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July 2011

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as Brown knows well, and points out in this publication and elsewhere, it is human activity which is causing climate change and particularly the burning of fossil fuels. There is now overwhelming evidence of global warming which in turn is changing rainfall patterns and affecting the climate in many ways. So to blame the flooding in Pakistan on goats removing ground cover is to misdirect attention away from the major cause of such flooding, namely climate change.

Blaming the Messenger: Goats and Grasslands

Written by Dr. James De Vries,
IGA Board Member

Lester Brown in his recent publication [World on Edge \[Earth Policy Institute, 2011\]](#) reflects on the growing number of goats as "signaling grassland decline." He provides some dramatic examples of the increase in the number of

goats in Pakistan and Nigeria as well as globally. And he notes "now the world's ever growing herd of cattle, sheep and goats are converting vast stretches of grassland to desert."

Blaming the goats and other animals for desertification is placing the blame in the wrong place. First,

Secondly, grazing lands depend on ruminant livestock, both domestic and wild for survival. The grasslands and the animals living on them evolved together and depend on each other. While the hooves of goats can break up the soil, this is in fact necessary for the seeds in

Continued on Page 11

International Goat Association Begins IFAD Project

The IGA recently received approval from the International Fund for Agricultural Development (IFAD) for a project to demonstrate that small ruminant production is an effective tool for poverty reduction in resource-poor regions.

The project, entitled *Scaling-up Successful Practices on Sustainable Pro-poor Small Ruminant Development*, will focus on two specific objectives:

- Undertake a Global Knowledge Harvest on resource-poor small ruminant farming systems that were effective in reducing poverty according to MDGs criteria so that others can apply this know-how;
- Based on the harvested knowledge, developing a business-like approach to prioritize processes/strategies and sensitize national policy, decision makers and donors

about the effectiveness of small ruminants' development for reducing poverty.

Target Group and Countries

The project will identify resource poor small ruminant farming systems and the development of technological or organizational innovations to reduce poverty. Goat production is particularly suitable for women and youth. For instance, women are responsible for processing goat products (milk, fibre and skin). Thus special attention will be given to ensure that women and youth will benefit substantially from programme activities.

Currently, the project will explore projects in several areas:

- Latin America/West Indies: Brazil, Bolivia, Mexico, Venezuela, West Indies;
- Africa: Morocco, Tunisia,

Senegal, Capo Verde, Kenya, South Africa;

- Middle East: Turkey, Lebanon;
- Eastern Europe: Romania;
- Asia: India, China

The primary anticipated output of this project will be a publication prepared and disseminated to share key findings, data and other relevant learning generated and/or harvested by this project. Moreover, knowledge and results generated by the project will be shared throughout the IFAD website and other international networks.

Project findings, will be presented and discussed during international events (i.e. the next International Conference on Goats that will be organized in the Canary Isles, Spain from 24 to 27 September, 2012) and disseminated to partner organizations.

25 years of goat milk production in the Netherlands

On Tuesday May, 24, the Dutch goat milk chain celebrated their 25th anniversary. More than 320 visitors came to participate in a national symposium about the future of the goat milk sector in the Netherlands.

In 1986 the first private and co-operative dairies started to collect goat milk at some small goat farms. The annual production in that time was about 3 million litres, produced at about 100 farms. Nowadays the goat milk production has developed. Some 360 young, innovative and specialized farmers produce 180 million litres of fresh goat milk of high quality. Most of the milk (> 95%) is collected for processing or export. A small part is for artisanal cheese production on the farm. The organic goat milk production takes about 7% of the sector, but is growing.

About two-third of the Dutch goat milk is processed into cheeses (a wide scale of semi-hard Gouda-type and soft cheeses), milk powders and fresh liquid goat dairy, like pasteurized milk and yoghurt. The rest of the goat milk is



exported as curd and fresh milk to some European countries, esp. France.

Next to the development of milk production, the goat milk chain has worked through the years on several challenges, like a system of quality insurance and quality control, high standards of animal health and welfare, sustainability and the building of a solid sector-network.

The national symposium on 25 years goat milk business in Holland was supported by a huge number of sponsors. Several speakers from

state department, retail, farmers union and dairy trade and industry gave their view on past, present and future of professional goat farming in Holland. Besides the speakers program there was an information market presenting companies involved in the goat milk chain. Program, location, information market and catering made it to be a great day with an excellent atmosphere. For more information on the symposium or the Dutch goat milk business you can go to: www.25jaarmelkgeitenhouderij.nl or contact Mr. Jos van Wegen (+31.653.169.182 / communicatie@25jaarmelkgeitenhouderij.nl). The organisation of the symposium was done by Barbara Hart, Annet Schimmel, Paul Witlox and Jos van Wegen (left to right). With flowers Mrs. Jeannette van de Ven, chairwoman of the Dutch goat farmers union.



IGA is proud to announce that EKcheese is our newest institutional member

Learn more about them on Page 4 or visit their website at: www.ekcheese.nl

Iran Country Report: Update on Crossbred Dairy Goats

Written by Dr. Farhad Mirzaei, IGA Country Representative – Iran

Institute's climate were crossed with imported Sannens.

average herd production for crossbred goats is 300kg/year, and it is expected to increase by 500 kg/year.

Sannen goats were first imported into Iran from Israel and Germany in 1964 and 1983 respectively. They were maintained in an intensive system at the Animal Science Research Institute of Iran.

Limited numbers of crossbred goats were distributed to local farmers in 1980. There are now many well adapted Sannen crosses which they are fed from byproducts and pastures.

Also, the price of male goats is increasing due to higher genetic potential and enhancement of artificial insemination along with recording.

Distributing status of Iranian crossbred goats

Region	Crossbred	Head
Yazd (Central)	Sannen x Raeini	600-700
Gonbad (Northern)	Sannen x Black hair Alpine x Black hair	400
Gonbad (Northern)	Sannen x Black hair	150
Bushehr (Southern)	Sannen x Black hair	150
Karaj (Central)	Sannen x Alborz	200
Kerman (Eastern)	Sannen x Kermani	100
Saveh (Central)	Sannen x Alborz	50
Ghom (Central)	Sannen x Alborz	200
Ghom (Central)	Sannen x Alborz	200

This type of breeding can also help for meat production, because carcass percentage of crossbred is about 1.5 times more than native goats. Prolificacy rate in crossbred is 1.75, and 1.1 in natives. Rate of parturition is 3 times /year for crossbred, whereas it is only 1 time/year for natives.

Since importing, they have been mated within the herd and crossed with native Najdi. These native goats are distributed from west southern of the country to coast zones of Persian Gulf. These animals, after adaptation to the

Data is registered by IDGC through numbering and tattoos. The overall herd size is expected to increase about 2000-3000 head/year.

Average herd production for native goats is 40kg/year, while the

Dr. Farhad Mirzaei is a member of the Department of Animal Production Management, Animal Science Research Institute of Iran (www.asri.ir). For a detailed list of his work visit: www.expertist.net/foto/3695-1.pdf

Important IGA News

IGA has changed to ".COM" -- www.iga-goatworld.com

We are aware that some of our friends had difficulty accessing the IGA website. This was due to a technical problem with our domain name which had not been renewed by our register. We are happy to inform you that the IGA website is available again and fully up to date.

You can find us at our new address: www.iga-goatworld.com. Please make sure that you register the change in your list of favorite sites. Also update any links you might have from your site to ours.

Through our site, we will regularly

inform you about our activities, our projects and about the **XIth Conference on Goats in Canary Islands**.

Beware: The past address www.iga-goatworld.org has no connection with IGA and is fake. As always, we are at your disposal if you have any questions.

IGA membership

If you haven't renewed your membership for 2011, then please [click here to download a membership application today](#). Fill it out and mail, e-mail, or fax it back to me as soon as possible.



2011 OFFICIAL MEMBERSHIP APPLICATION

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 \$47.50 USD per year – one year IGA membership* without the journal
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If you have further questions, please contact iga@hollis.org or call 1-800-454-0541. Be sure to visit our website at www.iga-goatworld.org for more member information.

Signature: _____ Date: _____

Dairy Goat Farm and Processing Tour: Netherlands

Introduction

Dairy goat farming is a specialised sector in the dairy milk chain, which need a professional approach to have a good efficiency. Compared to the entire dairy sector: only 3% of all milk produced in the world comes from dairy goats. The worldwide goat herd produces about 14 milliard kg, of which about 140 million kg is produced in The Netherlands.

The Dutch milk goat sector

Unless The Netherlands produces only a little part of the worldwide goat milk amount, there is a well-developed goat dairy sector present. There are about 320 professional goat farms which are milking more than 1.000 goats average. A Dutch dairy goat produces more than 1 liter (4,2) more milk than the worldwide average (3,2L). Far the most goat milk produced in Holland is processed to cheese (75%), 15% is traded and 15% is used for milk powder.

Ekcheese (www.ekcheese.nl)

Ekcheese is a Dutch consultancy company specialized in the goat farming and the cheese making sector. Our philosophy is to control the whole chain from healthy cattle to satisfied customers. Ekcheese can build on more than 30 years of experience in cheese making. The experience has been born in the operating company "Klaverkaas". Klaverkaas operates own farms with cows and goats and owns a cheese factory where the milk is converted in high quality cheese for the local and international market.

The Friesian (www.thefriesian.com)

The Friesian is a Dutch dairy development company, specialized in the dairy sector. The slogan "from grass to glass" covers all services from dairy farm management to dairy processing. The Friesian has experience in more than 60 countries worldwide, with a project portfolio from small-scale projects till large-scale projects. The

activities of The Friesian vary from feasibility studies, total dairy farm management and farm management training to quality risk management and raw milk sourcing. With a "hands on" approach and Dutch dairy knowledge, The Friesian is a reliable partner for dairy development projects and improvement and optimizing of existing dairy farms.

Ekcheese and The Friesian offer a 3 day interesting program to show the modern Dutch dairy goat industry (see schedule). We will visit some dairy goat farms and Klaver's goat milk cheese factory.

The program is made to investigate if there are opportunities in the dairy goat sector for your (dairy) company with modern Dutch knowledge and technology and to meet interesting modern companies from The Netherlands who can assist by setting up dairy (goat) projects. We hoop to welcome you in October to share our passion!

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Social Networking Report

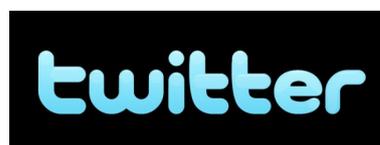
Social Networking Report

We are happy to report that the IGA is moving forward in the world of social media. Our [Facebook](#), [Twitter](#), and [LinkedIn](#) accounts are more popular than ever.

Recently we started a discussion on Facebook about [Goats and Grasslands](#), and we would love your comments.

We want to send a special thank you to our friends in Portugal, because while 44% of our visitors come from the United States, an amazing 39% are from Portugal! In July, on Facebook, we reached 232 people who liked IGA and more than 10,300 post views.

Please encourage your friends and colleagues to join us.



Recent Interesting Articles

Consumers' acceptance of innovations in traditional cheese. A comparative study in France and Norway

Appetite, Volume 57, Issue 1, August 2011, Pages 110-120
Valérie Lengard Almli, Tormod Næs, Géraldine Enderli, Claire Sulmont-Rossé, Sylvie Issanchou, Margrethe Hersleth

Highlights

- This study explores consumers' acceptance of innovations in traditional cheese in France and Norway.
- Six factors are included in a conjoint design: pasteurisation, organic production, omega-3, packaging, price and appropriateness.
- Consumers' willingness to buy traditional cheese is highly driven by price, appropriateness and raw milk/pasteurisation in both countries.
- Interaction effects involving appropriateness indicate the importance of the consumption context on the acceptance of innovations in traditional cheese.
- Well-accepted innovations in traditional cheese are those that reinforce the traditional and authentic character of the product.

Alignment-free comparison of genome sequences by a new numerical characterization

Journal of Theoretical Biology, Volume 281, Issue 1, 21 July 2011, Pages 107-112

Guohua Huang, Houqing Zhou, Yongfan Li, Lixin Xu

Highlights

- We present a new graphical technique of inspecting and comparing DNA sequences.
- We introduce a numerical

characterization which depicts intrinsic nature of genome sequences.

- We propose an align-free comparison model for the evolutionary relationship analysis.

A grassland ecosystem model of the Xilingol steppe, Inner Mongolia, China

Ecological Modelling, Volume 222, Issue 13, 10 July 2011, Pages 2073-2083

Masae Shiyomi, Tsuyoshi Akiyama, Shiping Wang, Yiruhan, Ailikun, Yoshimichi Hori, Zuozhong Chen, Taisuke Yasuda, Kensuke Kawamura, Yasuo Yamamura

Highlights

- We constructed a semiarid grassland ecosystem model in Inner Mongolia.
- The model reproduced temporal changes in aboveground biomass recorded in the past.
- The model was tested to various meteorological patterns and stocking conditions.
- The model will assist production activities of the farmers' cooperatives in the area.

The landscape epidemiology of foot-and-mouth disease in South Africa: A spatially explicit multi-agent simulation

Ecological Modelling, Volume 222, Issue 13, 10 July 2011, Pages 2059-2072

Elise Dion, Louis VanSchalkwyk, Eric F. Lambin

Highlights

- We model contact risk between buffaloes and cattle.
- Landscape patterns influence the distribution of this risk.
- Contacts depend on displacements of animals,

influenced by landscape configuration.

- Contacts take place not only close to water-point but also in grazing area.

The Use of Blood Analysis to Evaluate Trace Mineral Status in Ruminant Livestock

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 255-283

Thomas H. Herdt, Brent Hoff

This article summarizes effects and evaluation of 8 trace minerals considered significant in ruminant nutrition, both for nutritional deficiencies as well as production-related toxicosis: cobalt, copper, iron, iodine, manganese, molybdenum, selenium, and zinc. Changes in availability, metabolism, and amounts needed for optimum health and productivity in animals are their major effect; frank clinical toxicosis or severe nutritional deficiency are of limited concern in modern production agriculture. The information provided in this article can help to manage the risk of subtle effects that may alter performance and lifetime productivity.

Ruminant Mycotoxigenesis

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 315-344

Michelle S. Mostrom, Barry J. Jacobsen

Ruminants have the capacity to utilize some mycotoxin contaminated feedstuffs without impact on production or carry-over tissue residues. Despite large investments in crop development to diminish mold invasion and mycotoxin production, grain facilities to dry and store cereals, and use of alternative processing, mycotoxins frequently occur at

Recent Interesting Articles (continued from page 5)

elevated concentrations that affect ruminants. Fungal invasion by molds can occur in stored forages, silages, and wet bales and toxicity of these mold related mycotoxins is often poorly characterized. Ruminants occupy wide agricultural niches that expose animals to diverse toxins in different conditions, challenging veterinarians making diagnostic interpretations on contaminated forages and grains. This article discusses mycotoxins affecting ruminants in North America.

Diminished Reproductive Performance and Selected

Toxicants in Forages and Grains

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 345-371

Tim J. Evans

This article discusses reproductive toxicants as the potential, primary causes of observed reproductive abnormalities and other variables that can affect reproductive performance in ruminants. The causes of diminished reproductive performance in ruminants are often multifactorial. It is critical that producers and their veterinarians understand the potential effects of physiologic and genetic predispositions and nutritional, environmental, infectious, and toxic stressors, as well as interactions involving management. The recognition and prevention of the adverse reproductive effects of these enzootic toxic stressors are essential for optimal ruminant reproductive performance and profitability of a ruminant production system.

Commercial and Industrial Chemical Hazards for Ruminants

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 373-387

Robert H. Poppenga

There are many potentially hazardous commercial or industrial products used in or around ruminant environments. Although some products are highly toxic, their proper storage and use minimize their hazard to ruminants. Although most exposures to such materials occur via ingestion, inhalation or dermal exposures also are possible. The diagnosis of intoxication requires both thorough antemortem and postmortem examination of affected animals and thorough investigation of their environment. Fortunately, intoxications from such materials are relatively infrequent. The possibility of residues affecting meat or milk from exposed animals always needs to be considered.

Safety of Antibiotic Drugs in Food Animals: Comparison of Findings from Preapproval Studies and Postapproval Experience in the United States with Safety Information in Published Literature

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 389-405

Tomislav Modric, Sanja Modric, Michael J. Murphy, Susan J. Bright, Stacey Shults

Antibiotics are among the most widely prescribed drugs and are generally considered safe for the target species. However, their use has been associated with various adverse toxic effects in target animals, such as allergic reactions, gastrointestinal signs, cardiovascular effects, hypoglycemia, hepatic/renal toxicity, thrombocytopenia, and anaphylaxis. This article provides a qualitative summary of the adverse events observed in target animals during the evaluation of antibiotics by the Food and Drug Administration during both preapproval and postapproval periods. As there is a marked

scarcity of published data on safety of antibiotics in food animals, more research is needed in this area.

Effects of Xenobiotics and Phytotoxins on Reproduction in Food Animals

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 429-446

Kip E. Panter, Bryan L. Stegelmeier

As man-made chemicals (anthropogenic) are increasing in number and amount of use, it is not uncommon for farmers, ranchers, consultants, or veterinarians to suspect a xenobiotic (strange or foreign substance) as the cause of reproductive failures. In this article, the authors discuss toxicants that have been shown to affect reproduction, with emphasis on food-producing animals and fowl. The discussion is brief, and written to provide a resource for clinicians, students, and scientists by focusing on toxicant-induced reproductive dysfunction relevant to the toxicant, source, clinical effects, and livestock species known or suspected to be affected.

Treatment of Animal Toxicoses: A Regulatory Perspective

Veterinary Clinics of North America: Food Animal Practice, Volume 27, Issue 2, July 2011, Pages 481-512

Susan J. Bright, Michael J. Murphy, Janice C. Steinschneider, Randall A. Lovell, Lynn O. Post

This article focuses on the regulatory issues to consider when veterinarians are called upon to treat animal toxicoses, in particular those involving food-producing animals. The lack of Food and Drug Administration-approved drugs to treat animal toxicoses has been a long-standing problem. This article reviews extralabel drug use regulations, and the responsibilities of the treating veterinarian. It discusses the legal implications of

Recent Interesting Articles (continued from page 6)

compounding and the use of unapproved drugs to treat animal toxicoses. Efforts should be made to increase the availability of life-saving antidotal therapies.

Identification and evaluation as a DNA vaccine candidate of a virulence-associated serine protease from a pathogenic *Vibrio parahaemolyticus* isolate

Fish & Shellfish Immunology, Volume 30, Issue 6, June 2011, Pages 1241-1248

Rui Liu, Jixiang Chen, Kesheng Li, Xiaohua Zhang

Highlights

- We cloned and expressed a new serine protease of *V. parahaemolyticus*.
- The serine protease might be as a potential virulence factor.
- A DNA vaccine pEGFP-N1/m-vps containing the serine protease was constructed.
- The pEGFP-N1/m-vps was confirmed to be expressed in vitro and in vivo.
- Efficient protection against *V. parahaemolyticus* was obtained on vaccinated turbot.

Embryo transfer and sex determination following superovulated hinds inseminated with frozen-thawed sex-sorted Y sperm or unsorted semen in Wapiti (*Cervus elaphus songaricus*)

Animal Reproduction Science, In Press, Accepted Manuscript, Available online 24 May 2011

Q.H. Gao, H.E. Wang, W.B. Zeng, H.J. Wei, C.M. Han, H.Z. Du, Z.G. Zhang, X.M. Li

Immunohistochemical Detection of COX-2 in Feline and Canine Actinic Keratoses and Cutaneous Squamous Cell Carcinoma

Journal of Comparative Pathology, In Press, Corrected Proof, Available online 24 May 2011

M. Bardagi, D. Fondevila, L. Ferrer

Exploring the diversity of urban and peri-urban agricultural systems in Sudano-Sahelian West Africa: An attempt towards a regional typology

Landscape and Urban Planning, In Press, Corrected Proof, Available online 24 May 2011

Luc H. Dossa, Aisha Abdulkadir, Hamadoun Amadou, Sheick Sangare, Eva Schlecht

Highlights

- Six major urban and peri-urban farming systems were identified across three West African cities.
- Differences were based on farm activities, resource endowments and production orientation.
- Urban and peri-urban farming systems in Sudano-Sahelian West Africa are complex. A regional typology is possible.

Archaeosomes with encapsulated antigens for oral vaccine delivery

Vaccine, In Press, Uncorrected Proof, Available online 24 May 2011

Zhengrong Li, Lihui Zhang, Wenqiang Sun, Qian Ding, Yongtai Hou, Yuhong Xu

Caenorhabditis elegans as a model to screen plant extracts and compounds as natural anthelmintics for veterinary use

Veterinary Parasitology, In Press, Accepted Manuscript, Available online 24 May 2011

Luciana M. Katiki, Jorge F.S. Ferreira, Anne M. Zajac, Carol Masler, David S. Lindsay, Ana Carolina S. Chagas, Alessandro F.T. Amarante

Rapid succession of Biological Soil Crusts after experimental disturbance in the Succulent Karoo, South Africa

Applied Soil Ecology, In Press, Corrected Proof, Available online 23 May 2011

S. Dojani, B. Büdel, K. Deutschewitz, B. Weber

Highlights

- Recovery of Biological Soil Crusts (BSC) after severe small-scale disturbance
- Rapid re-establishment of crust cover including functions like soil stability
- Different crust types appear in successional order
- Full recovery from long-term disturbance takes longer than 3 years
- Timely and moderate grazing reconcilable with biological soil crust development.

NR2B subunit of NMDA receptor at nucleus accumbens is involved in morphine rewarding effect by siRNA study

Drug and Alcohol Dependence, In Press, Corrected Proof, Available online 23 May 2011

Jen-Hsin Kao, Eagle Yi-Kung Huang, Pao-Luh Tao

Gut CaVP is an innate immune protein against bacterial challenge in amphioxus *Branchiostoma belcheri*

Fish & Shellfish Immunology, In Press, Accepted Manuscript, Available online 23 May 2011

Zhen-Hong Zhuang, Xian-Liang Zhao, Hui Li, San-Ying Wang, Xuan-Xian Peng

Highlights

- The importance of calcium-binding proteins in immune response of vertebrates is determined, but whether they have the role in invertebrates is largely unknown.
- In the present study, gut CaVP appeared in bacterial immunized or challenged amphioxus and was

Recent Interesting Articles (continued from page 7)

- significantly higher in a healthy sub-group than a wounded sub-group post bacterial challenge.
- This response was strongly detected in immunization and challenge by the same Gram-negative bacterium.
 - These findings indicate the importance of gut CaVP in response to bacterial challenge.

The role of forest ecosystems in community-based coping strategies to climate hazards: Three examples from rural areas in Africa

Forest Policy and Economics, In Press, Corrected Proof, Available online 23 May 2011
Carmenza Robledo, Nicole Clot, Anne Hammill, Béatrice Riché

Research Highlights

- We investigated the coping strategies of rural communities in three countries in Africa to climate hazards.
- We examine the corresponding links to changes in the use of forest ecosystems.
- We identified factors that promote or prevent the use of sustainable coping strategies related to forest ecosystems.

Tobacco plants expressing the Cry1AbMod toxin suppress tolerance to Cry1Ab toxin of Manduca sexta cadherin-silenced larvae

Insect Biochemistry and Molecular Biology, In Press, Accepted Manuscript, Available online 23 May 2011

Helena Porta, Gladys Jiménez, Elizabeth Cordoba, Patricia León, Mario Soberón, Alejandra Bravo

Highlights

- Expression of *cry1AbMod* gene in tobacco plants does not affect plant development.
- Cry1AbMod-transgenic plants control toxin-susceptible

Manduca sexta larvae.

- Cry1AbMod-transgenic plants control tolerant cadherin-silenced *M. sexta* larvae.
- CryMod toxins could potentially be expressed in other transgenic crops to protect them against toxin-susceptible and toxin-resistant lepidopteran larvae

An immune-induced Reeler protein is involved in the Bombyx mori melanization cascade

Insect Biochemistry and Molecular Biology, In Press, Accepted Manuscript, Available online 23 May 2011

Yan-Yuan Bao, Jian Xue, Wen-Juan Wu, Ying Wang, Zu-Yao Lv, Chuan-Xi Zhang

Highlights

- Two reeler-domain containing cDNA clones, *reeler1* and *reeler2* were isolated from *Bombyx mori*.
- *Reeler1* expression is inducible by bacterial challenge in *B. mori* larvae, while *reeler2* expression is not inducible.
- *Reeler1* is involved in the nodulation responses.
- *Reeler1* participates in the prophenoloxidase activation cascade.

Oak (Quercus robur L.) regeneration in early successional woodlands grazed by wild ungulates in the absence of livestock

Forest Ecology and Management, Volume 262, Issue 5, 1 September 2011, Pages 780-790

Andrzej Bobiec, Dries P.J. Kuijper, Mats Niklasson, Aneta Romankiewicz, Katarzyna Solecka

- We studied oak regeneration in young woodlands influenced by wild ungulates.
- No browsing/thorny shrub facilitation effect on oak

regeneration found.

- Oak recruitment is a continuous process since agriculture abandonment 40 years ago.
- We conclude relatively low attractiveness of oak enables successful oak regeneration.

Feed barrier design affects behaviour and physiology in goats

Applied Animal Behaviour Science, Volume 133, Issues 1-2, August 2011, Pages 40-53

Eva Nordmann, Nina Maria Keil, Claudia Schmied-Wagner, Christine Graml, Jan Langbein, Janine Aschwanden, Jessica von Hof, Kristina Maschat, Rupert Palme, Susanne Waiblinger

Observing shared attention modulates gaze following

Cognition, Volume 120, Issue 2, August 2011, Pages 292-298

Anne Böckler, Günther Knoblich, Natalie Sebanz

Extended surveillance for CBPP in a free country: Challenges and solutions regarding the potential caprine reservoir

Preventive Veterinary Medicine, Volume 101, Issues 1-2, 1 August 2011, Pages 89-95

Florence Tardy, Patrice Gaurivaud, Lucía Manso-Silván, François Thiaucourt, Marie-Pierre Pellet, Pascale Mercier, Dominique Le Grand, François Poumarat

Marginal abatement costs of greenhouse gas emissions from European agriculture, cost effectiveness, and the EU non-ETS burden sharing agreement

Ecological Economics, Volume 70, Issue 9, 15 July 2011, Pages 1680-1690

Stéphane De Cara, Pierre-Alain Jayet

- Marginal abatement costs of

Recent Interesting Articles (*continued from page 8*)

- GHG emissions from European agriculture are assessed.
- Non-linear MAC reduced forms are parameterized for each Member State.
- A cap-and-trade system could more than half the costs of the 10% target compared to the BSA.
- The equilibrium emission price is found to be 32–42 €/tCO₂eq.
- Hot air and transfers from EU-15 countries to New Member States are substantial.

Effect of different farming management on daily total locomotor activity in sheep

Journal of Veterinary Behavior: Clinical Applications and Research, Volume 6, Issue 4, July-August 2011, Pages 243-247

Giuseppe Piccione, Claudia Giannetto, Simona Marafioti, Stefania Casella, Anna Assenza, Francesco Fazio

Relative importance of natural cues and substrate morphology for settlement of the New Zealand Greenshell™ mussel, *Perna canaliculus*

Aquaculture, In Press, Accepted Manuscript, Available online 25 June 2011

Paul E. Gribben, Andrew G. Jeffs, Rocky de Nys, Peter D. Steinberg

Space for innovation for sustainable community-based biofuel production and use: Lessons learned for policy from Nhambita community, Mozambique

Energy Policy, In Press, Corrected Proof, Available online 25 June 2011

Marc Schut, Annemarie van Paassen, Cees Leeuwis, Sandra Bos, Wilson Leonardo, Anna Lerner

- This paper explores space for innovation for community-based biofuel production and use.
- Heterogeneous farming strategies and their synergies at community level are key.
- Farmers have little trust in jatropha due to crop failure and absence of markets.
- (Inter)national biofuel policies influence space for local biofuel production and use.
- Policies should focus on *ex-ante* integrated assessment and creating an enabling environment.

Anthocyanin-rich Mulberry extract inhibit the gastric cancer cell growth in vitro and xenograft mice by inducing signals of p38/p53 and c-jun

Food Chemistry, In Press, Accepted Manuscript, Available online 25 June 2011

Hui-Pei Huang, Yun-Ching Chang, Cheng-Hsun Wua, Chi-Nan Hung, Chau-Jong Wang

- MACs induce apoptotic cell death of human gastric cancer AGS cells.
- The death pathway is through p38/jun/Fas/FasL and p38/p53/Bax signaling.
- MACs help prevent gastric tumourigenesis in AGS gastric cancer xenograft model.

Infertility in a beef bull due to a failure in the capacitation process

Theriogenology, In Press, Corrected Proof, Available online 25 June 2011

C. Lessard, L.G. Siqueira, O. D'Amours, R. Sullivan, P. Leclerc, C. Palmer

Occurrence of blood-borne tick-transmitted parasites in common tsessebe (*Damaliscus lunatus*)

antelope in Northern Cape Province, South Africa

Veterinary Parasitology, In Press, Accepted Manuscript, Available online 25 June 2011

P.S. Brothers, N.E. Collins, M.C. Oosthuizen, R. Bhoora, M. Troskie, B.L. Penzhorn

Anthelmintic and cytotoxic activities of extracts of *Markhamia obtusifolia* Sprague (Bignoniaceae)

Veterinary Parasitology, In Press, Accepted Manuscript, Available online 25 June 2011

F. Nchu, J.B. Githiori, L.J. McGaw, J.N. Eloff

The economic importance of non-timber forest products (NTFPs) for livelihood maintenance of rural west African communities: A case study from northern Benin

Ecological Economics, In Press, Corrected Proof, Available online 24 June 2011

Katja Heubach, Rüdiger Wittig, Ernst-August Nuppenau, Karen Hahn

- We examine the share of NTFPs in total income of rural households in Northern Benin.
- We compare NTFP income share between a. income groups and b. ethnic groups.
- On average, income from NTFPs accounted for 39% of total rural household income.
- Poorer households are relatively more dependent on NTFPs than wealthier ones.
- Ethnic groups show different NTFP income source patterns.

Influence of L-cysteine, oxygen and relative humidity upon survival throughout storage of probiotic bacteria in whey protein-based microcapsules

International Dairy Journal, In

Recent Interesting Articles (continued from page 9)

Press, Accepted Manuscript,
Available online 24 June 2011

D. Rodrigues, S. Sousa, T. Rocha-Santos, J.P. Silva, J.M. Sousa Lobo, P. Costa, M.H. Amaral, M.M. Pintado, A.M. Gomes, F.X. Malcata, A.C. Freitas

Sialic acid (N-acetyl and N-glycolylneuraminic acid) and ganglioside in whey protein concentrates and infant formulae

International Dairy Journal, In Press, Accepted Manuscript, Available online 24 June 2011

Ramón, Lacomba | Jaime, Salcedo | Amparo, Alegría | Reyes, Barberá | Pablo, Hueso | Esther, Matencio | M. Jesús, Lagarda

- Contents of Neu5Ac and Neu5Gc in infant formulae, whey and human milk are reported.
- It is the first time that Neu5Gc in human milk has been quantified.
- Content of gangliosides in infant formulae, whey and human milk are reported.
- Daily intakes of sialic acid and gangliosides from infant formulae are calculated

The effect of long term under- and over- feeding on milk and plasma fatty acids profile and on insulin and leptin concentrations of goats

International Dairy Journal, In Press, Accepted Manuscript, Available online 24 June 2011

E. Tsiplakou, S. Chadio, G. Papadomichelakis, G. Zervas

Modelling the effect of heterogeneity of shedding on the within herd *Coxiella burnetii* spread and identification of key parameters by sensitivity analysis

Journal of Theoretical Biology, In Press, Accepted Manuscript, Available online 24 June 2011
Aurélié Courcou, Hervé Monod,

Mirjam Nielen, Don Klinkenberg, Lenny Hogerwerf, François Beaudeau, Elisabeta Vergu

- We model *Coxiella burnetii* spread within a dairy cattle herd.
- We identify key parameters whose variation highly influences the infection dynamics.
- Shedding levels, mainly in mucus/faeces, are the most influential parameters.
- Characteristics of the bacterium in the environment have also a great impact.

State power and protected areas: Dynamics and contradictions of forest conservation in Madhya Pradesh, India

Political Geography, In Press, Corrected Proof, Available online 24 June 2011

René Véron, Garry Fehr

- We examine mixed (coercive, community- and market-oriented) forest protection in Madhya Pradesh.
- Imperfect decentralization and partial liberalization resulted in changed forms of state power.
- New policies and programs contributed to the separation of livelihoods and forests.
- Policy initiatives need to be coordinated to lead to positive environmental and social outcomes.

The use of pulsed-field gel electrophoresis to investigate the epidemiology of *Mycoplasma bovis* in French calf feedlots

The Veterinary Journal, In Press, Corrected Proof, Available online 24 June 2011

Marie-Anne Arcangioli, Hamidé Aslan, Florence Tardy, François Poumarat, Dominique Le Grand

- To investigate the

epidemiological design of *Mycoplasma bovis* outbreaks in veal calf feedlots.

- We typed 39 strains from 5 feedlots, isolated during and 30 days after outbreak using PFGE.
- *MluI*, *SmaI* and *KpnI* provide an excellent discriminatory power, and allow fine typing of related strains.
- The same *Mycoplasma bovis* strain spreads clonally and persists in feedlots after an outbreak.

The synthetic peptides Bovine Enteric β -defensin (EBD), bovine neutrophil β -defensin (bnbd) 9 and bnbd3 are chemotactic for immature bovine dendritic cells

Veterinary Immunology and Immunopathology, In Press, Accepted Manuscript, Available online 24 June 2011

Sarah Mackenzie-Dyck, Sam Attah-Poku, Veronique Juillard, Lorne A. Babiuk, Sylvia van Drunen Littel-van den Hurk

Efficacy of commonly used anthelmintics: First report of multiple drug resistance in gastrointestinal nematodes of sheep in Trinidad

Veterinary Parasitology, In Press, Accepted Manuscript, Available online 24 June 2011

N. George, K. Persad, R. Sagam, V.N. Offiah, A.A. Adesiyun, W. Harewood, N. Lambie, A.K. Basu

Development of a national methane emission inventory for domestic livestock in Saudi Arabia

Animal Feed Science and Technology, Volumes 166-167, 23 June 2011, Pages 619-627

A.A. Aljaloud, T. Yan, A.M. Abdulkader



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Grasslands*



Blaming the Messenger: Goats and Grasslands (continued from Page 1)

the feces of the animals to be able to take hold and begin to grow. The grazing by ruminant animals renews the grasslands when properly managed. Alan Savory and the Holistic Management Institute have done much research to show the beneficial results of animal impact and the desertification which can take place when animals are removed. Brown mentions the example of India's small holder dairy which involves stall feeding as a sustainable way to manage animals. Heifer International has also introduced "zero grazing" widely as an

effective way for small scale farmers to incorporate ruminant livestock into their farms increasing total farm productivity. However, large grasslands can only be managed through grazing systems.

This places the responsibility where it belongs - on the herders and on the larger society in which they live. Herders decide to keep more goats in response to various forces including climate change, reduction in reserve grazing as land is taken for cultivation etc., shrinking per capita grassland as population grows and markets for goat

products. While the increase in the number of goats sends an important message, the goats are only the messengers. Don't blame them for the "giant dustbowl now forming south of the Sahara." Think about people driving vehicles which consume a gallon of gasoline for each 18 miles driven and the increasing consumption of meat and fossil fuel based energy as livelihoods improve.

[To read Lester Brown's entire article on Growing Goat Herds, click here.](#)

Additional Comments on Goats and Grasslands (to add you comments [join us on Facebook](#))

*Comments by Jean-Paul Dubeuf,
IGA President*

Goats are pastoral animals. They are of great value to range lands because they naturally feed on poor value forages. Stall feeding can be useful, especially in peri-urban areas, but the shepherds

have a great know-how and generally good practices when it comes to managing range lands. The problem is overgrazing, which is often due to drought, speculation (for instance in the case of Angora goats in China) or poverty. We have to support keeping a multi-sector balance by

collective organization, training and complementary feeding in case of emergency.

My message would be, instead of blaming goats, we need more scientific knowledge and governance to solve these complex problems.



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