

Citrus Foundation Block and the Citrus

LOOKING BACK

LOUISE BRODIE AND LOUIS VON BROEMBSSEN



The Citrus Growers' Association (CGA) has bought the premises housing the Citrus Foundation Block (CFB) in the Eastern Cape and the Citrus Research Centre (CRC) in Nelspruit. Ending a long-term lease of these properties from Capespan, ownership of these strategically significant premises has now been placed right within the industry.

Until recently the Citrus Research International (CRI) head office – the CRC research facility buildings in Nelspruit, formerly known as the Outspan Citrus Centre – and the CFB property in Uitenhage belonged to Outspan. They had originally established these facilities in the 1970s. During the deregulation process, Outspan evolved into Capespan, which has now become a private company. It was in 2018 that the CGA purchased these properties from Capespan. The acquisition of these vital research entities by the citrus industry provides the opportunity to reflect on the development and significance of CRI and the Citrus Improvement Scheme (CIS) within the SA citrus industry. Louis von Broembsen, former Research and Technical General Manager for Outspan and Capespan Group General Manager for Research, Technical and Extension shared historical

insight. Louis also outlined the conditions of the citrus industry in the 1970s and the remarkable foresight that industry leaders showed back then, in establishing the CIS at the CFB.

Background

Louis explained that in the early 1970's the SA citrus industry was severely compromised as a result of diseases, including African Citrus

Greening, exocortis, tristeza, psorosis and cachexia, all of which were uncontrolled and transmissible. In addition, Rough Lemon rootstock, which was then being used for more than 90% of the industry's trees, had shown itself susceptible to soil pathogens and particularly Phytophthora root rot, which had a damaging impact on new orchards at the time. Where orchards were replanted, many were affected by the toxic build-up of fungal pathogens, nematodes, poor soil aeration and salinity. It was also estimated that less than 40% of nursery trees that were being planted in commercial citrus orchards were propagated using specifically selected budwood source trees.

This situation also meant that growers were unable to increase their yields and the industry average production remained at around 25 t/ha. The industry's total exports had been static at around 20 million cartons for several years and it had become clear that there was an urgent need for improved trifoliolate and trifoliolate hybrid rootstocks and horticulturally true-to-type plant material.

Motivation for change

The 6th Conference of the IOCV (International Organisation of Citrus Virologists), which was hosted in SA in 1972, was a watershed moment in the history of the industry. It was attended by the most preeminent citrus virologists in the world. Dr Clair Calavan was the President of the IOCV and directly and indirectly the assembly of scientists led to several important developments for the SA citrus industry.

Following the conference, a fact-finding tour to the Indian Ocean Islands of Reunion, Mauritius and Madagascar revealed that both the Asian and African HLB Greening disease and their respective vectors were present at varying altitudes on all three islands. So, as early as the 1970s the danger posed by the movement of both forms of the disease and their vectors to SA was noted, and this puts into perspective the industry's current efforts to keep Asian HLB at bay.



The plaque commemorating purchase of CFB.

Research Centre – it's all about ownership



Tour of the CFB facilities

Initiatives to establish a Citrus Improvement Scheme

Louis stressed that it was around this time that visionary industry leaders embraced the importance of the industry embarking on a Citrus Improvement Scheme. The individuals were the board members under the chairmanship of Gustav van Veijeren and soon after, by the equally forward-thinking and congenial Lance Danckwerts. The initiative was led on the ground by strategic thinker, Dr Cameron McOnie, who had been appointed as general manager of the Citrus Exchange in the early 1970s, and Dr Doug Stanton who was appointed to replace McOnie as head of research and technical.

Louis, along with Dr Doug Stanton represented a joint Citrus Improvement Programme (CIP) committee that was established by the SA Co-operative Citrus Exchange, as well as the Department of Agriculture. The programme came in the form of the Citrus and Subtropical Fruit Research Institute (CSFRI) and their representatives Drs Johan Grobler, Gawie Bredell, Cas Hotzhauzen and Hannes de Lange. The CIS was officially established in 1973 and the first consignment of trees certified under the interim CIP were planted in the late 1970s. In the meantime, added Louis, industry leaders had begun to realise the potential significance of the groundbreaking 1970s research development of Shoot Tip Grafting (STG), and its related discipline of glasshouse virus indexing, for the SA citrus industry. In 1976 he undertook a study on the functioning of CIPs in the USA, Spain, Israel and South America. This included a visit to Chet Roistacher's laboratory at UCLA, where he was engaged in perfecting the STG process. It gave impetus to the CSFRI's Dr Hannes de Lange, working closely with Roistacher in having STG instituted as a standard process in the SA CIP. In 1999 the University of Pretoria awarded an honorary



Louis von Broembsen giving a historic account of the industry leading up to the purchase of the Foundation Block in the late 1970s.



Prof Vaughan Hattingh congratulating Dr Jock Danckwerts after the unveiling of the CFB plaque.



Left: Michael Zamxaka receiving long-service recognition from Piet Smit and Thys du Toit.

Below: Thys du Toit with the CIS Certification Mark.



doctorate to Roistacher for his contribution to the SA Citrus Industry. In 1977, as part of this unfolding initiative, a state-of-the-art STG citrus virus indexing facility was established at the CSFRI in Nelspruit, under the experienced and professional care of Drs Hannes De Lange and John da Graca. This was to provide a virus-free source of budwood material for the industry. In the meanwhile, the Citrus Exchange focussed on the field selection of horticulturally superior propagation material, collaboration with commercial nurseries to create formal participating structures and the publicity and administration of the certification scheme.

Development of structures and industry information relating to plant material

In the mid-1970s the SA Citrus Nurserymen's Association was established through the nucleus of progressive nurseries of the Eastern Cape, under the leadership of Patrick Niven, Barney Joubert, Neils Meiring of Apapanzi, Dan Roberts of Baddaford and Thys du Toit of Paksaam Kwekery.

At around the same time the industry undertook an audit of the size and standard of all commercial citrus nurseries in SA. A countrywide evaluation was also undertaken of all the budwood source trees being used in the industry. This included the horticultural and disease status evaluation of all budwood mother trees being used by qualifying nurseries. Mother trees were also indexed and, in the process, STG and indexing became established as standard practices.

Establishment of the Outspan Foundation Block

Industry leaders also recognised the need to establish an isolated Budwood Supply and Certification Facility, which later became known as the Outspan Citrus Foundation Block situated at Uitenhage in the Eastern Cape. The location for this proposed facility was dictated by some very specific requirements. It had to:

- be established in an area suitable for citrus production, but where no commercial citrus plantings existed.
- be isolated but not too far away from a commercial centre, so as not

to be difficult to access or be unsuitable to accommodate the manager and his staff

- be relatively close to commercial citrus nurseries
- be in a greening-free area of the country (the Cape Province).
- have sufficient high-quality water and have a large deposit of soil nearby that was suitable for use as a potting mix for the thousands of budwood multiplication trees that would be required
- have some infrastructure to get the operation functioning as quickly as possible.

The person charged with the responsibility of finding this location was Andy Lee. Once the farm – one of several proposed by Andy – had been selected as the best potential site for the facility, soil scientist Doug Stanton, painstakingly took soil samples to check the site for suitability and more due diligence studies followed. Such was the credibility of Stanton and Cameron McOnie that when they put their proposal for the purchase of this farm to the SA Co-operative Citrus Exchange Ltd. (SACCE) board in 1978, it was passed unanimously without a challenge.

Following this, the Outspan Foundation Block was established in 1980, releasing the first virus-free certified budwood in 1984 and the first certified seed in 1986.

Louis added that Andy Lee also played an important role in the identification and acquisition of the property, as well as in the first 20 years of the growth and development of the CIP and the Foundation Block. Lee was a great character:

Celebrations were in order



The CFB shed, transformed to host the celebratory event.

What was not to celebrate when, after nearly 20 years, the Citrus Growers' Association (CGA) finally secured a loan to buy its Nelspruit facilities, as well as the Citrus Foundation Block (CFB) that they had been leasing from Capespan?

The event celebrating this pivotal transaction took place at the Citrus Research Centre (CRC) in Nelspruit, in September 2018. And more recently, an ownership celebration event was held at the CFB premises, in July 2019.

The CFB event, which coincided with the annual CFB inspections and Citrus Improvement Scheme (CIS) meetings, drew industry leaders and representatives from citrus nurseries and cultivar management companies. Not forgetting the "servants of industry" from CRI, the Agricultural Research Council (ARC), the Department of Agriculture, Land Reform and Rural Development, and others from the industry who are doing the unsung behind-the-scenes work to ensure that the CIS continues to fulfil its mandate. In brief, their commitment ensures the profitability of

intelligent, innovative and full of humour, he says.

Andy's greatest triumph, however, was his discovery of Thys du Toit as a suited candidate for management of the CFB. Thys, who was the manager at Paksaam Kwekery at the time, was duly interviewed and appointed to the position. His tenure ran from the official establishment of the facility in September 1980, until his retirement in 2017 as CIS Nursery Advisor. Through his development of this facility, from scratch to the well-developed and remarkable resource that it is today, Thys has made a significant contribution to SA's citrus industry.

In 2002, the management of the Outspan Foundation Block (now known as the Citrus Foundation Block) was transferred to the CRI, as part of the deregulation process.

Outspan Citrus Centre

The SA Cooperative Citrus Exchange (SACCE) researchers were

initially based at the Citrus and Subtropical Fruit Research Institute (CSFRI) in Nelspruit (now known as the Agricultural Research Council). By the late 1960s the expansion of the industry's citrus research efforts had already led to the establishment of Outspan Laboratories, which provided nutritional programmes based on leaf analysis.

SACCE invested funds in ongoing research and established the Outspan Citrus Centre (OCC) in Nelspruit in 1974. The buildings for this facility were constructed on a 3,1 ha property that was donated by the Solomon family of the Crocodile Valley Citrus Company. The SACCE research team moved to these facilities and the OCC became the headquarters for industry-driven research and development and extension services. As a result of the deregulation process, CRI was formed in 2001 and took over the OCC. This powerhouse institution now manages SA's citrus research.



Some of the attendees of the CFB event: Lucas Mclean (Rietvlei Nursery), Abs van Rooyen (ANB Investments), Fanie Meyer (Unifrutti; CRI director, CGA director and chairman of the CIS Advisory Committee), Justin Chadwick (CEO of CGA); Tonie Fuchs (MD of Capespan) and Ben Vorster (Laeveld Sitrus; Chairman of CGA). Right: Cultivar tasting.

Die Joernaal vir die Vrugtebedryf in Suid-Afrika

the citrus industry through the supply of high quality, disease-free and true-to-type citrus propagation material. The event also included a tour of the facilities and a fruit tasting from an array of new cultivars.

But an occasion of this significance would be incomplete without a historical look back. And the old adage "good things come to those who wait" certainly rings true when looking at the journey that the citrus industry has travelled in this context.

As part of the formalities, Louis von Broembsen and Thys du Toit recounted events around the buying and development of the Outspan Foundation block; and Tonie Fuchs (Managing Director of Capespan) and Justin Chadwick (CEO of CGA) spoke respectively about leasing and buying the CFB. Justin reminded the attendees that research is the foundation on which the southern African citrus industry is built, and that the CFB represents the metal rods in the foundation, ensuring 100% steadfastness. Abs van Rooyen, CEO of ANB Investments, highlighted the strategic importance of the CFB and CIS, which is a voluntary scheme that enjoys excellent support from citrus nurseries, cultivar management companies and growers. Abs spurred the continued improvement and dynamism of the scheme in its service to the industry.

Dr Jock Danckwerts, whose father unveiled the plaque commemorating the opening of the Outspan Foundation Block in 1984, unveiled the plaque at this event "which commemorates the purchase of the CFB and also records with gratitude, the contribution made

by the citrus growers of southern Africa, who made this possible".

Piet Smit, CEO of Komati Citrus Group and Chairman of the CRI board, unveiled the CFB Long-Service Award board honouring CRI employees from the CFB with more than 20 years' service.

These included Thys du Toit, with 39 years of service at CFB who, along with Piet, congratulated Patrick Kam-Kam (27 years), Louise Jackson (21 years), Michael Zamxaka (30 years), Monica Jonas (25 years), Linda Gelo (25 years), Mavis Mona (22 years), Michael Mona (23 years) and Michael Nelani (23 years).

Prof Vaughan Hattingh (CEO of CRI), was the master of ceremonies for the evening. He invited Paul Fourie, manager of the CIS, to unveil the CIS Certification Mark, which will in the near future be used to indicate CIS certification for propagation material, nurseries and trees. In honour and recognition of Thys du Toit's long-term service, his integrity, strength of character and compassionate commitment to the scheme and all its people, the Certification Mark uses Thys's signature in the design.

It was a truly memorable evening and special thanks goes to Jacolene Meyer (CFB manager) and her team for hosting the event, amidst other standard CFB operations; Michelle le Roux (CIS Administrator) and her team for their excellent coordination of the event; Johan Joubert and Werner Swiegers (CRI's cultivar evaluators) for organising the cultivar tasting; and Citro-gold for their sponsorship of ClemenGold gin and Zandvliet wines.