

The International Peanut Forum:

Feedback and insights

The 2016 International Peanut Forum was recently held in Madrid, Spain. This biennial event, which is organised by the American Peanut Council (APC), creates an opportunity for international role-players – ranging from primary producer level to processors, traders, consumer representatives, technical services, researchers and equipment suppliers – to meet, discuss and trade information on a wide scope of topics relevant to the groundnut industry every second year.

This year's forum covered matters relating to nutrition and allergies, the genome project, exciting new applications and product releases, the environmental impact of groundnut production and use, social media marketing and an overview of the international supply and demand factors playing a role in the current market arena.

The South African groundnut industry was represented by Adri Botha, chairperson of the SA Groundnut Forum, and Corné Louw, senior economist at Grain SA. The main objectives or prospective benefits of attendance were:

- Gaining updated and relevant global information on a broad spectrum that is not otherwise accessible to local industry role-players – especially the smaller entities that, to a large extent, represent the basis and potential growth of the industry.
- The opportunity to get a 'first-hand feel' for where South Africa finds itself on the international groundnut arena.
- Possibly gaining some insight which could support and assist in a turn-around strategy for the industry.
- Official representation by an industry representative body (SAGF/OAC/OPDT) of the industry. Due to dwindling production, South Africa is currently not viewed as one of the larger players, but by sending delegates, the aim was to demonstrate – especially as far as markets in Europe are concerned – that the South African peanut industry remains relevant.
- Identification of potential speakers or international specialists which could be invited to South Africa in future.
- Identification of possible topics to be highlighted in planned industry days.
- Exposure to new technology not necessarily marketed to South Africa.

According to the registration list, the South African representatives constituted two of the less than ten African attendees. As could be expected, the largest number of registrations came from the United States (US), Argentina and China, with



various European Union (EU) importing countries also being well represented.

Latest nutrition research

The Peanut Institute is a US-based non-profit organisation that supports nutrition research and develops educational programmes to encourage healthy lifestyles which include peanuts and peanut products. Patricia Kearney, programme director, presented an informative overview of recent international studies that focus on the positive health benefits of groundnuts which have been published in various well-respected medical journals across the globe. The detail and volume of information is substantial and would be better served in follow-up articles.

However, in short, the *New England*

Journal of Medicine (NEJM) has published the study 'Association of nut consumption with total and cause-specific mortality'. Among the vast findings of this study, it has been reported that by eating nuts – including peanuts – on a daily basis, the risk of death by any cause may be reduced by as much as 20%.

The study was conducted over 30 years, with the support of 120 000 participants. It was further found that by consuming a relatively small amount of nuts twice a week, the risk of death by any cause may be reduced by 12% and specifically for heart- (-24%), respiratory- (-16%), infection- (-32%) and kidney-related (-48%) causes.

According to another study conducted at the Vanderbilt University in Nashville, Tennessee, which was published in the *Journal of the American Medical Association (JAMA)*, peanuts, peanut butter and nuts have been proved to prolong life.

Risk of diabetes

This year the World Health Organisation (WHO) will focus on the risk of diabetes – a disease which has grown into epidemic proportions globally. The hope and call is to find ways of better treatment and prevention in place or support of medicinal treatments. A Harvard study conducted over 22 years, including 206 000 participants, shows that plant (not animal) protein lowers the risk of Type 2 diabetes by 9%. According to the study, plant proteins that carry this benefit include whole grain, legumes, peanuts, peanut butter and some others.

A five-year study on a group of 12-year-olds showed that peanuts and peanut butter may hold the key to preventing obesity. Replacing four snacks per week with peanut or peanut butter-based options significantly improved their average body mass index (BMI).

By encouraging people to consume more peanuts, the responsibility to manage food safety throughout the supply chain – including the control of aflatoxin contamination – is now more important than ever.

Improving traits without GMO

Dr Steve Brown, executive director of the Peanut Foundation in the US, managed to

bring the intricate and highly specialised world of genomics and biotechnology within reach of the average delegate. The vision of the peanut genome initiative is to guide the effective development of trait enhancement technologies, disease management systems, genomic resources, and agronomic germplasm for profitable peanut production.

Dr Brown outlined the basics of genome and gene studies, and that what this project is achieving should not be confused with genetic engineering. A vast majority of organisms have already somehow been modified by humans over time, for instance dairy cows, without genetically modified organism (GMO) intervention.

Promotion of the high protein content of products provides the opportunity for peanuts as an ingredient.

The peanuts cultivated today have also been domesticated over centuries, and are very different from the two natural wild species, which simply did not exhibit the traits we are looking for, and, therefore, breeding has led us to better suited varieties. The focus of the genome programme is to find the specific gene pattern or code linked to a particular trait – or in other words, mapping genes to traits.

Through marker-assisted selection, growing tests are to a large extent replaced by testing the deoxyribonucleic acid (DNA) code and identifying traits without long and expensive trials – therefore, a breeder toolbox to find the desired traits. The question that comes to mind now is where South Africa fits into this picture.

Peanut allergy research

Specialising in children's allergies and asthma at the Allergy Diagnostic and Clinical Research Unit of the Red Cross Children's Hospital and the University

of Cape Town, Dr George du Toit, who is also currently a consultant in children's allergies at the Evelina London Children's Hospital and an honorary senior lecturer at King's College London, shed some light on a study he is involved in.

The study, 'Effect of avoidance of peanut consumption', which was published in the *NEJM*, focusses on the effect of early introduction to at-risk children and the subsequent effect on peanut allergy. The study has been conducted over many years, following the children from birth. It has been found that the introduction of 2g of peanuts or peanut products per week is most beneficial in limiting or even preventing later allergies.

New product launches

New products containing peanut show a consistent growth in the EU, according to Edward Bergen, a trends and innovation consultant from Mintel UK. He is of the opinion that for some time consumers were confused over nuts – whether they are healthy or not.

However, lately the benefits of nuts, and particularly peanuts, have been widely promoted, and peanuts are increasingly finding their way into various kinds of meals and products. Promotion of the high protein content of products provides the opportunity for peanuts as an ingredient, and for products such as dry powder peanuts, to become readily available in the health food sector in particular.

Trendy and speciality tastes are on the rise, and peanut butter is no longer only available in smooth or crunchy varieties. Options such as chili or salted caramel peanut butters are presented on shelves. In the same trend, snacking flavours are becoming more adventurous, unusual and exotic. Descriptions and brand names are becoming more specific and authentic through origin-based marketing.

Peanut milk is being considered as an alternative to dairy or other nut-based 'milks', such as almond milk. With beer- and spirit-inspired products, such as Jim Bean Honey Bacon and Guinness Gourmet Peanuts, finding their way to consumers, the humble peanut seems to be undergoing a major makeover.

The greater message is that snacking can be better for one's health if the right choices are made. There is large growth potential due to legitimate product claims referring to healthier, high-protein, satiety and energy boost.

Environmental impact

Population growth will be the driver for change. In 2050, between 8 and 11 billion people will populate the earth, and in the next 30 years we need to find food to feed an additional two billion people. Agriculture is responsible for 70% of the global water usage, and crops and pastures occupy roughly 40% of our land surface. Considering these facts and the available surface areas, there is not much room for further expansion and we will have to consider other measures.

According to Dr James McCarthy from the University of Arkansas, crop science remains a key aspect, and disease and pest resistance in crops are of paramount importance, as producing food needs to remain sustainable for farmers. However, producing food should be ecologically sound, and we cannot continue producing food at any and all cost. Peanuts are well positioned as a possible solution for food supply, not only on nutritional merit but also due to the multiple benefits thereof in a rotational crop programme.

A full lifecycle impact assessment study quantifies the inputs and outputs, in order to determine the environmental impact of a certain product from production through to final consumption. A study conducted on peanut butter yielded some interesting and positive results – for instance, a total carbon footprint of only 2,77kg CO₂e/kg of peanut butter, of which the highest values were attributed to electricity and transportation costs in the secondary and tertiary sectors.

Recently, yields have increased in

Argentina, China and the US. Dr McCarthy is of the opinion that if yields can be increased in the rest of the top ten production countries, we should be getting much closer to our goal of filling the food gap.

Social media marketing

Regardless of the Facebook, Twitter and Instagram accounts most of us have on our cellphones and tablets, many are still amazed by the ever-increasing role social media is playing in our daily lives – especially the scope of direct, real-time marketing via these platforms to a broader, global and interconnected audience.

Charlotte Hamill, joint managing director at Born Social, a London-based marketing and advertising company, gave an entertaining and eye-opening presentation on the importance of understanding social media and the role it plays in today's business world.

Social media has levelled the playing field, providing small brands with the same opportunities as larger, better funded brands. One has to find the most relevant platform for a product to reach the right portion of the 2,3 billion people globally active on some sort of social media platform.

According to Hamill, the fundamentals of any social media programme are strategy, content and community. "Define your objectives, message and market. Decide on quality versus quantity postings and never forget the human factor. Find and maintain a connection by adding value for the reader," she said.

Supply and demand

The audience was not left with any impression of major changes in the overall global supply and demand position. The large production countries, the US, China, Argentina and India, remain well positioned

with the natural fluctuations of agricultural production that will remain integral in analysing any one season. Cultivars with shorter growing periods, high oleic content and increasing yields remain at the forefront of these nations' research and development agendas.

At the time of the event, Argentina (where plantings had been slightly down from the previous season) was experiencing high rainfall across main production areas, which could potentially have some effect on the crop during this time of harvest. They are currently awaiting the result on the yield.

The representative from Brazil reported that their harvest is progressing well and that quality seems better than the previous season. In his view, increased prices might entice farmers to increase 2016 plantings by between 10 and 20%.

Similarly, in China lower maize prices might make peanut production more attractive to farmers, and an increase of 5 to 10% in plantings is a possibility. India experienced two challenging seasons and exports from this country is down. According to their delegate, plantings depend on the monsoon, but that an increase of 10 to 15% may be feasible.

From the US it was reported that a yield of 2t/acre is common and that no other commodity poses real competition for peanuts. There is, however, some concern over storage infrastructure next year, and it was further noted that no changes in the *US Farm Bill* is expected.

Regarding imports, it was reported that the confectionary and chocolate markets are still growing in the US as well as the EU, where, depending on the country, a 3 to 5% growth per annum is experienced. In China the edible market still takes a backseat to oil remaining in high demand. However, consumption is growing annually in that country. 🌱

