



MELKPRODUSENTE-ORGANISASIE
MILK PRODUCERS' ORGANISATION

MILK BULLETIN

In partnership with
the dairymail
Publication for the dairy industry

Represents and empowers the producer

9 June 2017

Local market

Tenth SALHC a resounding success

The tenth biannual South African Large Herds Conference (SALHC) held at Champagne Sports Resort in the Drakensberg, KwaZulu-Natal attracted industry leaders from around the world. Close to 450 delegates attended the conference with the theme “Resilience – What makes a resilient dairy business going forward?” Local and international experts made presentations on enhancing dairy farming resilience by managing soil, water, feed, fertility, animal health, risk optimally, and on the challenges and opportunities arising from changing circumstances. Dairy farmers were encouraged by the fact that they rank among the best in the world and have a bright future with many growth opportunities.

This year’s farm videos featured the farming operations of Rob Stapylton-Smith in KwaZulu- Natal and Hannes Celliers in the Eastern Cape. Once again, the virtual farm visits proved to be one of the highlights of the programme.

The well-balanced programme also catered for the emotional well-being of dairy farmers, providing them with advice on balancing stress in their working lives in the dairy in addition to a humorous and inspiring talk on the secret to resilience. Delegates thoroughly enjoyed a performance by the renowned Drakensberg Boys Choir on Monday evening and had several opportunities for informal interaction at social events from Sunday to Tuesday.

Dairy farmers and representatives throughout the dairy value chain attended the event; farmers from Swaziland and Zimbabwe were among the delegates this year. A record number of 40 local and international companies exhibited their products and services. New to the conference this year was the Event App and also 29 scientific poster presentations.

Simon Matthews, chairman of the organising committee, thanks the 17 sponsors, in particular, Standard Bank the platinum sponsor for making this memorable conference possible.

Dr Chris van Dijk, MPO chief executive said, “The conference has proven over the years to be a sound investment and I hope that every dairy farmer who attended this year returned home inspired in their quest to achieve resilience on their farms.”

Drought aid for producers in Northern and Western Cape

The severe drought prevailing in the Northern and Western Cape, specifically in Namaqualand and Bushmanland, demands action. NWK will therefore support an initiative by a group of producers from the Hoopstad region to collect and transport donations of maize. Clients can also now make donations of maize through NWK silos.

“Feed donations received from across the country by producers in North West in 2016 during one of the worst droughts ever are still fresh in our memories. This is an opportunity to rise to the occasion by assisting fellow producers in need. NWK will contribute a sum of R50 000 towards the logistics of delivering the grain to the various points” said Heinrich Krüger, NWK chairperson.

A delivery account for the Western and Northern Cape Drought Aid, with the account name ‘Wes- en Noord-Kaap-Droogtehulp’ (number X980422WND) was created and NWK’s producers can deliver against this as a donation to the drought aid.

Enquiries with regard to the delivery of the maize can be addressed to any of NWK's silo managers. **Press release**

International market

Global dairy prices increase again

Global dairy prices increased for the sixth time in a row in fortnightly GlobalDairyTrade (GDT) auctions, a sign that the recovery in dairy in 2017 was on track. The GDT Price Index increased by 0,6 percent, with an average selling price of \$3,395 per tonne, in the auction held on Tuesday.

After two years of declining prices, farmers and analysts had been concerned that the 50% rebound in 2016 was temporary. Prices also moved downwards at the beginning of the new year as global supply increased. Nevertheless, there are positive signs that prices might start to stabilise. To read more, click [HERE](#).

Save money and water by detecting and repairing water leaks

Drip. Drip. Drip. The constant drip of a broken water trough float might be so commonplace that you might no longer even notice or hear it. Water conservation, not only to save pumping costs but to preserve ground water resources, doesn't necessarily involve sophisticated water-metering studies. It simply means fixing known leaks as soon as they occur, constant vigilance for new leaks, and making common sense management changes. At the Western Dairy Management Conference held in Reno, Nevada, earlier this year Joe Harner, an engineer at Kansas State University, outlined 10 areas where water use could be better managed. For practical advice in this regard, click [HERE](#).

Research

Review of the controversy over whether or not *Mycobacterium avium* subsp. *paratuberculosis* poses a food safety risk with pasteurised dairy products

Abstract

There is no question that *Mycobacterium avium* subspecies *paratuberculosis* (MAP) causes Johne's disease, a slow-advancing, chronic and fatal disease in cattle and other ruminants. However, in relation to human disease, specifically Crohn's disease (CD), the involvement of MAP is controversial and hotly debated. While most studies have targeted milk as a vector in regard to the exposure of humans to MAP via food, potential sources of MAP in the human food chain are manifold and include meat, water and vegetables. With milk products, the effectiveness of pasteurisation has also been disputed, with the impact of experimental design coming under scrutiny. This critical review shows that evidence implicating MAP as the causative agent of CD is lacking. Further, it determines that the weight of evidence indicates that the commercial pasteurisation of milk inactivates MAP and concludes that the evidence that MAP poses a food safety risk for pasteurised dairy products is not robust.

Robertson *et al.* *International Dairy Journal*
Volume 73, October 2017, Pages 10–18

Nutrient cost of dairy products lower than other food products – Brazil

In order to analyse the cost-benefit of dairy, in economic and nutritional terms, researchers from Embrapa Dairy Cattle, in partnership with the Federal University of Juiz de Fora (UFJF) and financial support from the Minas Gerais Research Support Foundation (Fapemig), set up the Nutrilite Project, which compared the nutrient costs of dairy products with other products typical of the Brazilian diet. The study used as a database the nutritional table and the products present in the national Household Budget Survey (2008–2009). They investigated 443 foods and beverages consumed by Brazilians, of which 43 were dairy products. The collection of prices was made in April and October 2016, in order to minimise the effects of seasonality and inflation. The lowest prices of all products were collected, without considering promotional prices, in 16 virtual

supermarkets in 10 states of Brazil.

The research findings showed that, of the eight nutrients analysed, dairy products presented a competitive cost for the acquisition of four of them: protein, calcium, vitamin A and vitamin D. This result further reinforces the importance of milk and its derivatives in food, and indicates that drinking milk does well not only for health, but also for the Brazilian consumer's pocket. To read more, click [HERE](#).

Gene editing for TB resistance

Gene insertion might result in calves being genetically resistant to bovine TB in the future. Chinese scientists have successfully inserted a tuberculosis-resistance gene into the bovine genome, without any off-target genetic effects. The researchers, at the College of Veterinary Medicine, Northwest A&F University in Shaanxi, China, used CRISPR (clustered regularly interspaced short palindromic repeats) Cas9n gene-editing technique to introduce the new gene to 11 calves.

Success in this process involves identifying the appropriate resistance gene and inserting it into the right location to transfer resistance without introducing off-target effects. The researchers identified a bovine tuberculosis (*Mycobacterium bovis*) resistance gene, called NRAMP1, which they inserted into the genome of bovine fetal fibroblast donor cells. Using somatic cell nuclear transfer, they inserted the nucleus of the donor cells into bovine ova, which were cultured in vitro for embryo transfer into recipient cows.

The researchers used genetic analysis to confirm that the NRAMP1 gene had successfully integrated into the genetic code at the targeted region in the 11 resulting calves. They also compared results using an older CRISPR/Cas9 technique, and found that the older method resulted in off-target genetic effects while the novel CRISPR/Cas9n method did not.

The researchers also exposed the transgenic calves to *Mycobacterium bovis*, and found increased resistance to the tuberculosis pathogen as measured by standard blood markers.

In their conclusions, the scientists say their experiment demonstrated that a single Cas9n can be used for gene insertion at a selected target site in the cattle genome and that this method is advantageous in terms of avoiding additional indel mutations.

The resulting transgenic cattle exhibited increased resistance to *M. bovis* infection. "Our study provides an avenue to develop the CRISPR/Cas9 system for agriculture applications."

The research report is called **Genome Biology**. To read more, click [HERE](#).

Training

Schedule your dairy farm training now

Helene Pheiffer, manager of training at the MPO, urges milk producers to schedule their dairy farm training as soon as possible. The Institute for Dairy Technology is continuously updating its schedule of training programmes for 2017. Courses are aimed at dairy farm workers and supervisors. Click [HERE](#) for details of the training programmes offered. Please contact Jas Wasserman at 012 843 5743 or 082 490 2465 for assistance and to book a five-day course.

MPO helps with occupational health and safety issues

The MPO's Institute for Dairy Technology offers a five-day training course on the occupational health and safety code of best practice for dairy farmers. The course is practical and equips participants with the knowledge they need to comply with the requirements of the Occupational Health and Safety Act. Training is conducted on-farm in the language of preference. Dairy farmers who need assistance in complying with the Department of Labour's health and safety requirements on their farms are encouraged to contact the Institute to schedule a training programme. The Institute is currently scheduling its training programmes for 2017. Click [HERE](#) for details of all the training programmes offered. Please contact Jas Wasserman at 012 843 5743 or 082 490 2465 for assistance and to book a five-day course.

Technology transfer

Participate in our competition!

Do you know how much milk was supplied in South Africa in April 2017? Put your knowledge to the test and stand a chance to win. A winner will be announced every month and there are several prizes to be won. After 12 draws, a national winner will be announced at the MPO's 2018 gala dinner. Click [HERE](#) for more information and instructions on how to enter.

Standing the test of time – developing a resilient farm management strategy

Dairy farmers face many challenges over which they have no direct control, for example milk prices, feed availability and prices, fertiliser prices and the climate. These challenges cause the farmer a lot of stress. In order to overcome this, farmers need to have a farm strategy that aims to prevent and respond and adapt to challenges and risks. In a nutshell, this is resilience – a quick and positive response to difficulties and negative circumstances. For advice on how to develop a resilient farm management strategy that will stand the test of time, turn to page 44 of the June issue of *The Dairy Mail* for an article by Craig Galloway, researcher for the Woodlands Dairy Sustainability project. To read the digital copy of TDM, go to www.agricconnect.co.za.

Events

You are invited to MPO North West farmers' meetings

MPO North West chairman Johan Strydom invites milk producers to attend route meetings that will be held in Brits, Leeudoringstad and Schweizer-Reneke on 21, 27 and 28 June, respectively. The aim of the meetings will be to provide a platform where dairy farmers in the province can exchange ideas and experiences in an informal manner. Dairy farmers who attend the meetings will also have the opportunity to interact with MPO directors and staff. Some of the meetings will be held on dairy farms. Join the MPO North West at one of the meetings below.

Date	Place	Venue
Wednesday, 21 June	Brits	Wagpos High School
Tuesday, 27 June	Leeudoringstad	To be confirmed
Wednesday, 28 June	Schweizer-Reneke	Johan Scribante's farm

For more information contact Benita Oelofsen on 073 116 8544 or send an email to benita@mpo.co.za.

Save the date – MPO Gauteng Dairy Day, 9 August 2017

Save the date for the annual MPO Gauteng Dairy Day which will take place on 9 August at Belnori Boutique Cheesery in Bapsfontein Gauteng. Rina Belcher has an interesting programme planned for the day, including a hoof cutting and dehorning demonstration. For enquiries please contact Rina at 082 377 5698 or send an email to belnori220@gmail.com.

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[Links](#)

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The Dairy Mail**

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