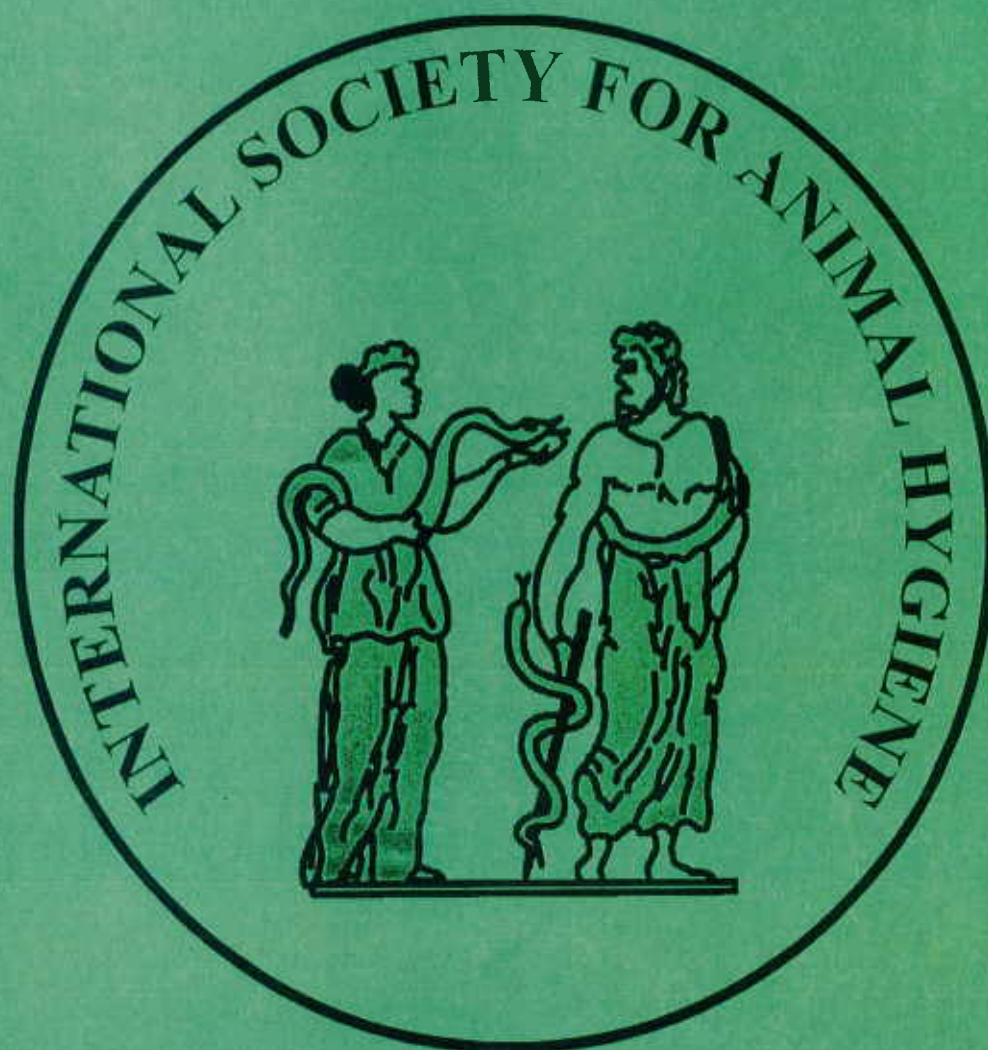


## CONTENTS

- ➔ EDITORIAL .....  
F. Madec  
Secretary ..... 1
  
- ➔ Teaching Animal  
Hygiene  
N. Alloul (Algeria) ..... 2
  
- ➔ REPORTS
- Sallinpork  
T. Blaha ..... 4
- EAAP Budapest  
F. Madec ..... 7
- Ramiran  
J. Martinez  
M.N. Maudet ..... 9
  
- ➔ FOUNDATION  
M. Tielen ..... 10
  
- ➔ OUR IN-BETWEEN  
CONGRESS IN  
AUSTRALIA  
T. Banhazi ..... 11
  
- ➔ ANNOUNCEMENTS
- PhD ..... 12
- EAAP ..... 12
- Adélaïde ..... 12
- Acapulco ..... 13
- Ramiran ..... 13



**International Society  
for Animal Hygiene**

**ISSUE 7**

**December 2002**

***Newsletter n° 7***



# Members of the International Society for Animal Hygiene

Dear members of the ISAH

Once more we are arriving at the end of the year ! On behalf of the board of the International Society for Animal Hygiene, it is my pleasure to wish you all a merry Christmas and a happy new year. Let's hope 2002 will give you opportunity of enjoying the life !

During the coming year, the activity of the ISAH will be focused on two major points. The first is our "in-between" symposium to be held in Australia next July with a very attractive item : "finding the balance - probability with responsibility". The second point is the preparation of our triennial main congress to be held in Mexico in 2003. Our president J. Saltijeral is working actively on the matter.

Like probably most of you, looking at the Media I have the feeling that in our changing and sometimes turbulent world, the area of Animal Hygiene is getting a growing importance and promising perspectives are ahead of us. Animal health and welfare, food safety, veterinary public health and environmental protection are major issues regularly coming on the table. The recent BSE and FMD earthquakes in Europe have crystallized the public opinion on animal production and on all the related activities and beyond that on the whole food chain. Food is vital to human life. It is not an "optional extra" either for primitive or advanced human Societies. All civilizations need a secure and safe food supply before investing in other activities.

The International society for Animal Hygiene cannot stay still as soon as vocables like : "food animals, animal health, food safety, sound environment and obviously "hygiene"... are involved. It means a huge field of items to be covered. Is it reasonable to propose an integrative approach to a so broad domain whereas the scientific community is being split into very specialized and day by day narrower territories ? In an attempt to draw out the borders of Animal hygiene, a series of contributions has been published in our newsletter. During the coming year it should be wise to continue the debate to finally find a best consensus on : "where and how do we go from here ?", keeping in mind the necessity for our activities to be backed to a strong scientific knowledge. The equation is not easy to solve but our field of interest is pivotal for the future of animal agriculture and this is enough to make the job exciting, isn't it ?

Again all the best for 2002.

**F. Madec**  
**Secretary of ISAH**

E  
D  
I  
T  
O  
R  
I  
A  
L

# Teaching Animal Hygiene

As you certainly know, the field of "animal hygiene" might be somewhat different depending on the country and/or the individuals since the vocable itself is probably diversely interpreted. At the board of our society we started a reflexion on this aspect and to feed it at a broader level a series of articles was scheduled in our newsletter. This is the 8<sup>th</sup> contribution on the subject and I would be delighted to receive other manuscripts for the next issues.

Please don't hesitate to contact me ([f.madec@ploufragan.afssa.fr](mailto:f.madec@ploufragan.afssa.fr))

*P.S. : Our colleagues from Germany (Prof. R. BOHM and Prof. D. STRAUCH) kindly asked me to add the following addendum to the document published in Newsletter N°6.*

*Hannover : head of institute : Prof. Dr. Jörg HARTUNG*

*Leipzig : head of institute : Prof. Dr. Andreas HENSEL*

## HYGIENE AND ANIMAL HEALTH IN ALGERIA By Dr Nadir ALLOUI ; Batna Univ., Algeria

In Algeria animal health is not a domain of activity integrated in the Public Health services. It doesn't exist, inside the governmental services, a formal structure that canalizes the ability and the competence of veterinarians to serve public health. The authorities themselves don't show any significant intention to integrate the service of the animal health in their global politics of public health. The activities regarding animal health consist mainly in fighting certain notifiable infectious diseases (foot and mouth disease, blue tongue, poxvirus disease), the major zoonoses (rabies, brucellosis), and the inspection of meat and food of animal origin. These activities are led by the veterinary services of the Ministry of Agriculture. Within each office of the agricultural services of a district ( wilaya ), there is a control veterinary service managed by a Veterinary Inspector. The latter has the following prerogatives:

- He has to take care of the application of the laws and regulations concerning the living animals and food of animal origin inside and at the borders of the country.
- To supervise the sanitary and medical prophylaxis

- To help at the improvement of animal production by the vulgarization and the implementation of appropriate hygiene measures.
- To take care of the application of the regulation which are coming into force, concerning the living animals due to be exported, to be imported and those leaving the farm for the slaughterhouse.
- To inspect food animals with the purpose of detecting those suspected to be unfit to the human consumption.
- To ensure that adequate laboratory analyses.

With the internationalization of the economy during this XXIeme century and the onset of diseases like B.S.E., A.I.D.S., Flu and the problem of dioxin, the authorities became more receptive and reacted through the institution of new measures concerning human beings and animals.

The veterinary education is under the authority of the Ministry of Higher Education and Scientific Research. Before 1970, the education of the veterinarians was achieved thanks to cooperation between Algeria and



other States (France and Eastern European countries). In 1971, the first veterinary school was created in Algiers. Since this period, the path doesn't stop developing itself. Today five points of veterinary education within faculties can be found on the territory. Thanks to the creation of a new schedule, the number of veterinarians passed from 5 in 1970 to 5500 in 2000.

The contents of the programmes within the different universities are uniform and have been inspired on the model of the French veterinary teaching, except for some matter (ex: diseases of pigs replaced by diseases of camels). The teachers are post-graduated professionals or professors who have obtained a specialization degree, abroad generally. Recently, the students can specialize in domains of animal sciences and animal health, in certain Algerian universities.

Demography increase in Algeria obliged the government to encourage animal production development with the help of grants from the banks and the provision of raw materials (cereals...) and medicines.

The intensification of livestock farming led to some difficulties hardly controllable by the farmers, because the majority of them are illiterate (Bedouins) or don't have the elementary educational bases for intensive livestock keeping. The creation of a "Hygiene Office" in each township brought its contribution to the sanitary education of populations in the field of the animal and also public health (information, projection of movies, display, exhibition, technical aid)

The Hygiene Office helps the farmers in all operations of development in their herds.

Animal hygiene, is part of the teaching curriculum of the future veterinarians. It is taught according to the type of livestock farming and to the animal species. It constitutes a very important stage in herd health appraisal and emphasis is put on prevention. (in accordance with the proverb: Prevention is better than cure).

Hygiene doesn't only consist in cleanliness and decontamination of the premises. It especially concerns the sanitary and medical prevention. Practical measures

related to hygiene are found in the routine management of the herds. Biotic and non biotic factors of the environment are concerned. To allow the animal to fully express its genetic potential, it is necessary to optimize its environment. Two categories of measures are necessary in animal hygiene:

Zootechnics measures: all non biotic factors, characterized by the physico-chemical parameters of the environment (temperature, humidity, radiations, air quality (noxious gas, dust...)...) and management conditions (density of population, buildings). Their variation can lead to the onset of various diseases and to stress. New scientific approaches like ecopathology allow a global approach to health/disease. By the way the risk factors at the herd level can be assessed. The latter are then used as a base for disease Prevention..

Biosecurity: relates to the measures supposed to avoid herd contamination. They especially aim the pathogens.

Epidemiology is aimed at informing us about the health status of the farm animal region or nation wide. It also inform about disease spreading.

To me, finally Animal hygiene is strongly concerned with veterinary public health in relation to animal production. Animal hygiene covers all these aspects of applied epidemiology, and beyond that it has to do with environmental protection in relation to animal keeping. The principles on which animal hygiene is established have their roots in sciences obviously like "animal sciences" but also ecology, ecophysiology, bioclimatology, ethology, ergonomics, to make it short, Animal hygiene stands at the confluent of several scientific disciplines.

This particular position might be found uncomfortable since there is the need to permanently gather knowledge from people involved in a more specialized scientific territory. In that, animal hygiene must not be confined to veterinarians but it has to be open to other scientists whose field of interest falls within the scope of animal hygiene.



# Report on "Salinpork 2001", September 2 – 5, 2001, Leipzig, Germany

By Thomas Blaha, DVM, Ph.D. (School of Veterinary Medicine, Hannover, Germany)

The following is an overview on the current knowledge on the occurrence of zoonotic *Salmonella spp.* in pigs and pork and their introduction into the food chain based on the results of the "4<sup>th</sup> International Symposium on the Epidemiology and Control of Salmonella and other Food-borne Pathogens in Pork", which was held in Leipzig from September 2 to 5, 2001. It is, in particular, discussed, whether it is justified to launch specific control programs, although there are still knowledge gaps to be filled.

## Introduction

Until the early 90's, the use of the term *Salmonella* in pig production had meant nothing else than porcine salmonellosis caused by the swine-adapted *Salmonella* serovar *Salmonella (S.) Choleraesuis*. This has changed, since the occurrence of porcine salmonellosis is gradually declining in the Americas and has even almost disappeared from Western and Central Europe. Thus, today the term *Salmonella* in pig production refers to the non-species adapted, zoonotic *Salmonella* serovars that do not cause any disease or lesions in pigs, but cause food-borne illness in humans. The reasons for the increasing "notoriety" of those *Salmonella* serovars, which do no harm to the productivity of pigs, but potentially lots of harm to the image of the swine industry and to the acceptance of pork, are:

1. Among other sources, contaminated pork is one of the recognized infection sources for human salmonellosis. It is generally assumed that about 75% of the human cases are due to food from animal origin. About 20% of these cases are due to contaminated pork and pork products. This puts pork as *Salmonella* source for humans in the second place following eggs and poultry products. Although there is no debate over the fact that *Salmonella spp.* can be introduced into the pork production chain at any level, there is also consensus about the assumption that the majority of the *Salmonella spp.* entering the pork chain is introduced via infected slaughter pigs. Therefore, intervention measures to reduce the frequency of infected slaughter pigs introducing *Salmonella spp.* into the pork production chain are an essential contribution to improving food safety and consumer protection.

2. The success of the Scandinavia countries Sweden, Norway and Finland based on their systematic control of *Salmonella* over several decades, and the "Danish National Salmonella Control Program in Pork" that was started in mid-1993 after a *Salmonella Infantis* outbreak in humans due to pork in Copenhagen in March 1993, has created a considerable expectation in the market. Therefore, the implementation of consistent *Salmonella* control programs beginning in the pre-harvest area (feed and feeding methods, on-farm procedures and transport) is a potential marketing tool and will soon be an essential contribution to becoming and maintaining competitive in the pork industry.

Knowledge is growing

It has to be asked, whether the knowledge on the epidemiology and control of *Salmonella* in pigs is sufficient enough for implementing control programs, and whether the costs of such programs can be justified by their effect.

In most countries with intensive pork production, research on the various aspects of the occurrence and epidemiology of *Salmonella* in pigs and on potential on-farm intervention measures has been under way for several years. Experiences have been internationally exchanged since the mid-90's at a series of International Symposia: The "1<sup>st</sup> Symposium on the Epidemiology and Control of Salmonella in Pork" took place in Ames in 1996 (35 participants from 2 countries, 25 presentations); the 2<sup>nd</sup> Symposium took place in Copenhagen in 1997 (100 participants from 12 countries, 75 presentations); the 3<sup>rd</sup> Symposium took place in



Washington, D.C. in 1999 (130 participants from 16 countries). The fourth Symposium was extended in its scope from just *Salmonella* to the "4<sup>th</sup>

Symposium on the Epidemiology and Control of Salmonella and other Food-borne Pathogens in Pork", which was held in Leipzig from September 2 to 5, 2001, with 270 participants from 26 countries presenting and discussing 170 scientific presentations.

The growing numbers of participants and of scientific contributions on the complex dynamics of the ecology and epidemiology of *Salmonella* in pigs and pork demonstrate not only the growing interest worldwide in this topic, but also the acceptance of the need of implementing control programs that include the pre-harvest area from feed production up to the transport, lairage and stunning of pigs prior to slaughter.

There is no doubt that there are still plenty of unanswered questions, but there is also a growing consensus that there will never be a "silver bullet" solution to the problem such as the vaccination against small pox and polio, i.e. any control will always be a complex of measures that need to be adapted to varying husbandry systems and organizational structures.

Implementation can be started

In spite of the still existing need of further research, there is an increasing amount of scientific knowledge and of empiric experiences especially on the dynamics of *Salmonella* in pig herds, during transport and lairage at the slaughter facilities. This knowledge and these experiences justify to launch control programs, although it is important to prevent unrealistic expectations, since there is no way to eradicate *Salmonella* from pork and/or to sanitize a pig herd permanently in a way as it is possible with the classical epidemic infections such as pseudorabies and classical swine fever.

The reasons for the possibility to launch control programs are:

1) Tools to identify infected herds are available that even allow the semi-quantitative estimation of the in-herd prevalence. Although there is still the need of standardization and further validation of the various ELISA tests through international ring tests, these tests can be used to **categorize herds into low, medium and high prevalence herds**, if continuously tested with the same test. Such categorization allows for two measures. First, it allows for separately slaughtering pigs from high salmonella prevalence herds. Second, it allows for gradually reducing the introduction and perpetuation of *Salmonella* on those farms

that are repeatedly identified as high prevalence herds.

2) The fact that for the *Salmonella* infection in swine no consistent infection pattern could be identified despite intensive research had created until recently the feeling that any recommendation on the control of *Salmonella* at herd level has no firm foundation. The 4<sup>th</sup> International Symposium in Leipzig this year, however, has led to a consensus that there is no consistent infection pattern that first needs to be understood before starting on-farm interventions. It is now widely accepted that the occurrence of *Salmonella* spp. in swine herds can vary considerably from farm to farm and even within a herd over time. The reason for this phenomenon is that the epidemiology of the *Salmonella* infection in a herd is highly determined by varying interactions of the animals, their caretakers, the environment and the husbandry system. It is now understood that it is possible to **develop farm-specific intervention programs**, if the special conditions are analyzed and taken into account.

3) There has been uncertainty about the question to which extend the reduction of the *Salmonella* load of swine herds contributes to the reduction of the *Salmonella* contamination of carcasses. This uncertainty resulted from observations that pigs from herds with a known low *Salmonella* prevalence can be found at slaughter as being not only contaminated, but also infected (salmonella-positive feces and/or intestinal lymph nodes). Intensive research into the role of transport and lairage has shown that salmonella-negative pigs can easily be infected prior to slaughter by being mixed with salmonella-shedding pigs. These pigs then become salmonella-positive (feces and intestinal lymph nodes) within a very short period of time. Taking this into account, it is very clear that there is little use in only concentrating on the *Salmonella* reduction and prevention at farm level, if there is no consistent plan throughout the pork chain, which also "dictates" to strictly **separate "negative" and "positive" pigs from the farm, through transport and lairage, and at the slaughter line.**

Intervention at farm level is possible

For quite a period of time there was some reluctance to recommend the implementation of routine control programs, since it was not clear which intervention measures can be taken on a farm with a high-prevalence herd. Now, that the reasons for the varying infection patterns are known, it is possible to identify the farm-specific ports of entry for *Salmonella* spp. and the *Salmonella* infection chains. For an efficient on-farm analysis of the *Salmonella* occurrence, the three major



determinants of the infection pattern on a farm need to be dealt with. These are:

- 1) The **introduction of *Salmonella*** onto the farm and into the herd that can take place at any production level (farrowing sows, gestation, flat decks, grow-finishers) through a host of vehicles (replacement animals, feed, water, people, rodents, birds etc.);
- 2) The "horizontal" (within and between pens and sties) and the "vertical" (sow infects piglet, infected piglet becomes infected weaner, infected weaner becomes infected... and so on) the ***Salmonella* infection chains from animal to animal**; and
- 3) The ***Salmonella* infection-contamination-infection cycle** between the shedding animals and their environment that they have direct and/or indirect contact with.

Knowing these mechanisms that determine the magnitude and the characteristics of the *Salmonella* occurrence in a swine herds and on the farm in question leads to the set of measures that together are capable of **reducing the introduction, the animal-to-animal infection chain, and the infection-contamination-infection cycle** on a farm. These measures are:

- 1) Intensifying all known means of biosecurity to prevent the introduction of "unwanted" microorganisms including *Salmonella*, and optimizing all known means of sanitation during production and in between production cycles;
- 2) Continuous and systematic rodent control with bait boxes and rock perimeters around barns and sties. Records the bait consumption will help to keep track of rodents and of the efficacy of the rodent control. No cats or dogs as "rodent control".
- 3) Stringent change of clothes and, most of all, boots – every barn, every building that houses pigs need "their" boots that are never used outside the building. This is the major method to keep environmental *Salmonella spp.* out of the reach of pigs.
- 4) Prevention of any contact between pigs and birds – any opening of the buildings (including ventilation in- and outlets) must be covered with bird nets. Removal of feed spills and other "bird-attractive" organic material outside the barns helps to reduce the number of wild birds "visiting" the farm.
- 5) Complete cleaning and disinfection, especially removal of any dust (ideal nutrient for *Salmonella spp.*), in between production cycles, including dust out of reach of the animals.
- 6) Producing, transporting and storing of feed according to GMP (good manufacturing practice) rules that

include specific measures for preventing and reducing *Salmonella* in feed.

The objective of these measures is not the "salmonella-free" farm per se (*Salmonella spp.* are ubiquitous), but to prevent and reduce the introduction of *Salmonella* into swine herds, which is a remarkable contribution to lower the potential risk of pork and pork products being contaminated with *Salmonella spp.*

Since most of the above measures that are to be taken to reduce the *Salmonella* load of swine herds are measures of good agricultural practice and a precondition for producing a high-quality pork product, it is advisable to integrate the salmonella-specific control measures into holistic quality management and assurance systems that aim not only at implementing pre-harvest food safety (*Salmonella spp.*, *Trichinella spiralis*, *Toxoplasma gondii* etc.), but also on environmental stewardship, animal well being and distinguishable product quality.

**Concluding** it can be said that implementing *Salmonella* control programs is possible, however, they make only sense, if:

- they are planned as coordinated and concerted action with all partners in the pork chain, and
- they are based on a continuous monitoring and on flexible measures at farm level that respond to the variable dynamics of the *Salmonella* infection in swine herds.

Implementing *Salmonella* control programs in the pork production chain will help the pork industry in regaining consumer trust and social acceptance, since such programs are meeting the growing demands of the society for "food safety as continuum from farm to table".

**Address of the author:**  
Prof. Dr. Thomas Blaha  
Field Station for Epidemiology  
School of Veterinary Medicine  
Hannover  
Buescheler Str. 9  
D-49456 Bakum - Germany





## 52<sup>st</sup> EAAP annual meeting (European Association for Animal Production)

by Dr. F. Madec, AFSSA (French Agency for Food Safety)  
BP 53 PLOUFRAGAN - FRANCE

EAAP is an international federation of national member organisations from 37 countries in Europe and the Mediterranean area. It was founded in 1949 in Paris under the auspices of the FAO which recognised it since 1954 as an INGO (International Non-Governmental Organisation). The 52<sup>nd</sup> annual congress was held in Budapest (Hungary). Prof. P. Rafai member of the board of ISAH was strongly involved in the organizing committee. Around 900 participants attended Budapest and more than 700 papers were presented (oral + poster presentations). It is out of question to report exhaustively on all of them. Therefore the present paper will focus on the scientific programme of Management and Health study commission whose field of interest is close to ISAH's area.

A first session was entitled "physiology of adaptation to housing systems". Two main papers were given. The first one (D. Lay, USA) focused on the assessment of the physiological state of livestock. Despite considerable acquisitions of knowledge, challenges remain in this field. On the other hand, J. SERVIERE (F) showed that pain results from the analysis of integrated physiological and behavioural signals. The other communications dealt with more practical aspects like electronic recordings in sows using a telemetric device. Body temperature and Body activity were the main target criteria. Two papers were related to automatic milking systems. This last topic will probably come again on the table in 2003 in Rome in connection with animal health and welfare.

Our second session chaired by Prof. Thibier concerned Genetically Modified Organisms (GMO's), a timely subject. The main sides of the subject were covered despite the fact that two scheduled speakers could not attend the meeting. A first paper concerned the

international regulation about GMO's in the context of the new millenium where a major challenge will be feeding an expanding world population whereas constraints exist in available arable land. The FAO and the WHO are active in the field of GMO's. The role of the Codex Alimentarius, intergovernmental body with 165 country members was explained. The Codex is currently working on GMO's, the first priority being given to plants, followed by micro-organisms used directly in food and then to food of animal origin. A. Aumaitre, president of EAAP gave a paper about new feeds from GM plants. In the light of the current scientific available knowledge the authors do not believe that GMO's are cause of concern. A paper followed about transgenesis in animals. The technology has considerably evolved during the last 3-5 years. The principles of the technology and possible application to animal health and production were displayed. A next paper dealt with the detection of transgenic DNA in milk from cows fed herbicide-tolerant soyabean meal. No transgenic DNA could be detected in milk. Food safety and the position of traditional products regarding GMO's were also considered. Undoubtedly the subject is of major interest. The papers are due to be presented in a special issue of Livestock Production Science.

A joint session was organised with several commissions (Nutrition, Cattle, Sheep, Pig) and the contact group "Central and Eastern European Countries" driven by M. ZJALIC. It was chaired by M. Tielen (NL), past President of ISAH. The major pathogens that can be found in meat and milk and having an impact on human health were reviewed during the session. The role of meat inspection was outlined but it appears that it has to be modified in the sense of a more integrative system starting at the farm level. On this line a monitoring scheme was shown with recordings



taking place along the pig chain, in agreement with the "from stable-to-table" concept. Animal health status is assessed through clinical examinations, serology and biochemistry. The microbiological aspects were also considered at meat inspection. In the second part of the session BSE and vCJD were considered. The transmission dynamics of BSE was shown using mathematical models. It is estimated that about 750,000 infected animals entered the human food supply in Great-Britain. Concerning vCJD, by the beginning of April 2001 there had been 97 confirmed and probable cases of vCJD in Great-Britain. There remains great uncertainty in the future course of the epidemics, due to the uncertainties in the epidemiology of the disease. Other more classical aspects of food safety were considered during the session. *Salmonella* infection is a major cause of concern in food borne diseases in human, and pork consumption is suspected to be involved. An important amount of work is currently devoted in Europe to the reduction of *Salmonella* bacteria load in the pig farms. A paper was given about the cholesterol level in milk and two on mycotoxins in the food chain. About 30 posters were presented on the related topic showing the relevance of the subject.

Several excellent papers were presented at the free communication session. They are mainly related to bovine. Our session 5 co-organized by OIE\* was devoted to spreading diseases, another timely issue. The greatest part of the presentations came from a EU-FAIR project just arriving at its end. The session was driven by both H. Windhorst (Germany) and by R. Huirne (NL). Foot and Mouth Disease and Classical Swine Fever were the two target diseases. The herd density on the territory and the movements of animals are two key factors in disease spreading. Geographic Information Systems (GIS) were used and models were calculated to build tools that could help the decision makers. In this session, Dr. T. Chillaud from OIE gave a paper on notifiable diseases and international trade. He also outlined the role of the OIE Code Commission in establishing standards.

The last session was focused on economics of diseases. It was chaired by Prof. Seegers (F). During the session methodological aspects as

\*\*OIE : Office International des Epizooties

well as results were presented. One of the studies showed that the disease with the highest consequences on the losses was mastitis. The consequences of BSE regulations in terms of reproduction strategies and economics were also assessed.

All-in-all the works reported were of good scientific level and the presentations were of high standard. Lively discussions occurred.

At the business meeting the programme for Cairo (2002) was reminded. Management and Health Commission will focus on animal health in harsh environment. The issues of animal handling and welfare, of drug use and of Pollution will also be addressed.

At last I must outline the excellent job of the local organizers. Everything ran smoothly and the kind hospitality of our Hungarian friends was appreciated.

A book of abstracts was prepared and it was given to the participants.

Publisher: Wageningenpers PO box 42, NL-6700 AA Wageningen, the Netherlands

**Dr. F. MADEC**  
**President of Management**  
**and Health Commission at the EAAP**



# **RAMIRAN 2001**

## **Gargnano (Italy)**



The ninth international workshop of the FAO Recycling of Municipal, Industrial and Agricultural Residues in Agriculture Network (formerly the Animal Waste Management Network), was held in Gargnano, Italy from 6 to 9 September 2000

The workshop gathered nearly 124 delegates representing 22 countries plus 2 International Organisations (EU and FAO). Colleagues from all European countries and Japan, Canada, USA and Mexico were present in Gargnano.

The FAO European Cooperative Research Network on Animal Waste Management was formed in 1976. The principal activity of the Network is for members to exchange research information not only on animal wastes but also on municipal and industrial wastes, which are spread on land and are the cause of environmental pollution. The aim of the expert groups is to keep in contact, exchange information and update research results in between workshops and conferences.

The theme of the Gargnano Workshop was « Technology Transfer ». The workshop was divided into five sessions :

1. Legislation and codes of good practices
2. Control of water and air pollution
3. Compost, manure, slurry and sludge management and treatment
4. Spreading of compost, manure, slurry and sludge
5. Technology transfer.

In session 1, « Legislation and codes of good practices » the papers were mainly focused on the regulations, and their consequences related to animal wastes, sewage sludge and wastes from olive oil industry, adopted in different countries. One paper was focused on problems on the use of wastes on arable land.

In session 2, « Control of water and air pollution » the main interest for the researchers seems related with ammonia emissions. Only one paper was related to water and soil.

In the third session, « Compost, manure, slurry and sludge management and treatment », the interest of the researchers was broader from hygienic problems to composting and from treatment techniques to the addition of zeolites or polymers or lime to slurry.

In session 4, « Spreading of compost, manure, slurry and sludge », the topics covered both agronomic, and environmental problems related with nitrogen migration into the soil and mechanical problems for an even distribution of compost.

In session 5, « Technology transfer », the topics ranged from biogas production to integration of specialised livestock and crop production, but also from demonstration watersheds to assessment tools of the manure management system.

Proceedings of all presentations and posters were published by University of Milan, Institute of Agricultural Engineering. Via Celoria 2. 20133 MILANO (Italy). The volume can be obtained from the editor, Franco Sangiorgi (e-mail : franco.sangiorgi@unimi.it).

The 10<sup>th</sup> Conference will be held in May 14-18, 2002, in Slovak Republic, and hosted by the Research Institute of Experimental Veterinary Medicine (<http://www.ramiran.sk>).

**José Martinez**  
**Network Co-ordinator**

**Marie-Noëlle Maudet**  
**Network Secretary**

[http://www.fao.org/regional/europe/escorena/ram\\_agr.html](http://www.fao.org/regional/europe/escorena/ram_agr.html)



**Prof. TIELEN foundation  
supports young scientists to  
participate in the XI congress  
on Animal Hygiene in Mexico**

The X<sup>th</sup> Congress on Animal Hygiene in Maastricht in the year 2000 was a great success in a scientific and a social way. Beside of that, the organising committee was very successful in collecting financial support for the congress by sponsors.

One of the special activities was the financial support for young scientists in developing countries to attend the congress. The organising committee of Maastricht founded the "Prof. Tielen Foundation" to dedicated to this purpose and was very successful. Due to the good financial management of the congress and the continuing effort of the PTF to collect new money we have created the opportunity to give again young scientists some financial support to participate in the next congress of the ISAH in Mexico.

We will use the same design for the application for this financial support as used for the Maastricht meeting.

So for the XI congress in Mexico young scientist in the South American countries can apply for a support of 400 US\$ for the congress fee and part of the lodging costs. The young scientist from developing countries "over seas" can apply for an additional contribution in the travel costs with a maximum of 500 US\$.

The conditions are as follows:

- Only young scientists of developing countries ( South America, Africa, Asia and Eastern Europe) can opt for financial support.
- The applicant has to be no more then 35 years of age.
- The young scientist has to present a paper with sufficient scientific quality.
- The young scientist has no opportunity to find financial support by other sources
- All applications are pre-selected by the country representative of the ISAH in the country of origin. There may be more then one application submitted, however only one will be selected per country by the committee ( See below).
- There will be only one young scientist awarded per country
- Country representatives can ask for application forms by e-mail to the Prof. Tielen Foundation ( e-mail: [martiel@tref.nl](mailto:martiel@tref.nl) or fax: \* 31 411 672852 )
- Completed Application Forms from the young scientist should be send or faxed together with a copy of the submitted abstract for the congress to the PTF-secretariat:  
PTF-Secretariat  
Att. Dr. P. van Gulick  
Elsendorpseweg 44  
5424 TB Elsendorp, The Netherlands  
Fax: \* 31 492 351484
- Selection of the applications will be carried out by the Board of the PTF and Dr. Frank van Eerdenburg, the country representative of the ISAH in the Netherlands.
- Payment of the promised financial support will take place at the venue of the congress in Mexico after handing in the registration confirmation and the travel tickets.

The PTF expects that it will be able to support 10-15 young scientists for participation in the congress under the mentioned conditions. In addition the organising committee of the Maastricht Congress will be able to support 2-4 applicants in the same way. Applications will be handled in order of reception. In cases of equal capability the order of reception will determine the final decision.

We hope that we can stimulate the attendance of young scientists and realise in that way a contribution to the development of this young scientist in Animal Hygiene and enhance the exchange of scientific knowledge between scientists within our Society of Animal Hygiene.

**Prof. Martin Tielen  
First Vice President of the ISAH**



# ISAH "IN-BETWEEN MEETING" IN AUSTRALIA



Finding the Balance - profitability with responsibility  
7-11 July 2002; Adelaide, Australia

## Invitation to contribute and attend

Dear Colleagues,

I would like to invite you on behalf of the Program Committee to contribute papers *and urge all your colleagues to do so*, to the joint **Australian Society of Animal Production** and the **International Society for Animal Hygiene** conference. If you and your colleagues wish to do so, please register your intention to contribute as soon as possible. The due date for registration of interest has been extended from the one originally advised and can be further extended for overseas contributors. However, early registration of interest will ensure priority handling of contributed papers and will facilitate better management of the Conference. After the Conference (on the 12<sup>th</sup> of July) a **workshop will be held** aimed at bringing a body of experts together to examine the opportunities and barriers of implementing "Precision Farming" principles into the Australian pig industry.

Livestock production systems need to be profitable, ecologically sustainable and able to meet the ever-increasing expectations of consumers.

- \* How can these demands be balanced to satisfy all stakeholders?
- \* How should resources be valued and used?
- \* What do consumers expect in terms of **food safety, animal welfare friendly and environmentally sound practices**?
- \* Should individual enterprises grow in scale to remain viable in the competitive environment or should they target niche markets?
- \* How can we make best use of **decision support systems to help implement new information**?

These issues will be addressed by a top line-up of invited speakers. (Please see the attached program outline.) Together with contributed papers on recent advances in **animal nutrition, breeding and health across a range of animal species**, the conference will offer four days of stimulating debate and discussion.

Contributed papers are invited on:

- ☞ Recent advances in nutrition, breeding, health and welfare of all classes of livestock.
- ☞ Animal production systems, including management of the business enterprises and the environment.
- ☞ IT Management in the livestock industries.
- ☞ Environmental quality of animal buildings.

An on-line form for registering your intention to contribute a paper is available on the ASAP web site. Please visit the site at:  
<http://www.asap.asn.au/conference>

Chose the "Intention to contribute" menu item, enter the details requested and send the form.

The Joint Conference will be held at the Adelaide Festival Centre, right on the banks of the River Torrens with breathtaking views of the city and parklands. Its close proximity to the City Centre and hotels chosen makes it an ideal choice. Adelaide is often called the "Life style" city of Australia and visitors will also have the opportunity to get familiar with the country as a number of exclusive tours will be available both pre and post conference. Please check the web-site for full details.

As the conference is approaching fast we would like to highlight some important dates:

Intent to submit papers/posters

Receipt of 1-page abstracts (not refereed)

**8 February 2002**

Deadline for guaranteed accommodation

**31 May 2002**

The proceedings of all presented papers (oral and posters) will be published on CD-ROM showing full reference details, which will be included in the conference satchel. Hard copies of the abstracts of all papers will also be made available for your convenience. Full guidelines and procedures will be sent to prospective authors who register their intent to submit a paper.

I am very much looking forward of seeing you in Adelaide;  
Best regards

**Thomas Banhazi**



## Announcements

### Ph D Project in Australia

*A new PhD project is as its starting process in Australia.*

*The project is entitled : "Use of infrared thermography to estimate percent skin wetness of pigs held within commercial piggeries".*

*Potential candidates should contact :*

Thomas BANHAZI : [banhazi.thomas@saugov.sa.gov.au](mailto:banhazi.thomas@saugov.sa.gov.au)

Web : <http://www.sardi.sa.au>

### SCIENTIFIC MEETINGS

#### EAAP meeting in Cairo (EGYPT), 1-4 Sept. 2002

European Association for Animal Production

Organizing committee, registration : [cise@main-scc.cairo.eun.eg](mailto:cise@main-scc.cairo.eun.eg)

Website : [esap.org.eg](http://esap.org.eg)

Abstract forms : [eaap2002@wageningenpers.nl](mailto:eaap2002@wageningenpers.nl)

Deadline for abstract submission 1<sup>st</sup> March 2002

#### *Programme (Management and Health commission)*

- 1 > Livestock farming systems in harsh environment
- 2 > Animal handling and transportation : welfare issues
- 3 > Animal factors in pollution control
- 4 > Free communications
- 5 > Animal health maintenance in harsh environment
- 6 > drug use, drug resistance and alternatives to drugs

Joint Conference of the Australian Society of Animal Production and the International Society for Animal hygiene

Item "Finding the balance : profitability with responsibility"

Adelaide AUSTRALIA 7-11 July 2002

<http://www.asap.asn.au/>

further info. See page 11 of this issue



International Symposium in Mexico :  
on the item : Animal Production sustainability

Place : Acapulco, Guerrero State university  
Date : 21-23 February 2002  
Deadline for paper submission : January 9, 2002  
Further informations : <http://www.uagro.mx>



#### Organizing Committee

José Martínez  
Network coordinator

Ján Venglovský  
Conference organizer

Gertrud Greser  
Conference secretary

Dear Colleagues,

On behalf of the RAMIRAN network we are pleased to announce the next Network Conference which will be held on May 14 – 18, 2002 in the High Tatras, a renown recreation, sports and health resort of the Slovak Republic.

Conference Sessions will deal with the following issues:

- *Hygiene in organic waste management*
- *Strategies for organic waste management in agriculture*
- *Agronomic value of organic wastes*
- *Measurement, modelling and control of gaseous emissions*
- *Processing and handling of wastes*
- *Environmental impacts*

We would appreciate if you could inform any other colleagues or institutions working on relevant topics and encourage them to register for the Conference.



FAO European Cooperative Research  
Network on Recycling of Agricultural,  
Municipal and Industrial Residues in Agriculture  
(Formerly Animal Waste Management)



### 10th International Conference of the European Cooperative Research Network on Recycling of Agricultural, Municipal and Industrial Residues in Agriculture

Hygienic safety  
in organic waste management

FIRST ANNOUNCEMENT

and

CALL FOR PAPERS

May 14 - 18, 2002

HOTEL PATRIA  
ŠTRBSKÉ PLESO HIGH TATRAS

Slovak Republic

Web site:  
<http://www.ramiran.sk>

Address:

Research Institute of Veterinary Medicine  
RAMIRAN  
Conference Secretariat  
Hlinkova 1/A  
040 01 Košice  
Slovak Republic



Phone: +421 - 55 - 63 318 52  
+421 - 55 - 63 218 72  
Fax: +421 - 55 - 63 318 53  
E-mail: [ramiran@ramiran.sk](mailto:ramiran@ramiran.sk)

