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## **The World Animal Science News**

### Main Topics

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- News from Science
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## EDITORIAL

### **The preliminary scientific program of the Lyon Conference 2023 is available!**

As I indicated in my editorial in the last Newsletter (October), the preliminary program of the World Conference on Animal Production, scheduled for the end of August 2023 in Lyon (France) is now available.

The Conference is a joint meeting of WAAP-EAAP and Interbull, and will begin on Saturday August 26, 2023 with a specific WAAP day on Sunday August 27. Two sessions will be held during this WAAP day. The first session in the morning, will be dedicated to the theme of "Control of GHG emissions in Ruminants farming". Six invited speakers will present the state of the art in this field. They will focus mainly on methane emissions by ruminants, as it seems to us that their reduction is both the main problem facing animal agriculture at the moment and represents a solution to avoid runaway global warming. In this session, our objective is to take stock of the tools for measuring emissions as well as the strategies that should be deployed quickly in order to reduce emissions. The program for this morning is presented below (with tentative titles):

#### **Morning: "Control of Green House Gas emissions in Ruminants farming"**

- Kris JOHNSON, Washington State University, USA : "The real place of livestock in GHG emissions and their control for climate change"
- Dominik WISSER, Food & Agriculture Organization (FAO), Italy: "Global GHG emission update"
- Anouk VAN BREUKEULEN, Wageningen University Research (WUR), The Netherlands: "Genetic control of ruminant methane emissions in livestock"
- Claudia ARNDT, International Livestock Research Institute (ILRI), Kenya : "Most effective strategies to mitigate methane emissions by ruminants"
- HA Bart LARDNER, Univ Saskatchewan, Canada : "Tannins, legumes and methane production by ruminants"
- Diego MORGAVI, Institut national de Recherche pour l'Agriculture, l'Alimentation et l'Environnement (INRAE), France : « Early life dietary intervention in dairy calves results in a long-term reduction in methane emissions »

... Continues

## Editorial (continues)

The afternoon of this first day of WCAP will be devoted to "Biodiversity as a lever for sustainable animal production." This is the second major challenge currently facing animal agriculture in the various livestock systems worldwide. The collapse of biodiversity around the world is one of the major developments of recent years which carries with it an extremely important danger for our future. It seemed very important to us, first of all, to hold this session just after that of the control of GHG emissions to affirm that the two areas must absolutely evolve together, one not being to the detriment of the other. We then endeavoured to explore some of the avenues to show that biodiversity can and must be one of the levers to be used to make rapid progress towards sustainable farming systems. The program for this second session is presented below (with tentative titles):

Afternoon: **"Biodiversity as a lever for sustainable animal production"**

- Julian CHARA, Centro para la Investigación en Sistemas Sostenibles de Producción Agropecuaria (CIPAV), Colombia : "Sustainable intensification of animal production with sylvopastoral systems"
- Anne MOTTET, Food & Agriculture Organization (FAO), Italy: "Sustainability of low-inputs livestock systems"
- An MO NOTENBAERT, Alliance Biovers Int & Int Ctr Trop Agr, Africa Hub, Kenya : "Agroecological transformations of livestock production systems"
- (Speaker to be confirmed) : "Challenges of managing livestock in areas where large predators occur"
- Joram M. MWACHARO, International Center for Agricultural Research in the Dry Areas (ICARDA), Ethiopia : "Community-based breeding programs (CBBPs) for genetic improvement of local breeds in smallholder farms"
- Abdelhak RHOUMA, University of Sousse, Tunisia : "Ecology of cultivated vegetation, fungal diversity and livestock populations in oasis"

Please note that the Invited speakers of the above sessions are some of the world's leading specialists in their fields.

Additional related sessions will be available for open submission of abstracts to be presented as either oral presentations or in the form of posters. These sessions will be held from Monday 28 to Thursday 31 August 2023.

Thus, during these four days, around 11 sessions will be co-sponsored by WAAP, 17 sessions are of very strong interest for WAAP and 54 other additional sessions are available and sponsored by EAAP and other partners that may be of interest to WAAP members.

Here are the tentative titles of the 11 + 17 other sessions that WAAP members might attend and consider for the submission of abstracts:

- Pasture based solutions to realise a role for ruminants in a sustainable food system
- Carbon sources and sinks within global livestock systems
- Transformation of livestock practices in response to society's expectations
- Technologies for outdoor systems: which application and opportunities?
- Understanding the role of dam colostrum and milk biochemistry in regulating offspring immune and metabolic physiology
- Adaptation of breeding strategies and genetics to climate change, right animal for right environment
- Contribution of animal genetic resources to climate change adaptation
- Environmental challenges of cattle tropical grazing systems
- Potential development of NBT (New BioTechnologies) in feed and animal productions
- Molecules in animal nutrition: over and above building blocks
- Alternative and new feed resources to reduce feed/food competition and enhance circularity of livestock production
- Resilient livestock farming systems in the face of climate and other global challenges – adaptation and mitigation
- Sustainable pig and poultry production, including the use of water
- Impact of epigenetics and genetics in determining animal physiology
- Environmental stress: mitigating the adverse effects

on animal physiology

- Establishing and scaling up breeding programs in extensive systems including developing regions
- Breeding for climate change: Mitigation
- Breeding for climate change: Adaptation
- EuroFAANG: genotype-to-phenotype research across Europe and beyond
- Building on a resilient dairy sector - from animal, farm and regional perspective
- Climate care dairy farming: follow up
- Grassland management and grassland-based feeding systems for efficient and sustainable milk and meat production
- Tropical and Mediterranean dairy value chains – technical and organizational innovations
- Insects in sustainable world
- Strengths and challenges of alternative animal production systems
- Role of the horse in farms and territories
- Challenges of fish nutrition for sustainable aquaculture
- One-health, one nutrition, one Earth: role of nutrition in livestock production

You can find the titles of the other 54 proposed sessions available for your abstract submissions on the [Conference website](#).

As in previous years, the inclusion of sessions in the final program depends on the number of abstracts received and selected by the Scientific Commissions of EAAP-WAAP. So, if a session particularly interests you, which I hope, **send proposals before March 1<sup>st</sup>**.

The deadline to submit abstracts is **March 1<sup>st</sup>** and all abstracts including those for invited speakers should be submitted on [OASES webpage](#).

Please submit your abstracts early to make sure it is included in the meeting.

The purpose of this newsletter is to encourage you to prepare your abstracts according to the EAAP instructions and submit early to avoid problems at the last minute. The Conference expects at least 1 500 scientific abstracts to be presented either as oral communications or as poster presentations.

I hope that you all will submit your best science and join us in Lyon!

Philippe Chemineau  
WAAP President  
[@ChemineauPh](#)  
<https://www.waap.it/>

### From WAAP Members

#### American Dairy Science Association® (ADSA®)

##### ADSA News



#### Submit your abstract 2023 ADSA Annual Meeting February 15, 2023

Be a part of the 2023 ADSA Annual Meeting, the most valuable dairy meeting for research presentations! Submit your abstract by February 15, 2023, to put your research in front of 1,500 scientists from at least 50 countries on June 25–28 in Ottawa, Ontario, Canada. All abstracts are peer reviewed by industry leaders and published as a supplement to the Journal of Dairy Science. Submit your abstract for ADSA 2023



## Register - 44th ADSA Discover Conference on food animal agriculture: Why cheese from milk? March 7–9, 2023

Join the hybrid [ADSA Discover Conference](#), in collaboration with the American Cheese Society, on March 7–9, 2023, in person (at the Northern Illinois University Conference Center in Naperville, IL) or virtually, to inform some of the latest research on the nutritional and health-promoting aspects of milk and cheese. [Register by February 15, 2023](#), to receive a \$100 discount.



## Read - January issue of the Journal of Dairy Science

Keep a finger on the pulse of global dairy research with the latest open-access issue of the ADSA's [Journal of Dairy Science](#). Skim through the high-level takeaways of each article in the [interpretive summaries for the January edition](#), or start with the editor's choice selections. [Read more.](#)



## Explore - January issue of JDS Communications

*JDS Communications* publishes narrowly focused, hypothesis-driven original research studies designed to answer a specific question on the production or processing of milk or milk products intended for human consumption. The journal aims for rapid turnaround and a short time to publication, and [was recently added to the prestigious PubMed database](#). Scroll through [the January issue](#), or [discover the editor's choice article selections](#). [Learn more.](#)



## Save the date - International Symposium on Ruminant Physiology (ISRP) August 26–29, 2024

[ISRP](#) is the major international symposium on ruminant physiology, providing an overview of current, important scientific findings and areas of research in the physiology of ruminants of all kinds. ADSA is honoured to bring this prestigious event to Chicago, IL, in 2024.





## European Federation of Animal Science (EAAP)

### EAAP News



**74th EAAP ANNUAL MEETING**  
**LYON France 2023**  
**August 26th / September 1st, 2023**

### REGISTRATIONS ARE OPEN!

We are delighted to inform you that the registrations for the 74th Annual Meeting of EAAP in the fabulous city of Lyon ARE OPEN! The general topic of this Congress will be “Climate change, biodiversity and global sustainability of animal production”. The Joint International Congress on Animal Science is locally co-organised by INRAE (The French National Research Institute for Agriculture, Food, and Environment) and the French Association for Animal Production (AFZ), on behalf of the European Federation of Animal Science (EAAP) and the World Association for Animal production (WAAP) and by “France Génétique Elevage” on behalf of Interbull. Make sure you secure your place to find out all about one of the **largest animal science congresses in the world**. Register [here](#). We're looking forward to seeing you in Lyon!

### EAAP Young Scientists Award

EAAP will grant to early career researchers the “EAAP Young Scientists Award”. All scientists who are born after 1 September 1985 can participate. The candidates should be EAAP individual members and should have demonstrated outstanding research performance with the European dimension and perspective. The awardee will receive a plate in Lyon and will be invited to present a paper at the following

Annual Meeting in Florence 2024 together with a free registration. Nominations must be submitted to the EAAP office ([eleonora@eaap.org](mailto:eleonora@eaap.org)) starting from January 2023.

The application shall be accompanied by the documents below:

- § Curriculum Vitae
- § European experience (if not in CV) such as participation in EU projects or benefiting EU grants
- § List of scientific publications and of products (e.g. patents)
- § List of eventual presentations at the EAAP Annual Meetings
- § Letter of support by another Individual Member
- § Eventual EAAP related scholarships received.

### EAAP Scholarships

Online applications for EAAP Scholarships are open! EAAP is happy to provide the same number of scholarships offered last year: this means that up to 20 applicants will receive financial support to attend the next EAAP Annual Meeting in Lyon! Details and information are available on the [website](#).

### Abstract Submission for the 2023 EAAP Regional Meeting is open!

EAAP is happy to remind that the **abstract submission** for the 1st EAAP Regional Meeting is open! The event will be held in **Nitra, Slovakia** on **April 26th-28th 2023**, with many inspiring and cutting-edge scientific sessions. If you want to discover more, please visit the official [event website](#). **The abstract submission will be open until February 1st, 2023.** All authors wishing to present papers at the EAAP Regional Meeting are required to submit the title and abstract of their presentations using the online application tool *EAAP's Online Management System for Evaluation and Gathering of Abstracts (OMEGA)* available [here](#). Thanks to this EAAP brand-new software it will be possible to easily submit and manage abstracts, edit profiles, ask for support, and more. When you register, please

make sure that you will indicate the presenting author very carefully.



## Latin American Association of Animal Production (ALPA)

### ALPA News



The year 2022 was full of successful activity at ALPA. A new Board of Directors was elected, ALPA's scientific journal: "Latin American Archives of Animal Production" published four issues and two supplements. [https://ojs.alpa.uy/index.php/ojs\\_files](https://ojs.alpa.uy/index.php/ojs_files). Likewise, four issues of the "ALPA en el Campo", a magazine aimed at producers, were published. Nine thematic networks remained active. ALPA's YouTube channel published twenty-four videos of conferences offered on the different networks.

At the 2022 General Assembly of the Latin American Animal Production Association (ALPA), Abelardo Conde Pulgarin was appointed president for the period 2022-2024.

Abelardo Conde Pulgarin is currently a Professor at the University of La Salle, in Bogotá, Colombia in nutrition and mathematical modelling and the leader of the research group "Sustainable animal production" with category A1, the highest in the Ministry of Science and Technology of Colombia. He was president of the National Association of Animal Science of Colombia for the period 2016-2017. He is currently Vice-president of the Professional Council of Colombia COMVEZCOL and has been a member of the ALPA Board of Directors since 2014.



*Abelardo Conde Pulgarin*

### The ALPA council for the period 2022 – 2024:

President: Abelardo Conde Pulgarin (Colombia).  
Email: [presidencia@alpa.uy](mailto:presidencia@alpa.uy)/[abelardocondep@gmail.com](mailto:abelardocondep@gmail.com)  
Vice-president 1: Fabio Montossi (Uruguay)  
Vice-president 2: Paulo Cesar Faccio de Carvalho (Brazil)  
Member 1: Marlene Medina Villacis (Ecuador)  
Member 2: Miguel Cervantes (Mexico)  
Member 3: Ricardo Alberio Alberio. (Argentina)  
Vocal 4: Jessica Quijada (Venezuela)  
Permanent Secretary: Omar Araujo-Febres. (Venezuela)  
Executive Secretary: Laila Bernal Bechara (Colombia)

The **XXVII ALPA Meeting** will meet in Zacatecas Mexico, together with the Mexican Animal Production Association (AMPA) from April 26 to 27, 2023. More information on the AMPA site – [AMPA-ALPA 2023](#).

## **Nigerian Society for Animal Production (NSAP)**

### NSAP News



### **Conference Announcement and call for conference papers**

The Nigerian Society for Animal Production (NSAP) in collaboration with **Federal University DUTSIN-MA** will be holding her 48th Annual Conference (DUTSIN-MA 2023) & Golden Jubilee Celebration. Date: 19th - 22nd March 2023

Venue: Federal University, Dutsin-Ma, Katsina State, Nigeria

Theme: **Animal Agriculture: A Sustainable Path to Nigeria's Economy Recovery and Food Security**  
Scientists, Academicians and Researchers are hereby invited to submit manuscript for the DUTSIN-MA 2023 Annual conference.

### **Call for Journal articles**

The Nigerian Journal of Animal Production (NJAP) is the journal of the Nigerian Society for Animal Production.

NJAP hereby calls for submission of papers for publication. [Visit the website](#) for more details and submission.

### **NSAP Young Scientist Award**

The Nigerian Society for Animal Production is delighted to announce the NSAP Young Scientist

Award 2023 sponsored by Prof. D.J.U. Kalla, (Fellow Nigerian Society for Animal Production). The intent behind organising the award is to bring deserving and thoughtful young talents to the spotlight by nurturing their creativity and perseverance. Deadline: **31<sup>st</sup> January 2023**.

## **News from Science**

### **Piglets' behaviour and performance in relation to sow characteristics**

Maternal provisioning and care vary amongst mammalian livestock species, but nearly all intensive farms separate the mother from their young much earlier than in a natural situation. In commercial farm environments, the role of the mother is limited. This study, recently published by animal, looked at the role of the sow in offspring development by observing the roles of sows beyond nutrition. The research describes the maternal characteristics contributing to offspring outcomes. The sows with lower cortisol concentrations showed constantly a better nursing behaviour and finally the piglets raised by sows with lower cortisol concentrations grew better. We can easily say that by reducing the sow stress during lactation will improve piglet performance and welfare, as well as performance and welfare of sows. This research confirms the many studies that proved the importance of maternal contact for offspring's health, physical, and behavioural development and its beneficial effects for stress coping abilities. That young mammals need their mothers seems like an obvious notion, but within the livestock industry, it is challenged by numerous husbandry strategies like abrupt and early weaning and artificial rearing, as described for cattle in one of the previous suggested papers. The results show that sows vary widely in their maternal provisioning and that, only to a limited extent, translates into piglet performance. Sows with low cortisol concentrations showed a better nursing capacity, therefore reducing sow stress is recommended.

[Read the full article on Animal.](#)



## Energy scarcity and rising cost: Towards a paradigm shift for livestock

Human beings use the earth's available resources since thousands of years but in the last decades such use increased considerably bringing to evident crisis on many sectors, including the food production sector that is also deeply influenced by pressures of food demand and agricultural land availability leading therefore to a significant and global increase in the prices of raw materials. Global energy shortage, creating a sharp increase in energy prices, caused increased prices of animal feed because their dependence on energy prices. Therefore breeders of animals who buy grains, pulses and cultivated fodder, will suffer a sharp loss in competitiveness. The growth of production costs will certainly lead to a sharp increase in the price of animal products and finally to a significant decrease in consumption in the context of a decrease in purchasing power. The authors thought about two possible scenarios for livestock systems: the reduction of arable land dedicated to animal feed production due to the remunerative markets of more profitable products and the switch to animal feeding strategies based on low opportunity land and poor materials. Both scenarios will lead to a reduction and redistribution of livestock in rural areas, modification of animal species and of features of livestock farming as well as the adaptation of supply chains. Such an evolution of animal farming must also respond to other major challenges such as climate change and the modification in quantity and composition of human diets. The authors proposed an economic approach related to energy and land competition between livestock and other sectors. Competition for land and greenhouse gas emissions can be reduced, especially in high-income countries, by implementing more sustainable production methods and by balancing diets with less animal products. The results show that this redistribution can reduce the production costs and energy dependence, bringing animals closer to high-quality, and limiting competition with other land uses. [Read the article on Agricultural System.](#)

## A large database linking the rumen bacterial composition and milk traits in Lacaune sheep

Lacaune is a very productive dairy sheep breed originally from South-West France. For the research described in this paper a large dataset was analysed by including almost 800 mid-lactation adult dairy ewes from which rumen and milk samples had been collected for five years under the same housing conditions. Rumen samples were analysed by a targeting sequencing of the 16S rRNA gene using a next-generation sequencing platform. The bioinformatics process of the resulting millions of DNA sequences generated more than two thousand operational taxonomic units as final data. Milk yield was recorded as well as milk samples were collected for each ewe. The samples were used to record somatic cell counts and, through mid-infrared (MIR) spectra, fat and protein contents and fatty acid and protein profiles was possible. All together 17 milk components were observed. The ruminal samples were sequenced to determine the bacterial composition and from bioinformatics analysis, 9,536,442 sequences were retained for analysis. Overall, around two thousand operational taxonomic units from the collected samples were attributed to 11 phyla. The most representative ones were Bacteroidota (50.6%) and Firmicutes (43.6%), and the most abundant families were Prevotellaceae (37.9%), Lachnospiraceae (18.1%), Ruminococcaceae (8.97%). Both shared datasets will be useful for researchers to study important links between rumen bacteria and milk traits and to propose solutions to improve animal production and health. [Read the article on Nature.](#)





## Impact of early dam contact on veal calf welfare

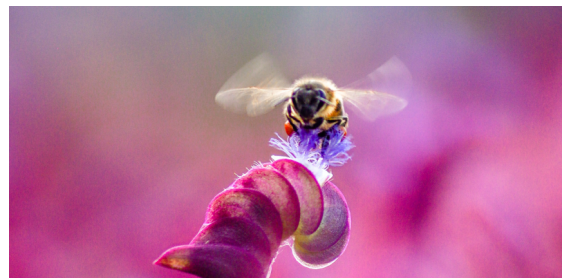
In intensive animal farming is normal habit to separate the calf from its dam shortly after birth mainly to protect the calf against diseases but also to ensure that the calf gets socialised with human handlers. Many other management purposes are contemplated. This practice has, however, been criticised by the public to be considered not to be natural and the relative concern of about separation of calf and dam. This paper published on Nature has the goal to evaluate the welfare impacts of raising surplus calves, that are kept for beef production, with their dam for 2 or 4 weeks until transport to the veal farm. The experiment was conducted by observing calves that were separated from their dam at birth or kept with the dam until transport to the veal farm at either 2 or 4 weeks of age. The calves were observed at both the dairy and veal farms for body weight, health, immunity, haematology and behaviour. The calves that were reared with dam had higher body weights in the first period after arrival at the veal farm, but by slaughter this advantage was lost. But there were more signs of disease (fever) for dam-reared calves at the dairy farm. Dam-reared calves also showed, through higher counts of white blood cells, a higher pathogen exposure. Dam-reared calves displayed more fear towards humans in a human approach but more frequent social behaviours. Finally, the research showed that there may be both advantages and disadvantages to keeping veal calves with the dam in terms of welfare in the current system. [Read the article on Nature.](#)



## News from Industry

### US government approves use of world's first vaccine for honeybees

The world's first vaccine for honeybees has been approved for use by the US government, raising hopes of a new weapon against diseases that routinely ravage colonies that are relied upon for food pollination. The US Department of Agriculture (USDA) has granted a conditional license for a vaccine created by Dalan Animal Health, a US biotech company, to help protect honeybees from American foulbrood disease. [Read the full article on TheGuardian.](#)



### 3 most reviewed insect-based pet food marketing claims

Globally, a research team counted 43 brands selling pet products using insect-based ingredients, with 35 of those brands operating in Europe. Black soldier fly larvae and mealworms were the two most frequently used insect species. [Read the full article on PetFoodIndustry.](#)



## IPIFF: A step forward for insects' sector in EU

On 20th October 2022, IPIFF, the Brussels-based business association representing the European insect sector, has welcome EU Member States' green light on frozen and freeze-dried formulations of the lesser mealworm (*Alphitobius diaperinus*) and on partially defatted house cricket (*Acheta domesticus*). [Read the Press Statement here.](#)

## Job Offers

### Professor at Ghent University, Belgium

[Ghent University](#) is looking for a Professor in Data-driven animal nutrition and animal management. This full-time position in a tenure track system is filled in at the department of "Animal Sciences and Aquatic Ecology" (Faculty of Bioscience Engineering). The recruitment is from 1st September 2023.

**Deadline: 30<sup>th</sup> January 2023.** For more information and application [read the job vacancy.](#)

### PhD position at Utrecht University, The Netherlands

[Utrecht University](#) is looking for an enthusiastic candidate for a PhD position on the topic of welfare risk assessment in the broiler chicken production chain. This position is part of a larger project on welfare risk assessment in farm animal and the project will also focus on bringing together information on welfare indicators and integrating the information to allow smart welfare monitoring over time. **Deadline: 31<sup>st</sup> January 2023.** For more details and application [read the job vacancy.](#)

### Two open professorships at University of Gottingen, Germany

The Faculty of Agricultural Sciences, Department of Animal Sciences, of the [University of Göttingen](#) seeks to fill two professorships' positions:

I. [Professorship on Animal Nutrition Physiology and Resource Efficiency.](#)

2. [Professorship on Climate-Smart Livestock Systems.](#)

Applications are welcome by **5<sup>th</sup> February 2023.**

### Postdoctoral position at INRAE, France

The candidate will be located in the Herbivore Research Unit (UMRH), close to Clermont-Ferrand (Theix). The successful candidate should have a PhD in animal nutrition, animal genetics or equivalent and Knowledge about Statistics (mixed models), bioinformatics and R software. **Deadline: 15<sup>th</sup> February 2023.** For more information and application [read the job vacancy.](#)

### Two postdoctoral positions at University of California, USA

The following two positions are available at the [University of California](#):

1. [Post-doctoral fellow in Assessment of Anti-methanogenic Feed Additives under Intensive and Extensive Cattle Production.](#)
2. [Post-doctoral fellow in Assessment of a standard for estimating methane emissions from enteric fermentation.](#)

## Publications

### I.Elsevier

[Animal: Volume 17- Issue 1 – January 2023](#)

Article of the month: [“Feeding pigs amino acids as protein-bound or in free form influences postprandial concentrations of amino acids, metabolites, and insulin”.](#)

### 2. New technical articles have been recently published on Engormix:

I. [“Do we know the real cost of heat stress to the dairy industry?”](#)

II. [“Effect of different levels of sunflower meal and multi-enzyme complex on performance,](#)

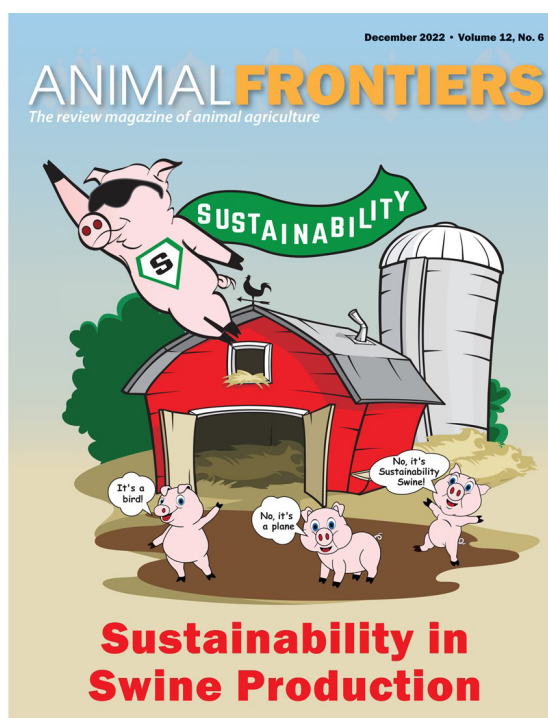
biochemical parameters and antioxidant status of laying hens”

III. “Use of enzymes as prebiotics”

IV. “Why do we associate chronic or sensitivity to diseases with mycotoxins?”

### **3. Oxford Academic**

“Animal Frontiers”, Vol. 12, Issue 6, December 2022.





## Meetings and Conferences

WAAP invites you to check the validity of the dates for every single event published below and in the Calendar of the website, due to the state of sanitary emergency that World is currently dealing with.

Event	Date	Location	Information
ADSA Discover Conference: Why Cheese from Milk?	7 -9 March 2023	Naperville, IL, USA	<a href="#">website</a>
10th International Sheep Veterinary Congress (ISVC)	6 – 10 March 2023	Sevilla, Spain	<a href="#">website</a>
Animal AgTech Innovation Summit	13 March 2023	San Francisco, USA	<a href="#">website</a>
BSAS Conference 2023	28 – 30 March 2023	Birmingham, UK	<a href="#">website</a>
International Conference on Farm Animal Breeding and Genetics	3 – 4 April 2023	Athens, Greece	<a href="#">website</a>
XXVII ALPA meeting	26 – 28 April 2023	Zacatecas, Mexico	<a href="#">website</a>
1st EAAP Regional Meeting	26 – 28 April 2023	Nitra, Slovakia	<a href="#">website</a>
ICAR Conference 2023	21 – 26 May 2023	Toledo, Spain	<a href="#">website</a>
20th Spanish Animal Production Conference	13 – 14 June 2023	Zaragoza, Spain	<a href="#">website</a>
ASDA annual meeting	25 -28 June 2023	Ottawa, Canada	<a href="#">website</a>
ASAS-CSAS Annual meeting	16 – 20 July 2023	Albuquerque, USA	<a href="#">website</a>
74th EAAP Annual Meeting	28 August – 1 September 2023	Lyon, France	<a href="#">website</a>
International Conference on Sustainable Animal Agriculture for Developing Countries (SAADC)	21 – 24 November 2023	Vientiane, Laos	<a href="#">website</a>

More conferences and workshops [are available on EAAP website](#).

The **World Animal Science News** is the Official WAAP Newsletter. This interesting update about activities of the global animal science community presents information on leading research institutions in the entire world and also informs on developments in the industry sector related to animal science and production. The Newsletter is sent to all WAAP member organizations and to their associates. You are all invited to submit information for the newsletter. Please send information, news, text, photos and logo to [waap@waap.it](mailto:waap@waap.it).

**WAAP Secretariat is located at the following address:** Via G. Tomassetti 3, A/I - Rome (Italy). Tel.: +39-06-44 20 26 39;  
E-mail: [waap@waap.it](mailto:waap@waap.it)

**Production staff:** Marlène Sciarretta, Philippe Chemineau, Andrea Rosati, Eleonora Azzaro, Federica Motterle.

**Graphics design and layout:** Gianfilippo Ercolani.