



**WORLD ASSOCIATION FOR BUIATRICS
WELT-GESELLSCHAFT FÜR BUIATRIK
SOCIÉTÉ MONDIALE DE BUIATRIE
ASOCIACIÓN MUNDIAL DE BUIATRIA**

www.buiatrics.com

Newsletter 4 – 2014



Dear Colleague,

On behalf of the World Association for Buiatrics we would like to wish you a merry Christmas and all the best for the coming year.

BONNES FETES ET BONNE ANNÉE.

FRÖHLICHE WEIHNACHTEN UND EIN GLÜCKLICHES NEUES JAHR

FELIZ NAVIDAD Y PRÔSPERO AÑO NUEVO.

We would like to encourage you to contribute to our newsletter.

Yours sincerely,

**Walter Baumgartner
president**

**Ottó Szenci
secretary general**

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Adult cows dying, catastrophic situation on a farm in Finland

This dairy farm has a new free stall in organic production, one milking robot, 60 dairy cows. Cattle were moved in 2 months ago. They are fed with TMR containing alfalfa, barley, turnip rape, + minerals and vitamins. Water comes from a new drilled well. Forage and water quality is visibly good.

Until now 18 cows have died, the first ones on December 3. Sick animals become apatic, have lowered body temp and bradycardia (40-60/min), no diarrhoea. Finally they are staggering and become recumbent. Rumen activity has been quite normal and muscular tonus in tongues and tails normal. In autopsy of 3 cows the only finding in 2 of them was local strong irritation of jejunal mucosa (but not hemorrhagic jejunitis). The third cow was void of any abnormal findings. Cows have not responded to NSAID and fluid therapy. Sick animals have been treated with benzylpenicillin, due to suspected clostridium infection. Feeding of dairy cows was changed to dry hey.

After one week feeding with this new diet some animals still become sick. Anthrax does not seem likely with these signs. Young stock is in another building and have been healthy.

We have suspects on some kind of toxin. Mycotoxins or eg *C. perfringens*. Some toxin causing bradycardia? Samples have been taken from blood, liver and forages and submitted to lab where they can do PCR to detect toxins of *C. perfringens*.

Any help is greatly appreciated.

Satu Pyörälä

Professor emerita

University of Helsinki, Faculty of Veterinary Medicine, Department of Production Animal Medicine

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Pictures from XXVIII WBC in Cairns



The three presidents! The next president of the WAB, Emile Bouchard; the president of the organizing committee of the XXVIII WBC in Cairns, Bob Rheinberger; the current president of the WAB, Walter Baumgartner.



Some executive committee members of the WAB at the end of the XXVIII WBC in Cairns



A short break between two sessions of the WBC in Cairns, just to recover the energy

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International Congresses and symposium

International Symposium

Global approach to control of diseases and improvement of productivity in dairy cattle through the recent advance in nutritional, metabolic, immunological and genetic studies

ANA Hotel Okayama, Okayama, Japan

February 13 -14, 2015

Second Announcement

We are pleased to inform you about the progress in the organization of the International Symposium “Global Approach to Control of Diseases and Improvement of Productivity in Dairy Cattle through the Recent Advance in Nutritional, Metabolic, Immunological and Genetic Studied” in Okayama, February 13 to 14, 2015. In addition to the eight invited lectures, 14 short papers from six countries will be presented in short communication sessions. The second announcement provides you with the finalized program including short communications. We are looking forward to seeing you in Okayama next February.

T. Nakao, Chair of the Organizing Committee

Organizing Committee

Toshihiko Nakao (Japanese Society of Farm Animal Veterinary Medicine) : Chairman

Shigeru Sato (Iwate University): Vice Chairman

Norio Yamagishi (Iwate University): Secretary

Hisashi Inokuma (Obihiro University of Veterinary Medicine and Agriculture)

Masashi Nagano (Hokkaido University)

Shin Oikawa (Rakuno Gakuen University)

Hiromichi Otsuka (Rakuno Gakuen University)

Motoshi Tajima (Rakuno Gakuen University)

Tomohito Hayashi (National Institute of Animal Health, NARO)

Shirou Kushibiki (NARO Institute of Livestock and Grassland Science)

Reiichirou Sato (Azabu University)

Hiroshi Katamoto (Miyazaki University)

Program

<Feb. 13, 2015>

13:00-13:10 Opening remarks T. Nakao (Japan)

Session I: Interrelationships among nutrition, metabolism, health, production and Reproduction

Chairpersons: L. Sordillo (USA), S. Oikawa (Japan)

13:10-14:05 Interaction of metabolic challenges and productivity

G. Opsomer (Belgium)

14:05-15:00 Factors contributing immunosuppression during periparturient period

K.L. Ingvarsen (Denmark)

15:00-15:20 **Coffee break**

Session II: Impact of metabolic status on immune function

Chairpersons: G. Opsomer (Belgium), T. Hayashi (Japan)

15:20-16:20 Impact of nutrition and oxidation stress on disease susceptibility in periparturient period
L. Sordillo (U.S.A.)

16:20-17:20 Effects of subacute ruminal acidosis on metabolism and immunity in cattle
S. Sato (Japan)

17:20-17:50 **Coffee break**

Short communication session I

Group 1: Chairpersons: J. Rehage (Germany), H. Inokuma (Japan)

17:50-18:02 Molecular mechanisms to control insulin sensitivity in adipose tissues of periparturient dairy cows
A. Kenez (Germany)

18:02-18:14 Trend to overcome the postpartum hormonal imbalance and oxidative stress in goat using *Trigonella foenum-graecum*
E. Ahmed (Japan/Egypt)

18:14-18:26 The effects of Chinese veterinary medicine preparation ChanFuKang on the endothelin and nitric oxide of postpartum dairy cows with Qi-deficiency and blood stasis
Z. Yan (China)

Group 2: Chairpersons: B. Han (China), M. Tajima (Japan)

18:26-18:38 Body condition correlates with results of ACTH-challenge in dairy cows
J. Rehage (Germany)

18:38-18:50 Liver copper and serum ceruloplasmin concentrations in hyperketonemic pregnant ewes
M. Sakha (Iran)

18:50-19:02 System for measuring blood calcium level in dairy cattle using wireless portable electrocardiograph
M. Itoh (Japan)

Group 3: Chairpersons: Z. Yan (China), R. Sato (Japan)

19:02-19:14 Isolation, identification, molecular characterization and epidemiological investigation of *Prototheca zopfii* from bovine mastitis
B. Han (China)

19:14-19:26 Subclinical mastitis in dairy cows in Kurunegala district of Sri Lanka: Prevalance, associated risk factors and effects on reproductive performance
R.M.S.B.K. Ranasinghe (Sri Lanka)

19:26-19:38 Effects of preparturient exercise in an outdoor pen on periparturient energy condition and subsequent reproductive performance in dairy cows
C. Yoshida (Japan)

Reception

19:50-21:00

All speakers including their accompanying persons, chairpersons, foreign delegates are invited.

<Feb.14, 2015>

Session III: Strategies to control diseases and improve productivity

Chairpersons: B.A. Mallard (Canada), N. Yamagishi (Japan)

9:00- 9:50 Disease prevention through nutrition

K.L. Ingvarsten (Denmark)

9:50-10:45 Improvement of reproductive performance with emphasis on transition cow
Management

G.M. Schuenemann (U.S.A.)

10:45-11:00 **Coffee break**

Short communication session II

Group 4: Chairpersons: M. Sakha (Iran), M. Nagano (Japan)

11:00-11:12 iTRAQ-based quantitative proteomic analysis of uterus tissue and plasma from dairy
cow with endometritis

Z. Shidong (China)

11:12-11:24 Ovsynch enhances fertility of Holstein cows subsequent to treatment for uterine
involution

G. Yu (Japan/China)

11:24-11:36 Follow up of embryonic/fetal losses in different breeds of goats using real time B-mode
ultrasonography

H. Samir (Japan/Egypt)

Group 5: Chairpersons: R.M.S.B.K. Ranasinghe (Sri Lanka), S. Kushibiki (Japan)

11:36-11:48 Prevalence of negative energy balance prepartum and subclinical ketosis in early
lactation in dairy cows in peri-urban Kampala, Uganda

T. Nakao (Japan)

11:48-12:00 Effects of intramuscular administration of vitamin E before transport on transport stress
response of Holstein steer calves

H. Ishizaki (Japan)

12:00-14:00 **Lunch on your own (Not included)**

Session IV: Genetics and genomics for improving health and production

Chairpersons: G. Schuenemann (U.S.A.), H. Katamoto (Japan)

14:00-14:50 Genetic Selection of cattle for improved immunity and health (part 1)

B.A. Mallard (Canada)

14:50-15:10 **Coffee break**

15:10-16:00 Genetic Selection of cattle for improved immunity and health (part 2)

B.A. Mallard (Canada)

**Session V: General discussion “Global approach to control diseases and improve health,
production and reproduction”**

Chairpersons: K.L. Ingvarsten (Denmark), K. Imakawa (Japan)

16:10-17:00

17:00-17:10 **Closing remarks S. Sato (Japan)**

Registration

All participants need to be registered in advance.

Japan Veterinary Medical Association (JVMA) members: Registration for Annual Conference of JVMA is required.

Non-members of JVMA (Japanese): No registration fee. Please send e-mail for registration with name, age, institute, position, institute address and E-mail address to

Dr. Reiichiro Sato, Azabu University (r-sato@azabu-u.ac.jp) by January 31, 2015.

On site registration is also accepted.

ID card must be presented at the registration desk on site.

Foreigners: No registration fee. For registration please send e-mail including name, age, institute, position, institute address and E-mail address to

Convention Linkage Inc. (okayama2015-intersympo@c-linkage.co.jp) by January 31, 2015.

On site registration is also accepted. Those who need VISA should contact by December 31, 2014,

Website

<http://jsfavm2015.umin.jp/index-e.htm>

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XX ANEMBE INTERNATIONAL CONGRESS BURGOS

BURGOS, SPAIN

May 6-8, 2015

www.anembe.com



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XV Middle European Buiatric Congress

10th ECBHM Symposium

XXV Conference of Slovenian Buiatric Association

Maribor, Slovenia

June 10-13, 2015

Dear Colleagues,

We have pleasure to invite you to

This will be organised by Slovenian Buiatric Association from 10th to 13th June 2015 in Convention Centre Habakuk, Maribor, Slovenia.

On the event will participate leading specialist on field of buiatic from Europe and USA. Following scientific topics concerning ruminants will be included:

Nutrition and metabolic diseases

Reproduction and udder health

Infectious diseases and immunology

Surgery and lameness

Herd health and economics

Food hygiene and public health

Diagnostics

Small ruminant diseases

Animal welfare

Registration and all important information will be open from 1st June 2014 on

www.mebc-ecbhm-2015.si

Registration fee for participants:

"early" bird (till 19th April 2015)	366 € (VAT included)
Registration after 20th April 2015	446 € (VAT included)
One day registration (gala dinner not included)	220 € (VAT included)
Student registration	183 € (VAT included)
Accompanying person (gala dinner included)	183 € (VAT included)
Gala dinner	50 €

Reservation of hotel capacities will be possible after 1st June 2014 in Hotel and Spa Centre Habakuk (5 stars) and surroundings hotels in the range of 500 m - walking distance (between 3 to 4 stars) for a price between 65 and 90 € (single bed) and in UNI youth hostel for 40 € on

booking@termemb.si

First announcement and call for abstracts will be available on web site after 1st June 2014

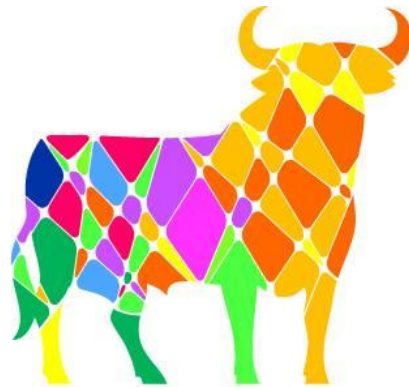
Organising committee

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XVII Latin-American Buiatrics Conference and XI Brazilian Buiatrics Conference

Sao Paulo, Brazil

July 22-24, 2015



buiatria2015

www.buiatria2015.com.br

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2015 AABP Annual Conference in New Orleans
New Orleans, Louisiana, USA
September 17-19, 2015



The 48th Annual Conference of the American Association of Bovine Practitioners will be held September 17-19 in New Orleans, Louisiana. The conference will feature the latest continuing education for beef and dairy veterinarians. Also included will be joint sessions with the American Association of Small Ruminant Practitioners. Additional events will include practice tips, poster sessions, preconference seminars, research summaries, sessions for students, entertainment and a large trade show. Registration will open May 1, 2015.

Visit www.aabp.org for more information.

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Scientific abstracts

Preventive Veterinary Medicine, 2014.116.391–403.

The Schmallenberg virus epidemic in Europe—2011–2013

A. Afonso, J.C. Abrahantes, F. Conraths, A. Veldhuis, A. Elbers, H. Roberts, Y. Van der Stede, E. Méroc, K. Gache, J. Richardson

During the Schmallenberg virus (SBV) epidemic, the European Food Safety Authority (EFSA) collected data on SBV occurrence across Europe in order to provide an assessment of spread and impact. By May 2013, twenty-nine countries were reporting to EFSA and twenty-two countries had reported cases of SBV. The total number of SBV herds reported was 13,846 and the number of SBV laboratory confirmed herds was 8730. The surveillance activities were based on the detection of SBV clinical cases (either adults or newborns). Malformation in newborns was the most commonly reported clinical sign of SBV-infection. All countries were able to provide the date when the first suspicion of SBV in the herd was reported and nineteen could report the location of the herd at a regional level. This allowed the spread of SBV in Europe to be measured both temporally and spatially. The number of SBV confirmed herds started to increase in December 2011 and two peaks were observed in 2012 (February and May). Confirmed herds continued to be reported in 2012 and into 2013. An increase during winter 2012 and spring 2013 was again observed, but the number of confirmed herds was lower than in the previous year. SBV spread rapidly throughout Europe from the initial area of detection. SBV was detected above the latitude of 60° North, which exceeds the northern expansion observed during the bluetongue virus serotype 8 epidemic in 2006–2009. The impact of SBV was calculated as ratio of the number of herds with at least one malformed SBV positive foetus and the total number of herds in this region. The 75th percentile of the malformations ratio in the various affected countries for the whole reporting period was below 1% and 3% for cattle and sheep herds, respectively. International data collection on emerging diseases represents a challenge as the nature of available data, data quality and the proportion of reported cases may vary widely between affected countries. Surveillance activities on emerging animal diseases are often structured only for case detection making the estimation of infection/diseases prevalence and the investigation of risk factors difficult. The impact of the disease must be determined to allow risk managers to take appropriate decisions. Simple within-herd impact indicators suitable for emerging disease outbreaks should be defined that could be measured as part of routine animal health surveillance programmes and allow for rapid and reliable impact assessment of emerging animal health diseases.

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Journal of Dairy Science, 2014.97.6223–6230.

Intramammary administration of platelet concentrate as an unconventional therapy in bovine mastitis: First clinical application

A. Lange-Consiglio, C. Spelta, R. Garlappi, M. Luini, F. Cremonesi

Bovine udder infections induce a variety of changes in gene expression of different growth factors that may suggest their possible role in glandular tissue protection or repair processes. Growth factors and also chemokines and cytokines may act synergistically to increase the infiltration of neutrophils and

macrophages to promote angiogenesis, fibroplasia, matrix deposition, and, ultimately, re-epithelialization. Considering the vast applications, typically in human medicine, of platelet concentrate (PC) and its ease of preparation, the aim of our study was to evaluate an alternative therapy to stimulate the regeneration of glandular tissue, administering a concentration in excess of the growth factors contained in the PC. In each one of the 3 farms examined in the trial, PC was prepared from donor cows in good health, free from infections, and with no records of medications administered during the previous 2 mo. The platelet produced in one farm was used only for treating the cows of the same farm in a heterologous way. A total of 229 mastitic quarters were divided in 3 groups: antibiotic group (treated with intramammary antibiotic), antibiotic and PC group (treated intramammarily with antibiotics in association with PC), and PC group (treated with intramammary PC alone). The diagnosis of mastitis was based on somatic cell count and bacteriological evaluation of the milk from the affected quarter. Platelet concentrate, alone or in association with antibiotic, was used for 3 consecutive days as an unconventional therapy in bovine acute and chronic mastitis. Our data show that the associated action of antibiotic and PC performed significantly better than the antibiotic alone, either for the recovery of the affected mammary quarters or for somatic cell count reduction. In the same way, the association antibiotic plus PC showed significantly fewer relapses compared with the antibiotic alone, either for acute or chronic mastitis. The treatment with only PC did not show statistically significant differences compared with both antibiotic alone or associated treatment for acute mastitis, and it was better than the use of only antibiotic for chronic mastitis. Our results show that PC alone may be useful for a quick resolution of the inflammatory response, playing a role in limiting the tissue damage to the mammary gland parenchyma and reducing the recurrence rates.

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Veterinary Microbiology, 2014.173.101–109.

A longitudinal study of the prevalence and super-shedding of *Escherichia coli* O157 in dairy heifers

K. Williams, M. Ward, O. Dhungyel, E. Hall, L. Van Breda

The fecal shedding and super-shedding of the human pathogen *Escherichia coli* O157 by cattle has been the focus of many previous studies with varied results observed. The heterogeneity of shedding is becoming more accepted, both in the numbers of animals shedding and the levels at which animals shed. To clarify patterns in shedding and super-shedding we undertook a longitudinal study to investigate shedding within a cohort of replacement dairy heifers. The cohort of 52 heifers was sampled 18 times at approximately weekly intervals with no significant changes in management during the sampling period. An overall prevalence of 44.3% (412/930 samples) was detected with prevalence ranging from 9.6 to 94.3% at individual sampling points. Each of the 52 heifers yielded at least one sample which was detected positive for *E. coli* O157. Super-shedding was detected at a sample level of 3.6% (32/893) and ranged between 0 and 9.6% at each sampling point. Of the 52 heifers, 24 (46.2%) were detected to be super-shedding at some point during the study, 19 of which were detected as super-shedding at only one point. From our findings we conclude that super-shedding is not associated with a small subset of animals that shed at high levels continually as had been proposed by earlier studies. We propose that the term ‘super-shedding event’ as opposed to ‘super-shedding animal’ better describes the nature of shedding.

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Veterinary Record 2014.175.605-606.

News and Reports

Food security

Feeding the world: the role of vets in food sustainability

In October 2011, the world population reached 7 billion, and even the most conservative demographic projections suggest that it will continue to rise for years to come. One of the problems posed by an increasingly populous world is how to ensure that food production keeps pace with demand. This was the central theme of a recent meeting organised by the Veterinary Public Health Association and the Association of Government Veterinarians. Laura Feetham reports.

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Acta Veterinaria Hungarica 2014.62.304–316.

Rapid detection of *Listeria monocytogenes* in raw milk and soft cheese by a redox potential measurement based method combined with real-time PCR

O. Erdősi, K. Szakmár, O. Reichart, Zs. Szili, N. László, P. Székely Körmöczy. P. Laczay

The incidence of outbreaks of foodborne listeriosis has indicated the need for a reliable and rapid detection of the microbe in different foodstuffs. A method combining redox potential measurement and real-time polymerase chain reaction (PCR) was developed to detect *Listeria monocytogenes* in artificially contaminated raw milk and soft cheese. Food samples of 25 g or 25 ml were homogenised in 225 ml of Listeria Enrichment Broth (LEB) with Oxford supplement, and the redox potential measurement technique was applied. For *Listeria* species the measuring time was maximum 34 h. The absence of *L. monocytogenes* could reliably be proven by the redox potential measurement method, but *Listeria innocua* and *Bacillus subtilis* could not be differentiated from *L. monocytogenes* on the basis of the redox curves. The presence of *L. monocytogenes* had to be confirmed by real-time PCR. The combination of these two methods proved to detect < 10 cfu/g of *L. monocytogenes* in a cost- and time-effective manner. This method can potentially be used as an alternative to the standard nutrient method for the rapid detection of *L. monocytogenes* in food.