



Rooibos research ‘blooming’

thanks to funding boost

Scientific research into the health benefits of Rooibos have been boosted with a R4.8 million investment from the Department of Science and Innovation (DSI). The investment is aimed at unlocking the potential socio-economic value of SA’s favourite tisane at a time when Rooibos is gaining wide appeal due to its nutritious properties.

Aligned to its core mandate of supporting research on Rooibos, the SA Rooibos Council (SARC) undertook to match the Department’s investment, taking the combined funding to almost R10 million. The announcement was made in November at a Science Café held at Kirstenbosch National Botanical Garden, hosted by the industry body and focused on showcasing research on Rooibos.

The Department’s, Sunita Kalan, Director of Sector and Local Innovation, explained that the funding has been made available through the Sector Innovation Fund (SIF) – a programme launched by the DSI in 2013 to increase the competitiveness of various sectors in the economy by way of incentivising increased investment into research, development and innovation (RDI).

“Given the decline in private sector investment into R&D in recent years, the Sector Innovation Fund has helped to create an enabling environment for RDI priorities that are largely driven by the industry in a co-funding arrangement with government. The intention is to explore new approaches to fostering RDI partnerships with the private sector, as well as building stronger links between industry and the public science system,” she remarked.

Supporting community growers

In addition to the funding provided to the SARC through SIF, the DSI has also strengthened the Rooibos and Honeybush sectors through support provided to community growers in the Western Cape and the Eastern Cape.

The SARC responded to the call with a proposal seeking to establish a scientific evidence base for the health benefits of Rooibos and was one of six proposals that were approved for funding in this phase of the SIF programme.

Joe Swart, Research Director for the SA Rooibos Council, says the industry welcomes the partnership with the DSI. This will give scientists the opportunity to further their work and to better understand and harness the true value of Rooibos – which he describes as one of SA’s most treasured indigenous botanical assets.

“The demand for natural medicinal products in modern medicine as complementary or alternative therapies is on the increase; however, the potential medicinal values of these plants, including Rooibos, are not always properly researched and documented, and the industry and wider sector can benefit from an increased focus on R&D in this area.

"While Rooibos has been studied for well over 20 years and researchers have confirmed its beneficial properties, lack of funding has stymied progress. The additional investment will help the industry to move forward with studies that include human trials – an important next step in the development of therapies containing Rooibos as an active ingredient. Human studies are paramount as it will allow us to make scientifically-recognised health claims regarding Rooibos," he says.

Multiple benefits

Rooibos has already been hailed for its chemoprotective properties (reducing the incidence of inflammation, which is a leading cause of cancer), is good for the heart, helps to control blood glucose, fights inflammation and reduces stress and anxiety. Scientists consider it a rich source of polyphenols, that are packed with antioxidants and potential health benefits, which can be used in the development of phytomedicines, nutraceuticals and cosmeceuticals.

Swart says human trials involving Rooibos could uncover alternative ways to help manage many modern-day diseases, including cancer, heart disease and other metabolic diseases like diabetes and Alzheimer's.

The multi-million-rand funding will allow researchers to delve deeper into Rooibos' ability to:

1. protect against Alzheimer's disease that causes the brain to shrink and is the most common cause of dementia;
2. target oxidative damage;
3. prevent and/or manage inflammatory bowel syndrome;
4. protect the heart from oxidative stress;
5. reduce allergic rhinitis (nasal allergy) and;
6. counter cardiometabolic diseases like heart attacks, strokes, diabetes, insulin resistance etc.

Swart says there is a growing trend at local and international research institutions to prioritise Rooibos as part of their novel food or functional food research, as well as for studies focusing on metabolic and lifestyle diseases.

Global reach and research

"Since 2016, the SARC has funded 23 studies that were headed by 23 Principal Investigators, involving 43 national and international researchers (mostly professors and associate professors). Eight post-doctoral students were granted employment contracts and ten completed PhD degrees, 25 Master's degrees, and eight Honours degrees were awarded. The body of research has been published in 35 different articles and were presented at 53 conferences," Swart remarks.



"Two researchers obtained full time employment at Stellenbosch University on completion of their Rooibos-related studies and a further two had their Master's degrees bumped up to PhD degrees, as a result of the novelty of their Rooibos-related research study."

According to Swart, the economic opportunities are meaningful. Once a deeper assessment of Rooibos' pharmacological qualities has been concluded, it will give an indication of how Rooibos can be used in the future.

"We have the best minds in research, science and innovation coming together to secure evidence-based information on Rooibos, which is likely to lead to rapid technological advancement into novel Rooibos products. Learning more about Rooibos and its properties, will also contribute to economic diversification, that will create benefits all the way down the Rooibos supply chain, while enabling the industry to expand into new markets.

"Other studies that are currently underway will continue to explore Rooibos as a rich source of antioxidants, and thus thought to potentially play a preventative and therapeutic role in various conditions, including neurodegenerative diseases, like Parkinson's and Alzheimer's, high blood pressure, diabetes, inflammation, heart disease, as well as obesity."

To date, the SARC has contributed more than R21 million towards Rooibos-related research.

Article compiled from a media release issued by the SA Rooibos Council. For more information on Rooibos, visit <https://sarooibos.co.za/>.

Dinyakišišo tša mahlale ka ga meholo ya maphelo ya Rooibos di godišitšwe ka peeletšo ya R4.8 milione go tšwa go Kgoro ya mahlale le Boitlhamelo(DSI). Peeletšo e lebišitšwe go notlolla boleng bjo bo ka bago gona bja ekonomi ya leago ge e le gore ke dinama tše di ratwago tša SA ka nako yeo Rooibos e hwetšago boipilešo bjo bo nabilego ka lebaka la dithoto tša phepo.

Translated into Sepedi by Prof. Walter Matli.