight and for relative weight comparative to control group and in inverse correlation to exposure level, significantly for absolute weight and for relative weight only when exposure level increased from minimum to maximum; significantly for absolute weight and for relative weight only when exposure level increased from minimum to maximum; decrease of absolute and relative weight of bulbo-urethral glands comparative to control group and in inverse correlation to exposure level, significantly only for absolute weight and at medium (50 ppm Cr) and highest (75 ppm Cr) exposure level for relative weight.

# OBSERVATIONS REGARDING THE TREATMENT OF COWS WITH SUBCLINICAL MAMITIS

**ROȘCA P., DRUGOCIU D., RUNCEANU L., HROMEI N., CIORNEI ȘT.** U.S.A.M.V. Iași, Veterinary Medicine Faculty

Key words : cow, subclinical mamitis, weaning, treatment

### SUMMARY

The researches have been effectuated on 2 lots, each one composed by 45 cows from the breed Romanian Speackled with Black in the weaning period.

The cows from the experimental lot have been submitted during the weaning period to a intramammary treatment with a suspension which contained as active substance Cloxacylin involved in a base with long action. In the interval of 25-30 days pos partum the R Mastitest has been effectuated to determine the incidence of subclinical mamitis in cows from the experimental lot comparatively with the cows from the control lot which did not benefit from an antiinfectious treatment in the repouse period.

# APPEARANCES CONCERNING THE MORPHOLOGY AND THE TOPOGRAPHY OF THE PANCREAS OF HEN (GALLUS DOMESTICUS)

Petronela ROŞU, G. PREDOI, C. BELU, I.DUMITRESCU, A.I. TOADER, Anca ŞEICARU, Carmen BIŢOIU, Florina DUMITRESCU Faculty of Veterinary Medicine Bucharest,

Key words: pancreas, hen, topography.

## SUMMARY

For the dissection 15 adult birds were used, in which the abdominal cavity was opened, following in particular the connections of the pancreas with other organs. After studying the topography channel excretion, the pancreas was harvested and measurements were made. All the possibilities that are different from the classical scheme had been noticed.

# MECHANICAL COMPRESSION TESTS ON REINFORCED RESTORATIVES OF MAXILLARY 4<sup>TH</sup> PREMOLARS ON DOGS

M. SABĂU<sup>1</sup>, C. IGNA<sup>1</sup>, L. RUSU<sup>2</sup>, Roxana DASCALU<sup>1</sup>, Monica ŞEREŞ<sup>1</sup> <sup>1</sup> Faculty of Veterinary Medicine Timişoara <sup>2</sup> Polytechnic University Timisoara

Key words: composite restoratives, reinforced, compression, dog

### SUMMARY

The purpose of this study was the comparative evaluation of the reinforced composite restoratives with and without endodontic dowels resistance to compression.

# BACTERIOLOGICAL CONTAMINATION ASSESSMENT OF SOME SEAFOOD PRODUCTS MARKETED IN BUCHAREST

C. SAVU<sup>1</sup>, Mara NICOLAESCU<sup>1</sup>, A. POPOVICI<sup>2</sup>, V. BUTEAN<sup>3</sup>
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2 - The Sanitary Veterinary and Food Safety Department of Bucharest;
3 - The Public Health Agency of Transport Ministery, Romania

Key words: bacteriological hazard, seafood, cooked, raw.

## SUMMARY

Over a 2 year period of time, 1311 samples of different seafood products were analyzed in terms of the degree of bacteriological pollution. Analysis for coliforms, *E.coli, Salmonella spp.*, coagulase-positive staphylococci, *Clostridium spp.*, *Listeria monocytogenes* and aerobic plate count (APC) were performed. The only pathogen associated with ready-to-eat products was *Listeria monocytogenes* with very low prevalence. Therefore, the overall bacteriological quality of analyzed samples was considered to be good and raw seafood may be considered safe if properly cooked.

# CLINICAL, BIOCHEMICAL AND HISTOPATOLOGICAL OBSERVATION IN CANINE LYMPHOMA

## I. SCURTU, G. GIURGIU, M. MIRCEAN, A.I. BABA, Mihaela NICULAE

University of Agricultural Science and Veterinary Medicine Cluj-Napoca

Key words: canine lymphoma, cancer in dog

### SUMMARY

Canine lymphoma is a malignant disease in dogs. Anamnesis reveals about weakness, weight loss and inapetence. Clinical signs reveal most often an individ in poor body condition, with exaggerate lymphadenopathy, with dyspnea (especially in submandibular lymphadenopathy) and in some cases with pelvic limb oedema (especially in popliteus lympadenopathy). The confirmation of canine lymphoma is reliable after lymph node aspirate or biopsy. In our study 100 % of the cases have presented inapetence, weight loss, generalized lymphadenopathy, 80 % dyspnea, weakness and 40 % pelvic limb oedema, 100 % the of cases have presented hypocalcemia, 60 % hyperglycemia and 40 % hypergamaglobulinemia and histological examination revealed predomination of blastic cells.

## DETECTION OF *ECHINOCOCCUS* COPROANTIGENS BY ENZYME-LINKED IMMUNOSORBENT ASSAY IN DOGS FROM CLUJ COUNTY

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Key words: Echinococcus spp., coproantigens, dogs, Cluj county

## SUMMARY

The implemention of modern techniques has improved the diagnosis of the *Echinococcus* species infection in definitive hosts (domestic and wild canids). One particularly promising approach is the detection of parasite–specific antigens in faeces (coproantigens) by the ELISA technique. This approach gained increasingly widespread use in the last years, and it is used in Romania too, for the identification of dogs infected with *Echinococcus* spp.

The objective of the present study was to determine the prevalence of intestinal *Echinococcus* spp. infection in dogs from Cluj county (44 localities), using the coproELISA technique. This is the first study performed in Cluj county concerning this method of diagnosis. 484 faeces from rural dogs were collected and examined by ELISA immunosorbent assay for coproantigens. 137 dogs (28%) were infected with *Echinococcus* spp. In order to establish the species (*Echinococcus granulosus* or *Echinococcus multilocularis*) the results should further be confirmed by PCR test, based on copro-DNA detection (future studies). Application of the ELISA coproantigen test in epidemiological and control programs for *Echinococcus* species in Romania is very promising and will lead to a better understanding of transmission and surveillance of this important zoonotic cestode.

## A CASE OF CANINE MALIGNANT HISTOCYTOSIS

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Key words: malignant histiocytosis, morphology, dog

## SUMMARY

Morphological investigations considered a patient from the canine species clinically suspected of a tumoral disease. Following the pathological investigation, the diagnosis was set as malignant histiocytosis. This process is included in lymphatic system tumors and is rarely diagnosed in our country. Clinically, general signs of illness became worse, death occurring 24 days after diagnosis. Grossly, the lesions were diverse, implicating most of the internal organs: lymphnodes, kidneys, heart, stomach, intestine, lungs, muscle and skin. External and internal lymphnodes were equally involved. The adenopathy was discrete without a generalisation but with multicentric expression. The liver and the spleen were not involved. All the lesions had a gross unique or multicentric aspect. Cytological features showed a proliferative histiocytic disease. Tumoral cell population was dominantly formed by large-sized cells, with ovoid or rounded, occasionally cleaved nuclei. Histologically, the structure of all sampled tissues was obviously altered, with interstitial infiltration of same cell population.

## THE REACTIVITY OF THE LYMPHOID TISSUE ASSOCIATED TO THE DIGESTIVE MUCOSA IN POULTRY IN SOME PATHOLOGICAL STATES

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Key words: Lymphoid tissue, mucosae, reactivity, chickens, ducks

### SUMMARY

Histological lesions of the lymphoid tissue associated to the digestive mucosa in chickens and ducklings were studied in different diseases: Gumboro disease, coccidiosis, ochratoxicosis in chickens, coccidiosis and aflatoxicosis in ducklings. In Gumboro disease, apoptosis and death of lymphoid tissue associated to the digestive mucosa was observed. In coccidiosis, both in chickens and ducklings, inflamatory and necrotic lesions of duodenal or caecal mucosa (depending on *Eimeria* species) were observed. Ochratoxicosis in chickens and aflatoxicosis in ducklings determined depletion of digestive mucosa lymphoid associated tissue and of fabricius bursae.

# THE MUSCLES OF THE PELVIC BASIN AND THE THIGH AT THE BROWN BEAR

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Key words: bear, anatomy, muscles

### SUMMARY

Brown bear is a pentadactil mammal with a support patrupedal but it can move from four predominantly to biped support in moving. Basin and thigh muscles are the muscles which have developed the body of the muscles and the tendons of insertion are short and powerful. So, thigh muscles basin development to determine the efficiency and stability of the hip joint and heel joint during lifting and movement in support biped. The muscles of the buttock, through the both reports insertions, action on the hip joint, in addition to a joint operating efficiently and abductor member, thus ensuring stability during the movement. At the same proportion and develops medially thigh muscles as a member of adductor.

# THE BONES OF THE HINDLEG AT THE BROWN BEAR

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Key words: bear, femur, shank, joint, bone

### SUMMARY

The ilium is particular through an iliac palette, triangular in form that has a wide gluteus fosse. The rounded caudal border of the ischium is covered with a fibro-cartilaginous tissue partial ossified, is ventro-medial oriented, therefore making an ischiatic arcade as "V" aspect with a dorsal opening. The femur of the brown bear present all the trochanters, the third trochanter being lowed under the femoral head level till the base of the femoral head, aspect that show the large possibility in rotation and abduction of the hindleg. At the tibia level, the jointing surface of each condyle is organized into two plans: the laterally that is convex in the both directions, and the axial plan that is antero-caudally convex and obliquely towards the femoral axis.

## THE DETECTION OF MERCURY RESIDUES FROM FISH AND FISHERY PRODUCTS SAMPLES

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Key words: mercury residues, fish, fishery products

### SUMMARY

Consumption of fish is considered to be an important element of a balanced human diet. Fatty fish is an important source of long chain n-3 polyunsaturated fatty acids. Other substantial natural sources of n-3 polyunsaturated fatty acids are human milk and marine algae. The aquatic environment, from which it is derived, however, is also the ultimate repository for a considerable range of natural and anthropogenic contaminants. An actual major problem for food safety is represented by the presence of toxic substances residues, which in some situation can affect the health of consumers. Fish and many crustaceans and mollusks are capable to concentrate the metals which pollute the water.

The purpose of this study is to relieve the presence or absence of mercury residues in fish and fishery products, to compare the founded values with maximum residues limits stipulated by the laws in force and to find some correlation regarding the possible effects on human homeostasis.

The method used was represented by the atomic absorption spectrophotometry.

The results obtained consequently to the analysis of an important number of fish, shellfish and roe samples, indicated the presence above the maximum limits admitted for mercury in 3 samples from 3 species: rapacious carp, barbel and northern pike.

All the other values which were obtained were situated under the maximum residue limit. The monitoring of mercury residues in fish and fishery products is very important, considering that chronic intoxications with mercury, according to data provided by the specialty literature, are mainly due to consumption of contaminated fish.

The usage of some high performance determination methods permitted the detection of mercury even in low concentrations, which don't represent a danger to human health, but can produce in time chronic intoxications.

# THE MONITORING OF CERTAIN HEAVY METALS RESIDUES FROM FISH SAMPLES

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Key words: heavy metals residues, fish, contamination

### SUMMARY

Fish is an important source of proteins of high biological value, n-3 polyunsaturated fatty acids and certain vitamins and minerals. There is evidence that fish consumption, especially fatty fish, benefits the cardiovascular system and may also benefit foetal development.

In order to detect heavy metals and nonmetals with toxic potential in fish, the method used was represented by the atomic absorption spectrophotometry.

The results obtained consequently to the analysis of fish samples indicated the presence of cadmium and lead residues above the maxim limits admitted in 8 samples for cadmium and 8 samples for lead.

Although there aren't established maximum admitted limits for copper and zinc in fish, we must consider that, in time, small quantities of these metals have synergic effects and large quantities have antagonistic effects.

# COMPARATIVE ASPECTS OF SOME BIOCHEMICAL PARAMETERS IN THE HONEYBEES' HAEMOLYMPH (A. M. CARPATHICA) IN RELATION TO SEASON

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Key words: Apis mellifera carpathica honeybees, haemolymph, biochemical parameters, active season

### SUMMARY

The biochemical analyses applied on honeybee hemolymph, could be used in monitoring the healthy state of honeybee colonies. The present studies represent preliminary researches, which aimed to investigate the variability of the main biochemical parameters in the hemolymph of the healthy honeybees in active and inactive season. The researches were carried out on honeybee samples collected from 5 honeybee colonies belonging to a breeding apiary of the Institute for Beekeeping Research and Development from Bucharest.

In order to perform the biochemical analyses, the honeybees samples, consisting in 50 individuals on sample (10 individuals/colony) were randomly collected and their haemolimph recolted,  $(300\mul/analized sample/determination)$ , at different time intervals, in active season (spring-summer) and the same in the inactive season (fall winter). Totally, there were collected 250 haemolymph samples in a 2 years interval and the following 20 biochemical parameters were analysed: GLU (mg/dl), HDL-c (mg/dl), ALP (UI/l), T-cho (mg/dl), Tprot (mg/dl), Alb. (g/dl), BUN (mg/dl), LDH (UI/l), CPK (UI/l), Mg (mg/dl), IP (mg/dl), GGT (UI/l), AST (UI/l), ALT (UI/l), Ca (mg/dl), Cre (mg/dl), Amy (UI/l), T–BIL (mg/dl), TG (mg/dl), UA (mg/dl). The test was carried out after the collection and processing of the samples using the SPOTCHEM EZ<sub>SP4430</sub>, equipment with dry kits, the slides technique, respectively. During the 2<sup>nd</sup> part of the active season, the values of most biochemical parameters decrease in different proportions, their levels being maintained also in the first part of the inactive seasons and in the 2<sup>nd</sup> part of the main studied biochemical parameters increase variabily, also in the first part of the active season. The values obtained for the main studied biochemical parameters in the haemolymph of the healthy honeybees collected from honeybee colonies kept in natural conditions show a highly variable evolution in the two consecutive years of experiments during the active and inactive season.

# **BIOFEEDBACK INVESTIGATIONS IN VETERINARY MEDICINE**

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Key words: biofeedback SCIO/QXCI; trivectorial analysis.

### SUMMARY

Starting from the germen physician Reinhold Voll who introduced resistance as the main parameter to measure electric activity of tissue, organs and systems, continuing with the germen physician F.A. Popp, who proved bio-photon emission by living cells and ending with the Nobel prize winner for biochemistry, Lehninger, who claims that the body coordinates it's chemical reactions by photon emissions, the foundation for quantic medicine and biofeedback investigations have been set.

According to this every cell, tissue and organ presents its own specific oscillations and develops this way a complex oscillating spectrum. The quality of the oscillations can be modifies by different degenerative disease (metabolic X syndrome), infections, parasitizes, intoxications, irradiations; in this cases this organs present themselves with no harmonious oscillations.

Through biofeedback technique one can determine if some substances or living pathogen agents, can, in some dismetabolic situations, have a negative effect on the body, if the no harmonious oscillations can be reduced or eliminated and the harmonious ones amplified to achieve the homeostasis of the organism.

## POTASSIUM DICHROMATE (CRVI) IMPACT ON FUNDAMENTAL MARKERS OF REPRODUCTIVE FUNCTIONALITY IN FEMALE RATS

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Key words: chromium VI, female rats, sexual cycle

## SUMMARY

The study carried out on 32 white Wistar adult female rats, divided in three experimental (E)groups, exposed for three months to 25ppm Cr – LOAEL (E<sub>1</sub>), 50ppm Cr – 2 X LOAEL (E<sub>2</sub>), 75ppm Cr – 3 X LOAEL (E<sub>3</sub>) and one control (C) group which received tape water not containing chromium pointed out: significant increase of sexual cycle duration comparative to control group and significant but not conclusive correlated to exposure level; modifications of sexual stages duration: significant decrease of sexual cycles percentage with proestrus, estrus and diestrus stages in physiological limits as duration comparative to control group and significant but not correlated and not conclusive with exposure level, appearance of sexual cycles with absent proestrus, estrus and diestrus, not conclusive, with different degrees of significance and not correlated to exposure level and significant linerase of sexual cycles with prolonged estrus and diestrus, comparative to C group and significantly but not conclusive and not correlated to exposure level.

# THE IMPACT OF ALUMINIUM SULPHATE ON SOME MARKERS OF DEVELOPMENTAL TOXICITY IN FEMALE RATS (BODY WEIGHT, LITTER SIZE, LITTER WEIGHT UNTIL WEANING)

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Key words: female rats, aluminium, developmental toxicity

#### SUMMARY

The study carried out on 32 white Wistar pregnant female rats divided in four groups, one control and three experimental exposed only tduring pregnancy to 200 ppb Al (exceptional admitted level by Romanian Low 485/2002), 400 ppb, 1000 ppb Al (levels found in drinking water for animals in areas surrounding aluminium industry) and on their offspring until weaning, emphasized aluminium negative impact on some markers of developmental toxicity: significant lower body weight at the end of pregnancy comparative to C group and in inverse, significant, correlation to exposure level; significant decrease of litter size comparative to C group and in inverse correlation, not conclusive as significance, to exposure level; significant lower litter weight comparative to C group and in inverse correlation to exposure level; significant lower litter weight comparative to C group and in inverse correlation to exposure level at 0, 7, 14 and 21 days of life.

## SEMIOLOGYCAL ASPECTS IN DOGS WITH NATURALLY INFECTION OF LARGE *BABESIA CANIS* FORMS

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Key words: Babesia canis, large forms, dog, naturally infection

### SUMMARY

This paper presents the results of retrospective study regarding clinical changes in dogs naturally infected with large form of *Babesia* in the southern part of our country. The diagnosis was confirmed by direct observation of large *Babesia* forms in stained blood smears. Based on the clinical signs the dogs were divided in two groups – uncomplicated (80.21%) and complicated (19.79%) forms. All dogs were treated with antibabesial drugs and the response to the therapy was good.

# PREVALENCE OF SOME PARASITES WITH ZOONOTIC POTENTIAL IN DOG FAECAL SAMPLES FROM TWO DIFFERENT AREAS OF BUCHAREST

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Key words: prevalence, zoonotic, dog, faecal

## SUMMARY

A study on the prevalence of intestinal parasites in dogs was carried out in two different areas of Bucharest. 192 faecal samples were collected between March and August 2008. Of the faecal samples 17.71% contained *Toxocara canis* eggs, 11.46% *Strongylus spp.* eggs, 6.77% *Trichuris vulpis* eggs and 4.17% *Isospora spp.* (4.17%). In two faeces samples (1.04%) we identified *Dipylidium caninum* proglottids. The results suggest that a risk of human infection by some parasites exists and promotion of health and prevention are needed.

## MAIN ARBOVIRUSES IDENTIFICATION THROUGH MOLECULAR BIOLOGY TECHNIQUES

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Key words: blue tongue virus, West Nile virus, diagnostic, PCR

## SUMMARY

Europe's actual epidemiological situation, with blue tongue virus and West Nile virus disemination on vast areas of the continent, severe and costly measures for prevention and control of the disease once it appears, together with the increase of bovines import from areas with potential infectious risk have rise the necesity of quickly establishing a protocol for surveillance and diagnostic of the disease. Given the particular way of horizontal transmission (through insects), such a protocol must rely on rapid, sensitive and exact laboratory tehniques.

# EVALUATION OF BOVINE ENZOOTIC LEUKEMIA VIRUS INFECTION THROUGH MOLECULAR BIOLOGY TECHNIQUES

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Key words: BLV, PCR, provirus identification

### SUMMARY

Identification of bovine enzootic leukemia virus through Nested PCR (nPCR) test allows, together with routine diagnostic techniques, establishing of infectious status at individual level, along with dynamic tracking of the process. In this way, molecular biology methods complete the bovine enzootic leukemia integrated diagnostic, with characterization of viral genome. This study was performed on a total number of 54 samples consisting in blood and different organs (spleen, lymph nodes, liver and lung) originated from 9 individuals found positive through OIE recommended techniques, agar gel immunodifusion (AGID) and ELISA.

# IMMUNE RESPONSE AGAINST NEWCASTLE DISEASE ON YOUNG REPLACING CHICKENS VACCINATED AGAINST IBDV

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Key words: antibodies, inhibiting-hemaglutination units, immunosuppression

### SUMMARY

The aim of the present work was to study the effect determined by the IBDV prophylactic vaccination on the immune response of the young replacing chickens vaccinated against Newcastle disease.

The experiments were made using 3 groups of young replacing chickens (n=10). The first group was vaccinated at day 14 of life, using an inactivated oil three valent vaccine against Newcastle disease, egg dropping syndrome, and IBDV with subcutaneous administration. The second group was vaccinated using Gumboro Vaccine Nobilis 223 E, a live vaccine administrated at day 14 of life, trough oral via, in drinking water. The third group was used as a control group and remained unvaccinated.

All three groups were vaccinated at first day of life against Newcastle disease using Newcastle vaccine Nobilis Clona 30, aerosol vaccine.

The assessment of the serum antibody titers after Newcastle disease vaccination was made using inhibiting-hemaglutination test. The results obtained had indicated that the live vaccines used in IBDV prophylaxis were more inhibiting against Newcastle antibodies comparative to the inactivated ones.

# THE PRESENCE OF ANTIBIOTIC RESIDUES IN SOME SAMPLES OF ROMANIAN HONEY

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Key words : honey, food safety, antibiotics

## SUMMARY

Honey is the oldest natural sweetener known. Recent researches bring to light different pathological circumstances in which honey has heeling effects. In the same time, honey raises problems of food safety, because of the possible contamination by different pollutants. As a result, consumers'health can be affected. We synthesized the possibilities to contaminate honey, the chemical substances involved and we searched some usual pollutants in honey samples from the South of Romania. The most frequent contamination was due to veterinary drugs and to antibiotics.

## PROTEIN QUALITY AND CONTENT IN MEAT PRODUCTS FROM ROMANIA (2007)

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Key words: proteins, collagen, cold-cuts, biological value

## SUMMARY

Cold cuts (meat products) are highly consumed products in the contemporary Romania. Unfortunately, the level of proteins in these products is often lower than suitable and, hence, their nutritional value is not as high as expected by the consumers. The use of low quality by-products rises the collagen content, but unfortunately not the biological value.