

# IGA Newsletter August 2015

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# August Reminder -- 12th International Conference on Goats - ICG 2016

Dear Colleagues,

On behalf of the Conference Organising Committee it is our pleasure to invite you to attend the "12th International Conference on Goats - ICG 2016", which will take place between September 25-30, 2016 in the great city of Antalya, Turkey. We are delighted to welcome all delegates to this event.

Goat production professionals in the disciplines of sustainability, management, social aspects, health and association establishment from all over the world will have the opportunity to learn new knowledge, share experiences and explore the exciting city of Antalya and its surroundings.

The theme for the conference is "Contributions of Caprine Agrosilvopastoral Production Systems to Society and the Environment" with a focus on research and evidence for practice, and the contribution to delivery of quality products of the goat. Our keynotes and invited speakers come from around the world, representing the very best in their field of expertise. Additionally we will have presentations, both oral and poster, from colleagues in practice, education, management and research. Poster sessions are organized to provide a forum for continued and expensive coverage of the topics addressed in conference and to encourage and provide the opportunity for young scientists to present their work.

Learning from the past and innovating for the future, the 12th Conference will provide us with an excellent opportunity to share our experiences and projects. In addition to outstanding scientific program being offered, we encourage delegates to enjoy famous cultural heritage and natural beauty of Turkey with our social and cultural events. You also may visit trade conference exhibition to get most updated knowledge on related technology and new systems.

We welcome all delegates to what promises to be a highlight of the 2016 calendar!

Yours Sincerely, Dr. İrfan Daskıran - Chair & Juan Capote - IGA President

#### Important Dates

Abstract Submission Deadline: 01 March 2016 Notification of Acceptance of the Abstracts: 01 June 2016 Full paper admission: 01 July 2016 Early Registration Deadline (for Registration Payment): 01 July 2016 Author Payment Deadline: 01 July 2016

#### www.icg2016.org

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- Memberships are 1 year from when you join.
- Memberships include online access to SRR.
- Latest information on regional conferences.
- Receive the IGA Newsletter.

#### Most Cited Small Ruminant Research Articles The most cited articles published since 2010, extracted from Scopus.

**Recent advances in exploiting goat's** relevant physiology and biochemistry. milk: Quality, safety and production aspects

Volume 89, Issues 2-3, April 2010, Pages 110-124 N. Silanikove | G. Leitner | U. Merin

| C. G. Prosser

Goat milk production is a dynamic and growing industry that is fundamental to the wellbeing of hundreds of millions of people worldwide and is an important part of the economy in many countries. The aim of the present review is to provide an integrated and critical analysis of the major aspects in this field to highlight unexploited nutritional potential health of goat milk and the need for improvements, particularly in food safety. First, it should be kept in mind that goat milk like cow milk delivers many nutrients with relatively low energy content, and is relevant to the health of consumers throughout the life cycle. In addition, the review presents data suggesting that goat milk possesses many advantages over cow milk, for use as a nutritional source for infants and children and as a medicinal food. Furthermore, goats, by consuming large amounts of natural browsing plants all year around, are a potentially overlooked "treasure trove", with respect to health promoting components. The survey suggests that total bacterial count that is currently used as the major quality measure to prevent pathogen-related food toxicity is not



sufficiently effective. The proposal is to include somatic cell count as a routine criterion to qualify the hygienic status of goat milk in The paper presents a novel mechanism controlling milk secretion, and demonstrates the use of this knowledge in making decisions for two major managerial tasks that farmers face, namely milking frequency that dictates to a large extent the milk yield and workload on the farm, and helping to deal with subclinical mastitis that is the single major cause for economical losses in dairy farms worldwide. © 2010.

# The importance of selenium and the effects of its deficiency in animal

Volume 89, Issues 2-3, April 2010, Pages 185-192 Abd El Ghany Hefnawy | J. L. Tórtora -Pérez

Selenium (Se) is an essential trace element in animal nutrition, and exerts multiple actions related to animal production, fertility and disease prevention. Glutathione peroxidase (GSH-PX) enzyme was the first proven selenoenzyme that can prevent oxidative damage of the cellular membrane. Actually more than 30 selenoenzymes have been described and a hierarchy process for expression in the animal has been established. White muscle disease (WMD) was the first recognized condition associated with Se deficiency. WMD causes new born mortality, especially in ruminants, and impaired production condition in growing and adult animals. Selenium is critical to thyroid hormone synthesis and it is also very important for converting T4 (thyroxin inactive form) to T3 (active form). A good immune response requires Se too. Selenium status in soil, plants and animal blood and tissue can be used in the diagnosis of Se deficiency. Diverse forms of Se supplements are available, but many factors affect their activity and efficacy, such as its chemical form and animal's terms of the health and production condition. The

relationships between foetus Se metabolism and pregnant dam Se status are critical for productivity and need further research. © 2010 Elsevier B.V. All rights reserved.

The effects of dietary consumption of plants secondary compounds on small ruminants' products quality Volume 101, Issues 1-3, November 2011, Pages 150-159

Valentina Vasta | Giuseppe Luciano Worldwide policies are encouraging the use of natural rangelands and low input feeding resources for livestock farming. Most of the low input feed contain secondary compounds (PSCs) - such as phenolic compounds (PhCs), saponins, and essential oils (EO) which play a primary role on animal digestion and performances and also on product quality. Meat and milk fatty acid composition can be manipulated by dietary tannins as these PSCs modify ruminal biohydrogenation of dietary polyunsaturated fatty acids through changes in ruminal ecology. Dietary tannins improve products' flavour by reducing the ruminal biosynthesis of skatole and its accumulation in meat and milk. The addition of garlic or juniper EO in lamb diets reduces the off-flavours perception while thyme or rosemary EO lowered the rancid-odour perception of meat under display. It is proved that dietary PhCs ameliorate meat oxidative stability and prevent meat from discoloration thus extending product shelf life. The doseresponse effect of these PSCs as well as their mechanisms of action are not fully unravelled. Nevertheless, the use of plants rich in secondary compounds or the supplementation of purified PSCs in small ruminants diet seem to be a promising strategy for improving products quality. © 2011 Elsevier B.V.

To read entire articles, visit SRR.

#### **CD-T Vaccinations**

Written by Susan Schoenian, IGA member, and Sheep & Goat Specialist, University of Maryland Cooperative Extension

There are many diseases for which sheep and goats can be vaccinated, but there is only one universallyrecommended vaccine, and it is for the clostridial diseases that commonly affect small ruminants.

Clostridial diseases are fatal diseases

that strike ruminant livestock suddenly, often causing death before any clinical signs are seen. Clostridia (bacteria) are widespread in the environment. They are normally found in the soil and feces. They are also present in the digestive tract and tissues of healthy animals. For these reasons, vaccination is the best way to prevent disease outbreaks.

Two clostridial vaccines are commonly used in sheep and goats: a 3-way vaccine called CDT; and an 8-way vaccine. CDT protects healthy sheep and goats against clostridium perfringens type C and D (overeating disease) and clostridium tetani (tetanus). The 8way vaccine protects against these same diseases, plus several additional clostridial diseases, including blackleg. The 3-way vaccine is probably all that's needed on most sheep and goat farms.

#### CD-T vaccine

Pregnant ewes and does should be vaccinated with the CDT (toxoid) during their last month of pregnancy, but at least two weeks before they are due to lamb/kid. First-time moms should be vaccinated twice in late pregnancy, 3 and 6 weeks before parturition. Rams, bucks, and wethers should receive an annual booster for CDT.

Lambs and kids will receive passive, temporary immunity to CDT when they consume colostrum. This immunity will start to wane after about six weeks. Thus, lambs and kids from vaccinated dams should receive their first CDT vaccination by the time they are 6-8 weeks of age, followed by a booster 3-4 weeks later.

Lambs and kids from unvaccinated dams should receive their first CDT vaccination when they are 3-4 weeks



of age, followed by a booster 3-4 weeks later. Earlier vaccinations may not be effective, due to many factors, including the immature immune system of young lambs and kids.

The tetanus antitoxin should be administered at the time of docking. castrating, and disbudding, as lambs and kids from unvaccinated dams will lack protection (from tetanus). An antitoxin provides immediate, shortterm immunity, whereas the toxoid provides longer-lasting immunity, but Canada for bringing this article to takes time and a second shot to complete the immune process.

A pre-lambing vaccination is the only way to protect lambs and kids from type C, though the antitoxin could be administered in the event of a disease outbreak.

Purchased feeder lambs and kids should be vaccinated twice for clostridium perfringens type D ("classic" overeating disease). You should vaccinate any animal's whose vaccination status is unknown.

> The CDT vaccine is administered subcutaneous (under the skin) by pulling up a handful of skin to make a "tent," and sliding the needle into the base of the tent and pressing the plunger. Subcutaneously injections can be given high in the neck, in the axilla (arm pit) region, or over the ribs.

> Sometimes, an abscess will develop at the injection site. For this reason, the axilla is usually the best injection site, especially for market lambs and goats and show animals.

> All vaccines should be stored and used according to the manufacturer's label. Needles used to vaccinate animals should not be used to draw vaccine into the syringe. Needles should be

changed frequently. Ideally, a clean needle should be used for each animal. An 18- or 20-gauge needle is suitable for CD-T vaccinations.

Some experts believe that CDT vaccinations are not as effective in goats as sheep.

Special thanks to our friends at GoatKeeper magazine, and in particular, Jackie Dunham, IGA Country Representative for Western our attention.

#### Sheep and goat value chains in Ethiopia: A synthesis of opportunities and constraints

#### Introduction

The sheep and goats population of Ethiopia, including expert estimates of the pastoral areas, is 66 million head of which some 35 million are sheep (Negassa et al. 2011). They provide 46% of national meat consumption and 58% of the value of hide and skin production (Awgichew et al. 1991).

Sheep and goats have many advantages over large ruminants for most smallholder farmers, including: lower feed costs, quicker turnover, easy management and appropriate size at slaughter (Wilson and Morrical 1991; Abegaz 2002; Donkin 2005). They also have greater tolerance to less favourable conditions, suffering less mortality during periods of drought than large ruminants (Galal 1983; Wilson and Morrical 1991). In addition, subsistence farmers prefer sheep and goats as the risk of losing large ruminants is often very high (Sölkner et al. 1998).

Apart from subsistence, livestock also play important economic and cultural roles. Thus, goats have important roles in food security and in mitigating environmental risks due to their unique adaptation to arid and semiarid areas. Sheep and goats are primarily used for meat and milk production for home consumption. They are the major sources of cash income for farmers and pastoralists. With more frequent droughts and environmental degradation the pastoral community is expanding goat production as an adaptation strategy.

In its five-year plan for growth and transformation, the Government of Ethiopia has decided to increase meat exports to 110,000 t in 2015 with the aim of earning USD 1 billion a year. The government is committed to support the private sector involved in export of these commodities. It is as-

> sessing the constraints along the meat export value chain and is ready to take all necessary measures to increase the supply of live sheep and goats to export abattoirs and the export of meat according to targets. This creates better market opportunities for sheep and goat producers. As part of this commitment, regional governments are allocating significant funds in the scaling up and out of community based breeding programs and veterinary drugs revolving funds to boost supplies of better quality animals to the market.

More generally, the demand for Ethiopian sheep and goat meat has dramatically increased after market promotion by development projects in close collabora-

tion with the government. This has created an opportunity for sheep and goat producers to sell more animals at better prices. Meat export performance has increased from 870 t in 1991 to 18,000 t in 2011-12.

According to the traditional classification of livestock production systems, there are two distinct subsystems in Ethiopia. The highlands, more than 1500 metres above sea level, cover 40% of the total area of the country and host some 60% of the total livestock population. The lowlands cover 60% of the country. While the exact numbers are not known, pastoral and agropastoral areas contain an estimated 40% of the goats, 40% of sheep, 20% of cattle and all of the camels in the country (Negassa and Jabbar 2008). The lowland areas are home to over 12 million pastoral people, who are highly dependent on livestock.

The productivity of Ethiopian sheep and goats is low; they grow slowly and kid mortality is high. There is an urgent need to increase the productivity of sheep and goats to improve household income and nutrition, and to meet the demands of the growing human population and foreign markets.

Developing efficient input delivery systems, knowledge-based animal husbandry (including feeding, breeding, housing and health care), costeffective marketing, and efficient and equitable supply chains have all been identified as important interventions.

This report is a synthesis of eight value chain assessments that examined the constraints and opportunities along sheep and goat value chains in Ethiopia. The assessments also identified best-bet research, development and policy interventions to support development of the sheep and goat value chain.

READ MORE ...



#### China Sheep and Goat Production and Academic Conference

By Juan Capote, IGA President, Jean Marie Luginbuhl, IGA Secretary-Treasurer, and Cesar Meza, IGA Country Representative

The Chinese Sheep and Goat Association organized the 2014 China Sheep and Goat Production and Academic Conference in Liaocheng, Shandong province, from 22 to 24 August, 2014. China raises more than 20% of the world goat population (with a similar percentage of people) on only 7% of the planet territorial area. Numerous native sheep and goat breeds with unique genotypes represent local environmental characteristics. China has generated an enormous consumer market for milk, meat, cashmere and leather that is of great interest for livestock industries. The Chinese Sheep and Goat Association was founded 26 years ago and has more than 1500 members.

The President and two IGA members, Dr. Luginbuhl (Secretary- Treasurer) and Dr. Meza (Mexico Country Representative) attended the conference and made presentations: "Environments and goats around the world: importance of genetic and

management factors" (by Juan Capote), "Pasture evaluation and utilization for meat goats in North Carolina" and "Use of goats to control invasive vegetation in old or abandoned pastures in the Appalachian region of North Carolina" (by Jean-Marie Luginbuhl) and

"How to improve productive efficiency in goats? Interactions targeting supplementation & reproductive outcomes" (by Cesar Meza).

More than 600 researchers, technicians and farmer association leaders participated at the Conference that was held in the Liaocheng Hotel located in the Water City. All participants were given a technical tour where they visited two sheep farms and a sheep show.



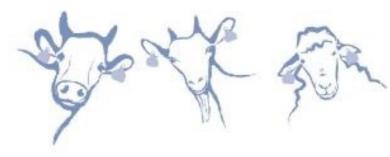


After the meeting, Dr. Wang Jianming invited the IGA members to visit the College of Animal Science of the Shandong Agricultural University. They also toured a goat farm where the University is developing a project to improve dairy goat management as a pilot demonstration site for new farms in the region. Fresh milk is processed onsite into yoghourt and fresh cheese. The farm is also growing some vegetables, and is in the process of building a restaurant on the premises. IGA members sampled the dairy products mentioned above at the farm owner's store in the city.

Afterwards, IGA members, the farmers and relevant members of the University staff had a meeting to discuss the creation of new avenues of collaboration between IGA and Shandong Agricultural University. As a consequence, a report prepared by the IGA members was emailed to the University at a later date with recommendations to improve dairy goat production at the farm.

Finally the Governor of Shandong province (100 million inhabitants) invited the IGA members for lunch. He expressed great interest in increasing and improving goat production in his province.

# REPORT: FAO-ICAR African Symposium on "Animal identification and recording (AIR) systems for traceability and livestock development in sub-Saharan Africa", 14-16 April 2015, Pretoria (South Africa)



Around 130 participants from 30 countries met in Pretoria, South Africa, on 14-16 April 2015, at the occasion of the international Symposium jointly organized by FAO and The high-level delegates included permanent secretaries of ministries of agriculture, heads of animal production departments and chief veterinary officers, representatives of the African Union Inter-African Bureau for Animal Resources, the World Animal Health Organization, the International Livestock Research Institute and regional research centers,

from farmers associations, development agencies, service providers and breed societies. The Symposium was opened by the Minister of the South African Department of Agriculture, Forestry and Fisheries, Mr. Senzeni Zokwana

The files presented at the FAO-ICAR Symposium on Animal Identification and Recording, and the Pretoria Declaration produced at the Symposium is available <u>here</u>.

## IGA 2014 Financial Report and 2015 Budget

As always, the IGA seeks to be a transparent organization. We want our members to know what is happening in the association and around the world. As part of this effort you will find an outline of the Financial Report for 2014 and the Budget for 2015. If you need clarification or have questions about the revenue or expenditures, please contact either:

Jean-Marie Luginbuhl Secretary-Treasurer jmlugin@ncsu.edu or Beth Miller Assistant Secretary-Treasurer goatlady1492@yahoo.com

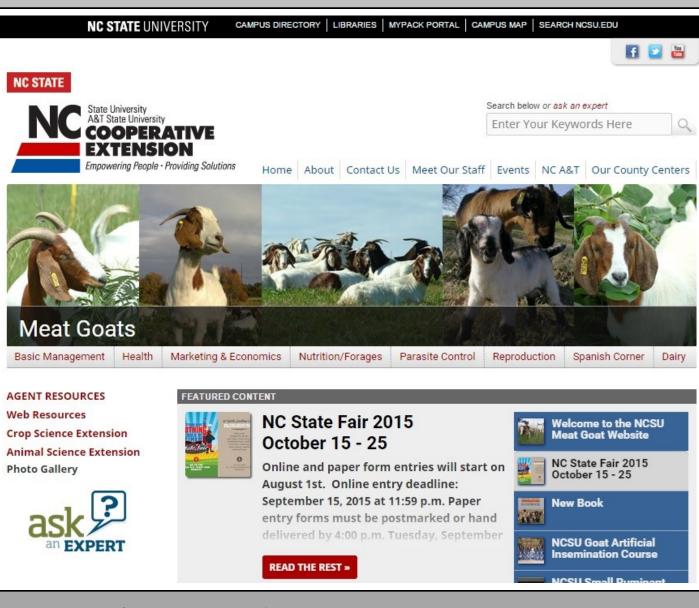
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#### 2014 IGA actual + budget and 2015 budget 2014 2014 2015 Revenue IGA revenue Actual Budget Budget \$19,000.00 \$22,000.00 IGA revenue: Elsevier Royalties \$20,995.60 IGA revenue: Individual Memberships \$12,000.00 \$12,000.00 \$10,025.00 IGA revenue:Institutional Memberships \$5,000.00 \$5,000.00 \$4,853.98 **TOTAL IGA revenue** \$35,874.58 \$36,000.00 \$39,000.00 Expenses 2014 2014 2015 IGA expenses Actual Budget Budget IGA expenses:Bank Fees -\$401.30 -\$700.00 -\$700.00 IGA expenses:Communication -\$63.15 -\$40.00 -\$100.00 IGA expenses:Elsevier expense -\$16,989,53 -\$9,000.00 -\$17,000.00 IGA expenses: Personnel expense -\$25,409.80 -\$25,000.00 -\$25,000.00 IGA expenses: Postage and Printing -\$500.00 -\$500.00 IGA expenses:Supplies and Equipment -\$500.00 -\$500.00 IGA expenses:Travel -\$995.10 -\$3,000.00 -\$3,000.00 IGA expenses:Web expenses -\$264.00 -\$264.00 -\$264.00 TOTAL IGA expenses -\$44,122.88 -\$39,004.00 -\$47,064.00 **IFAD** grant IFAD Grant: Consultant Fees -\$5,000.00 \$0.00 \$0.00 IFAD Grant: final payment \$15,000.00 \$15,000.00 \$0.00 \$10,000.00 \$15,000.00 \$0.00 Total IGA revenue \$35,874.58 \$36,000.00 \$39,000.00 IFAD grant \$10,000.00 \$15,000.00 \$0.00 IGA expenses -\$44,122.88 -\$39,004.00 -\$47,064.00 TOTAL INCOME \$1,751.70 \$11,996.00 -\$8,064.00

# North Carolina State University Meat Goat Extension Portal

Welcome to the NCSU Meat Goat Extension Portal. The Meat Goat Extension Portal was developed to bring together resources pertaining to production, management and marketing of meat goats in North Carolina. On this site, extension agents and producers can find extension and research-based information, with links to local, national and international organizations.

#### http://meatgoats.ces.ncsu.edu



# Need to contact us?

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