



Citrus
Growers'
Association
OF SOUTHERN AFRICA



2024

ANNUAL REPORT





OUR MISSION

SUPPORTING CITRUS GROWERS
TO BE GLOBALLY COMPETITIVE
AND MAXIMISING THE LONG-TERM
SUSTAINABILITY OF ITS MEMBERS

STRATEGIC OBJECTIVES

- ✓ Administer, fund and resource the CGA Group
- ✓ Gain, retain and optimise market access
- ✓ Fund, control and implement research and development
- ✓ Develop industry intelligence
- ✓ Provide product and quality assurance
- ✓ Engage with government and other stakeholders
- ✓ Assist growers' long term sustainability
- ✓ Drive industry transformation
- ✓ Facilitate efficient logistics

Citrus Growers' Association of Southern Africa

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CHAIRMAN'S REVIEW

Hannes de Waal

The year 2023 brought some relief for citrus growers. A smaller Northern Hemisphere crop created better market conditions and a smaller Southern Hemisphere crop, especially the South African crop, allowed for much more favourable returns after the financial bloodbath of 2022.

Perhaps the most important factor was the reduction of freight rates that further supported a return to sustainable margins for most farms. However, the devastation brought about by the extraordinarily high freight rates of the previous season may still leave many growers in a financially precarious position.

The CGA spent an extraordinary amount of time briefing banks in order to explain the situation facing growers. Cash flow needs was often a main topic of discussion. The total effect of 2022 will probably take at least three to five years to dissipate, as one hears about some farms being placed under administration or in some state of insolvency.

The staff of the CGA and a consultant travelled globally to engage shipping lines in order to promote additional services for the South African crop, with great success. Vision 260 brought about a number of workstreams aimed at achieving the vision of exporting 260 million cartons, and the additional shipping services offered by two shipping lines as a result of this CGA initiative will make a big difference to many growers and help us move towards the Vision 260 goal.

Ports remain a topic of concern to the entire South African economy, with private sector involvement already taking place at many levels to find strategies that will see an improvement

in productivity and global competitiveness. The CGA continued to support this shift as much as possible, be it on operational, strategic, board, or even ministerial levels. The clear intent of Transnet to embark on a strategy of Public-Private Partnerships is to be commended and the members of the CGA and the industry as a whole can benefit tremendously from it. Private involvement in Durban's Pier 2 can bring about significant improvements to port efficiency in the short- to medium-term. Although the matter is now the subject of a court dispute, it certainly remains a highlight of 2023 that a private operator was indeed chosen for Durban's Pier 2. Encouraging the government to follow through to other ports and terminals will remain a strong focus. The CGA was grateful for the formation of the National Logistics Crisis Committee under extremely influential leadership and support it via the Agricultural Business Chamber (Agbiz).

For those of us invested in this country, the faith in our Creator and support for each other calls at present for hope that matters can, and will improve. Regardless of a rise in populist politics, we need to be firm in our viewpoints, strong in our actions and sensible on how to allocate resources to support the massive changes required to accommodate the future we all invested in with extensive new plantings over the past years.

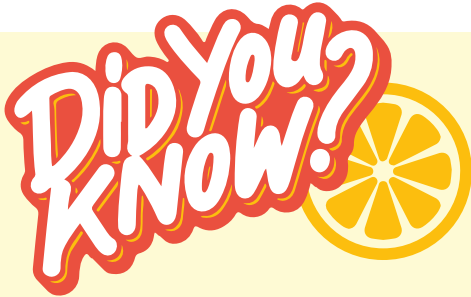
While markets treated growers with good products well, the international trade scene is characterised by conflicts, be it on real trade like the USA and China, or be it wars between countries. In 2023 it was recorded that the most global conflicts are now active since 1946. This may well set the scene going forward. The positioning of the South African fruit industry and its markets sometimes contrast with that of our government as our reliance on the Western markets remains extremely high. Furthermore, the unfair phytosanitary regulations applied by the European Union (EU) were the reason for a court case between a producer and the Minister of Agriculture, with the CGA as a respondent in the case. The case was justified, the outcome was favourable and while complex situations between the Department of Agriculture, Land

Reform and Rural Development (DALRRD) and the CGA sometimes arise, the CGA's relationships with government is valued and managed, especially following clear direction by the Minister. Although the CGA was not a party to the court case, the issue did concern us and the association once again learned that harmony between all stakeholders is of utmost importance.

At the time of writing this, no less than thirty years of hard work is culminating in the South African government agreeing to launch a World Trade Organisation (WTO) dispute process in order to counter the current unfair EU regulations on Citrus Black Spot. The harmony and cooperation between industry and the government in this coordinated effort is heartening to experience.

On a more personal note, I want to thank the staff of the CGA and all the related companies for their cooperation and the support that I received during my tenure. You are all remarkable teams and we are grateful to have you onboard during challenging times. I am deeply appreciative of the Executive Committee, the board of the CGA and those who have served on the boards of related companies - these people were always willing to sacrifice their own interests in order to make sure that the larger organisation is supported and the staff is enabled. I also want to thank the industry for its support of me personally during a lengthy and traumatic period of hospitalisation and the time of convalescence that followed. I am nearly fully healed and the excitement of serving the world's most dynamic growers is certainly helping me to heal completely.

Finally, I recently handed over the CGA Chairmanship to Gerrit van der Merwe, who is a most capable and dynamic leader. Many years back his father taught me the principles of cooperating whilst competing in agriculture, which is, in effect, all that our association is about. It has been my absolute privilege and an honour to serve you and I look forward to supporting Gerrit who will now assist the CGA in taking the next big steps towards a bright future for this incredible industry.



QUICK FACTS

The South African citrus industry...

-  Employs an estimated 100,000 people on farms, and a further 40,000 in packhouses and downstream activities.
-  Generates between R25 and R28 billion in export earnings annually, the largest agricultural export earner in South Africa.
-  Is the second largest exporter of citrus fruit in the world.
-  Exports to 119 countries around the globe.
-  Is the largest citrus exporter in the Southern Hemisphere.
-  Is the world's largest grapefruit exporter, third-largest orange exporter, third-largest lemon exporter, and fifth-largest soft citrus exporter.
-  Is recognised as a world leader in citrus research.
-  Invests R180 million annually in citrus industry research.
-  Is a key rural economy driver in parts of Limpopo, the Eastern Cape, and Mpumalanga.
-  Invests R60 million annually in black grower development and human capital development.



CEO'S REPORT

Justin Chadwick

The activities of the Citrus Growers' Association of Southern Africa (CGA) are directed by the strategic plans developed by the Association's board. The CGA board represents all growing regions in South Africa, Zimbabwe, and Eswatini.

In 2022 the board adopted Vision 260 – an ambitious plan to profitably and sustainably export 260 million cartons of citrus from Southern Africa. This represents an almost 100 million increase from export levels in 2022. Vision 260 gave the industry a clear goal for the next ten years – a vision that all staff and grower members of the CGA could aspire to. This vision directed the allocation of resources during the season under review.

Growers alone will not make the lofty goals of Vision 260 a reality. All those who work within the value chain and all stakeholders need to be invested in the vision. During 2023 a lot of time was spent briefing all role-players about Vision 260 and how it would not only benefit citrus growers but also all those in the value chain, government, labour, and rural communities. The success of the citrus industry is also the success of the entire South Africa. This was a message sent loudly and clearly to all.

Communication is one of the eight core projects of Vision 260. As explained in the communication section of the report, the CGA Group communicates through the roadshows, alternating with the CGA Citrus Summit, as well as the CRI Research Symposium, CRI workshops, weekly newsletters, weekly logistics sessions, and the monthly Citrus Marketing Forum (CMF) meetings during the season, the CGA App, and the communication of key messages through the CGA Comms Tool. Keeping our growers informed is to keep them empowered to make the best possible decisions.

The staff and board of the CGA have included Vision 260, and the projects covered by the strategic plan, in all activities. This is clear to see when going through this report. With one year of the ten-year vision now complete, the industry is well on track to reach the goals set by the CGA board. The board has empowered the CGA group staff by ensuring that the correct resources are provided, and by trusting the process that follows.

The CGA consistently acknowledges the central role research plays in our industry. Growers' investment in research ensures that they have access to world-class techniques and information. Research is also essential for the CGA and government to use in gaining new markets, optimising access conditions, and ensuring retention of existing markets. After all, Vision 260 is grounded in growing market demand.

Every board meeting revisits the ways of achieving the goals of Vision 260. The board remains responsive and resilient. The industry is dealing with a natural product, traded in fickle markets with what are sometimes unjust barriers to trade. Plans need to change as circumstances arise, but the end goal remains certain.

Four of Vision 260's projects are logistics-related. There is still a lot of work to be done to improve the rail network and reduce reliance on road transport, while at the same time addressing road transport challenges. That some of the initial building blocks are in place to address these transport challenges is a source for optimism, but a lot remains to be done. This is also true of port performance. The joint venture with the private sector at Durban's busiest container terminal is a crucial step in bringing about reform. At the moment, the industry is well-capacitated in terms of warehousing and cold stores. The present excess capacity will be utilised by the ever-expanding export volumes. There has also been progress on the shipping front. Increased freight rates in 2021 and 2022 brought the industry to its knees, but the inclusion of additional services in 2024 should set the industry on a path of reasonable freight rates and better opportunities.

The present levy cycle comes to an end in December 2024. Since the levy approval process can take up to a year, the CGA board started preparations for the new levy towards the end of 2023, with the final plan tested at grower roadshows during February and March 2024. The overwhelming support from all roadshow meetings was a signal that the CGA board's strategic vision aligns with grower needs and sentiments.

The appreciation of growers for the work the CGA does remains a motivation for every member of the CGA group staff. Every day we are encouraged to continue delivering on the plans embodied in Vision 260.



VISION 260

Justin Chadwick



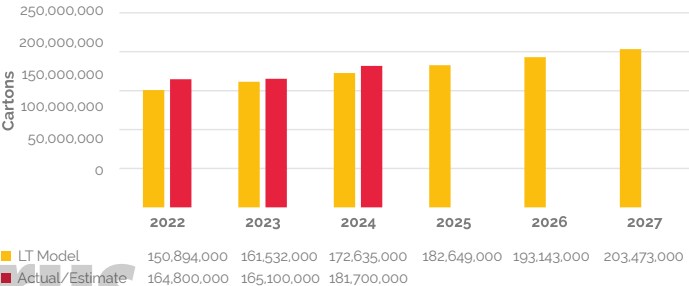
The ambitious goals embodied in Vision 260 were again discussed at the CGA board strategic planning session in November 2023. Although the long-term model of export growth from Southern Africa now pegs the crop in 2032 at 230 million, the ambition remains to achieve 260 million cartons sustainably and profitably exported by 2032.

Project 1: Market Demand

At the strategic planning session, the board adopted the market plan for 2027 (the first 5 years of the ten years in Vision 260). This market plan allocates the volume growth into different markets, which then directs interventions and engagements with other stakeholders.

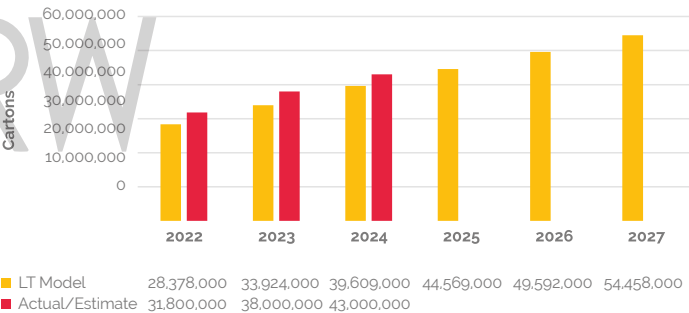
With one year completed (2023), and the 2024 estimate completed by the end of March 2024, an assessment was done to check progress.

Total Citrus Actual versus Long Term Model



Total **actual citrus** volumes for 2023, and the estimate for 2024 show that industry is ahead of Vision 260 levels. In fact, 2024 estimates are almost at what is expected in 2025. However, the different citrus categories have had mixed fortunes.

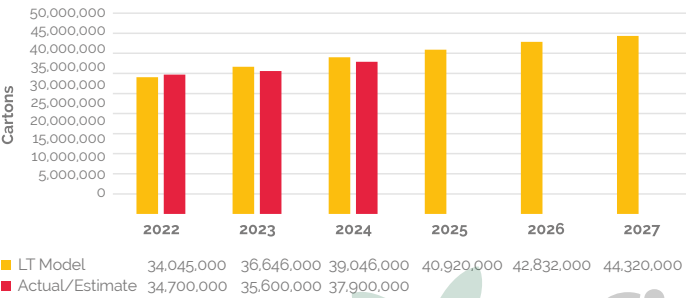
Mandarin Actual versus Long Term Model



Mandarin volumes in 2023 tracked slightly ahead of Vision 260 predictions. This was driven by growth in the EU, UK, Asia, and the Middle East. Growth in Asia, North America, and Russia lagged a bit on predictions. Asian growth was largely driven by China and

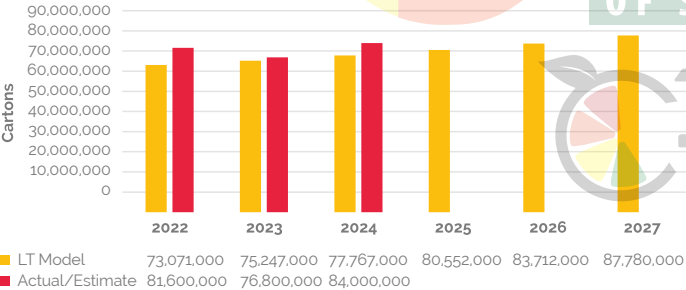
Hong Kong, with significant increases in volumes. Initial estimates put the 2024 season ahead of the Vision 260 target.

Lemon Actual versus Long Term Model



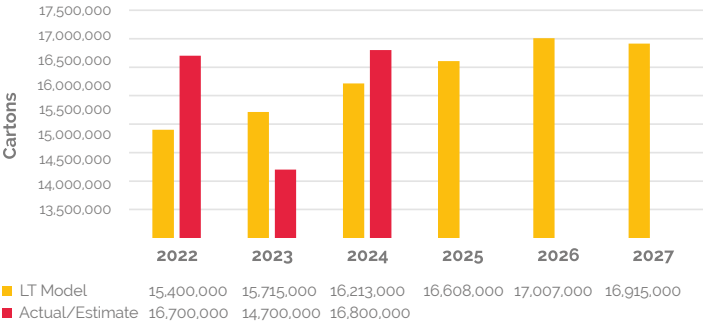
Lemon volumes tracked slightly behind predictions in 2023. Although the EU, UK, and Russia showed increases ahead of expectations, Asia, the Middle East, and North America did not reach the predictions.

Orange Actual versus Long Term Model



Orange volumes tracked slightly ahead of Vision 260 targets in 2023. The EU, North America, and Russia showed increases ahead of expectations, while Asia, the Middle East and UK did not reach the predictions. Initial estimates put the 2024 orange prediction ahead of the Vision 260 target. In fact, oranges are ahead of targets for 2024 and 2025.

Grapefruit Actual versus Long Term Model



Grapefruit volumes show the most volatility. After tracking below 2023 levels, the 2024 estimate is ahead of both the targets for 2024 and 2025. 2023 Volumes were impacted by a big decrease in exports to China and a moderate decrease to Japan. These were offset to a certain extent by increases to the EU and Russia.

Progress on the eight projects is found embedded in this report:

- #1 Where will the fruit be marketed?
- #2 How will we get the fruit from packhouse to port?
- #3 How will we store the fruit before shipping?
- #4 How will we get the fruit effectively and efficiently through the port, and onto vessels?
- #5 How will we ship the fruit cost-effectively and timeously?
- #6 How do we ensure all stakeholders are aligned to enable Vision 260?
- #7 How do we communicate the plan, its challenges and opportunities, progress, and setbacks?
- #8 How do we collect, collate, analyse, and distribute information that is essential to make informed decisions?



ADMINISTRATION

Tanya Ungerer

Governance

Members of the Citrus Growers' Association are citrus growers from all citrus-producing regions in Southern Africa and each region is represented on the Association's board by elected directors. Every two years, these positions are up for re-election, and all growers in the region then nominate and elect who will represent them on the CGA board. Citrus growers in South Africa are divided into fourteen regions, each with at least one representative on the board, irrespective of size. Eswatini and Zimbabwe have one board representative each. At the board level, two black grower representatives represent this group of growers. Each board representative engages closely with his/her region and keeps members informed about all matters related to citrus export markets. These matters include but are not limited to market trends, government regulations, and other industry-related news. In addition, the board works to ensure that the CGA's members receive the best prices for their citrus crops and have access to efficient production technology. Electing board members ensures that CGA members' voices are heard and their interests are represented.

During the year under review, the CGA was governed by twenty-three directors comprising nineteen regional representatives, an independent audit chairman of the Finance and Risk Review Committee, a government relations specialist, and two emerging farmer representatives - one from the north and one from the south of the country. This broad-based representation of the CGA ensured that the various interests of the organisation were adequately taken into account when making decisions.

The National Agricultural Marketing Council (NAMC) is the government agency that oversees the statutory levy process. Grower levies are used to fund the activities of the CGA, and it is imperative that the CGA remain compliant with the statutory levy process. The NAMC is invited to attend CGA board meetings and the annual general meeting as an observer since the continuation of the statutory levy requires the Minister's approval every four years. The NAMC representative provides updates on the current levy process, as well as providing assistance and advice on any changes or issues that may arise from the levy process.

Hannes de Waal took over as chairman in April 2022 and ended his term at the end of March 2024. Over this same period, Cornel van der Merwe served as outgoing vice-chairman and Gerrit van der Merwe began his tenure as incoming vice-chairman. The CGA is extremely grateful for the commitment and generosity of its directors, and Cornel van der Merwe of the Onderberg region completed his 10 years of service on the board during the year under review. Directors give freely of their time to attend board meetings despite not being compensated. The citrus industry greatly appreciates their dedication.

Appointment of Chief Operating Officer (COO)

The board decided to strengthen the management of the CGA by appointing a Chief Operating Officer. Paul Hardman was appointed as the first COO of the CGA in July 2023. This promotion necessitated the appointment of a new Industry Affairs Manager, Albert Coetzee, who was appointed in November 2023.



Executive Committee for 2023-2024

Hannes de Waal – chairman
Cornel van der Merwe – outgoing vice-chairman
Gerrit van der Merwe – incoming vice-chairman
George Hall
Piet Engelbrecht
Jan-Louis Pretorius

Board Meetings

31 August – 1 September 2023

River Meadow Manor, Irene

Apologies were received from Smit le Roux, Hannes de Waal, and Mathilda van der Walt (NAMC representative).

16-17 November 2023 – Strategic planning session

Katberg Mountain Resort and Hotel

Apologies were received from Per Noddeboe and Rajen Govender (independent audit chairman).

13-14 March 2024

Lemoenkloof Guest House and Conference Centre, Paarl

Apologies were received from Guy Whitaker, Per Noddeboe, and Paul Bristow.

Annual General Meeting

The annual general meeting of the CGA Group of companies (Citrus Growers' Association, Citrus Research International, Citrus Academy, CGA Grower Development Company, CGA Cultivar Company, and River Bioscience/Xsit) was held on the 31st of August 2023 at River Meadow Manor, Irene.

BOARD OF DIRECTORS

The board bid farewell to Eric Nohamba who had served for six years as a director of the CGA.

Hannes de Waal	.....	Sundays River Valley
Hennie Ehlers	.....	Sundays River Valley
Jan-Louis Pretorius	.....	Letsitele
Andries van Wyngaardt	.....	Letsitele
Piet Engelbrecht	.....	Senwes
Charles Rossouw	.....	Senwes
Cornel van der Merwe	.....	Onderberg
George Hall	.....	Boland
Gerrit van der Merwe	.....	Western Cape
Andrew Muller	.....	Nelspruit
Guy Whitaker	.....	Limpopo River
Jock Danckwerts	.....	Eastern Cape Midlands
Marius Bester	.....	Oranje River / Northern Cape
Mike Woodburn	.....	KZN / Pongola
Paul Bristow	.....	Zimbabwe
Per Noddeboe	.....	Eswatini
Phillip Dempsey	.....	Patensie
Smit le Roux	.....	Burgersfort / Ohrigstad
Tommie Landman	.....	Hoedspruit
Khaya Katoo	.....	Emergent growers – southern regions
Bennet Malungane	.....	Emergent growers – northern regions
Vangile Titi-Msumza	.....	Government Relations Specialist
Rajen Govender	.....	Chairman – Finance and Risk Review Committee



ORANGE HEART

Sive Silo

Orange Heart is the social responsibility initiative of the Citrus Growers' Association of Southern Africa. It provides a structure through which citrus growers and other industry stakeholders can contribute to uplifting and supporting the people of South Africa, especially people living in rural citrus-growing regions. The CGA sees the upliftment of those less fortunate and the promotion of rural growth and development, especially in citrus-growing regions, as critical to the well-being of the industry and the country as a whole. Through Orange Heart, we encourage and enable the grower community to get involved and lend a hand.

Orange Heart has two main initiatives, namely the Orange Heart Fruit Drive, and the Summit Outreach. The Orange Heart Fruit Drive was established in 2020 in an effort to alleviate the impact of the COVID-19 pandemic on many households in South Africa. Fruit and other food donations from growers and packhouses were directed to organisations that distribute food to poor households.



During the period under review, Orange Heart made substantial contributions to various organisations.

As part of the Summit Outreach initiative, a colouring-in competition is held in a different citrus-growing region every year. In the year under review, the competition was held in Robertson in the Western Cape. Nkqubela Primary School and H. Venter Primêr submitted their entries, with both schools each having a winner in the junior primary category and in the senior primary category. The two winning entries each won a cash prize and a cash prize was also awarded to the school.

Hearts in Hands, an early childhood development centre in Embo, KwaZulu-Natal, received a donation towards the maintenance of their facilities. The building was painted, the ceiling was repaired, their electricity was rewired, and they installed a bicycle track for the learners, which were all very welcome refurbishments.

The Addo Youth Football Academy was also a recipient, through the Summit Outreach. Based in Sundays River Valley, Eastern Cape, this football academy seeks to alleviate poverty in the immediate community by offering soccer to children as an extra-mural activity and exposing them to other opportunities. The academy received soccer balls, soccer boots, a storage container, and brand new kit for the teams.





COMMUNICATION

Tanya Ungerer

Roadshows

As is customary, the CGA held its biannual grower roadshows in February 2024 where two CGA teams took to the road and visited all sixteen citrus-growing regions in South Africa, including growers from Zimbabwe and Eswatini. The main focus of the roadshows was to discuss the next levy period (2025 to 2028) as the current four-year levy cycle will end at the end of 2024. There was a total of 496 growers who attended the roadshows and it was great to see the younger generation coming through and joining the older, more experienced growers. Their energy, enthusiasm, and different ways of thinking will add great value to the industry. As always, the growers showed great hospitality to the travelling teams, and the CGA board members took the lead in the ensuing conversations.

Nedbank once again collaborated with the CGA in the form of sponsorship to cover some of the refreshments after the events, which gave everyone a chance to network and catch up. The teams have the privilege to experience the diversity and appreciate the beauty of the South African landscape and its people during these two weeks of travel. Driving through the regions brings the figures behind Vision 260 into stark focus as there are so many of the more recent plantings that are starting to mature and a lot of netting is now evident.

Week one kicked off with Justin Chadwick's team, consisting of Sean Moore (CRI), Rob Elfick (RBX), Mitchell Brooke (CGA), Lukhanyo Nkombisa (CGA-GDC), Sam Louw (CA), Jon Roberts (CGACC), and Paula Bester (CGA), visiting the Senwes, Nelspruit, and Onderberg regions. During the same week Paul Hardman's

In collaboration with the Kaross Foundation, Orange Heart donated computers to two schools in Letsitele, Limpopo, namely Vhulakhanjani and Manyuny Primary Schools. The schools are part of the CAMI (Computer-Aided Math Instruction) programme. Each computer has the CAMI programme loaded and the learners take turns to have lessons, with the manager providing oversight and assistance to the learners. As part of the donation to these schools, mousepads were also donated.

Orange Heart also took part in the national Mandela Day campaign, by donating goods to a baby house in Westville, Durban. The house was in dire need of baby food, formula and nappies and also did some minor refurbishments and finishings to the house.

In November 2023, the staff of the CGA and Citrus Academy came together to pack eighty-six Santa Shoeboxes that were donated for distribution to underprivileged children through the Santa Shoebox organisation.



team, consisting of Vaughan Hattingh (CRI), Sean Thackeray (RBX), Dave Watts (CGA consultant), Andrew Mbedzi (CGA-GDC), Jacomien de Klerk (CA), Tevan Lehman (CGACC), Precious Kunota (CGA), and Albert Coetzee (CGA), visited the Burgersfort/Ohrigstad, Hoedspruit, Letsitele, and Limpopo River regions.

During week two Jacomien de Klerk (CA) and Tevan Lehman (CGACC) joined Justin's team, and Jon Roberts (CGACC) and Sive Silo (CA) joined Paul's team. Justin's team travelled to the Patensie, Sundays River Valley, and Eastern Cape Midlands regions, while Paul's team braved the long road to the Boland, Western Cape, and Northern Cape regions. Week two ended on a high note for Justin's team as they visited the Winterberg Agricultural High School in Fort Beaufort to hand over some tablet computers (courtesy of the Orange Heart initiative) to assist learners as they embark on the Citrus Secondary Programme offered by the Citrus Academy.

Nkwalini was the last region to be visited by Justin's team and there was a great turnout from the KZN region with growers traveling from as far as Pongola and the Midlands. There were once again great discussions and another excellent networking opportunity over refreshments after the event.

From the Desk of the CEO

The CEO's weekly newsletter is one of the most popular communication tools of the CGA, prepared by CEO, Justin Chadwick every Friday, barring two weeks over the Christmas break. The one-pager summarises the latest news, reports on current market-related matters, and provides information on upcoming industry events. The newsletter is made available in both English and Afrikaans and anyone, not just growers, can request to be added to the mailing list and join the more than 4,000 recipients.

Should you wish to be added to this distribution list, kindly send an email to info@cga.co.za.



Social Media

The CGA has a presence on various social media platforms and can be followed on LinkedIn, Facebook, 'X', and Instagram. CEO Justin Chadwick's 'X' feed (@justchad_cga) is also a must-follow for those interested in staying up to date with the latest developments in the citrus industry.



CGA Comms Tool

The CGA Comms Tool is an internally managed communications tool used to circulate information to various groups within the citrus industry. It is vital that growers and stakeholders keep us informed of any changes to their details, such as their email or postal addresses, ownership changes, or if they no longer wish to receive communication from the CGA. This ensures that our communications are up-to-date, relevant, and targeted to the right individuals.

We appreciate the time and effort taken to keep us up to date, and we thank all growers and stakeholders for their continued support. If you have any questions or queries regarding this process, please do not hesitate to contact us at info@cga.co.za.

CGA Members Register

The Citrus Growers' Association (CGA) continues the process of compiling a comprehensive member register. This register will enable the CGA to communicate more effectively with citrus

growers in Southern Africa. All citrus growers in South Africa, Zimbabwe, Eswatini, and Botswana are therefore encouraged to submit their details to the CGA.

Citrus Marketing Forum (CMF)

The Citrus Marketing Forum (CMF) was initially created as a platform for interaction between growers and export agents, but now a wider audience. The CMF is a joint initiative between the Citrus Growers' Association (CGA) and the Fresh Produce Exporters' Forum (FPEF). It meets twice a year as a full session – at the start of the season in March to discuss estimates, and again in October to conclude the season, and share successes and learnings from the season. Monthly 'mini' CMF sessions have now also been introduced and are well attended by the different Variety Focus Groups, the CGA, and FPEF members. The CMF aims to provide a platform for collaboration and discussion on key topics, initiating research and investigations, and making recommendations on a wide range of industry issues. Through these meetings, the CMF strives to create a cohesive vision of the citrus industry and develop a strategy that will ensure the industry's long-term success. All growers and registered export agents are eligible to attend these meetings, but other interested parties, such as suppliers or shipping companies, can request an annual membership from the CGA. Please email info@cga.co.za for membership queries and to be included in these meetings.

CGA Website (www.cga.co.za)

The CGA website is a valuable source of information for all citrus growers and other stakeholders. It provides a secure platform to access information, tools, and resources relevant to the citrus industry. The CGA Member section is accessible to registered citrus growers issued with a Production Unit Code (PUC) or Food Business Operator (FBO) code, as well as members of the FPEF. Currently, the website has over 800 members who use the password-protected section to access information.



South African Fruit Journal (SAFJ)

The South African Fruit Journal (SAFJ) is published every second month and all registered members of the CGA receive a copy free of charge. The publication's shareholders comprise the CGA, Hortgro, South African Table Grape Industry (SATI), and

Fresh Produce Exporters' Forum (FPEF). The publication contains informative articles from various sources within these industries and covers a wide range of subjects, including research, technical papers, market information, skills development, and other articles of interest. To access a digital copy of the SAFJ, visit www.safj.co.za, or contact editor@safj.co.za if you have any comments or questions about the publication. For advertising opportunities, contact sales@safj.co.za.

CGA Briefings

During the year under review, the CGA held three briefings with the commercial banks – ABSA, FNB, Standard Bank, and Nedbank. In addition, the CGA held briefings with some of the biggest export agents handling Southern African citrus, the Industrial Development Corporation (IDC), and Corteva.

Communication Committee

The CGA Communication Committee comprising Gerrit van der Merwe, Hannes de Waal, Jan-Louis Pretorius, Justin Chadwick, Deon Joubert, and Resolve members (Tracé Venter, Loftus Marais, and Paul Boughey) met every second Friday to discuss media-related issues. Resolve provided assistance with media interviews (written, television, and radio), compiling of an annual strategic plan, social media monthly plans, and correspondence.



CGA App

Effective communication was identified under Vision 260 as critical to align all role players to achieve this collective goal. The importance of easily available information and data is becoming increasingly important for our modern-day growers.

In response to that, the CGA has developed an app, where members have access to the latest shipping volumes, newsletters, press releases, and statements. The number of users has increased from 205 to 382 in the past year.

The CGA will be updating its website during the 2024/25 financial year, with the aim of aligning the app with the website and therefore simplifying our communication channels.

The CGA app is available as a desktop app, on Google Play, and the Apple iStore.



<https://apps.apple.com/us/app/cga-southern-africa/id6444870834> - Apple iStore



<https://play.google.com/store/apps/details?id=za.citrusgrowersassociation.cga> - Google Play

<https://citrus22.entegyapp.com.au/Page/8/1> - Web App

REPRESENTATION

Tanya Ungerer

The CGA is represented on various boards and committees, with the representatives reporting relevant information to the CGA board of directors.
The office bearers for the period under review were as follows:

Agbiz Justin Chadwick, Cornel van der Merwe, Charles Rossouw	CGA Grower Development Chamber Khaya Katoo, Bennet Malungane	Fruit Industry Value Chain Round Table Committee Paula Bester, Albert Coetzee
Agbiz Fruit Desk Paul Hardman	Citrus Academy Board Phillip Dempsey, Marius Bester, Bennet Malungane, Frikkie Olivier	Fruit SA IT Steering Committee / SHAFFE Sustainability Task Force Paul Hardman
Agrihub Precious Kunota	Citrus Improvement Scheme Paul Hardman, Smit le Roux	Fruit South Africa / SA Fruit Journal / SHAFFE / ATF Justin Chadwick
BI Steering Committee Vaughan Hattingh	Citrus Industry Trust Phillip Dempsey	HLB Steering Committee Justin Chadwick, Jock Danckwerts, Cornel van der Merwe
CGA Combined Disaster Management Committee Ben Vorster, Charles Rossouw, Tommie Landman, Francois Dillman, Hannes de Waal, Jock Danckwerts, Per Noddeboe, Peter Nicholson, Piet Smit (Komati Group) Cornel van der Merwe, Gerrit van der Merwe, Pieter Nortjé, Deon Joubert, Justin Chadwick, Vaughan Hattingh, Elma Carstens, Rocco Renaldi, Boet Mouton, Fredri Kok, George Hall, Paul Bristow	Citrus Marketing Forum Cornel van der Merwe, Jan-Louis Pretorius	Market Access Working Group Elma Carstens
CGA Communication Committee Jan-Louis Pretorius, Deon Joubert, Justin Chadwick	Citrus Research International Board Piet Smit, Fanie Meyer, Deon Joubert, Eddie Vorster, Mike Woodburn, Piet Engelbrecht, Louisa Mogotsi (CGDC)	National Logistics Crisis Committee Mitchell Brooke
CGA Cultivar Company Board Barend Vorster, Francois Joubert, George Hall, Guy Whitaker, Siseko Maqoma, Hendrik Warnich	Citrus Sustainability Forum Paul Hardman, Paula Bester, Albert Coetzee	Perishable Produce Export Control Board Ian Beukes, Pheladi Tlomatsane
CGA Grower Development Company Board Andrew Muller, Ronald Ramabulana, Rajen Govender, Lawrence Mgadle (CGDC), Ntamiseni Mankhili (CGDC)	Confronting Climate Change Steering Committee Paula Bester, Albert Coetzee	River Bioscience / Xsit Board Jan-Louis Pretorius, Marius Jurgens, C P Mouton, Eric Nohamba, Rajen Govender
	Finance and Risk Review Committee Rajen Govender, Mike Woodburn, Andrew Muller, Andries van Wyngaardt, Jan-Louis Pretorius, Phillip Dempsey	SIZA Board Alana Snyman
	FMS Working Group and CBS Working Group Hennie Ehlers	SIZA Working Groups Albert Coetzee
	GLOBALG.A.P. National Technical Work Group Paula Bester	



FINANCE

Robert Miller

The Citrus Growers' Association (CGA) is responsible for administering the statutory levy due on exported citrus. The levy is collected and allocated to fund the following activities:

- Research and technical support services, carried out on behalf of the CGA by Citrus Research International (CRI)
- Market access and market development
- Consumer assurance and food safety
- Provision of industry information and statistics
- Logistics coordination
- Transformation services, including:
 - Human capital development, carried out by the Citrus Academy
 - Enterprise development, carried out by the CGA Grower Development Company

In 2023, the third year of the four-year statutory levy cycle, the levy was set at R1.73 per carton and R274 million was collected.

This levy was approved by the Minister in the Government Gazette number 43979 on the 11th of December 2020. The funds were used by the CGA to provide the above services to growers.

The statutory CGA levies for the final year of the approved period is as follows:

2024 – R1.79 per 15kg carton

An application for a new four-year statutory levy will be submitted in 2024. The new levy period will run from 2025 to 2028.

CGA BEE Status

In early 2024, the CGA Group proudly achieved a level 5 rating on the Agricultural Sector B-BBEE scorecard, renewing its B-BBEE certification. This rating applies to all of the companies under the CGA Group umbrella, including River Bioscience, Xsit, CGA Cultivar Company, CRI, and the CRT. To view the new B-BBEE certificate granted to the CGA Group, please visit the CGA website at www.cga.co.za. We will continue our commitment to the promotion of transformation and inclusion.

CGA GROUP FINANCE AND RISK REVIEW COMMITTEE (FRRC)

The members of the CGA Group Finance and Risk Review Committee for the year under review were Rajen Govender (chairman), Mike Woodburn (CGA director KZN), Andries Van Wyngaardt (CGA director Letsitele), Andrew Muller (CGA director Nelspruit), Phillip Dempsey (CGA director Patensie), and Jan- Louis Pretorius (CGA director Letsitele).

This committee is responsible for providing vital oversight and guidance to the various boards of the CGA Group of companies, which includes risk management, financial, and internal control management. The FRRC also ensures that all companies comply with corporate governance regulations and requirements and operate efficiently while mitigating potential risks.

The FRRC held one meeting during the year under review, on the 8th of August 2023.

RISK MANAGEMENT

Robert Miller

Below are the main risks identified by the CGA during the year under review and the mitigation measures in place:

Effect of phytosanitary constraints on export volumes and associated levy income

Citrus Black Spot (CBS)

- A disaster management committee is in place.
- Special envoy is engaged with various role players on this matter.
- Relevant government departments are being engaged in this matter.
- New export markets are being developed.
- Additional funds have been allocated to CRI for research on CBS.
- A WTO dispute legal case is underway.
- A risk management system has been developed and implemented.

False Codling Moth (FCM)

- A FCM Management Committee has been established to assess, monitor, and manage this risk.
- Special envoy is engaged with various role players on this matter.
- Discussions with government representatives are taking place.
- A FCM Management System has been developed and implemented.

Bactrocera Dorsalis (BD)

- Movement of fruit from regions where BD is known to be established is being controlled.
- A CGA and CRI steering committee action plan is in place and managed.
- Other fruit groups provide contributions towards the management of this risk.

Biosecurity – Huang Long Bing (HLB)

- A biosecurity manager is employed in CRI to manage this risk.
- A HLB Steering Group is in place.
- A HLB action plan has been developed.

Logistical constraints on export volumes and levy income

- A CGA logistics development manager is employed to address this risk.
- A Logistics Risk Committee was formed to assist the logistics development manager.
- Identified focus areas are:
 - decrease supply chain costs;
 - monitor and advise on reducing congestion and improving port efficiency;
 - increase exports through alternative ports;
 - address shipping costs and container cost escalations;
 - address national roads legislation; and
 - develop rail transport options.
- Thomas Eskesen Advisory Services was appointed to investigate and provide solutions to escalating shipping costs.

Socio-political constraints on export volumes and associated levy income

- Industry transformation has been identified as a priority focus area, with about 20% of levy income spent on transformation annually.
- The CGA Grower Development Company and Citrus Academy have been established to address respectively, enterprise development and human resource development in the citrus industry, promoting industry transformation.
- Opportunities are pursued to partner with other stakeholders to make funding available for enterprise development to emergent growers to promote transformation, for example, the ETBCG programme (please see report elsewhere in this publication).

Effect of B-BBEE rating on future levy approvals

- Since 2022, the CGA Group received a

combined B-BBEE rating, enabling all companies in the group to benefit from the investment in transformation and elevate their B-BBEE rating.

- The CGA group underwent an annual B-BBEE audit and achieved a level 5 rating and certificate.
- A strategy has been developed to improve the CGA Group B-BBEE rating.

Constraints that buy-in from producers may have on future levy approval and income

- Grower representation is enabled through the composition of the CGA board, ensuring that the concerns of growers are heard and addressed.
- An effective communication strategy has been developed, which includes weekly newsletters, the CGA Citrus Summit alternating with roadshows, and other publications, while other group companies are encouraged to keep growers informed of their activities.

IT systems failure puts industry data at risk and results in the company being unable to operate

- The CGA employs an information consultant.
- Data is backed up regularly.
- Offsite backups and storage of company data are in place and constantly monitored.
- Finance and accounting data is backed up to an offsite location daily.

Cyber-risks and POPI Act

- Cyber risk reviews are conducted regularly and the suggested improvements are implemented.
- POPIA compliance reviews are conducted and the CGA Privacy Policy is enforced to protect the data the CGA obtains.



LOGISTICS

Mitchell Brooke

The 2020, 2021, and 2022 citrus export seasons were challenging in many respects regarding logistics and shipping. It was comforting to note that there were no major logistical challenges during the 2023 season – long may this continue. Despite this, there are still a few years of volatility ahead for Southern African citrus exports, partly due to poorly performing container terminals.

Port container terminal equipment challenges are now intensifying, mainly due to a lack of maintenance and refurbishment of redundant fleets. Transnet introduced a Recovery Plan, and this will see certain equipment and fleets being procured over the next three to five years.

Meanwhile, productivity will be affected until each terminal has sufficient equipment to ramp up productivity. Due to poor performance, shipping lines have changed routing and schedules to reduce vessel delays across the South African port system.



An important development was the awarding of a partnership agreement between Transnet and International Container Terminal Services Incorporated (ICTSI) for the Durban Container Terminal, due to commence on the 1st of April 2024.

However, the date has been postponed. Should the partnership prove successful and productivity increase to international norms, Ngqura and Cape Town Container Terminals would be motivated to propose similar partnerships in the future.

Another highlight in 2023 was the announcement of the Rail Regulation amendment that will potentially see private rail operators on the national rail network. Transnet has published the Rail Network Statement which will be subject to response ahead of the final implementation of the regulations.

Transnet Freight Rail (TFR) will be separated into sub-organisations, thus separating the rail network, rail operations, and rail wagon fleets.

CGA Vision 260, logistics, and shipping

The primary focus of Vision 260 is to assess and implement plans to ensure the citrus industry's growth can be managed and remain sustainable.

The Vision 260 logistics and shipping projects took center stage in 2023, as a comprehensive analysis of production, transportation, cold storage capacity, port capacity, and shipping capacity was undertaken. The short-term analysis of the tree census data suggests that citrus production for export will increase from 165 million 15kg equivalent cartons (2023 final exported) to 210 million 15kg equivalent cartons over the next five years (2027 or 2028 seasons).

There are sections of the logistics and shipping network that are well aligned for growth, however, there are some elements that are seen to be problematic and need a thorough structured plan of action to correct the shortcomings.

The following critical elements are seen to be needing a thorough action plan:

1. The northern regions comprising KwaZulu-Natal, Eswatini, Mpumalanga, Limpopo, Botswana, Zimbabwe, and Mozambique are set for high levels of production growth.

This production increase will bring about a very high peak season between weeks 25 to 36 annually. The average baseline production is set to increase from roughly 4 million 15kg equivalent cartons per week to roughly 6.5 million cartons per week.

The logistics and shipping network along the northern regions' corridor is very likely to be constrained as far as transport and port capacity is concerned. To avert possible constraints and bottlenecks, producers will need to export higher volumes through Maputo, pack as many containers from the inland packhouses directed to port container terminals, and rail export containers in mass to Ngqura or Cape Town ports for export.

2. There will be an accumulative demand for up to 2,000 additional truck trips between hinterland packhouses and ports across the country, including Eswatini, Botswana, and Mozambique. This is calculated using a net zero assumption for rail transport. It is expected that the northern regions will see the most additional truck trips per week during peak season, with an additional 1,000 trips per week.
3. To offset the high transport demand in the northern regions where road transport is likely to be heavily oversubscribed, a very progressive and expansive rail transport project is required. To offset the demand for road transport, a minimum of 20,000 pallets and 1,000 containers of citrus will need to be transported.
4. In 2023, a total of 96,000 refrigerated containers of citrus were exported to global markets. Aligned with the growth



projections over the next five years, 120,000 refrigerated containers will be needed to export the 210 million cartons of forecasted citrus from Southern Africa.

5. To manage the reefer container throughput demands for the additional 24,000 reefer units forecasted, port capacity will need to be radically increased.
6. Port terminal productivity will need to be improved to ensure containers penetrate the ports efficiently and effectively. Similarly, ships need to arrive and depart as fast as possible to clear import and export containers through the port network.
7. Market supply trends indicate that shipping capacity to greater Northern Europe, the Far East, Asia, and South East Asian markets will need to be increased by 30% to meet forecasted growth.

To conclude, the CGA has broadcast a series of online content related to Vision 260, facilitated by Lucentlands Media.



INFORMATION

Precious Kunota

The CGA and FPEF jointly fund the procurement of citrus information from two sources. The PPECB supplies weekly data on volumes of citrus packed and passed for export. Agrihub, an independent legal entity established between the South African fruit exporting industries and four competing software solution providers, supplies shipping data and reports on a real-time basis. This information is made available to all members of the CMF.

Tree Census

The annual tree census is based on data collated through the Department of Agriculture, Land Reform and Rural Development's (DALRRD) orchard registration process for exports in November 2023. Growers in Zimbabwe and Eswatini provide additional information. The 2023 tree census accounted for a total of 99,755 hectares. Valencia and Midseason oranges constitute a 31% share of the total that are planted, soft citrus accounted for 27%, lemons for 18%, navels for 15%, and grapefruit remained at 9%. The data procured through the tree census serves various purposes, including the CGA's Industry Statistics booklet, and the annual updates and refinements to the long-term citrus production model.

Citrus Statistics Booklet



The annual Citrus Statistics booklet provides an overview of exports, crop distribution, and growth trends of the different citrus commodities. Export-related data is supplied by Agrihub and PPECB. The tree census data, as well as data on export and local market sales, processing volumes, and revenue, are

obtained from DALRRD. Budwood sales data supplied by CRI are also published in the booklet. The 2023 Citrus Statistics booklet has been printed and posted to all registered citrus growers. The electronic version can also be found on the CGA website under Publications. Should you no longer wish to receive the booklet via the postal service, kindly inform the CGA at info@cga.co.za.

Packed Figures

Information on volumes packed is supplied by the PPECB on a weekly basis. The packed figures reflect the actual volumes packed to date, previous years' packed figures, and the estimated packed figures for the current season and are presented on a weekly and cumulative basis. These figures are available in the member section of the CGA website (www.cga.co.za).

Shipped Figures

Information on volumes shipped was supplied by Agrihub in 2023 and is posted on the website weekly under the member section. These reports show volumes shipped per variety, per week, and by market, with comparisons to previous years. The reports can be downloaded at any time directly from the Agrihub website, with some reports available on the CGA website weekly in the members' section.

Variety Focus Groups

The 2023 Southern African citrus export crop estimate was assembled by the regional Variety Focus Group representatives in March 2023. Regular Zoom meetings were held during the season to update the crop projection and discuss the markets. The Variety Focus Groups' updated crop projections were communicated to the industry in the CEO's weekly newsletter and in minutes published on the CGA website. The table below shows the original 2023 estimates, the actual volumes achieved, and the estimates for the 2024 season. All figures are in 15kg equivalent cartons. The Variety Focus Groups aim to estimate within 10% of final volumes inspected and passed for export by PPECB inspectors. Overall, the 2023 estimate was almost 100% accurate.

Commodity	2023 Estimate	2023 Actual	% Actual vs. Estimate	2024 Estimate
Valencia	54 464 610	52 043 636	-4%	58 309 762
Navels	25 295 000	24 806 917	-2%	25 687 243
Grapefruit	14 353 442	14 736 521	3%	16 773 516
Lemons	37 308 044	35 600 159	-5%	37 937 869
Mandarins	34 107 415	37 978 805	11%	43 025 109
Total	165 528 511	165 166 038	-0.2%	181 733 498

Citrus Marketing Forum (CMF)

The CMF is a joint forum between growers and export agents (CGA and FPEF). It provides a platform for the sharing of information, initiating research and investigations, and making recommendations on a wide range of industry issues. During the year under review, the CMF met on the last Thursday of every month. In October 2023 the closing season's events and lessons were discussed and in March 2024 the forthcoming season was the main area of consideration. The input to the CMF from the Variety Focus Groups with respect to estimates, projections, and growers' feedback was facilitated by the CGA.

International Information Exchange

Southern Hemisphere Association of Fresh Fruit Exporters (SHAFFE)

The major Southern Hemisphere fresh citrus exporting countries participate in a joint initiative whereby members supply information on shipped by volume and destination to the SHAFFE secretariat, who collates and supplies this information to the participating SHAFFE members.

Lemon tracking on the EU and UK market

The CGA collaborated with SAFRESCO Global's Anya Jaworski to develop an Artificial Intelligence (AI) model to track lemon volumes on the EU and UK markets, aiming to detect warning signs before market saturation occurs. The first of the monthly online sessions was held in June 2023 with the Lemon Focus Group, which was chaired by Leroux Venter. The objective of the Lemon Tracking model is to closely monitor South African lemon exports to the EU and UK markets. Lemons are unique among citrus fruits because of their consumer behaviour. They

are considered inelastic products, meaning demand does not significantly increase despite price drops. Therefore, it is crucial to track market trends in key destinations such as the EU and UK.

World Citrus Organisation (WCO)

At the WCO AGM, held on the 19th of April 2023, the meeting reflected on the accomplishments of the organisation since its inception:

- Growth in membership, from the original 10 members to the current 41 in four years, with representation from both the Northern and Southern Hemispheres.
- Building a global networking and truly representative platform for exchange on matters of concern for the citrus industry.
- Launch of the members' area in April 2023.
- Creating a common reporting format for citrus production and export data thanks to the cooperation of WCO members.
- Creation of an interactive database with production and trade forecast data.
- Exchange on global marketing initiative and interaction with stakeholders, PR, and marketing firms to define a marketing campaign.
- Design and campaigning on the health benefits of citrus varieties.
- Commission of study on nutritional benefits of citrus varieties.
- Organisation of in-person events for citrus sector actors, including field trips, since the end of the pandemic – at least twice a year.
- Enabling exchanges between members on various topics.
- Liaising with media entities on events and other relevant materials.
- Building presence on social media.
- Representation of the sector at various events.
- Setting up of global citrus conferences of its own and/or in collaboration with Fruitnet.

To assist the secretariat in the running of the organisation, a steering committee made up of the two Chairmen (Justin Chadwick from CGA, South Africa and Jose Antonio Garcia of Ailimpo, Spain), Sergio del Costello of Peru, and Tal Amit of Israel, met on a monthly basis.

Apart from the AGM, the WCO also met in Madrid on the 3rd of October 2023 and held an online Citrus Outlook Conference on the 15th of November 2023.



VARIETY FOCUS GROUPS

Portia Magwaza

The Variety Focus Groups set the initial export estimate for each season, monitor the packed and shipped information provided by the service providers, discuss market conditions, and update export predictions during the course of the season.

Minutes of the regular Variety Focus Group meetings are distributed to growers and summarised in the CEO's weekly newsletter. From time to time, the Variety Focus Groups also give opinions on dispensation requests referred to them by DALRRD when called upon to do so. The Variety Focus Groups met regularly during the 2023 season via Zoom conferencing, with the CGA convening the meetings and acting as secretariat.

The CGA extends its appreciation to the Variety Focus Group regional representatives for giving their time to serve their fellow growers. Special thanks are due to Francois Dilman (Grapefruit chairperson) who stepped down from his role at the beginning of the 2023 season. The CGA would also like to express its gratitude to the Fresh Produce Exporters' Forum (FPEF) representatives for their contribution to the Variety Focus Groups.

The following Variety Focus Groups meetings were held:

Month	Grapefruit	Oranges	Lemons	Mandarin	Total
February	1	1	1	-	3
March	1	-	1	1	3
April	1	-	1	1	3
May	2	-	1	1	4
June	2	1	1	1	5
July	2	1	2	1	6
August	1	3	1	1	6
September	1	1	-	1	3
October	-	-	-	1	1
Total	11	7	8	8	34

The regional representatives on the Variety Focus Groups for the 2023 season were as follows:

Regions	Grapefruit	Lemon	Mandarin	Valencia / Navel
Boland		J. Boonzaaier	S. Bruwer	B. Mildenhall
Eastern Cape Midlands		E. de Villiers	J. Danckwerts	T. Landman
Hoedspruit	G. Kruger	J. Meintjes	E. van der Westhuizen	B. Landman
Letsitele	B. Landman*	B. Landman	D. Fourie	J. Joubert
Limpopo River	F. Dilman	F. Dilman	J. Joubert	A. Muller
Nelspruit		A. Muller	P. Pretorius	
Nkwalini		B. Snyman		C. van der Merwe
Onderberg	M. Neethling	G. van Staden	M. Bester	R. Van Zyl
Oranje Rivier	D. Steyn	M. Hamman	M. Odendaal	W. Kleyan
Patensie		Z. van der Merwe		
Pongola	A. Rouillard	A. Barnard	A. Janse van Rensburg	D. Joubert/ K. Terblanche
Sundays River Valley		L. Venter*	R. Els	P. Nortje
Senwes		H. Schoeman		P. Button
Southern KZN		P. Button	H. Warnich*	S. Engelbrecht* / P. Hough
Western Cape		B. Mouton		G. Brown
Eswatini	J. Boyd			P. Bristow
Zimbabwe	P. Bristow			

* Chairperson



CONSUMER ASSURANCE

Paul Hardman | Albert Coetzee | Paula Bester

The Consumer Assurance portfolio is managed by Albert Coetzee, who took over the role of Industry Affairs Manager from Paul Hardman in November 2023. Paul, in his new role as COO (July 2023), continues to oversee the Consumer Assurance portfolio, assisting Albert, whose main focus is sustainability, and Paula Bester, who is focussed on food safety aspects.

It remains critical that the CGA has the internal capacity to deal with sustainability and food safety matters, given how directly they link back to on-farm decision-making, and the long-term competitiveness of industry players. Growers need to be informed so that they can respond to changing market-led consumer assurance trends. These trends are being driven by the following forces:

Pull back on the European Green Deal: Since June 2023, particularly leading up to the European Union elections in 2024, strong EU agricultural unions have expressed dissatisfaction with the shackles being placed on farmers under the EU Farm-2-Fork (F2F) strategy. Visiting Brussels in February 2024, the CGA witnessed first-hand the impact of protests and the pressure the Commission is facing. This push-back is being heard by politicians and recent retreats from the original goals set for cutting pesticide use, as an example, have been observed. What this unfortunately signals, is that access to crop protection products is now a political issue and has moved well away from science-based decision-making. Even though this turn in the EU may slow the trend of fewer and fewer crop protection products, it also has the potential to hurt trade if the response by the Commission and Parliament is to restrict imported fruit based on residue grounds. An example where France banned fresh produce due to legally permitted residues arose in 2023 and 2024.

Government Regulations: It is clear that more governments globally are implementing legislation aligned with international commitments on climate change. The challenge is that not all countries approach these Directives in the same way, leading to a patchwork set of trade requirements. This is particularly relevant in the case of reporting standards for sustainability metrics.

Retailer Requirement: Retailers add additional layers by imposing their perspective on what sustainability and food safety means. Given the competitiveness of the retail environment, these requirements again are not always based on good science and can be tainted with trying to compete on the grounds of "sustainability". A typical example is the massive pressure retailers place on producers to reduce post-harvest treatments, knowing that this will directly impact food waste.

Cost of Compliance: One issue that continues to be a cause for concern is the exorbitant cost of demonstrating compliance. The citrus growers at CGA are generally motivated to act in accordance with regulations but frequently become disenchanted when they are confronted with the expenses associated with conforming to private assurance schemes. Another challenge is the amount of duplication in these standards, leading to administrative burnout.

Citrus Sustainability Forum (CSF)

The CSF has become a central platform for addressing sustainability and food safety matters. Meetings were held regularly on a quarterly basis. In accordance with an update to the Terms of Reference, the format of the meeting changed so that private entities offering services or products in the sustainability or food safety sectors, could promote them at the end. The CGA does not endorse these products or services, but it has an interest

in making growers aware of products and services that may be helpful to them in their sustainability and food safety efforts. The examples included online data management tools to help with reporting and also how to get financial assistance for solar energy installations. The excellent response to the CGA survey on solar energy use and demand helped guide the discussion and CGA's direction to support growers on this topic.

Crop Protection Products

The CGA/CRI Recommended Usage Restrictions of Crop Protection Products on Southern African Export Citrus was updated periodically to reflect the latest changes in MRLs.

Mancozeb: The CGA concluded the studies to generate data to try and retain important uses for Mancozeb for fruit destined for the EU. This fungicide is used to enable producers to comply with EU phytosanitary import requirements. The EU Commission contemplated the future definition of the Dithiocarbamate residue definition in Europe (Mancozeb falls into this group), which has complicated the final submission of the data package. Clarity was sought in February 2024 with a visit to the Commission and the official data submission process began, following this visit.

Act 36 of 1947: The Registrar of Act No. 36 of 1947 indicated his intention to withdraw the registrations of certain active substances based on their toxicological profile (or hazard classification). This was the first time a hazard-based approach was being introduced to evaluate crop protection products and a deviation away from the risk-based approach, which is seen as more appropriate. The implication is that from 1 June 2024, some key crop protection products will be phased out, including a key fungicide for blackspot control. The CGA has been working with registration holders and CropLife South Africa to mitigate against the loss of these key products.

Crop protection industry: Regular meetings were held throughout the year with the crop protection industry. These meetings considered current and future needs for the citrus industry given the loss of key tools for pest and disease control. Typically, key staff from CRI joined this discussion to contribute their knowledge and experiences.

Carnauba Wax: The CGA worked with a group of wax suppliers to make an application for the use of Carnauba wax on fruit destined for Taiwan. Feedback from the team working in Taiwan was that Carnauba wax posed no human health risks and is likely to be added to their regulations in line with the EU MRL for Carnauba applied as a surface treatment on unpeeled, fresh citrus fruit.

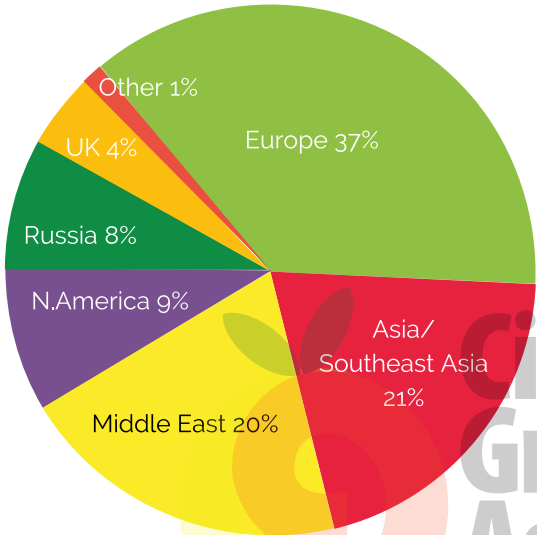
Vegan waxes: UK retailers are now predominantly requiring fruit to be treated with vegan waxes (i.e. non-shellac containing waxes) driven by consumer demand.

SHAFFE Sustainability Task Force (STF): Regrettably, the momentum around the STF has come to a halt mainly due to the changes that have taken place at the SHAFFE Secretariat. Although CGA still holds the STF chair, no meetings have been held since June 2023. However, during the SHAFFE meeting at Fruit Logistica in February 2024, decisions regarding the Secretariat were made, and it is hoped that SHAFFE will receive the necessary support to enable the STF to function effectively again.

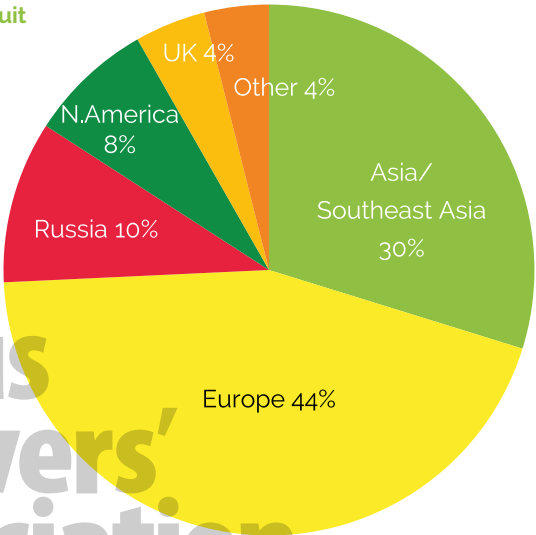
Looking Ahead: The CGA has started working on a Food Safety and Sustainability Strategic Plan for 2025-2028, which is in line with the next levy cycle. The current plan has successfully guided the CGA staff to address the most important Consumer Assurance matters, but much has happened in the last four years. Key topics that will be addressed going forward are the defence of crucial active substances, addressing dubious laboratory residue results, and trying to influence retailer requirements. The CGA will also explore and communicate avenues for green finance options for producers, to lessen the burden of compliance costs. A renewed emphasis will be placed on building and nurturing relationships with government bodies, registration holders, and retailers. The CGA will also play a leading role amongst various industries in a collaborated effort to avoid duplication when it comes to sustainability reporting and compliance. There is a need for better alignment between grower associations, government, and private institutions to push back on risks that will lead to only a single materiality.

EXPORTS 2023

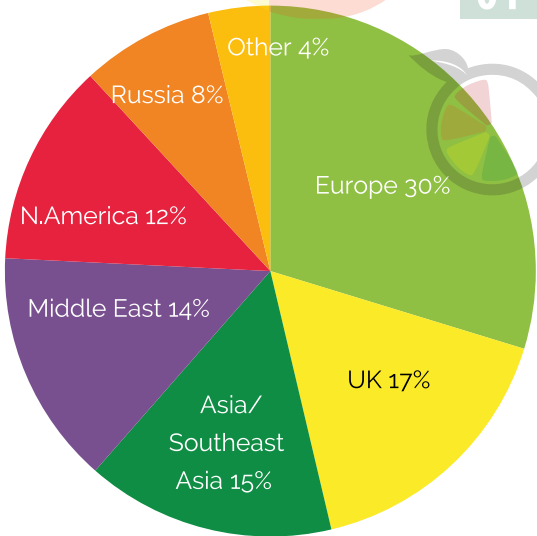
Oranges



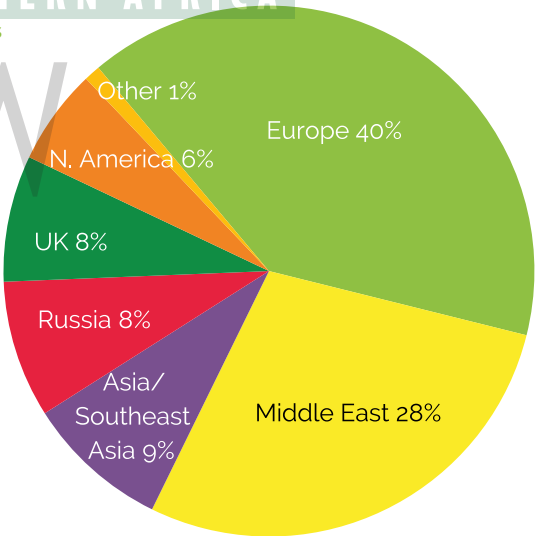
Grapefruit



Mandarins



Lemons





MARKET ACCESS

Justin Chadwick | Dr Vaughan Hattingh | Dr Elma Carstens

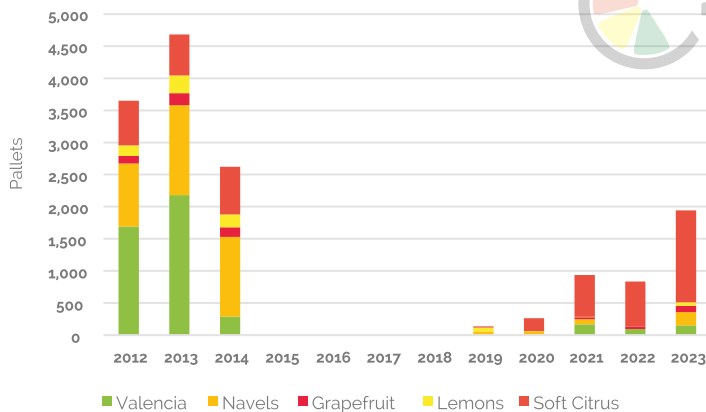


PHILIPPINES

Engagements: The CGA met with the Philippine Ambassador in Pretoria, along with senior Embassy officials. The Embassy is keen to assist in promoting trade between the countries.

Agrilink Manila: The CGA has supported this trade show for many years – with a stand at the show and the opportunity to meet importers and government officials. The South African Embassy in Manila has been extremely supportive of the South African fruit industry. During the year under review, Paula Bester and Tanya Ungerer attended the Manila show.

Volumes: 2021 was the first year that South Africa exported citrus to the Philippines under the new protocol. The volumes shipped in 2023 doubled from the previous season, albeit from a low base. Mandarin exports are starting to grow in this market. Volumes are restricted due to shipping opportunities and the cost of shipping. This market holds the potential for additional volumes in the future.



VISION 260: Should the protocol be changed to exclude lemons from cold treatment due to the non-host pest status of lemons for FCM and fruit flies, Vision 260 anticipates a potential of 5,000 tons of lemons to this market by 2027.



VIETNAM

South Africa applied for access for oranges in 2013.

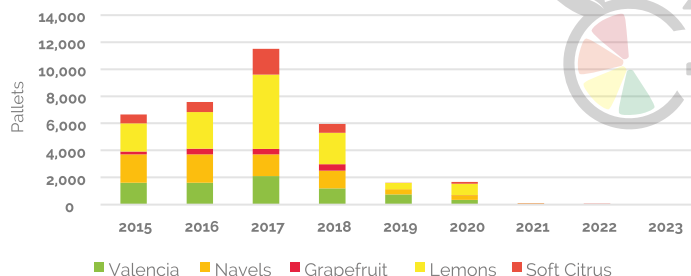
At an advanced stage in negotiating the export protocol, Vietnam unexpectedly included two fruit flies on the list of pests associated with oranges from South Africa. CRI provided information indicating that oranges are not a host for these fruit flies. Ensuing from an official bilateral meeting between South Africa and Vietnam, the Vietnam Plant Protection Department (PPD) provided two documents used by PPD to support their inclusion of the two fruit flies on the pest list. On the 15th of August 2023, CRI provided a response to DALRRD detailing the reasons why the articles do not provide evidence that citrus is a natural host for these two fruit flies. DALRRD submitted a response to PPD on the 4th of September 2023, and based on the evidence again requested that the two fruit flies be removed from the list of quarantine pests. A Fruit South Africa delegation, which included CRI, visited the South African Embassy in Vietnam and the PPD on the 5th and 6th of September 2023. The listing of the two fruit flies was discussed in the meeting with PPD. To conclude the matter, the PPD requested a letter from DALRRD stating that citrus is not a natural host of the two fruit flies. The First Secretary Political at the Embassy who was part of the Fruit South Africa delegation conveyed the request to DALRRD via DIRCO. The Embassy also requested a document from CRI

showing a timeline of all the exchanges of information between the countries since 2008. The document was submitted on the 12th of September 2023. In a meeting with the Vice President of Vietnam on the 14th of September 2023, the importance of concluding the protocol for the export of fresh citrus fruit to Vietnam was highlighted. DALRRD submitted a letter to PPD on the 23rd of October 2023, again stating that citrus is not a natural host for the two fruit flies.

In February 2024, communication was received from Vietnam PPD indicating an agreement to remove the two fruit flies from the list of quarantine pests. They also included the draft import conditions for fresh oranges from South Africa. CRI and NPPO SA agreed with the draft import conditions. DALRRD also provided feedback, indicating that South Africa agreed with the draft import conditions but proposed some administrative changes. In March 2024, DALRRD received the final draft import conditions. CRI and SA NPPO confirmed acceptance of the import conditions.

Fruit South Africa Advocacy trip to Vietnam: In September 2023 Dr Elma Carstens (CRI) travelled to Vietnam as part of a Fruit South Africa delegation to visit Vietnam officials, importers, and the South African Embassy in Hanoi.

Volumes: Since there is no access, volumes are non-existent.



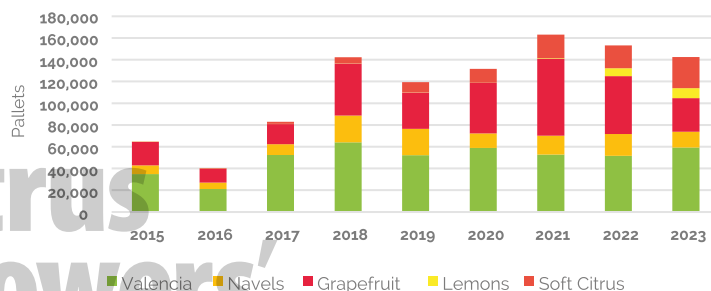
VISION 260: It is anticipated that access to Vietnam could result in the export of 10,000 tons of oranges and 15,000 tons of mandarins by 2027.



CHINA AND HONG KONG

Volumes: Volumes to China continued its slight downward trend due to a reduction in grapefruit as growers decided to restrict exports of fruit for processing purposes. Since the 2021 change to the lemon access conditions, lemon volumes have continued to grow. There was also a significant increase in Mandarin volumes. Volumes are still above the 140,000 pallet mark.

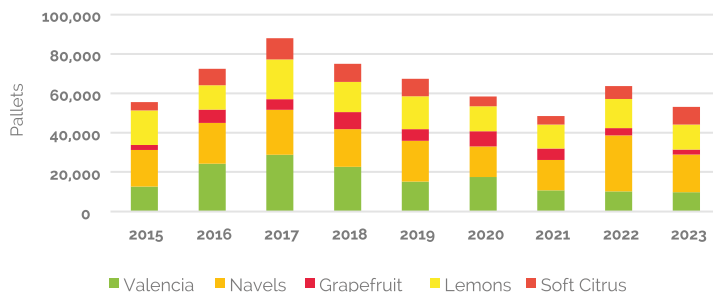
China



VISION 260: Mandarin volume increases are already 53% of the 2027 goal, while lemon volumes have only achieved 7% but are expected to continue to increase as the new protocol advantages are realised.

Hong Kong: Export volumes into Hong Kong are flat at the 50,000 pallet level. Decreases in navel imports were offset by increases in mandarins.

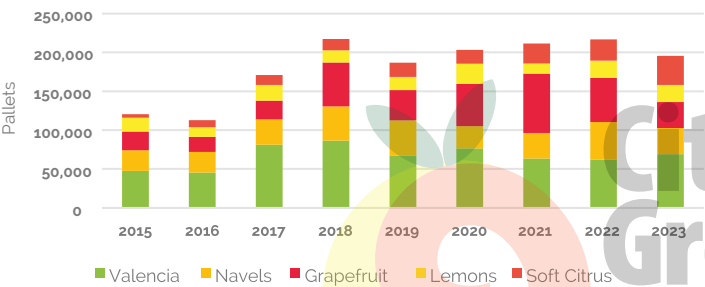
Hong Kong



VISION 260: As in the case of exports to China, Mandarin export increases to Hong Kong are now 67% of the 2027 target. Vision 260 does not anticipate growth in lemon or orange exports to Hong Kong.

The combined volumes to Hong Kong and China have been static at around 200,000 pallets since 2018. Gains in Valencias and mandarins have been offset by decreases in grapefruit and navel volumes.

China and Hong Kong



ZIMBABWE

During 2023, Zimbabwe commenced with small volumes of citrus exported to China.

JAPAN

Optimising access conditions for all citrus types; Access for all mandarins, excluding Satsumas; Access for all navel oranges and amendments to the bilateral protocol.

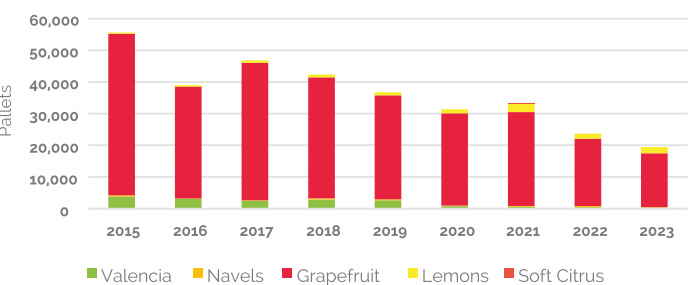
There has been no movement on any of the matters as Japan-MAFF only deals with one market access request from a country at a time and the import protocol for avocados from South Africa was still pending. A Fruit South Africa delegation visited the South African Embassy in Japan and Japan-MAFF on the 14th and 15th of September 2023. In the meeting, Japan-MAFF indicated that when the avocado protocol is concluded, DALRRD must send a letter

to them, stating that the three long outstanding citrus issues are the next priority for South Africa and that the three issues must be handled concurrently. DALRRD previously sent such a letter to Japan-MAFF in December 2019. Nonetheless, CRI provided a letter to DALRRD requesting that such communication again be sent to Japan-MAFF. DALRRD sent the requested communication to Japan-MAFF in November 2023. On the 30th of November 2023, the industry was informed that the market for South African avocados is officially open. For the 2024 citrus export season, the Japanese inspector will arrive in June/July to oversee both export programmes. The 2024 citrus export programme can, however, commence before the arrival of the inspector.

Amendments to the current bilateral protocol: In May 2023 a draft of the current bilateral protocol was received from Japan-MAFF and a meeting was held between DALRRD, CRI, PPECB, and FPEF to discuss inputs from Japan-MAFF. In January 2024 a response was received from Japan-MAFF, but without a response to the three long outstanding issues. A meeting to discuss the response is scheduled for April 2024.

Fruit South Africa Advocacy Visit: In September 2023 a Fruit South Africa delegation visited Japan. The delegation briefed the Embassy on the outstanding fruit trade issues, visited with Japan-MAFF, and held an Importer Seminar attended by nine Japanese companies.

Volumes: Export volumes to Japan continue to decrease. Whereas South Africa used to export over 50,000 pallets of grapefruit to Japan, those volumes have decreased to less than 20,000 pallets in 2023.



VISION 260: It is anticipated that volumes of mandarins and lemons will increase once protocol changes are enacted.



UNITED STATES OF AMERICA (USA)

Access for citrus from the rest of South Africa (CBS areas); Recognition of CBS pest-free places of production in an area of low pest prevalence; The inclusion of other Western Cape magisterial districts.

DALRRD submitted a letter to USDA-APHIS on the 2nd of March 2023 to follow up on the long outstanding issue of allowing citrus exports from the CBS areas. A technical bilateral meeting was scheduled for the week of the 17th of July 2023 but was cancelled. The meeting took place on the 8th of August 2023. In the meeting, USDA-APHIS indicated they would respond on all the outstanding matters when information is available. On the 22nd of August 2023, DALRRD received a letter from USDA-APHIS, indicating that they have started a review process of the current work plan – Preclearance Operations to Export Citrus Fruit Produced in South Africa to the United States of America. The current work plan was last reviewed in 2008. USDA-APHIS indicated that once they have an updated version, it will be shared with DALRRD for comments and further discussions.

Meeting with National Pork Producers Council (USA): In October 2023 the CGA met with senior officials of the National Pork Producers Council (USA).

African Growth and Opportunity Act (AGOA): During November 2023, South Africa hosted the AGOA Forum in South Africa where the CGA attended the Business Forum. AGOA has been an important element in the growth of citrus export volumes to the USA, allowing duty-free access to this important market.

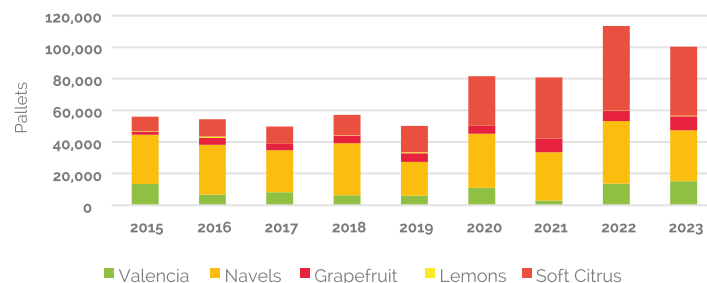
USTR Ambassador Katherine Tai and USDA Secretary Tom Vilsack communicated with DTIC Minister Ebrahim Patel prior to the AGOA Forum to promote more dialogue with the goal of enhancing more bilateral trade and eliminating several long-standing trade irritants including US pork and South African citrus.

Engagements: In May 2023, the CGA hosted Ambassador Brigety at a farm in the Western Cape. This engagement with the Ambassador and Embassy staff from Pretoria and Consular staff from Cape Town was an excellent opportunity to build networks and brief the representatives on challenges and opportunities in the South African citrus industry. The CGA attended the US Independence Day celebrations in Pretoria, meeting with the Ambassador and Embassy staff. The CGA briefed the South African Ambassador in Washington. The CGA met with both the United States Department of Agriculture and United States Trade Representative officials in Washington.

CGA Representative in USA: Nick Gutierrez continues to engage with USA, USTR, and other US government authorities. He has also built a network within the South African and Eswatini Embassy in Washington. He sends through a very detailed monthly report outlining progress and activities which is sent to the CGA board and other interested parties.

Eswatini: The CGA and CRI continued to assist Eswatini growers and authorities with the access process.

Botswana: The CGA met with the US Ambassador to Botswana and attended the US – Africa Business Conference in Dallas, Texas which included President Mokgweetsi Masisi of Botswana and high-level US Department of State officials. The CGA then met with USDA-APHIS leadership in Washington, D.C. the following week. The US Department of State is partnering with USDA-APHIS to publish the draft risk assessment for public or stakeholder comment by September 2024. This is the critical first step in the approval process to allow for new market access.



Volumes: After years of sustained growth, volumes to the USA dropped slightly in 2023 but remained above the 100,000 pallet level.

VISION 260: With decreases in volumes of oranges and mandarins to the USA, no progress was made towards the 2027 targets.

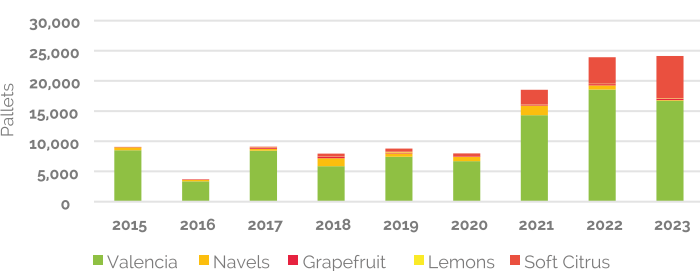
 INDIA

Optimising access conditions (cold treatment protocol for citrus shipments) for all citrus types

Since 2017, there have been engagements between the SA NPPO and Indian NPPO regarding reverting to in-transit cold treatments. Despite several trial consignments being sent, no positive outcomes were achieved. In March 2024, a Fruit South Africa delegation met with NPPO India in New Delhi, including representatives from CRI, the CGA, and DALRRD. During the meeting, the NPPOs agreed that two further trial shipments would be sent. A meeting was held in March 2024 involving the two exporters, DALRRD, and PPECB. The indication is that the fruit intended for shipment will be ready by the end of May 2024.

Representative in India: The CGA has concluded contractual arrangements with a representative in India. This arrangement will commence in April 2024.

Volumes: There was a slight uptick in export volumes to India in 2023. Mandarin volumes have increased while Valencia volumes decreased.



VISION 260: The Mandarin volume increase is 13% of the target of growth to 34,000 tons by 2027.

 SOUTH KOREA

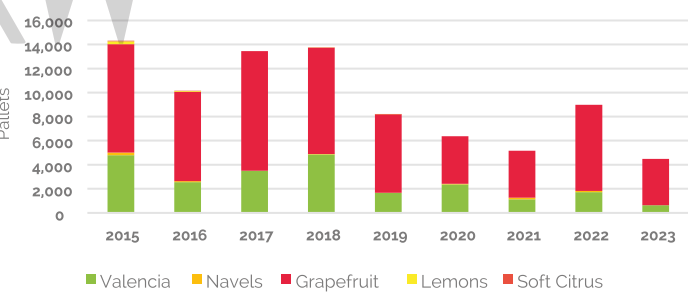
Management of mealybugs for citrus fruit intended for export to South Korea

For the first time since the COVID-19 pandemic, a South Korean inspector visited South Africa in 2023 for joint phytosanitary inspections with DALRRD. The inspector arrived on the 2nd of April 2023 and after visits to the farms and packhouses, the South Korean list was approved for export.

Problems were again encountered with mealybug interceptions on grapefruit in the 2023 export season.

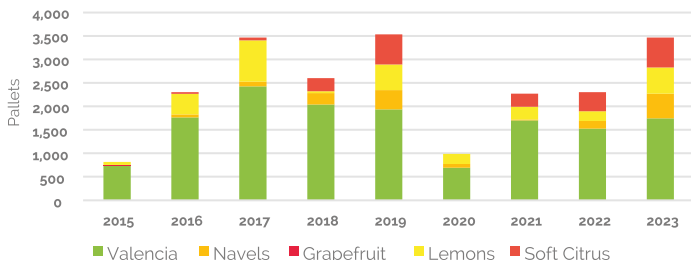
At the Citrus Information meetings in November 2023, DALRRD indicated that the rule that prevented those PUCs that had registered for 2023 but did not export in 2023, from registering for the 2024 export season, has been withdrawn. Also, the previously prescribed requirements for the management of mealybugs and the corrective actions will not be implemented in the 2024 export season.

Volumes: Export volumes to South Korea continued on a downward trajectory.



INDONESIA

Volumes: Export volumes in 2023 showed significant growth over the previous season, with all citrus categories growing in volume.



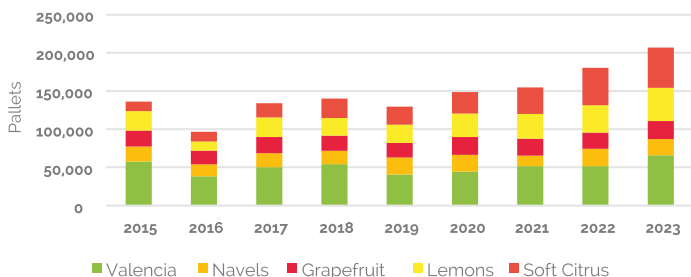
VISION 260: Exports are on track to reach the target of 5,000 tons by 2027, increasing by 20%.

RUSSIA

CGA Representative in Russia: Mikhail Fateev continued to represent Southern African citrus interests in Russia. Mikhail used all opportunities to engage on issues facing the industry and in building links between South Africa and Russia. Mikhail prepared a weekly newsletter which is distributed to the Russian Interest Group.

Volumes: The Russian market continues to grow for South African citrus, with all citrus categories showing growth.

VISION 260: Lemons and oranges are well on track to reach 2027 targets with oranges at 50% and lemons at 67% of the targeted increase. Mandarins are 14% of the targeted increase.



THAILAND

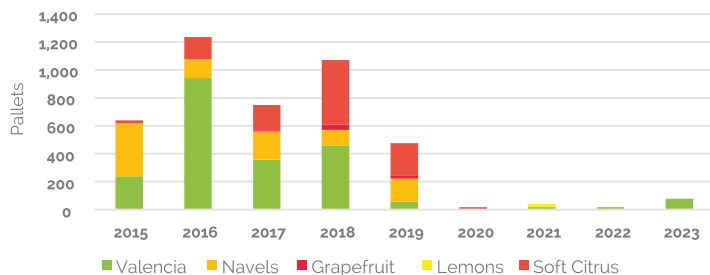
Interpretation of current FCM Cold Treatment Protocol; Inclusion of improved FCM cold treatments; and Exclusion of lemons from the mandatory cold treatment.

CRI received a response from the DOA, via DALRRD, on the 12th of July 2023. The response included a draft import protocol. Although the interpretation of the cold treatment was corrected, the improved FCM cold treatments were not included and lemons were also not excluded from the FCM cold treatment. Meetings took place between SATI, CRI, and Hortgro. A consolidated response was submitted to DALRRD on the 22nd of August 2023. In this response, it was indicated that the industries agreed with the improved wording in both the citrus and grapes draft import protocols, and agreed to the signing of the new draft protocols. CRI requested DALRRD to continue to engage with DOA on the inclusion of the improved FCM cold treatments (citrus and grapes) and the removal of lemons from the mandatory FCM cold treatment (citrus). DALRRD submitted a response to DOA on the 31st of August 2023.

A Fruit South Africa delegation visited the South African Embassy in Thailand and the DOA from the 2nd to the 4th of October 2023. In the meeting, DOA indicated that they are still reviewing the response. In March 2024, a delegation from DOA visited the deciduous industry. During the closing meeting, DALRRD raised the issue of finalising the citrus and grape protocols. The Director of the DOA NPPO indicated that a meeting is scheduled for early April 2024 to discuss the two amended protocols. He also indicated that if the committee agrees with the amended protocols, information will be communicated to the Director General of DOA NPPO for signature and gazetting. DOA will inform South Africa when the protocols are gazetted.

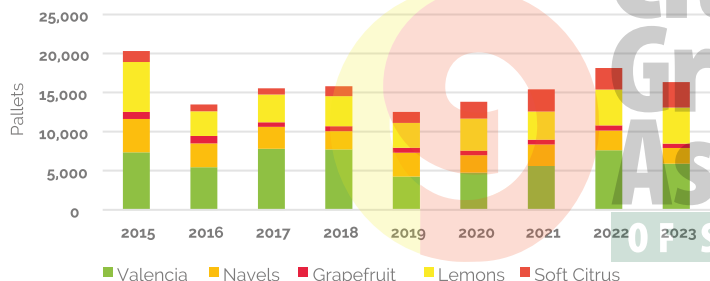
Engagements: The CGA met with the Thai Ambassador in Pretoria, along with senior Embassy officials. The Embassy is keen to assist in promoting trade between the countries.

Volumes: Negligible volumes of South African citrus are exported to Thailand.



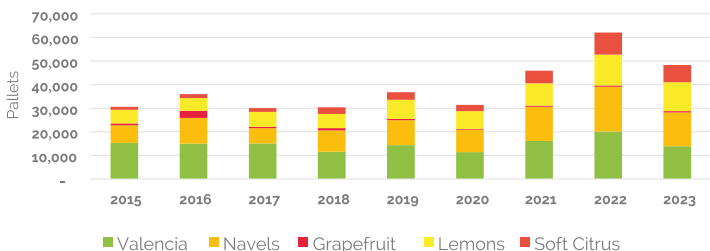
SINGAPORE

Volumes: Singapore remains an important destination for South African citrus with an annual volume ranging around the 15,000 pallet mark.



MALAYSIA

Volumes: Malaysia is a significant importer of South African citrus with a slight decrease in volumes in 2023 to just below the 50,000 pallet level.



GENERAL

BRICS: The BRICS Summit was held in South Africa in August 2023 where the CGA attended the BRICS Business Forum.

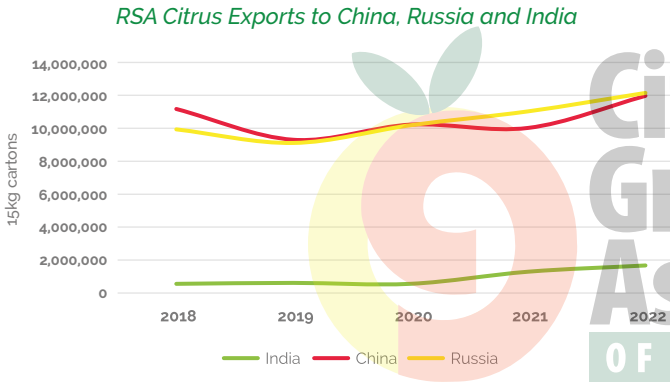
The BRICS Business Forum was an eye-opener. In the past, these fora were dominated by discussions on energy and minerals. The Sandton event was dominated by agriculture – given the large rural population and importance of agriculture in the BRICS nations, agriculture should, and did, take center stage. The outcomes of the Business Forum have been adopted and delivered to the Heads of State. Important for the fruit industries is a focus on tariffs and attention to phytosanitary issues. Linking business people was a priority, with discussions on air linkages between the BRICS nations, visa-free entry, and a move to dealing in their own currencies.

Within BRICS, South Africa is seen as a proxy for Africa and represents the wishes and priorities of the African continent. There was a lot of discussion on the African Continental Free Trade Agreement and how Africa will be connected in the future. Probably the biggest announcement from the Summit is the addition of six new countries to the partnership. Since the Summit, Argentina decided not to join. While there is a lot of commentary on the geopolitical impact of this change, the impact on the Southern African citrus industry may be as follows:

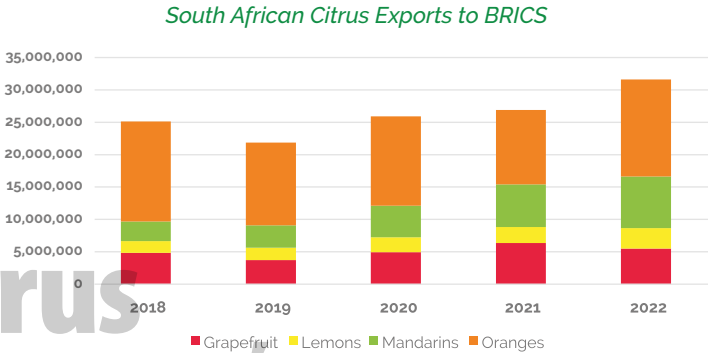
- For African citrus the inclusion of Egypt adds a significant orange producer and exporter into the mix.
- In terms of export destinations for Southern African citrus, BRICS already has the number two (China) and number four (Russia) markets in the fold; the addition of UAE brings in number five and Saudi Arabia number eight. In total, over 600,000 tons of South African citrus are exported to these BRICS+ countries – 30% of total exports.
- In terms of potential markets, it was not long ago that South Africa exported 45,000 tons of fruit to Iran, in 2023 it was zero. There could be a possibility of reviving the citrus trade with Iran.

There will always be debates about the merits of being part of BRICS. Membership must start to benefit the people in these nations. These summits need to go beyond talk and deliver tangible benefits for those who pay the taxes.

South Africa has healthy citrus exports into both China and Russia, while India is starting to show promise. Russia has been an important destination for South African citrus for many years. Since South African citrus gained access to China in 2004, exports have increased dramatically. Unfortunately, exports to India remain far below potential levels, as access conditions remain difficult and import duties remain high.



South Africa's total citrus exports to China, Russia, and India have grown from 25 million, 15kg equivalent cartons in 2018 to over 30 million cartons in 2023. This represents 19% of all citrus exported in 2023. The citrus basket exported to these countries is mostly oranges, with grapefruit, lemons, and mandarins being imported in increasing quantities.



African Continental Free Trade Agreement: Almost all African countries are now signatories of the AfCFTA. Once fully implemented, this Agreement could improve access and volumes into the rest of Africa. Logistics and payment guarantees would need to be sorted out.

Saudi Arabia: The CEO of the CGA has been appointed by the Minister of Trade, Investment, and Competition to serve on the Saudi Arabia Business Council. Saudi Arabia is an important importer of South African citrus fruit. Serving on the Council means that the citrus voice can be heard at a number of engagements.

Botswana, Zimbabwe, and Mozambique: Several meetings were held with Botswana NPPO and citrus producers to provide information and technical guidance on how to comply with the import conditions of different trading partners. Technical guidance was provided to Zimbabwe NPPO and growers on how to comply with EU Regulations on CBS. Discussions were held with Mozambique growers on how to gain market access. A meeting was scheduled in April 2024 with the NPPO of Mozambique to discuss their citrus pest list.

WE ARE CITRUSCENTRIC



FRUIT SA DELEGATION



Meeting with the Ministry of Agriculture Plant Protection Division



Meeting with the Indian Ministry of Commerce



Agrilink, Manila



Opening ceremony of Agrilink, Manila

FRUIT LOGISTICA



Fruit SA delegation at dinner hosted by
Ambassador BN Radebe-Netshitenzhe



Andries van Wyngaardt, Paula Bester, George Hall



Fruit Logistica



Paul Hardman, Paula Bester, Deon Joubert



EU MARKET ACCESS

Deon Joubert | Rocco Renaldi | Dr Elma Carstens

General

The Southern African 2023 season to the EU was beset with difficulties at the outset, but ended well, with shipments of South African citrus continuing until the end of the normal season.

Early citrus black spot (CBS) notifications of non-compliance (NONC) created a flurry of EU Commission notices. This time South Africa refused to voluntarily close the EU market in mid-July 2023, due to the CRI identifying multiple instances of questionable or incorrect interceptions. This enabled South Africa to close the EU market on oranges, unilaterally and voluntarily, towards the end of the first week of September 2023. The South African crop, which was early, was able to end its run without adding pressure to other markets due to the EU overflow.

The key enabler for continued trade was the excellent report prepared by CRI, which challenged a number of erroneous EU NONCs and was shared through official channels with the European Commission and other EU stakeholders towards the end of 2023.

Regrettably, the EU refused to discuss the merits of the report and to review any of the NONCs that were challenged. On the 24th of April 2024, the World Trade Organisation (WTO) announced that South Africa had called for formal consultations with the EU on the EU CBS regulations, in accordance with the WTO dispute settlement procedures.

Retaining and Optimising Access Conditions for all Citrus Types

False Codling Moth (FCM) Regulations

The FCM Management System (FMS) and the relevant protocols for the 2023 export season were approved by DALRRD on the 29th of November 2022. A CRI Cutting Edge and the relevant documents explaining the changes made to the FMS were

communicated to role players on the 9th of March 2023.

Despite high-level political discussions, there was no relief from the new EU FCM regulations for oranges, so exporters in 2023 were compelled to apply these measures.

By the end of the 2023 citrus export season, South Africa had received notification of 3 FCM interceptions in the EU. Two of the interceptions were contested since the cold chain was such that there could have been no survivors, and photographs of the intercepted specimens indicated that they were certainly dead. The EU refused to withdraw its notified FCM interceptions.

The withdrawal of the CBS Risk Management System (RMS) in 2023 raised concerns about the responsibility of PPECB to enforce specific requirements of the FMS. Meetings were held between CRI, PPECB, and DALRRD, culminating in clarification of the responsibilities of PPECB in ensuring compliance and agreement was reached on the application of the system as of 2024.

No changes were made to the EU regulations for FCM, and the FCM systems approach remained unchanged for 2024. On the 14th of March 2024, DALRRD communicated the updated Citrus FCM Risk Management System (FMS), now renamed the Citrus False Codling Moth Systems Approach (Citrus FCMSA). A CRI Cutting Edge and the relevant documents were communicated to role players on the 2nd of April 2024.

Citrus Black Spot (CBS) Risk Management System (RMS)

The CBS RMS and associated documents for 2023, including new requirements to ensure compliance with EU CBS regulation, and to address concerns raised by the EU Audit report, were circulated on the 7th of March 2023. A Cutting Edge explaining the changes, together with the CBS RMS and relevant documents

was communicated to the industry on the 15th of March 2023.

In 2023, mid-season the European Commission communicated to DALRRD that South Africa should consider a voluntary suspension of citrus exports to the EU and demanded a plan of action from South Africa to avoid further CBS interceptions. South Africa raised concerns with the EU about the phytosanitary testing conducted by certain EU member states as the basis for their reported interceptions on citrus fruit imports from South Africa, including several of the CBS interceptions. South Africa declined to apply voluntary suspension of exports to the EU and continued exports to a natural cessation of packing in mid-September 2023.

By the end of the 2023 citrus export season, South Africa had received notifications of 48 CBS interceptions in the EU. The technical accuracy and reliability of several of the notifications (as well as reported interceptions for some other pests) were contested, including CBS interceptions from a CBS-free area and from a place of production considered to be CBS pest-free. The CRI coordinated the compilation of technical assessments of the EU laboratory testing procedures, concluding that serious deficiencies were evident, rendering the results unreliable. Despite South Africa providing clear technical evidence of the deficiencies in the EU laboratory testing, the European Commission refused to revise their associated notifications of interceptions.

DALRRD withdrew the CBS RMS towards the end of 2023, and CBS requirements for export to the EU have subsequently been limited to the requirements stipulated in the EU CBS regulations. This gave rise to many concerns about the way forward to ensure continued compliance with the EU import requirements. The CRI had multiple engagements with DALRRD regarding the technical details and procedures and the industry CBS Working Group was engaged to provide formal technical recommendations. DALRRD indicated that they wanted to promulgate the EU CBS requirement details in South African legislation. There were many ensuing interactions with DALRRD, including CRI, the CGA, FPEF, and Fruit South Africa, and recommendations were made by the CBS Working Group. A consensus was reached on the way forward and on the 12th of February 2024, DALRRD

communicated a document outlining procedures that will be applied to ensure compliance with the CBS EU Regulations, replacing the former CBS RMS. Further to this, on the 16th of February 2024, DALRRD published a notice that the STANDARDS AND REQUIREMENTS REGARDING CONTROL OF THE EXPORT OF CITRUS FRUITS will be amended. The amendment included the following sentence: "Approval for export of citrus fruit destined to the European Union shall comply with the European Union import phytosanitary requirements". The notice provided for a 30-day public comment period. CRI and the CGA provided comments on the 16th of March 2024. The amended export standard was signed on the 3rd of May 2024.

Citrus Canker

In July 2023, South Africa received a notification of a citrus canker interception on citrus from the Eastern Cape. South Africa is internationally recognised as a country that is free from citrus canker caused by *Xanthomonas citri* pv *citri* and *X. citri* pv *aurantifolii*. DALRRD requested a detailed laboratory report from the EU, and an investigation into the implicated orchards under the auspices of South Africa's NPPO, took place and included citrus pathologists with relevant citrus expertise. CRI coordinated expert technical assessments of the laboratory diagnostic testing conducted in the EU as the basis for the reported interception.

It was concluded that the diagnostic procedures followed were deficient and did not justify the reported interception and that the symptoms on the intercepted fruit indicated the presence of *Alternaria* and not citrus canker. In the orchard investigation, no symptoms of canker were found but fruit with *Alternaria* symptoms were found. Also, the fruit and leaves submitted to the DALRRD laboratory, tested negative for citrus canker but tested positive for *Alternaria* spp. This evidence was communicated to the EU by DALRRD, but the European Commission refused to withdraw its notice of interception. South Africa maintains its officially declared canker pest-free status.

Fruit Fly Regulations

At the end of the 2023 citrus export season, South Africa had not received any notifications of fruit fly interceptions in the EU. No

changes were made to the South African Fruit Fly Management System and the document was circulated by DALRRD on the 14th of March 2024 and communicated to role players thereafter.

EU Audit

The EU audit to evaluate the system of official controls for the export of citrus fruits to the European Union took place in September 2022. The draft report on the audit was received from DALRRD on the 24th of January 2023. CRI and the CGA provided inputs and a meeting took place on the 2nd of February 2023 to discuss and finalise the inputs to the draft EU audit report. A response was received from the EU on the report submitted by South Africa and a meeting took place on the 7th of July 2023 to discuss the report. Most of the concerns addressed by South Africa were accepted, but the EU still had concerns with the sampling for Valencia ethephon testing and the orchard inspections. The EU also requested copies of the pack house SLA and the working procedures for the 1% online pack house inspection. CRI provided inputs to address these concerns and DALRRD submitted the requested information on the 16th of July 2023.

Spanish Direct Shipping Group

There were 5 CBS NONCs and 1 FCM NONC in Spain during 2023. This did not stand out amongst the total EU numbers for 2023, which were 48 CBS and 3 FCM.

Ports of Cartagena

The South African citrus industry decided to widen access to Spanish ports in 2023 by including an agreed lemon-only programme to Cartagena in the Murcia region. This is where the Spanish Lemon and Grapefruit Producers Organisation, Ailimpo has its headquarters. The delegation included FPEF chairman, Mark Jensen and Fernando Negroni from Safresco. Fernando's presence was extremely valuable as he is not only fluent in Spanish but works with citrus fruit received in Spanish ports and programmes in Europe daily.

Through Ailimpo we met with the Spanish Central Government responsible for phytosanitary control and inspection in Murcia. Although it was a first and tight meeting, a very productive set of arrangements flowed from this meeting which led up to the final

programme between the first weeks of June to the end of August 2023. It consisted of 25,000 pallets of South African lemons. The arrangements and phytosanitary inspection in Cartagena were efficient and fair. Additionally, Ailimpo worked closely with the CGA and FPEF on NONCs and the progress of the programme. In the end, Ailimpo even requested an extension which both sides signed off on before execution. This was a highlight and a good basis for sustainable future supply to Spain.

Rejected fruit had to be re-exported as Cartagena port has no destruction facility due to license and contamination issues, and Spain does not allow overland trucking of rejected fruit. Generally, they were very satisfied with South African fruit quality and documentation on arrival – excellent quality, good organisation, and documentation.

A few issues with pallet stamps - ISPM 15 – and one supplier had multiple issues with packing lists and multiple PUCs in one container.

Ports of Algeciras

We first visited the port of Algeciras in 2019 and met with their National Government in Madrid's phytosanitary senior contingent in the Algeciras Port region. Equally, it was strict but constructive. Javier López, Commercial head of the Algeciras Port Authority, remained our access point.

Unfortunately, due to the Argentinian custom to load multiple PUCs in one container, it created a massive delay in the port as the inspectors tried to execute the inspection sample size required by the EU CBS regulation. This became a massive issue and led to South Africa being heavily implicated and led to serious financial losses in 2023.

Fortunately, this resulted in the Port of Algeciras appointing additional inspectors, expanding their working hours, and opening the weekends to accommodate additional inspection capacity. Javier Lopez flew to South Africa and attended specially organised meetings with South African citrus exporters and producers to explain their failure and also the steps to address these in 2024. This created a lot of confidence that the issues of 2023 are unlikely to be repeated.



CRI - RESEARCH & TECHNICAL

Dr Vaughan Hattingh



Governance and Funding

The 2023 year was the third year of the CRI four-year plan, supported by the current levy. In line with the four-year plan, CRI has increased research infrastructure through Capex investment in research equipment, with the Citrus Research Centre in Nelspruit undergoing a major expansion in 2023/24. CRI was able to upscale research from 75 projects in 2020/21 to 132 projects in the 2023/24 budget and has stabilised (as projected) at 131 projects in 2024/25. The upscaling of CRI research and technical activities in 2023 provides a solid platform for incremental adjustments to be effected in 2024 and thereby achieve the level of upscaling envisaged in the four-year plan.

The structure of the CRI board of directors remained unchanged with the CRI executive committee consisting of Piet Smit (chairman), Deon Joubert (vice-chairman), Mike Woodburn and Eddie Vorster, with Piet Engelbrecht serving as the most recently appointed director.

The CRI advisory committees were chaired by the following directors: IPM - Fanie Meyer; Disease Management – Eddie Vorster; Citriculture - Piet Smit; Cultivar and Rootstock Evaluation – Deon Joubert; and Citrus Improvement Scheme Advisory Committee (CISAC) - Fanie Meyer. The balance of the board consisted of: Steve Turner (Citrus Exporters Forum), Nthabiseng Motete (ARC), Chris Kellerman (Citrus Consultants), Nigel Barker (University of Pretoria), Danie Brink (Stellenbosch University), Martin Hill (co-opted, Rhodes University), and Louisa Maloka-Mogotsi (Citrus Growers Development Chamber, co-opted as an observer).

Market Access

In addition to the market access section of this publication, the following items are highlighted here. Vietnam accepted the improved FCM cold treatment schedules and the scientific evidence of the non-host status of oranges for the two fruit fly species that were under discussion. This concluded in 2024 a very protracted technical negotiation with Vietnam culminating in the opening of the Vietnam market for oranges from South Africa. For the first time since the COVID-19 pandemic, a South Korean inspector visited South Africa in 2023 for joint phytosanitary inspections, but mealybug interceptions continued to disrupt the export of grapefruit to this market. Thailand accepted improved wording to describe FCM cold treatment in the citrus and table grape export protocols, but the Gazetteing of the amended protocols by Thailand remains pending. South Africa will continue to negotiate with Thailand for acceptance of an improved FCM cold treatment and for the exclusion of lemons from the FCM cold treatment requirement. Despite high-level political negotiations with the EU, there was no relief from the new EU FCM regulations required for oranges as of the 2023 season. South Africa contested several of the FCM and CBS interceptions notified by the EU in 2023 on the basis of technical deficiencies in the testing procedures. Towards the end of 2023, DALRRD withdrew the CBS Risk Management System (RMS). This raised concerns about how ongoing compliance with EU import requirements would be implemented. After numerous engagements with DALRRD, agreement was reached and DALRRD released a document outlining procedures that would be applied as of 2024, replacing the former CBS RMS. DALRRD also released the documents

effective as of 2024: The Citrus FCM Risk Management System (FMS), renamed as the Citrus False Codling Moth Systems Approach (Citrus FCMSA), and the SA Fruit Fly Management System. A meeting in India led to an agreement that South Africa would send two trial shipments of citrus to support acceptance of in-transit cold treatment.

Research

The increased level of funding via the current levy cycle has broadened the scope of research on citrus being conducted by CRI staff, especially through CRI collaborations with other institutions both locally and internationally. The results from this research are regularly transferred to citrus growers and other role players in the industry in the form of recommendations, using the excellent technology transfer platforms provided by CRI Extension. During the current report period, the infrastructure at the Citrus Research Centre in Nelspruit has been substantially expanded with new facilities for biosecurity personnel, laboratories for citrus black spot diagnostics, and additional laboratories for horticulture and plant pathology. In approaching the next levy cycle, the focus will be on optimising the use of these facilities and consolidating partnerships made with new research collaborators.

Within the *Integrated Pest Management* research portfolio, the focus remained firmly on addressing market access priorities, with 57% of the 86 research projects concentrating on these issues. In this regard, false codling moth (FCM) remained the top priority, followed by fruit fly and mealybug. Highlights in the FCM research programme included trials that confirmed the efficacy and accuracy of the new preharvest infestation monitoring system for FCM (used in the FCM Systems Approach) and the identification of unique volatiles emitted from FCM-infested fruit, as a step towards postharvest detection of such fruit. Furthermore, it was shown that control strategies based on FCM pheromone (e.g. SIT, mating disruption, monitoring) are equally effective throughout South Africa and that the earlier initiation of mating disruption in the

warm northern production areas may more effectively suppress FCM. A range of potential FCM repellents have been identified, as was insecticidal synergism between baculovirus and neem oil. Lastly, relevant to FCM, a very high diversity of bats was recorded in citrus orchards, with their diet including families of moths that include citrus pests. The FCM programme continues to focus on the development of new postharvest disinfestation techniques and schedules, postharvest detection technologies for infested fruit, and the development of an Area of Low Pest Prevalence protocol for inclusion in a systems approach.

Highlights in the fruit fly programme include demonstration that cold treatments effective against Medfly will also be effective against other fruit fly pest species, such as Natal fly and Oriental fruit fly, and demonstration through field monitoring trials that oranges are not a host for Marula fly. The fruit fly systems approach was also shown to be as effective as a Probit 9 stand-alone disinfestation treatment. Lastly, it was shown that the efficacy of fruit fly cold treatment is not reduced by temporary interruptions in applying the cold treatment, indicating that uninterrupted maintenance of the treatment temperatures, as prescribed in current protocols, may not be necessary. Key objectives in the fruit fly programme remain the development of new postharvest disinfestation techniques and schedules, and the development of postharvest detection technologies for fruit-fly-infested fruit.

The *Other Pests* programme grew strongly, both in number of projects and in amount of funding. This was due to several factors: an increased focus on resolving mealybug problems from a phytosanitary perspective; growing attention on preparation for the imminent arrival of the Asian Citrus Psyllid (ACP); recognition that the extent of IPM-compliance may in future affect market access; and the increasing need for non-chemical alternatives to traditional pesticides. Highlights within this programme included determination of the most effective pesticides and programmes for mealybug control, which also confirmed the very high efficacy

of naturally occurring biocontrol. This confirms the long-held view that mealybug outbreaks are primarily attributable to insecticide disruption of the mealybug biocontrol complex. A novel postharvest fumigation treatment was shown to be effective against mealybug, although the practicality of this as a potential treatment remains a challenge. Lastly, great progress has been made in the identification of psyllids in South Africa, to enable rapid and accurate identification once ACP arrives. The focus within this portfolio will remain on development of postharvest techniques for mealybug management, pre-emptive development of management techniques in preparation for the arrival of ACP, and improvement of biocontrol for key IPM pests and mites.

The IPM research portfolio has settled into a good balance between preharvest and postharvest issues and rapid solutions versus more blue sky (usually high tech, with solutions in years to come) projects. This is facilitated by the dramatic growth in collaboration partners, providing access to certain highly specialised expertise and technology that was previously inaccessible or unaffordable.

Sustainable production of high-quality citrus fruit is also dependent on successful management of various pre- and postharvest plant pathogens that include fungal, viral, viroid and bacterial pathogens. To cover all of these, the Disease Management research portfolio comprises the following research programmes: Preharvest Diseases (fruit and foliar with citrus black spot and soilborne diseases); Graft Transmissible Diseases (GTD); HLB and Greening Disease; and Postharvest diseases (PHD).

In the Preharvest Diseases programme, strong emphasis is being placed on better understanding of the different pathogens through epidemiological studies as well as finding alternative control strategies or improving the current strategies. This entails searching for and screening softer management options, improving chemical control programmes to prevent resistance

development and spread, and improving spray technology.

Citrus Black Spot (CBS) remains the most important disease in the South African citrus industry, because of its phytosanitary importance for access to the EU, and several projects are aimed at improving management and detection of *Phyllosticta citricarpa*, the causal pathogen. Some very promising new chemical options are currently being developed for CBS management. Furthermore, the potential for any reduction in strobilurin sensitivity of the CBS pathogen is being investigated. More efficient spray application of agrichemicals is receiving attention. CRI PhytRisk was developed as a CBS prediction platform and is continuously being improved as a management tool. Other research covers the tempo of CBS infestation of new orchards and the development of a CBS risk matrix that can be used to predict the CBS risk associated with orchards. Accurate and sensitive diagnostic protocols are continuously being improved.

Alternaria diseases of citrus, and specifically Alternaria Brown Spot, have increased dramatically in the recent past and control measures are under continuous evaluation. Other aspects relating to *Alternaria* spp. are addressed in several projects including the fungicide sensitivity of different species and the infection susceptibility of different cultivars and plant parts.

Soilborne diseases and nematodes form part of this programme with preplant soil fumigation under investigation and investigation of new chemicals, non-chemical products or biocontrol agents for the management of soilborne pathogens and pests. Root and fruit rot, caused by *Phytophthora* spp., remain serious limitations in citrus production and chemical control of these diseases is still the cornerstone of management. Possible reduced phosphonate sensitivity within South African *P. nicotianae* populations is under investigation and the influence of different rootstocks on phosphonate translocation. Management of mefenoxam resistance is important for citrus nurseries and a molecular assay to detect mefenoxam resistance in *Phytophthora* spp. isolates is

being developed. There is increasing pressure to reduce the use of fungicides and research aims to better understand biological control of these pathogens and how to optimise the control achieved.

Within the *graft transmissible diseases* (GTD) programme the focus aims at preventing the damaging effects of GTD pathogens, such as citrus tristeza virus (CTV) and citrus viroids. These pathogens can easily spread through plant material. Therefore, research in this programme focusses on ensuring that pathogen-free plant material is supplied to the industry through the Citrus Improvement Scheme (CIS). A single-strain isolate, B390-5 is being compared in grapefruit field trials to GFMS35, the current cross protection source. This is due to B390-5 showing very good tree health and production results in previous research. Early indicators of stem pitting are being investigated to identify markers that can be used in the selection of cross protection strains. Different CTV strains may vary in priming host defence responses and their interaction is being investigated. Viroids, due to their mechanical transmissibility, remain a problem where susceptible rootstocks are used. New rootstocks are therefore being evaluated for their sensitivity to viroids. Rootstocks may even influence the distribution of viroids in the scion. The horticultural performance of field-cut propagation material versus Improvement Scheme material has been under debate for some time. However, field trials continue to clearly show that trees made from Scheme material outperform trees made from field-cut material.

The *HLB* programme coordinates and facilitates the interdisciplinary research needed to prepare the industry for the arrival of this disease. One of the critical factors in management of HLB is rapid and accurate diagnostics of the pathogen. Research to construct a comprehensive *Liberibacter* genome reference database in support of the development of accurate detection and identification assays, is contributing to the success of the HLB Action plan. This information will be used to develop a novel HLB detection test that can be used in the field for HLB diagnostics.

Further research aims to establish a test orchard under protection where the African Greening infection of trees will be studied along with any possible management strategies that could be used in the management of HLB. In the South African industry, trees are often co-infected with African Greening and CTV. The interaction of these two pathogens is being studied, especially with reference to the possible effect on CTV cross-protection.

Postharvest disease management is facing challenges in terms of increasing pressure to reduce the number and level of detectable residues present on export fruit. The focus in this programme is therefore to optimise the application of chemical postharvest treatments and to investigate and optimise alternative non-chemical control options.

To this end, one project continuously evaluates alternative products. In 2022, UV-C as a postharvest treatment was tested and it was discovered that very good control of sour rot could be obtained. Further development of this treatment is in progress. To address the need to treat waste water, a new system was evaluated, again with very promising results. One of the active ingredients that remains under threat in the EU, is imazalil. To prepare the industry for any potential additional restrictions on the use of this active ingredient, alternative actives are continuously being evaluated. From the numerous postharvest trials, it became evident that postharvest fungicides give variable disease control results on mandarins. To investigate this phenomenon, research is being undertaken on the possible role that rind phytochemistry and morphology may play in causing variable efficacy of postharvest fungicides. Increased shipping times, shipping delays, and reduced shipping temperatures, are associated with problematic saprophytic fungal growth on the stem-end of exported fruit. The exact causes and remedial actions that can be taken are being studied. Currently, GRAS chemicals, biocontrol options and organic management options are being tested as either preharvest sprays or postharvest applications. Postharvest management of *Phytophthora* Brown rot is the focus of a number

of research projects, including investigating the contribution of postharvest sanitisers to the management of Brown rot in the packhouse.

Pressure on postharvest fungicides has led to greater focus on managing postharvest pathogens in the near-harvest period. Some practices are already employed in the industry and the efficacy of these and other methods are being investigated. Results obtained indicate that preharvest applications of PAA provide variable control of postharvest pathogens. However, very promising results were achieved with fulvic acid applications. Along with pre-harvest management, specific investigation of alternative, non-chemical control methods are a big focus within postharvest research. Essential oil volatiles are under investigation for the control of all major postharvest pathogens in degreening rooms and also possibly in cartons through novel application techniques. Certain biological control products have had little to no effect on postharvest pathogens, but this avenue of research will continue.

In the *Citriculture* research portfolio, progress was made in projects ranging from cultivar evaluation to cold chain management. The trees in two rootstock evaluation blocks, 'Gusocora' and 'Jasi' Valencia, reached bearing age and the first results indicate that C22 (Bitters) performed well, followed by C35 and US-812. In a Valencia evaluation trial in Kirkwood, 'Wonder Why', 'Gusocora' and 'Jasi' are currently performing very well.

To improve water management in citrus orchards, irrigation volume was compared in two drip systems. Low flow drip (0.7 L/h) decreased drainage below the root zone in a citrus orchard with sandy loam soil compared to conventional drip (1.6 to 2.3 L/h). As a result, there was increased water storage in the root zone. Furthermore, data suggest that there is improved application efficiency and, therefore, more efficient water use at lower emitter delivery rates. However, a comparison of fertilisation-irrigation management combinations in full-bearing Valencia and Nadorcott

orchards shows that the Nutrient Use Efficiency (NUE) of low-flow drip-irrigated orchards, fertilised with enriched water, is poorer than the other approaches, with similar levels for the other irrigation-fertilisation systems. This work provides a verified benchmark by which producers can evaluate their fertilisation rates, and NUE less than 420 kg fruit/kg N, or application rates that exceed 2.4 kg/ton fruit should be reassessed. Three cover crops (grazing vetch, medics and oats) are being evaluated in a multi-season project. The first two seasons indicate possibly reduced weed dry matter production in the oats cover crop treatment, indicating that oats suppressed weeds better than the other treatments.

A comprehensive analysis of the citrus container cooling process, provided insights into causes of chilling injury and hotspots. These data are being used to support market access decisions, improve airflow modification kit designs, and optimise loading strategies. Furthermore, developing a temperature monitoring system and authentication process is enhancing the reliability of cold chain data. Data on cold storage infrastructure and logistical forecasts are being provided to role-players, improving decision making in the season and informing cold storage guidelines for the industry.

Extension

The operations of the Extension Division made a significant contribution to the citrus industry at farm and packhouse level during the 2023 season, due to expansion of the extension capacity and associated operations.

Several technical courses were presented and the grower feedback was very encouraging. There is a need to roll out the presentation of these courses to all the production regions over the next two years. A number of short videos on a range of topics were recorded and released. These videos were so well received that more will be made on an ongoing basis. The videos are short, to the point, and aimed at practical implementation on the farms or in packhouses.

The study groups and packhouse forums continue to run smoothly in the different production regions and the attendance is generally good. The CRI Production workshops and the CRI IPM & Disease Management workshops were combined and presented during May and June 2023. The fact that the IPM & Disease Management workshops were moved earlier assisted growers to better plan their spray programmes and allow sufficient time to order the right products. There is currently a strong drive in the Extension Division to promote the principles of IPM, but it has become evident that growers need assistance throughout the season in their decision-making processes.

The very popular CRI Postharvest Workshops were once again hosted in the six main regions during January and February 2024. The attendance of, and feedback on, the presentations were really encouraging. It is clear that increased one-on-one postharvest extension at packhouse level is making a huge contribution in assisting with decay control and general packhouse practices. A very capable candidate was employed as Postharvest Extension Officer: North, after the position became vacant due to the resignation of the previous person in this position.

The review of the carton accreditation process was finalised and the outcome was communicated to the Packaging Working Group and to the industry during the CRI Postharvest workshops, as well as in a Cutting Edge. The primary change in the system is that the specifications and protocols became guidelines, with no changes to technical values and principles. The reviewed CRI document on packaging will be updated on an annual basis and distributed as the CRI Guidelines for Packaging and Palletisation. The successor of the Postharvest Technical Forum and Packaging Working Group Coordinator will be appointed in 2024, and this position will in future become the Packaging Specialist.

The structure of the CRI Postharvest Technical Panel was also reviewed, with only two membership groupings remaining, namely the Exporters Technical Panel and the Packaging Working

Group. The Exporters Technical Panel meeting, which took place in November, was very well attended with good input and discussions among the attendees. A number of meetings were held with the Packaging Working Group for their input during the review process of the carton accreditation system.

Communication with CRI's stakeholders improved significantly after the implementation of the CRI Customer Relationship Management (CRM) communication system two years ago. Striving for better communication to all stakeholders continues to be a strong focus and additional avenues for effective communication are in the planning stage.

Biosecurity

Biosecurity is at the core of Citrus Research International's (CRI) mission to maximise the long-term global competitiveness of Southern African citrus growers. Dr Solomon Gebeyehu managed the Biosecurity division from January 2018 until September 2023. Since October 2023, the Biosecurity division has been managed by Dr Paul Fourie, who previously managed the Citrus Improvement Scheme (CIS) division for CRI. The CIS was incorporated as a sub-division into the Biosecurity division. The strategic objectives aimed at ensuring CRI-Biosecurity's mission are summarised under four pillars: Preparedness, Operations, Awareness, and the CIS.

For preparedness, a comprehensive citrus industry biosecurity master plan was developed as a policy and operational guide on which threat-specific activities can be based. This plan will be updated in due course. The top 10 threats were identified and pest risk assessments were developed. Asian Citrus Greening (HLB) and its vector the Asian Citrus Psyllid (ACP) is the number one threat. The HLB/ACP Action Plan was peer-reviewed and updated, along with the HLB Safe System for the production of citrus trees in nurseries. Official regulations of relevance to the execution of the HLB/ACP Action Plan were promulgated. The practical feasibility of the HLB/ACP Action Plan will be evaluated

through scenario planning exercises. CRI will continue to grow the biosecurity contingency fund to support emergency response, and will also investigate other national or international funding options.

Biosecurity operations mostly involved surveillance aimed at early detection of exotic pests and diseases. These operations are coordinated by CRI's Biosecurity Operations Coordinator, and require sustained and effective engagement of stakeholders and support platforms, including CRI's Biosecurity Advisory Committee (BAC), pest-specific steering committees, and relevant government forums. More than 800 ACP traps, including 200 from DALRRD, are serviced at CRI-CRC. At present the service is operating at capacity leaving limited scope for expansion. The trap placement was strategically reviewed and the number of trapping locations will be reduced. African Greening was detected in Knysna, East London, and Port Elizabeth. It was proposed that these areas be declared as Areas of Low Pest Prevalence (ALPP) to allow specific control measures. A surveillance trip to south-east Kenya, where HLB was previously reported, was undertaken in collaboration with Kenyan scientists and government officials. Other matters that receive ongoing attention are the rapid response plan for the isolated leprosis virus detection, and follow-up cases of suspected disease outbreaks, or potential illegal imports of propagation material.

HLB and ACP diagnosis in the Southern African context is markedly more complex than experienced elsewhere, given the endemic variation in greening-causing Liberibacters and their subspecies, as well as in the insect vector genera, Diaphorina and Trioza. Two research projects were initiated to resolve the diagnostic complexities. As part of the post-entry quarantine diagnostics, the CRI and ARC laboratories are continuously conducting the development and optimisation of diagnostic protocols for other identified biosecurity threats.

Awareness is undoubtedly one of the most important aspects

of biosecurity. A broad biosecurity awareness strategy is being developed with specific communication plans for the variety of stakeholders in Southern Africa (growers, national and provincial governments, the ag-chem industry, other fruit industries, and the public in urban and rural settings). Appropriate awareness materials will support early detection, responsible actions, and response preparedness, but should be tailor-made for each audience. Fact sheets for the top 10 threats were developed and are available on the CRI website. The engagement of stakeholders in Southern and Eastern African countries was supported by the planned incorporation of Namibia, Botswana, and Mozambique into the CGA. CRI promotes the use of certified disease-free citrus propagation material, instead of high-risk material from other countries, for all citrus development in Southern Africa. A technical workshop was held with the NPPO of Zimbabwe, facilitated by CGA-Zimbabwe, to promote the CIS and biosecurity awareness. ACP trapping networks were established in Zimbabwe and Mozambique along corridors that should enable early warning of ACP spread from Tanzania through Mozambique into Zimbabwe, Eswatini or South Africa. However, further engagement and funding are required to sustain the surveillance efforts. CRI continues to collaborate with other citrus industries and their scientific and technical support structures, particularly those in the USA and Brazil have proven invaluable in the development of South Africa's preparedness and response plans. In this reporting cycle, CRI biosecurity team members attended the pre-HLB congress in Spain, visited Brazil, USA Florida and California, and attended the international HLB congress.

The *Citrus Improvement Scheme* is essentially a citrus health scheme and a logical fit in CRI's Biosecurity division. The status and integrity of the CIS must be maintained, such that the scheme continues to support the biosecurity interests of the Southern African citrus industry. Whilst a sub-division in CRI Biosecurity, the CIS will effectively be administered and operated as a financially self-sustained unit.

Citrus Improvement Scheme

The 2022/23 and 2023/24 seasons saw massive drops in seed and budwood orders: seed orders were 70.1% and 74.3% down from the prior 5-year average of 5986 litre/season; and budwood demand was down by 58% and 67.4% from the prior 5-year average of 6.6-million buds/season.

The Citrus Foundation Block's (CFB) ability to directly supply demand increased to 92.2%, with the remainder of buds authorised for cutting in nurseries. Of the 9.67-million buds supplied in the 2021/22 to 2023/24 seasons, the top cultivar types were mandarin hybrids (28.4%), Valencia (26.9%), navels (13.4%), lemon (12.9%), Clementines (6.3%), and grapefruit (5.9%).

The respective proportions in 2023/24 were 28.1%, 29.5%, 13.0%, 11.0%, 3.6%, and 5.4%, with 5.7% of buds supplied for traditionally non-commercial cultivars (diverse, kumquat and limes), indicating increased focus on the retail market by nurseries coping with the decline in tree orders from citrus growers. CFB cultivar stock stands at 544 cultivar lines, but the top 30 varieties comprised 92.2% of total number of buds supplied in the past season.

The top 10 cultivars last season were Midnight Valencia, Jasi Valencia, Turkey Valencia, ARC Nadorcott LS mandarin, Tango mandarin, Eureka lemon, Nadorcott mandarin, Royal Honey Murcott mandarin, Witkrans navel, and Limoneira lemon.

Thirty-three nurseries were certified in the last audit in November 2023, with eight achieving a 5-star rating, thirteen a 4-star rating, eight a 3-star rating, and three a 2-star rating, while one new nursery was provisionally certified. A CRI Cutting Edge with the certified nursery list, including the star-grading, was sent to growers.

The industry's cultivar gene sources are duplicated at CFB in a state-of-the-art polycarbonate greenhouse. Development of the CIS Seed Farm is a strategic objective to protect the industry's budwood supply from the biosecurity risk of future incursions

by HLB and its insect vector ACP. A suitable farm was acquired in the Thornhill/Loerie area, and development was initiated in September 2022. Renovations, soil preparations, and installation of irrigation have been concluded, and trees were planted in August/September 2023.

The notice for public comment of the intended promulgation of the CIS as a compulsory statutory scheme was published in the Government Gazette in September 2023, after which information sessions were arranged in the different provinces. Feedback was positive throughout and the notice is being finalised for ministerial approval and promulgation.

The bulk of CIS funding is from income from the supply of budwood and seed and the dramatic decline in demand compromises the affordability of the CIS and its strategic initiatives.

The CIS is a strategic industry asset that supports a healthy and competitive industry. It is essential to ensure that the CIS remains positioned to be able to respond to future upturn in demand, and not be a hindrance to further future growth should circumstances provide an opportunity for increased demand.

All discretionary expenditure in the approved 2023/24 and 2024/25 budgets for the CIS was reduced to the point of being able to supply the reduced demand and still preserve the value of the industry asset. The predicted downturn is expected to last for about 4 years, and in these years CIS income will not cover expenses.

The CRI board of directors agreed to use past CIS profits in the reserve fund to offset the CIS shortfall on breakeven. To adjust the CIS income relative to the 3 to 4 million tree industry expected in the longer term, a price adjustment was required for seed and budwood.

The price adjustment constitutes approximately a 1% increase in tree price.



CGA CULTIVAR COMPANY

Jon Roberts



There were signs of improvement in the cultivar and nursery industry in 2023. However, new and replacement plantings did not improve as farmers recovered and consolidated from the disastrous 2022 year.

The graph below shows a continued downward trend by March 2024 of 1.8 million bud sales, the lowest level since 2007.

Seed sales were even lower. Significantly, where nurseries used to plant seed on specification, based on previous years' sales averages, now nurseries are tending to only sow seed on a firm order. This will result in a longer lead time of an additional 10 to 12 months on a nursery tree. These are all factors that continue to impact the nursery, CFB, and cultivar industries. As a result, CGACC total buds released, reduced from 466,796 in the 2022/23 season to 374,565 in the year under review.

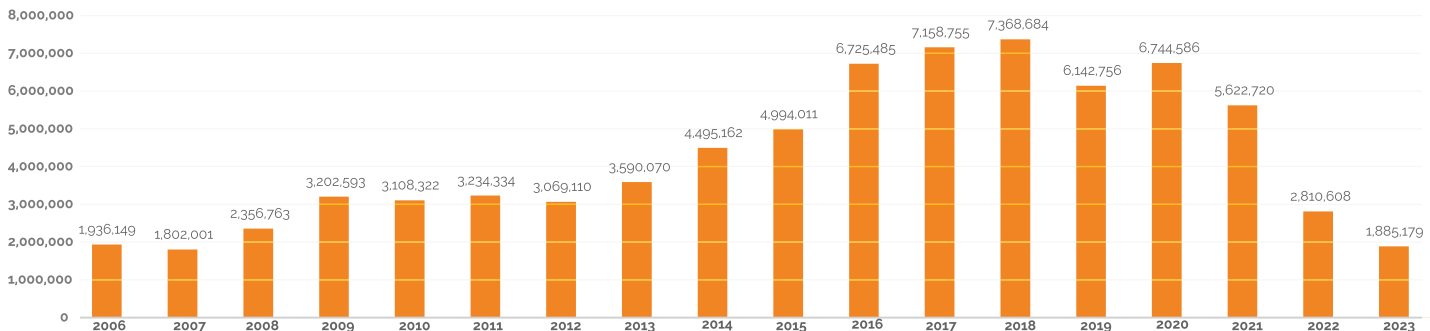
A recovery to an average annual bud sales of 3 million to 3.5 million is probable and sustainable for nurserymen, as it is recommended to replant 5% of one's farm to keep trees at an

optimum age. This would also probably maintain orchard age based on the tree population in South Africa.

CGACC is similarly affected by these events. However, new releases locally and continued offshore sales of our cultivars do allow for cautious optimism going forward. The first offshore sales reported in the previous financial year have continued and have now outperformed local sales of the variety this year. Given South Africa is only 13th in terms of production of citrus worldwide, we are forecasting that offshore sales in the larger producing countries will far exceed local sales in the near future. Given these sales are restricted to Northern Hemisphere countries, these volumes will not compete with South African growers.

Three cultivars have been protected in all the main Northern and Southern Hemisphere citrus-producing countries, with a further two that we have entered into an agreement for release in 2023 to the EU and Med Basin. This will provide multiple income streams in the coming years to ensure the self-sustainability of the company.

Budwood supplied



Locally, we are confident that the new varieties we began releasing last year will assist sales as we start to reach a sufficient budwood supply. The bud sales table of CGACC cultivars below shows the newer varieties (highlighted) that have been released recently.

Below are some statistics of cultivars managed by CGACC (new releases are highlighted in orange)

Cultivar Line	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Grand Total
Turkey	92.000	152.813	143.545	251.305	285.705	173.697	167.691	1.266.756
Bennie 2	110.148	136.533	122.078	235.789	164.525	130.040	78.603	977.716
Red Lina	48.170	65.396	14.493	62.984	39.957	10.892	460	242.352
Red Lina Spanish sales						27.445	29.982	57.427
Clemenson		1.020	10.585	27.730	36.912	44.835	3.715	124.797
Australian Finger Lime (CRC 3672)				1.598	11.722	24.022	22.272	59.614
Muller late red navel, (Valentine)						15.199	15.786	30.985
Suitangi	1.895				3.700	21.315	2.965	29.875
Mustang Early					2.880		25.130	28.010
Addo Early (EH)	13.595	2.560	2.500	2.400	1.060	500	275	22.890
McClellan SL	1.300	4.575		79	650	8.460	5.895	20.959
Kas Early Valencia (TS Early)						1.945	16.799	18.744
Pink Eureka						3.930	11.668	15.598
Wonder Why Midnight						2.605	12.500	15.105
Kinsei (Dekopon)			27	1.726	7.433	2.125	1.903	13.214
Malinda 2 Valencia	50	3.360	5.020	3.080	405			11.915
Kinsei (Dekopon) (2)						4.568	6.095	10.663
De Wet 1 (EDP-1) (5022)	2.209				4.520		3.415	10.144
Caloma Late Navel	530	574			8.820	20	25	9.969
ClemOle (RBC 01)						1.110	9.796	10.906
Ngonini Early SL Valencia				435	485	100	6.070	7.090
Beli SL Valencia		2.185	1.860		2.580			6.625
Florida (CH-19-30 900)						4.496	291	4.787
Florida 914 Ruby Grape fruit hybrid						1.650	3.496	5.146
Ratho Early (GE)						1.110	2.270	3.380
Maxi	3.480							3.480
Sunrise Early (LF Early 1)						1.050	500	1.550
Rosy Red RR-C exp.							445	445
Powell Summer		370						370
Novalee (Lee X Nova)						incr.buds	240	240
Saint André (HE), Exp.						300		300
Tanorlate retn to Exp	20.157	10.730	8.565	13.970	610			54.032
Florida C4-15-19 retn to Exp.	85	3.925	33.465	70.875	12.076			120.426
	296.459	385.391	343.078	675.598	597.269	466.795	374.565	3.139.155



Off-shore travel

In October 2023, I travelled to Spain with the owner of Red Lina. We attended Fruit Attraction in Madrid for three days where the Red Lina variety was being promoted for commercial release. From there we travelled to the south of Spain where Citrus Rosso, our agents in Spain, were hosting groups of growers from Spain and Turkey to view the first plantings of Red Lina in Spain.

The oldest planting (a three-to-four year old orchard) is performing well with good-sized pigmented fruit and showing the same good production characteristics seen in South African plantings. From discussions with the owner of this farm, it was interesting to note that he was not planting Red Lina due to its earliness alone, even though Red Lina is indeed earlier than CaraCara navel. He also valued Red Lina because of its superior external pigmentation that sets it apart from normal navels on the shelf, as well as it performing better in terms of production and pack-out than his control CaraCara trees of the same age. As per the bud sales in the previous table, international Red Lina bud sales will move to third place in terms of our overall sales in the coming season, based on current contracts in Spain and the first release of orders in Turkey. The Northern Hemisphere farmers are encouraged by the growing consumer interest in red oranges in Eastern and Northern Europe and Russia, Turkey's main market.



On the same topic as red oranges, we were excited to enter into an agreement to manage Rosy Red Valencia in South Africa. Rosy Red is a mutation out of Olinda Valencia and is notable for the intense Lycopene in all parts of the fruit, rind, flesh, and juice. The fruit not only has potential on the fresh fruit market in its late window but is also extremely important to the Brazilian juice industry. Our Brazilian agent has also imported it to improve juice pigmentation of the early Valencia variety Hamlin, which is too pale.

Commercially released cultivars

Cultivars that continued bucking the downward trend are our



Olinda Valencia parent



Rosey Red

newer releases, the KAS Early Valencia, sweet ruby grapefruit hybrid (Florida 914), and Wonder Why, a high-producing Midnight which we have released on a fast track semi-commercial basis to farmers. We were unable to supply demand for growers wanting to plant these varieties last year but we finally achieved sufficient supply stock by March 2024.

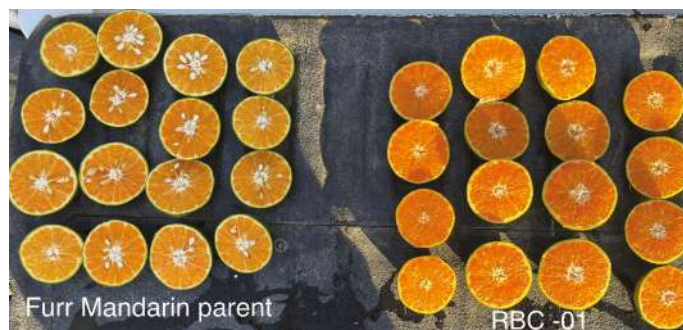
ClemOlé (RBC-01), a low seed, mid-season Mandarin, continues to promise and is showing near seedlessness in trial sites in the Cape this year. RBC-01 is from the heavy-producing Clemcott/Furr Mandarin that achieves a tonnage of 80 to 100 tons in the Sundays

River Valley. Production of RBC-01 appears similar to the parent in bearing trial sites in 2023 and fruit set for the following year is again impressive.

Early seedless mandarin Lee x Nova and Florida 900 are being followed by growers interested in mandarins in the early window. We imported plant material of Marathon Mandarin in 2023. Marathon is expected to ripen in the same early window as UF 900, is seedless, and reported to have a good shelf life.

Rosalate Navel, a red navel ripening three weeks after CaraCara, continues to impress with three consecutive good crops in the first trial sites and fruit set in 2023 was again impressive. Like Rosalina, the Rosalate bears fruit that has an external pink blush in the oil cells and as trees mature, the red lycopene pigment becomes darker than the CaraCara Navel. The three navels together are now joined by Rosy Red and will provide a season-long red-orange line.

Interest in Early Navels has increased this past year with orders for Addo Early, Mustang, and Sunrise early. Sunrise is the earliest, followed by Mustang and then Addo, three weeks before Palmer. These are all naturally even colouring varieties and offer a good early alternative to the older Lina and Newhall varieties that require degreening to colour up. The early navel season has been difficult in recent years due to cheap, late Egyptian fruit remaining in the market at this time. However, the early navel market in



March has been emptier compared to previous years due to the shortages of orange juice, promising producers better prices. The orange juice shortage is likely to continue for some time as the main juice suppliers begin to struggle with Asian Greening.

Cultivars that are showing promise in the evaluation phases

- **Florida 900 mandarin:** reported previously, was our earliest ripening mandarin in 2023, reaching full colour in late April to early May. UF 900 must be planted in isolation or under net to prevent pollination. Fruit set in the second follow-up crop in Western Cape trial sites looks promising.
- **Kinsei Dekapon (seedless):** one of the finest eating mandarins gave the first fruit from a commercial block in the Sundays River Valley. The fruit was picked with a 17.2 brix and an acid of 1.1 and sold into the local market where there were no longer late mandarins available. The marketer reported a very good shelf life and good interest from consumers achieving a good price. It appears this variety is later than first thought and is probably in the ultra-late mandarin window. The follow-up fruit set of the second crop is good and the variety does not appear to be an alternate bearer.
- **Florida 914:** continues to be evaluated and some growers are planting test blocks to develop commercial management guidelines for this new grapefruit hybrid.
- In some cases, small plantings of Valencias have been made to evaluate their management requirements. Valencias that are still undergoing evaluation, include:
 - **Ngonini early Delta SL**, three weeks earlier than Delta but with similar Delta characteristics.
 - **Ratho Early SL** matures in week 26, smooth with dark rind and good size.
 - **Beli SL** is earlier than Midnight with a smooth rind and good size.

- **Malinda, LS**, late Valencia season, heavy bearing with good size and smooth skin.
- **Wonder Why SL**, Midnight mutation is a high-producer in hot areas and has followed up with a good fruit set this year, and continues to show better production than Midnight control trees. There has been an interest in both KAS Early Valencia and Wonder Why for export.
- **De Wet Navel:** continues to evaluate well, showing little to no orchard waste due to the naturally closed navel end. Production and packout of this cultivar makes it our best conversion to cartons per hectare compared to all navels in our trials due to good production and minimal waste.

At Fruit Attraction in October 2023, I met with the breeder of FA5 rootstock who agreed to release this high potential rootstock to us. These and other promising rootstocks offered will be imported in the near future.





CITRUS ACADEMY

Jacomien De Klerk



Citrus Academy Board of Directors

The board of directors for the year under review consisted of the following individuals:

Representation	Name	Date of Appointment
CGA	Phillip Dempsey (chairperson)	2012/11/20
Donors (Citrus Industry Trust)	Dr Hildah Lefophane (vice-chairperson)	2021/11/04
CGA	Marius Bester	2017/03/09
CGA	Bennet Malungane	2018/03/22
CGA	Frikkie Olivier	2020/09/08
Service providers	Johann Engelbrecht	2023/03/29
Additional seat	Vacant	

The company secretary, Robert Miller and the chairperson of the CGA Finance and Risk Review Committee (FRRC), Rajen Govender, attend board meetings *ex officio*, while the CGA's Chief Executive Officer, Justin Chadwick, and Chief Operating Officer, Paul Hardman, are invited to attend board meetings as observers.

The following board meetings were held during the year under review:

Date	Meeting	Apologies
2023/10/31	Board Meeting	Marius Bester, Robert Miller
2024/01/18	Strategic Planning Session	None
2024/03/27	Board Meeting	Marius Bester

The sixteenth annual general meeting of the Citrus Academy was held at River Meadow Manor, Jan Smuts Avenue, Irene on Thursday, the 31st of August 2023.

Financial Results

In the year under review, the development of learning material for occupational qualifications and for advanced citrus production practices continued, the Citrus Secondary programme was piloted at three sites, the Citrus Quick Skills and Citrus SuperPower programmes were developed, and a career progression survey was conducted amongst Citrus Academy Bursary Fund graduates. Income from citrus short courses continued to decrease, resulting in the suspension of face-to-face courses. Income from e-learning programmes continued to rise steadily.

A failure to secure bursary funding from the AgriSETA towards the end of the financial year resulted in a significant shortfall for the year under review. In the 2023/24 financial year, the Citrus Academy reported a shortfall of R331 447, compared to the 2022/23 surplus of R52 325.

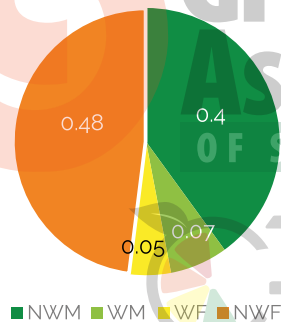
Alignment with CGA Strategic Objectives

The Citrus Academy is a non-profit company, established specifically to serve the transformation objectives of the CGA. All Citrus Academy activities are aligned with four of the strategic objectives of the CGA.

The primary objectives in question are driving industry transformation and assisting growers' long-term sustainability. Secondary objectives pursued by the Academy are engaging with government and other stakeholders, specifically regarding human resources, and supporting the implementation of research and development through bursaries for students involved in research and assisting with technology transfer.

Beneficiary Demographics

Because the Citrus Academy is an essential component of the CGA's transformation drive, the demographics of its beneficiaries are constantly monitored. Beneficiaries are calculated as all programme participants, excluding user-pay programmes (short courses and e-learning programmes). Of the 2,650 beneficiaries to date, 88% are non-white, while 53% are female. In the year under review, beneficiaries were 83% non-white and 48% female.



Citrus Academy Bursary Fund

Citrus Academy Bursary Fund allocations are separated into three categories, namely postgraduate, undergraduate, and BEE bursary support. The BEE bursary support section of the Bursary Fund supports black-owned citrus enterprises to build their internal capacity and empower self-management. During 2023, just more than R2.5 million was paid as bursaries to 49 beneficiaries. There is a worrying downward trend in the number of bursaries that are allocated each year, mostly due to a lack of funding.

Graduate retention remains satisfactory, with two-thirds of graduates employed in the fruit industry, academia, and government departments or agencies. More than half of those graduates are employed in the citrus industry. The Citrus Academy constantly strives to meet the demands of the industry for graduates.

The Citrus Industry Trust and the AgriSETA are still the major sources of bursary funding, while the contribution by companies from within the citrus industry keeps growing. Their continued support is appreciated.

Citrus Academy Bursary Fund Experiential Learning Programmes

The Citrus Academy creates opportunities for Bursary Fund students to gain exposure and experience while they are studying, and after they have graduated. Vacation work is arranged for all B-degree and diploma students, at workplaces where they can gain experience relevant to their field of study. The internship and graduate placement programmes assist Bursary Fund students in finding placements at citrus enterprises where they can gain work experience. Through the industry exposure programme, current and former students are assisted in attending conferences, symposia, and other events that are relevant to their field of study.

In the year under review, four interns and one graduate started their experiential learning in January 2023. Five students participated in the vacation work programme, while ten benefited from the industry exposure programme.

Career Fairs

The Citrus Academy takes part in regular career fairs, with the aim of creating awareness about the citrus industry and encouraging young people to study agriculture. During the year under review, the Citrus Academy participated in a number of events, both virtual and in person, including AgriCAREERConnect, the SRVM Career Exhibition in the Sunday's River Valley, and the AgriSETA career summit.

Pick me!

The Pick me! platform on the Citrus Academy website has proved a powerful tool to put work seekers in touch with potential employers. Work seekers are able to register their details on the platform, and recruiters can view the available candidates. A bulletin with the details of available candidates by province is circulated to employers every second week. An option for allowing businesses to advertise available positions on the platform is currently under investigation.

Citrus Short Courses

Citrus Academy short courses are aimed at developing insight and understanding of particular aspects of the citrus value chain. In the year under review, two more short courses were added, bringing the total of available short courses to five, dealing with citrus production, citrus packing, citrus packhouse quality control, the citrus export supply chain, and citrus economics. At present, all short courses are also available on the Citrus Academy e-learning platform, with the exception of Citrus Economics and Citrus Packhouse Quality Control. These will be added by the end of 2024.

Participation in face-to-face short courses continued to decline during the year under review, while the use of e-learning short courses increased.

Citrus Secondary Programme

The Citrus Secondary programme is aimed at providing an opportunity for learners at schools in citrus production regions to achieve an NQF2 plant production qualification while still at school. The programme runs over two years, targeting grade 10 and 11 learners. The programme content and assessments are online, on the Citrus Academy e-learning platform.

In 2023, the programme was piloted at three schools in the Eastern Cape. In 2024, the programme was implemented throughout the country, with fifteen schools in all major citrus production regions participating.





Continuous Improvement – Citrus Best Practice Handbooks

In order to support the long-term sustainability of growers and packhouses, the Citrus Academy has developed best practice handbooks as practical resources for growers, packhouse managers and their teams. These handbooks aim to improve the most important business and operational practices that ultimately ensure competitive and sustainable commercial performance. The two citrus best practice handbooks are available on the Citrus Resource Warehouse.

Learning Media – Audio-Visual Media

The Citrus Academy develops audio-visual learning modules on various aspects of citrus production. All Citrus Academy audio-visual material is available on USB, and can also be found on the Citrus Academy YouTube channel. Furthermore, audio-visual modules can be downloaded from the Citrus Resource Warehouse members' section. No new series developments were undertaken during the year under review.

Citrus Resource Warehouse (CRW)

The Citrus Academy moderates and maintains an industry information-sharing platform where documents can be found that deal with all aspects of citrus production, including research reports, extension briefs, legislation and regulations, annual reports of CGA group companies, and many more. All documents are in searchable PDF format, which means that a variety of sources linked to keywords can be searched easily.

Economic Transformation of Black Citrus Growers Programme (ETBCG)

In 2020, the CGA implemented the Economic Transformation of Black Citrus Growers Programme, aimed at providing support for enterprise development to black citrus growers. The programme is being implemented from April 2020 to March 2023. The programme has been extended to March 2025 to allow for the finalisation of monitoring and evaluation.



CGA GROWER DEVELOPMENT COMPANY (CGA-GDC)

Lukhanyo Nkombisa



A major focus of the CGA-GDC has been to enhance the participation of black citrus growers in the entire value chain while enabling an environment for these growers to participate fully. A variety of challenges were faced during the year under review, including logistics, ports, load shedding, markets, and the cost of production, all of which had a severe impact on the operations at farm level. Despite all the challenges, our growers have demonstrated resilience to perform well in terms of output. It is true that agriculture is not for the faint of heart.

The CGA-GDC was formed to drive development and contribute to the transformation of the citrus industry and agricultural sector, and in doing so, the CGA continues to support the work of the CGA-GDC, who implement programmes and initiatives to create an enabling environment. Details of the support provided to growers in the year under review are presented in this report.

Economic Transformation of Black Citrus Growers (Jobs Fund)

The Economic Transformation of Black Citrus Growers (ETBCG) project ends the fourth year of its implementation with approved projects to the value of R275m. The project has now reached the end of the disbursement phase and will focus on reporting KPIs until 31 March 2025.

A total of 58 applications were received, of which 36 were presented to the Project Steering Committee (PSC), and a total of 13 were approved for implementation.

As of the 31st of March 2024, 96 permanent and 1035 seasonal jobs have been created. A total of 882 beneficiaries have also been trained.

The status at year-end was as follows:

Indicator	Target	Achieved
Total amount of funds approved		R308,000,000
Total amount of funds disbursed		R275,000,000
Hectares planted	746ha	222,79ha
New permanent jobs	316	96
New seasonal jobs	1713	1035
Beneficiaries trained	1005	882

Disbursed funds were used for new plantings, working capital, installation of a packhouse generator, orchard maintenance, power grid and solar infrastructure, and packhouse repairs.



Enterprise Development Fund

The purpose of the Enterprise Development Fund (EDF) is to address the specific business needs of existing black-owned and managed citrus businesses, as well as to create an enabling environment to improve productivity and competitiveness. Major challenges faced by these enterprises are financial uncertainty arising from high input costs, price fluctuations, and stringent market requirements. During the year under review, the CGA-GDC spent a total of R31.3m across six provinces on inputs, packing costs, electricity, fuel, trees, integrated pest management, maintenance costs, compliance, and water.

Total hectare support across six provinces:

Province	Ha supported
Eastern Cape	2046,04
Limpopo	1276,10
Mpumalanga	532,09
KwaZulu-Natal	446,20
North West	98,30
Western Cape	77,76
Total	4476,49

The target categories that were funded during this period continue to be important and remain critical in the development of farmers. Orchard-level expansion is another major area for investment in achieving Vision 50, and during the period under review, an estimated 25,985 trees were purchased which translated to the expansion of orchards by 52 hectares.

Collaboration with the Eastern Cape Development Corporation (ECDC)

The CGA-GDC entered into a partnership with the ECDC on the implementation of agro-processing route-to-market support and development of the citrus industry value chain, focusing on black citrus producers in the Eastern Cape province. As a part of



the route-to-market initiative, the intervention will provide support towards accreditation of developing black citrus agri-businesses with Global Good Agricultural Practice V6 (GLOBALG.A.P.) certification (minimum export standard), and Sustainability Initiative of South Africa (ethical trade requirement for export), for increased secure export markets. Furthermore, the intervention will provide support towards the project development phase of critical postharvest and processing facilities (feasibility and business plans) for developing citrus agribusiness as part of expanding and transforming the citrus industry value chain. The financial contribution of this initiative is on a cost-sharing basis, with the ECDC contributing 60% while the CGA-GDC contributes 40% of the agreed amounts.

Summary Implementation Plan

Projects	Expected completion date	Budget
Project 1 - Compliance support	September 2024	R352,100
Project 2 - Post-harvest facility feasibility study	October 2024	R700,000
Project 3 - Frudata/Economic survey	July 2025	R349,770

Government Supported Projects

The CGA-GDC participates in two programmes under government partnerships, these are the Comprehensive Agriculture Support Programme (CASP), and Land Development Support (LDS) fund.

Comprehensive Agricultural Support Programme (CASP)

The Comprehensive Agricultural Support Programme (CASP) is implemented by the Western Cape Department of Agriculture through its commodity-focused approach in an effort to extend its services to producers within the province. The programme is implemented through the Commodity Project Allocation Committees (CPAC). The strategic goal of this programme is to create a favourable and supportive agricultural service environment for the farming community, including subsistence,

smallholder, and commercial land reform producers, as well as those involved in agri-processing within the Western Cape Province.

Three applications were received and one was approved to the value of R403,000. This project was also recommended to the Unit for Technical Assistance (UTA) to assess the empowerment aspect as it has remained the same for the past seven years. By the end of the year under review, the CASP business plan was not yet approved at a national level.

DALRRD's Land Development Support Fund (LDS)

The Land Development Support programme (LDS), is aimed at providing comprehensive farm development support to land reform farms and addressing the gaps identified during the farm assessment process. The programme provides full grant support to farmers, and it is implemented in partnership with commodity organisations. The programme is implemented in three provinces, namely the North West province, Eastern Cape, and KwaZulu-Natal.

The North West province project is in its final year of implementation and the infrastructure development is 90% complete. Orchard maintenance is 95% complete for the project in the Eastern Cape, while one project in KwaZulu-Natal has been completed, and the second project's orchard establishment is 80% complete.

Partnership with the Eastern Cape Rural Development Agency (ECRDA)

A tripartite Memorandum of Agreement was signed between the DRDAR, ECRDA, and the CGA-GDC at the end of the 2022 financial year. The purpose of this agreement was to support distressed farms in the Eastern Cape and the Ripplemead packhouse. Under

the farmer support grant, the DRDAR made funds available to the value of R12,462,000 to cover some of the selected costs. The project was implemented at the start of the 2023 financial year.

In order to determine the best method of disbursing the funds, farmer representatives were engaged, and an agreement was reached to have equal distribution of the funds. Thus, each farm would receive an R499,369 allocation, with the exception of three farms that did not fall under the equal distribution requirement.

Based on the identified needs, funds were allocated to two broad categories of expenditure:

- i) Production costs (electricity, fertilisers, agrochemicals, plant protection, fuel, packing costs, and repairs and maintenance); and
- ii) Overhead costs (transportation, accounting, administration, and auditing fees).

Integrated Monitoring and Evaluation

The CGA-GDC worked closely with BFAP in the development of an integrated monitoring and evaluation system. The platform has been customised to match the requirements of the CGA-GDC. Thus far the focus has been on customizing specific outputs for the Jobs Fund and the CGA-GDC requirements. Efforts have been made to standardise data and maintain accuracy. System and process customization is dependent on consistent and accurate data structures and inputs. There have been and will continue to be changes in the data requirements for the Jobs Fund and Key Performance Indicators (KPI) for the CGA-GDC. Once the processes and baseline data are available, routine updates and analysis for reporting will be more efficient and with greater accuracy and traceability.

Standardised templates for tree census data have been developed and implemented to enable accurate evaluation of various metrics. Data was collected from the field and collated, and seasonal dashboards reflecting available data are now

available. BFAP and the CGA-GDC had a number of workshops around the KPIs and the data requirements to be able to report against the identified metrics.

Production and Technical support

Extension Services

The CGA-GDC extension services play a critical role in bringing information on new technologies to black citrus growers, which they can adopt to increase productivity, income, and standards of living.

Study Group Meetings

The purpose of the citrus study groups is to gain knowledge and share best practices among group members. By hosting the group at a different venue each month, growers can learn from the different orchards and techniques that their fellow growers are using.

During the year under review, 40 citrus study group meetings were held in all citrus-growing regions. These study group meetings were well attended.



Information Days

These annual events are held in the major citrus-producing provinces. During the year under review, information days were hosted in the Eastern Cape, Limpopo, KwaZulu-Natal, and North West. The Information Days are an opportunity for all relevant stakeholders in the development of black citrus growers to come together and share available opportunities for growers. This includes government departments, financial institutions, and suppliers who play a major role in the industry. These information days were also well attended.

One-on-One Farmer Support

One-on-one farmer support is the most common form of personal contact between the extension services officer and the farmer and often constitutes over 50% of the extension activities. Because they take up so much of the extension officer's time, it is important to be clear about the purpose of such visits and to plan them carefully. The purpose of these visits is to:

- Familiarise the extension officer with the farmer and his family;
- Enable him/her to give specific advice or information to the farmer;
- Build the extension officer's knowledge of the area and the kinds of problems faced by the farmers;
- Permit him/her to explain a new recommended practice, or follow up and observe results to date; and
- Arouse general interest among the farmers and stimulate their involvement in extension activities.

During the year under review, a total of 80 one-on-one farmer support visits were concluded.

Citrus Improvement Scheme (CIS) Workshops

CRI and DALRRD, with the assistance of CGA-GDC invited all nursery representatives, relevant producers of citrus propagating material, and citrus producers to participate in workshops to submit any objections or representations concerning the establishment of the compulsory scheme.



During the year under review, in-person CIS public consultation workshops were held in Mpumalanga, Limpopo, the Eastern Cape, and KwaZulu-Natal. A virtual workshop was held for the Western Cape, Northern Cape, and North West provinces.

Uploading of Citrus Tree Census Collection

BFAP assisted the CGA-GDC with the update of some of the 2023 citrus tree census data but going forward, this task will be handed over to the CGA-GDC Information Officer, who will be assisted by BFAP to access the updated platform. Three training workshops were held at BFAP's boardroom to understand how the BFAP platform functionalities work.

CITRUS GROWER DEVELOPMENT CHAMBER (CGDC)

Sive Silo

As part of its commitment to industry transformation, the CGA established the Citrus Grower Development Chamber (CGDC) in 2011 as a platform of engagement where emergent growers can raise and discuss matters of common concern. Directives from the CGDC are also taken on board by the CGA Grower Development Company and the Citrus Academy.

The CGDC consists of representatives elected by the technical study groups established for emergent growers in all citrus-growing regions. The CGDC usually meets twice a year, with meetings of the executive held when necessary.

During the year under review, the following people served on the CGDC:

Eric Nohamba	Eastern Cape Midlands
Lawrence Mgadle	Eastern Cape Midlands
Siseko Maqoma	Eastern Cape Midlands
Khaya Brian Katoo	Patensie
Simphiwe Yawa	Sundays River Valley
Steri Ndyenga	Sundays River Valley
Wayne Mansfield	Boland
Ntamiseni Thompson Mankhili	Limpopo River
Bennet Sdumo Malungane	Letsitele
Octavias Masalesa	Letsitele
Pheladi Tlomatsane	Letsitele
Olivia Dikeledi Selowe	Nelspruit
Hlulekile Joyce Phonela	Nelspruit
Simon Tiisang Selowe	Nelspruit
Petros Eric Shiba	Onderberg
Mziwoxolo Makhanya	KwaZulu-Natal
Louisa Maloka-Mogotsi	Senwes



The CGDC executive committee is elected by the CGDC members. During the year under review, the following CGDC members and company representatives served on the executive committee:

- Mziwoxolo Makhanya (chairperson)
- Ntamiseni Mankhili (vice-chairperson)
- Eric Nohamba
- Bennet Malungane
- Lawrence Mgadle
- Lukhanyo Nkombisa (general manager, CGA-GDC, *ex officio*)
- Justin Chadwick (CEO, CGA, *ex officio*)
- Jacomien de Klerk (general manager, Citrus Academy, *ex officio*)

The Citrus Academy is contracted by the CGA to coordinate the activities of the CGDC and act as a member liaison.

The following meetings were held during the year under review:

2023/05/25	CGDC executive committee	Virtual
2023/06/15	CGDC executive committee	Virtual
2023/09/15	CGDC executive committee	In-person
2023/09/15	CGDC	In-person
2024/03/25	CGDC executive committee	In-person
2024/03/26	CGDC	In-person



RBX GROUP

Rob Elfick

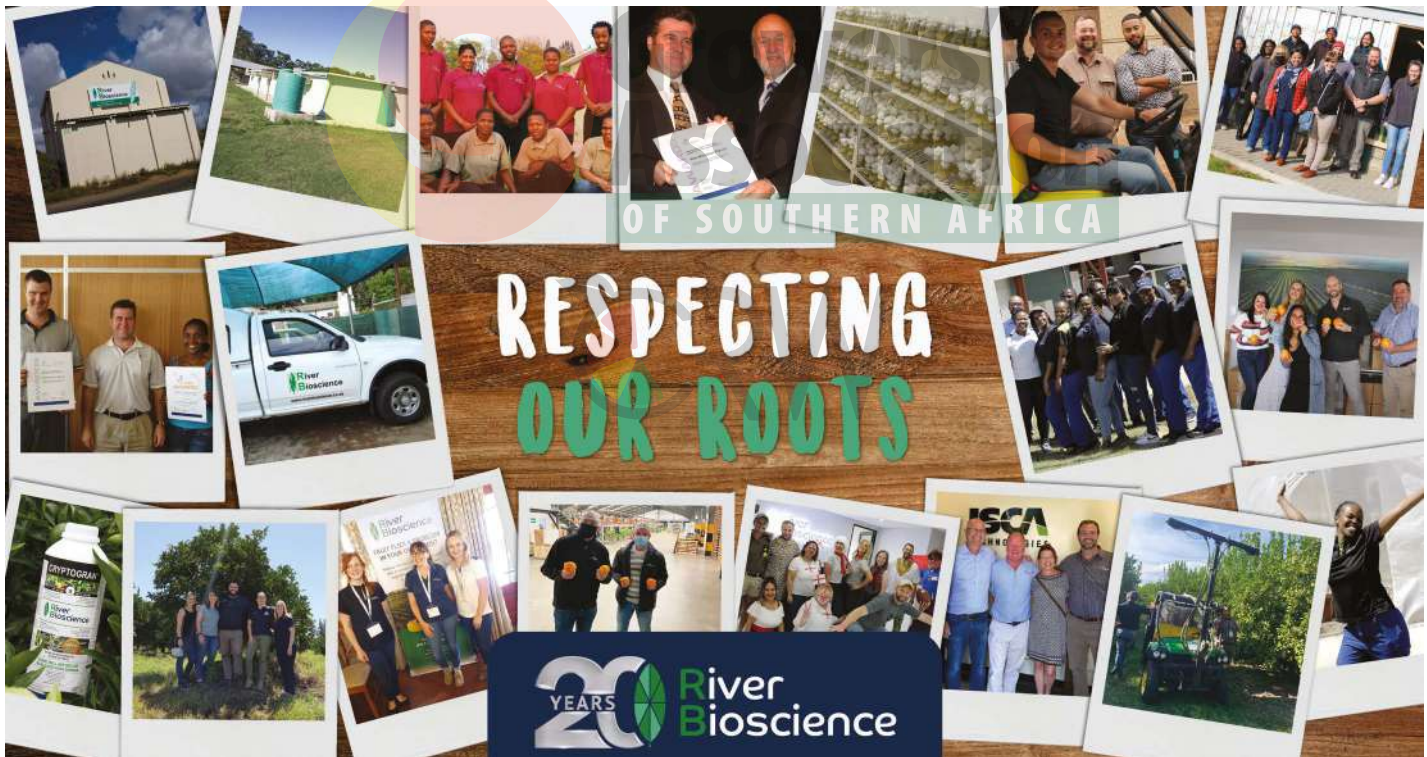


The RBX Group had a solid year in a stressed international economy, while continuing to set the base for the enhancement of sustainable crop protection programmes for key pests into the future.

River Bioscience Turns 20 Years Old

In 2003 the CGA decided to establish its own crop protection company, River Bioscience, to commercialise Cryptogran, a granulovirus to kill False Codling Moth (FCM) larvae. The company

was founded to ensure the virus would be available to all Southern African citrus growers and other agricultural crops. This product came out of Citrus Research International (CRI) through the work of Dr Sean Moore and 20 years later, the company has added a number of products to its portfolio with plenty more in the pipeline. The theme of our anniversary year was "Respecting our Roots, Forging our Future" with the punchline of "20 years down the road and River Bioscience is just getting started".



Launching our anniversary celebrations at the CGA Citrus Summit held in Port Elizabeth, provided us with a fantastic opportunity, to not only support the sustainability segment of the summit programme, but also facilitate the pre-summit grower tour of the nearby growing regions and our new offices and laboratories, that are a big part of making the envisaged future a reality.

Sterile Insect Technique (SIT) for FCM

The objective of our SIT programme is area wide population suppression of this phytosanitary pest in high-value export crops. This is achieved by applying FCM SIT and facilitating effective key pest control through area wide, coordinated and reliable monitoring, including reporting on and alerting growers to pest activity. This serves to support the sustainability of South Africa's access to key international markets, through the supply of chemical residue and pest free fruit, while creating employment in the green economy.

The financial viability of these important but costly programmes is under threat, as are other SIT programmes around the world. This is due to a growing trend of above-inflation increases in all production and pest control costs for primary producers, with SIT being no exception. The precarious position of SIT programmes globally is further exacerbated by the increased availability and relative affordability of other pest management options. These options are often compared to SIT, however, lacks the coordinated and area wide approach that SIT offers. This dictates that all stakeholders' support is needed to ensure the long-term availability of this key pest population suppression technology.

In this last season, not only did we revert back to the way the programme was first designed during the research done by CRI, but the programme also received increased support from growers in the form of additional contracted hectares. The Western Cape Department of Agriculture made an extremely valuable stimulus contribution towards making SIT more



affordable for the farmers in the Western Cape, no matter what their focus crop is. We want to thank the Minister, Dr Meyer, and Head of Department, Dr Sebopetsa, and their teams for visiting our facility and contributing to the efforts being made. We hope this collaboration will grow over the years so that SIT can become more affordable to growers and move to a true area wide application in the relevant focus areas.

During our pre-season producer visits we asked the producers to take a survey on their assessment of X-SIT performance. We received feedback from 82% of our SIT growers, showing that, while we may still have a few items to improve on, a significant number of our customers are very happy with our current performance and we scored an average of 4 out of 5.

It is encouraging to see increased hectares for SIT in this, the first season where a holistic programme of moths, information and weekly support via agents, or direct to producers, has been implemented in all the valleys serviced. We trust this will help with the sustainability and growth of this important programme.



Forging the Future - Patented Nuclear Polyhedrosis Virus (NPV)

The registration and launch of our first products using the patented novel virus CrpeNPV was certainly a highlight of the year. The two new offerings using this active ingredient are

MultiMax, for use against FCM, litchi moth and the macadamia nut borer in Macadamias and Litchis, and CodlMax, for use against codling moth in apples. This active ingredient was developed by River Bioscience in collaboration with the CRI and the Centre for Biocontrol at Rhodes University, once again highlighting the strength in partnership between like-minded people and world-class organisations.

The product launches saw roadshows in collaboration with our distribution partners, where our team was able to connect directly with growers and provide them with valuable insights about these new products and how they can synergise with existing solutions, including beneficial insects, in combating tortricid moth species.

The interest, uptake and success of these products and programmes, in just the first year, shows how much these options are needed, and bode well for the future registration and sales of these products into other parts of the world, including Europe and the USA.

Expanding the Basket

Other products that we brought to the market this year were APIS Bloom, to assist with bee pollination, and our own locally produced virus for Bollworm, called HeliMax. River Bioscience's USA partner, ISCA Tech, has developed APIS Bloom which releases semiochemicals like those that bees produce when they find an



area favourable for foraging. Growers apply this product to the desired crop and this can result in improved bee foraging within the treated area and thereby facilitate an increase in pollination. APIS Bloom is widely used in the Almond and Berry industry in the USA. Our innovation department continues to work on other remedies that can further increase our offerings, while discussion by our commercial team with international collaborators ensure that our pipeline of future products remains full.

An Engaged Corporate Citizen

South African Bioproduct Organisation (SABO)

SABO was founded in 2013 through collaboration between the Department of Agriculture, Forestry and Fisheries, Universities, research institutions, and the bioproduct industry. SABO aims to



elevate bioproduct quality in the market for the benefit of both consumers and commercial users. It also strives to advance South Africa's agricultural bioproduct sector and uphold ethical and science-based standards by regulating participant activities.

The work of SABO is significant for the export crop market, as growers find themselves under increasing pressure to deliver high quality fruit with minimal chemical residues, while at the same time containing no phytosanitary pests. Biological products are a big part of getting this right and supporting more sustainable farming practices.

We are extremely proud of our Chief Commercial Officer, Sean Thackeray, who was elected as the 2023/24 SABO Board Chairperson. Sean brings a wealth of experience to the table, not only as an active member of the biological sector over the last 10 years, but also as someone who has served on the SABO board for 4 years.

Entomological Society of Southern Africa (ESSA)

River Bioscience is proud to be part of the scientific research community aiming to improve pest management and holistic integrated pest management programmes. Our team lived out this support at the 23rd Congress of ESSA, which was held in Stellenbosch in July 2023. The RB research team presented research relating to area-wide pest management, pollination, phylogeny, and novel biopesticides.

The research posters presented are as follows:

- Morphological and molecular identification of a novel grapevine pest – *Eben Mundell*
- Mass rearing of multiple Tortricid species on a commercially produced artificial diet – *Jeannine du Plooy*
- Apis Bloom: A novel tool for improving honeybee pollination in Kiwi crops – *Megan Mulcahy*
- A novel baculovirus-based biopesticide for Tortricid management – *Sean Thackeray*

Our head of innovation, Dr Megan Mulcahy, also presented two talks titled 'Assessing the efficacy of a point release system for the deployment of sterile moths in a commercial SIT programme' and 'A comparison of x-ray and gamma irradiation for the sterilisation of False Codling Moths (FCM) in a commercial SIT programme'. Finally, Khalipha Dambuza, one of our Research Technicians, presented his Master's research titled 'Evaluation of potential repellents for False Codling Moth, *Thaumatotibia leucotreta* (Meyrick) (Lepidoptera: Tortricidae)' in his personal capacity.

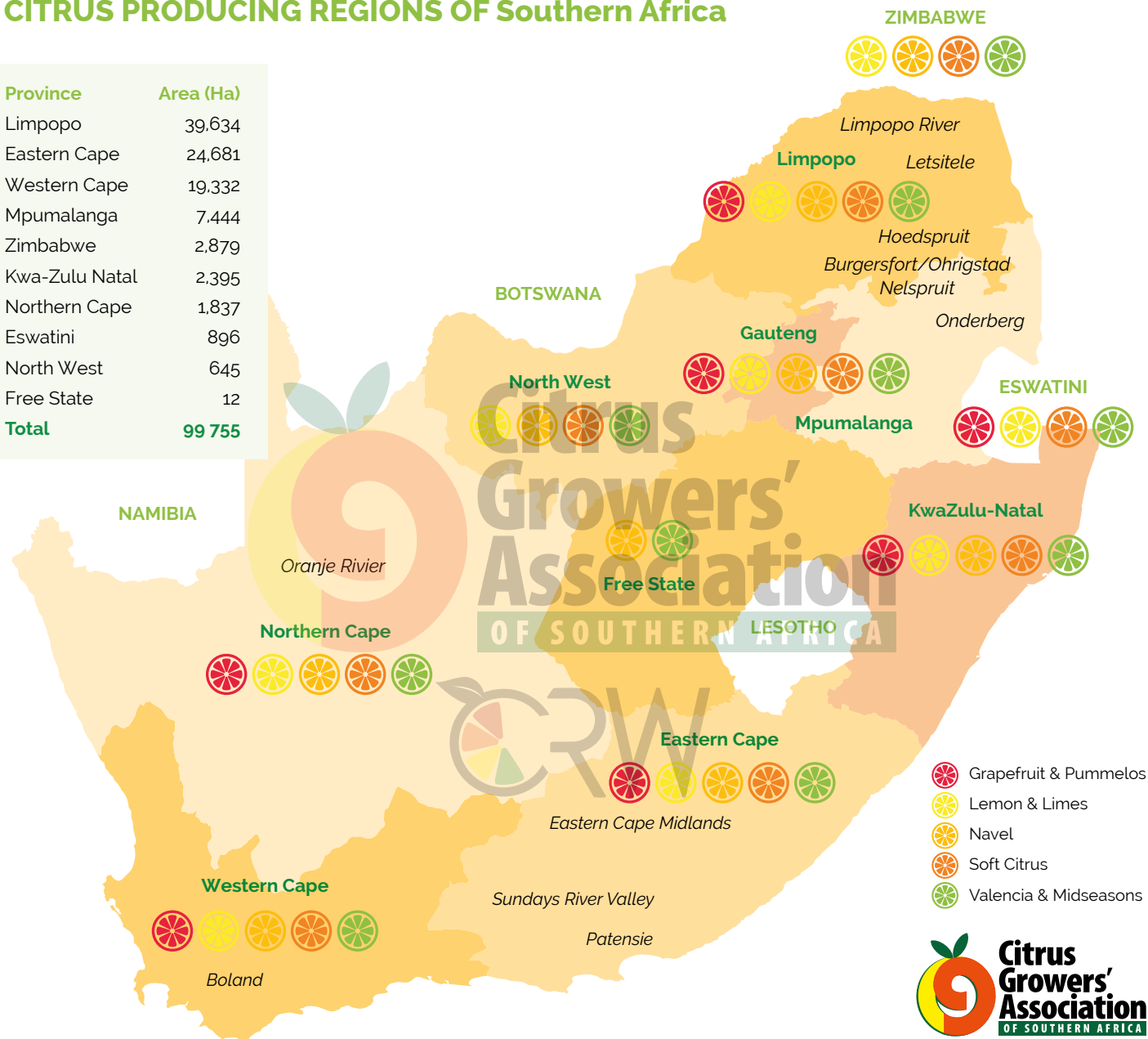
A major highlight of the ESSA event was Eben Mundell winning the Best Poster Award.



A huge thank you to the whole RBX Team for a massive effort that saw good results and the further development of holistic and accurate programmes to help fight key pests in a sustainable manner during a difficult season. This coupled with the strong support of our business partners and stakeholders bodes well for the future.

CITRUS PRODUCING REGIONS OF Southern Africa

Province	Area (Ha)
Limpopo	39,634
Eastern Cape	24,681
Western Cape	19,332
Mpumalanga	7,444
Zimbabwe	2,879
Kwa-Zulu Natal	2,395
Northern Cape	1,837
Eswatini	896
North West	645
Free State	12
Total	99 755



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ABRIDGED FINANCIAL STATEMENTS

	Actual 2022/23	Budget 2023/24	Actual 2023/24	Budget 2024/25
Income	273,471,736	270,209,000	279,003,718	297,488,000
RSA Levy	262,925,472	266,247,000	270,305,232	292,486,000
Eswatini / Zimbabwe Levy	4,136,029	2,622,000	3,891,951	2,717,000
Property Income	254,386		267,105	285,000
Interest	2,424,871	1,000,000	4,373,778	2,000,000
Dividends Received - River Bioscience / XSIT	375,000	340,000		-
Citrus Summit Income	3,182,500			
Other Income	173,478		165,652	
Expenditure	252,326,119	262,083,921	255,521,148	287,418,330
Staff Costs	5,507,599	7,215,609	7,923,525	7,754,346
Travel & Accommodation	270,232	325,000	842,204	313,000
Office - Rent & Equipment	54,964	40,000	58,233	357,000
Office Expenses	748,749	559,000	896,793	621,000
Board Expenses	961,510	1,280,000	1,068,998	1,301,000
Services (Accounting, Legal & Insurance)	914,209	1,159,000	795,019	2,184,000
Subscriptions	934,170	930,000	713,300	836,000
Communication	928,466	1,140,000	1,364,721	1,120,000
Market Access	4,892,141	8,491,378	4,877,583	9,606,000
Market Access - CBS / FCM	6,991,343	8,260,000	4,630,463	8,280,000
Fruit South Africa	897,473	1,000,000	942,347	1,200,000
Research Programmes - Citrus Research International	152,748,689	164,994,934	164,994,934	176,630,984
Research: CRT Bond	3,400,000	3,200,000	3,200,000	3,200,000
Transformation - CGA incl. ETBCG Programme	7,097,051	3,554,000	4,836,889	5,110,000
Transformation - CGA Grower Development Company	39,000,000	44,000,000	43,991,382	50,000,000
Transformation - Citrus Academy	8,712,280	9,000,000	9,635,346	10,000,000
Depreciation	85,883		77,845	120,000
Information	1,836,346	1,710,000	2,038,749	2,470,000
Provision for doubtful debts	8,172,111		(4,487,896)	
Leave Pay Provision	(250,043)		235,242	
Impairment of Loan - CGA Cultivar Company (Pty) Ltd	1,600,000		2,500,000	
Infrastructure & Logistics	3,390,491	3,700,000	2,325,792	3,970,000
Shipping		1,000,000	737,037	1,000,000
Market Development	249,955	475,000	1,322,642	1,195,000
Citrus Summit Expenses	3,182,500			
General		50,000		150,000
NET SURPLUS / (LOSS) FOR YEAR	21,145,617	8,125,079	23,482,570	10,069,670



**Citrus
Growers'
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OF SOUTHERN AFRICA



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