ucf Undercover farming

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Celebrating
100 years of Rijk Zwaan

It is a history filled with the stories of our people who developed an initial idea, made a change, or planted the very first seed that led to the innovations of Rijk Zwaan today. The motto of Rijk Zwaan, 'moving forward,' is ingrained in the company's DNA. With an eye for innovation and progress, Rijk Zwaan continues to pioneer and breaking new grounds.

We are very grateful for the contributions of employees, customers, and partners to its success and looks forward to many fruitful years of collaboration and growth. This is the first day of our new centenary!

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100 years of people, pioneering and moving forward

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100 YEARS

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SCRIPTURE

Song of Solomon 2:11-12 – The Passing of Winter and Arrival of Spring

"See! The winter is past; the rains are over and gone. Flowers appear on the earth; the season of singing has come; the cooing of doves is heard in our land." In this romantic and poetic book, the passing of winter signifies a time of renewal and joy. The verse beautifully illustrates that just as winter makes way for spring, the difficult periods in our lives are temporary.

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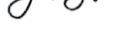
FRONT PAGE:
Sweet Palermo's grown from Rijk Zwaan seed.
"Surprisingly Sweet Pepper"

INSIDE ...

We hear about weather borne and disease situations in greenhouses almost daily. Let us not forget the power outages and other adverse conditions under which our producers, undercover and open land must contend with. The latest onslaught in greenhouses is the possibility of the Spotted wing drosophila which was detected in blueberry production areas of Eastern Cape. In this edition we have an editorial on a study in Japan on red shade net over tomatoes, peppers and cucumbers. According to the group of plant scientists about ninety percent less insect attacks were found on produce. Whether this is applicable to South African greenhouse farmers, our shade cloth suppliers must answer. I am currently in Ontario, Canada and found one of the biggest challenges faced by greenhouse operators here in winter is controlling the temperature for crop growth. Ontario's greenhouses use technologies such as climate control systems and energy-efficient heating to create a warm and stable environment. The lack of sunlight in long winter months also creates difficulties for greenhouse growers, as plants without light still need to grow. To combat the darkness, a combination of highly advanced lighting control systems providing light, and energy screens are used to conserve the heat inside, reducing the amount of natural gas needed to heat the greenhouse, while transmitting sunlight through to the crops and keeping cold air out. These practices not only ensure the well-being of crops but also contribute to energy conservation. In conclusion, it came to our attention that African countries are steadily becoming more aware of greenhouse production to provide fresh vegetables for communities. This could also work in our country (SA) if we can obtain training, finance and ongoing technical visits to communal producers. Keep well in winter!



A FARMER'S JOURNEY:
From Humble Beginnings to Agricultural Success


Johan Hannekom

Early Life and Engineering Background

Johan Hannekom, a seasoned farmer from Brits has a story that mirrors the struggles and triumphs of many in the agricultural industry. Raised in Namibia by his grandparents, an area primarily focused on livestock farming and where vegetables were a luxury, Johan's ambitions extended beyond livestock. With a background as a qualified engineer, Johan, a greenhouse farmer specialising in cucumbers, began his farming career in the Brits area where his path crossed with Rijk Zwaan South Africa. As retirement approached, Johan sold the farm and reignited his passion as an engineer designing and developing grow lights. He soon realised that, in order to test the efficiency of his designs, he would need a small greenhouse. Initially Johan considered focusing on herb farming in order to test his invention. However, after crossing paths with Ruan de Bruyn from Rijk Zwaan, his journey led him to specialize in cultivating high-quality peppers, setting him on a unique and challenging path in the agricultural world.

Transition to Pepper Farming

Two years ago, Johan began his current farming venture at Thysaan. His decision to focus on Capsicum and Sweet Palermo® peppers, rather than cucumbers or herbs, was driven by his desire to become a specialist in pepper cultivation. Partnering with Ruan, Johan tested various pepper varieties, including Massilia, Sven, Verdial and Avante. His meticulous testing and dedication yielded remarkable results, earning recognition for the quality of his produce. This success paved the way for a partnership with two major retailers, allowing Johan to supply his peppers on a larger scale.

Optimal Growing Conditions

Johan's farm spans 2.5 hectares of undercover farming and just over 1 hectare of open field. The region of Broederstroom, known for its fertile soil and favourable climate, provides a unique opportunity for cultivating high-quality peppers. However, the unique clay soil of the area poses significant challenges. Clay soil, while rich in nutrients, can be difficult to manage due to its tendency to retain water, leading to drainage issues and potential root diseases.

To overcome these challenges, Johan invested in soil improvement techniques and advanced irrigation systems. By incorporating organic matter and using precision irrigation, he was able to improve soil structure and ensure optimal growing conditions for his peppers.

Water and Soil Management

Ensuring the health and productivity of his crops, Johan utilizes both fountain and borehole water. He emphasizes the importance of regular water and soil analysis to maintain optimal growing conditions.

This rigorous monitoring helps to identify any deficiencies or issues early, allowing for timely interventions and adjustments. The built-in resistance of the Rijk Zwaan sweet pepper varieties against pests also contributes tremendously towards healthy and successful fruit production.

Skilled Labour and Community Support

Despite his efforts, Johan faces the ongoing challenge of finding reliable and skilled labour. Employing 85 workers, the scarcity of skilled labour affects the efficiency and productivity of his farming operations. Recognizing this issue, Johan is considering partnering with local agricultural colleges and vocational schools to provide training to students.

By investing in education and skill development, he hopes to create a pipeline of skilled workers who can contribute to the success of his farm and the broader agricultural community.

Adding value and creating employment

Taking care of excellent produce is the key in ensuring that consumers receive only the healthiest and most nutritious peppers for human consumption. Looking at Johan's cold chain control, it is evident that no cost is spared in ensuring that all the nutrients in the peppers are locked in for consumers. His packing facility is state of the art, interlocking with his cold room.

Looking around in his cold room, one immediately recognizes different stacks of packed peppers. After a short

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RIJK ZWAAN

Massilia RZ F1

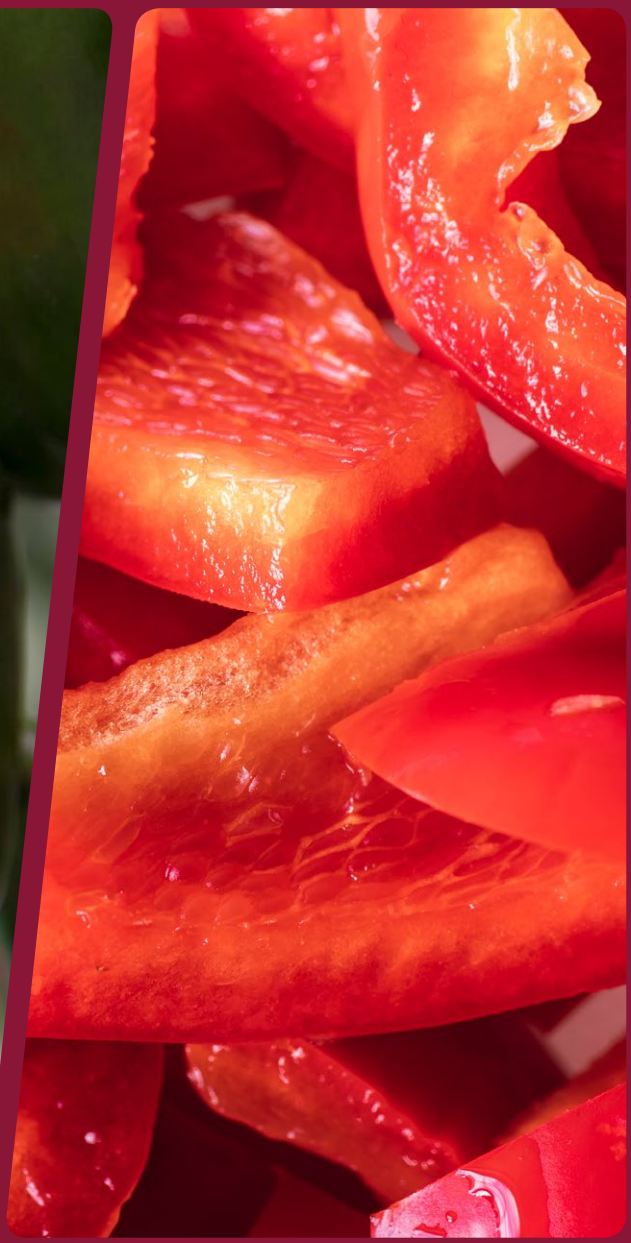
Blocky Sweet Pepper

HR: Tm:0-2
IR: TSWV:0/Lt/Ma/Mi/Mj

Nematodes and PM resistance, Fruit size uniformity in time, Compact plant type, All round variety.

For more information contact: Francois Kruger - 076 152 8411

www.rijkzwaan.co.za



explanation is became clear that the stacks are for different retail companies, but also for "giving back to the community". Johan met upcoming small businesses that are start-ups in agri-prosessing and decided to donate a sizeable amount of the peppers to help these businesses grow and create new jobs.

Innovation and Sustainability

Johan's farm has become a hub of innovation and sustainability. He is committed to adopting sustainable farming practices that minimize environmental impact while maximizing pro-ductivity. This includes using integrated pest management techniques to reduce reliance on chemical pesticides and implementing crop rotation to maintain soil health.

His dedication to sustainable practices has not only earned him recognition within the agricultural community but has also made his produce more appealing to consumers who are increasingly conscious of environmental issues.

Future Vision and Community Involvement

Beyond his own success, Johan is dedicated to giving back to the community. His efforts extend beyond his farm, as he advocates for policies that support sustainable farming and address the challenges faced by small and medium-sized farmers.

Johan's focus on future innovation includes exploring new technologies and farming techniques that enhance productivity and sustainability. From experimenting with advanced greenhouse systems to exploring the potential of precision agriculture, Johan is at the forefront of agricultural innovation.

CONCLUSION

Johan Hannekom's journey is a powerful reminder of the importance of resilience, innovation, and community in agriculture. Talking to Johan it is crystal clear that his "partnership" with Rijk Zwaan South Africa and in particular Ruan de Bruyn has opened new horizons and brings new meaning to the phrase: "Have you eaten today? Thank a Farmer" in Johan's case and he is quick to correct you: "Have you eaten today? Thank a Farmer and Rijk Zwaan's dedication and expert knowledge".

His story inspires not only those within the agricultural sector but also anyone facing challenges in their pursuit of success. Through hard work, dedication, and a commitment to quality and sustainability, Johan has transformed his farm into a thriving enterprise that contributes to the prosperity of his community and the agricultural industry as a whole. His vision for the future, combined with his deep-rooted values, ensures that Johan's farm will continue to flourish for generations to come.

SOFT CITRUS

shift in the Cape to avoid clash with late mandarins

Colors, Sonlia's soft citrus, stone fruit and pomegranate export brand.

Winter rain pleases all Cape farmers – although citrus farmers perhaps rejoice less loudly than grain and deciduous fruit farmers, who had been worried by an exceptionally warm and dry May. Fruit colouring on citrus has been slowed by the warm temperatures.

Recent heavy rains have subsided and the citrus harvest can commence, but since fruit first goes into de-greening rooms, packhouses will have a breather this week before they recommence with all hands on deck, packing citrus 24 hours a day.

The Sonlia packhouse in Wellington is among them: here various categories of fruit are packed: from C count plums with a diameter of 40mm to Count 5 pomegranates with 115mm diameter, on two pack lines. Sonlia packed 3,207 pallets of export pomegranates this year. Although volumes were less than last year, Sonlia Marketing's export volumes under the Colors brand more than doubled.

Growers pleased

They give technical support staff a workout running this array of fruit over the line, remarks Sonlia's CEO JC Muller, but in this way, they fully capitalize on the costs of running a packhouse. And there's no shortage of fruit to pack: they had to push to finish up with the pomegranates this year to make way for the increasing amounts of early clementines.

"On soft citrus we've recently experienced a whole shift: traditionally May and June brought high volumes but recently a number of the producers who pack with us, sawed off their clemenules. The early Tangos from the north of South Africa clash with their clemenules,"

When faced with the choice, overseas buyers invariably choose late mandarins, and growers are opting to plant earlier clementines like Octubrina. "In our grouping, a fair amount of Octubrinas have been planted to replaced clemenules."

Their own late mandarins will be cropped in two or three weeks. "The growers all indicate there's a nice late mandarin crop hanging," Muller says. "We're looking ahead to the second part of the season with excitement."

It's been a good quality year, remarks Marita Rossouw. She handles the marketing of Sonlia's soft citrus. On the domestic market, prices are a bit better than last year. The fruit is small, but there are supermarket programmes in the Far East that are keen on small soft citrus, she says.

Lighter lemon crop

"The lemon season is definitely lighter. According to Citrus Growers' Association figures, total exports are 14% lower than last year at this point, and it chimes with what we're also seeing," Muller adds, noting that counts are slightly smaller. They will be packing seedless lemons for the first time this year.

Unlike the price for processing oranges, however, the lemon juice price is truly weak: R150 (7.37 euros) a tonne and there's not much space on the market for marginal counts.

Sonlia will pack the citrus of fifteen growers until September and one month later, stone fruit restart. It could be early: some of the early nectarines are already budding, three to five days earlier than last year, again as a result of this uncharacteristically warm month of May.

At least, he remarks, the current cold and snow in the Western Cape will induce stone fruit orchards that had still been uncharacteristically verdant, to finally enter dormancy. **Sonlia**

This value pack's appeal to children makes it a top seller among their local clients

Lettuces grown vertically

VERTICAL HYDROPONICS
Food of the Future

BY JOHN SANDISON*

In 1798, Robert Malthus an English economist, predicted that population growth would be curtailed by the inability of agriculture to keep pace with food demands. This controversial assumption has so far proved to be false, simply because up until now agricultural development has outpaced the demand for food.

In some cases the technological advances in agriculture were so great that some countries such as the United States and Rhodesia in the last century were able to export huge quantities of surplus food to those countries in dire need of it.

Advanced food technology has ensured, in the main, that the world's populations are fed. Those countries we hear and read about that maintain starving populations usually do so through corruption or a desire for control.

Hydroponics is another technological advance that will ensure that enough food is produced to feed the countries' populations, and ensure that food is available at an accessible price.

A return to the practices of the 19th century using compost and manure might be very laudable from an ecological point of view but it is not cost-effective and cannot be implemented on a scale of sufficient size to feed large populations. If organically grown foodstuffs could be grown cheaply and on a large scale it would be a different matter.

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◀ Vertical Hydroponics from page 8

Hydroponics is a method of growing food using water soluble fertilisers and an inert growing medium such as composted pine bark or perlite. There is no soil involved in hydroponics and the plants derive their nutrition solely from the nutrient feed. A constant pH of 5.5 to 6.0 must be maintained at all times to ensure maximum nutrient uptake by the plants. Nutrient fertilisers are supplied by the fertiliser companies in the form of Calcium Nitrate on the one hand and a balanced cocktail of 11 other macro and micro nutrients, so calculated to supply the plants with perfect nutrition. This is something that traditional soil based agriculture seldom can achieve, as the distribution in the soil of the 13 minerals required for a plant's nutrition is completely random. It is also dependent upon rainfall or irrigation to ensure the plant's appropriate development. In hydroponics, water is part of the food distribution system so this problem never arises, and incidentally, hydroponics uses approximately one third of the water consumed by agriculture because with the latter there is much water wastage past the root zone back into the water table.

Unlike Australia for example, South Africa is a water-stressed country (Increasing population outstrips the natural geographical rainfall) and agriculture is one of the biggest users of water so the worrying prediction is that in the-not-too-far-distant-future we will run short of water unless stringent water-saving measures are taken. Future food security can be achieved by concentrating on developing hydroponic farmers into large scale suppliers.

We are consistently reminded by our health experts to eat salad greens, cruciferous vegetables, carotenoids, fruit, nuts, etc. Yet a simple check of black South Africans' daily diet will reveal that very few avail themselves of this advice, either because of economic reasons or because of a lifetime of habits eating carbohydrate based foods. Either way, retailers, who make their profits from high volumes and low mark-ups, would be do well to enlist hydroponic farmers among their suppliers for these are precisely the people that will be able to fulfil the food tastes and needs of the black market in the future.

Chemical sprays against pests and diseases in hydroponics is now also largely a thing of the past as biological remedies are fast taking over from previously chemical based substances. This means that the danger to humans from consuming chemical laden fruits or vegetables in hydroponics is no longer a threat. This could also now be the case in traditional agriculture but some farmers are slow to recognise the advantages of using biologicals and a lifetime of habit sticks them to tried and trusted methods, albeit old fashioned ones.

Another myth that needs dispelling is that Hydroponic fruits and vegetables do not have as many vitamins in them as their soil-grown equivalents. If the nutrition in hydroponics is perfect, then the equivalent soil based nutrition could never match it, due to the reason mentioned earlier and the levels of vitamins found in Hydroponic grown vegetables are as high and in some instances higher than their agricultural equivalents.

Hydroponic suppliers fulfil the retailers' most stringent requirements for quality, quantity, reliability and price.

Peppers Grown in Tunnels

***John Sandison of DaisyFresh Hydroponics holds certificates in advanced hydroponics and is a hydroponic consultant and educator. His company manages hydroponic projects to ensure profitability and he has written a book on the subject titled "A Guide to Profitable Hydroponics" (available on Amazon).**

Contact: www.daisyfresh.co.za

UNLOCKING THE AGRICULTURAL REVOLUTION:

TTI - MASTERS OF IRRIGATION

In the dynamic realm of modern agriculture, the name Turf Technology & Irrigation (TTI) resonates as a beacon of innovation and excellence. With a steadfast commitment to pushing the boundaries of agricultural technology, TTI has emerged as a driving force behind the transformation of farming practices worldwide. Join us as we embark on an in-depth exploration of TTI's journey, uncovering the secrets behind its unparalleled success and the cutting-edge solutions it offers to revolutionize the agricultural landscape.

TTI: Pioneering Precision Agriculture

At the heart of TTI's mission lies a relentless pursuit of innovation and a dedication to revolutionizing the way we approach agriculture. With a keen understanding of the evolving needs of farmers, TTI has consistently pushed the boundaries of what's possible, introducing groundbreaking technologies and solutions that optimize efficiency, sustainability, and productivity.

Redefining Soil Management: Precision at Its Core

In the realm of soil management, precision is paramount, and TTI leads the charge with its comprehensive suite of precision soil care solutions. From

state-of-the-art mowing equipment to advanced fertilization systems, TTI's offerings are designed to optimize every aspect of soil maintenance, ensuring pristine farming landscapes that stand the test of time.

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to optimize water usage and minimize waste.

By maximizing efficiency, TTI empowers farmers to achieve higher crop yields while conserving precious resources. With SABI approved certification, Francois Fourie and his business partner, Gerrie Gerritsen have a hands on approach to projects and leads their team of expert craftsmen ensuring their clients' peace of mind.

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In the era of precision agriculture, data is king, and TTI harnesses the power of data analytics to drive informed decision-making.

Through innovative precision agriculture solutions, TTI provides farmers with unprecedented insights into soil health, moisture levels, and crop performance, empowering them to optimize inputs and maximize returns.

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◀ TTI from page 10

Sustainability at the Core: Nurturing the Land for Future Generations
In today's environmentally conscious world, sustainability is not just an option; it's a necessity. TTI embraces this ethos wholeheartedly, integrating sustainable practices into every aspect of its operations.

From eco-friendly equipment designs to water-saving irrigation technologies, TTI is committed to helping farmers operate in harmony with the planet, ensuring a brighter future for generations to come.

Empowering Farmers with Knowledge and Support
At TTI, customer success is more than just a priority; it's a guiding principle. Recognizing that education and support are essential for farmers to unlock the full potential of their investments, TTI offers comprehensive training programs, expert technical support, and ongoing consultancy services. By empowering farmers with knowledge and resources, TTI ensures that they stay ahead of the curve and achieve their goals.

Unrivaled Quality and Reliability: The TTI Difference
In an industry where reliability is paramount, TTI sets the standard for quality and performance. With products engineered to withstand the rigors of agricultural life, TTI ensures seamless operation and minimal downtime for farmers. From robust construction to rigorous quality control measures, every aspect of TTI's offerings reflects a commitment to excellence and reliability.

A Global Network of Excellence: Serving Farmers Worldwide
With a presence in markets around the globe, TTI boasts a vast network of partners and distributors, ensuring that farmers everywhere have access to its world-class solutions.

This global reach not only underscores the quality of TTI's products but also reflects its unwavering commitment to serving the needs of farmers worldwide.

Shaping the Future of Agriculture with TTI
As we stand on the precipice of a new era in agriculture, one thing is clear: the future belongs to those who embrace innovation, sustainability, and excellence. Turf Technology & Irrigation leads the charge, offering a comprehensive suite of solutions that empower farmers to thrive in an ever-changing world. From precision soil management to smart irrigation solutions, TTI continues to shape the future of farming, one field at a time.

For farmers seeking to unlock the full potential of their land and achieve optimal yields with minimal environmental impact, TTI remains the partner of choice.

For more information:
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Francois Fourie and his business partner, Gerrie Gerritsen

APPLICATION OF SILICON (SI) may reduce the need for synthetic fungicides

Silicon (Si) is readily available in the soil, being the second most abundant element, after oxygen, present in the earth's crust as silicon dioxide (sand) and various silicates or sheet silicates. Silicon is extracted from sheet silicates as silicic acid. Silicate minerals weather to clay, which forms the soils in which plants grow.

Soil water generally contains 50 to 400 ppm silicic acid, which is readily absorbed by plants. Hydroponic nutrient solutions should contain potassium silicate or treated with10 parts per million of silicic acid (H^2SiO^3), although hydroponically grown cucumbers are often grown in nutrient solutions without added Si.

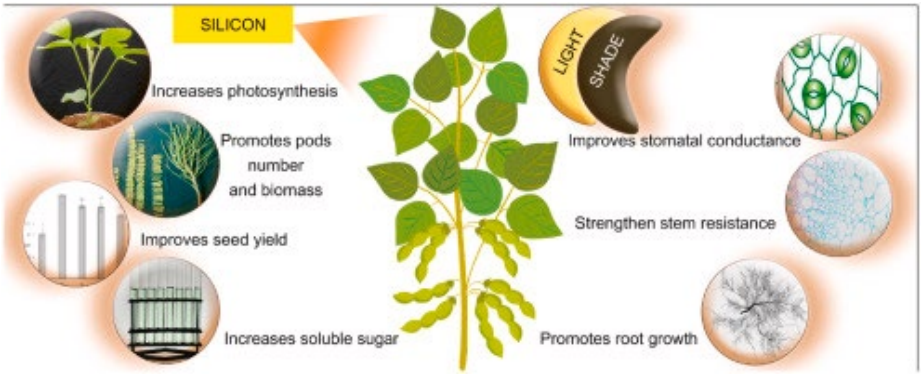
Studies of plant tissue have found a range of silicon content from a fraction of 1% dry matter to as high as 10%. In plants, silicon seems to play a role in growth, mineral nutrition, mechanical strength, resistance to fungal diseases, and reaction to adverse chemical conditions.

Role of Silicon

Studies regarding silicate applied as a fungicide at the Pacific Agri-food Research Centre (PARC) in British Columbia first explored powdery mildew (PM) control and increased yield by adding silicate to growing media, with good control of powdery mildew on grapes, melons, zucchini, and cucumber. Continuing studies reveal that the form of silicon in solution and the solution pH greatly affect efficacy.

Fungal disease resistance in greenhouse cucumbers was shown to increase substantially in response to Si fertilization. Different rates of Si fertilization (potassium silicate) on powdery mildew were tested on cucumber leaves (inoculated PM conidia), results showed that leaf area covered by powdery mildew reduced by as much as 98%, with concentrations of 100 ppm or more of SiO^2 giving best results.

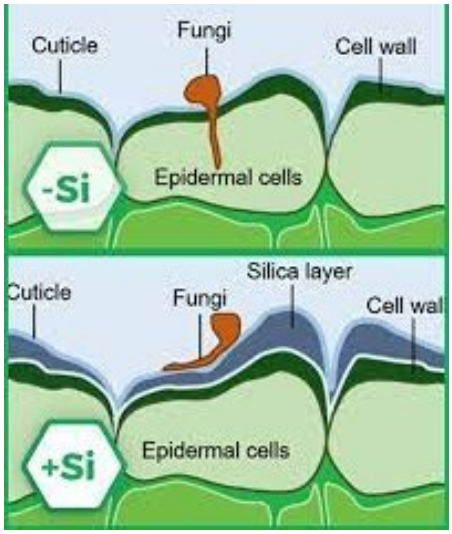
More than 25 years ago, plant nutrition scientists found that nutrient concentrations of 100 to 200 ppm SiO^2 significantly reduced root mortality, root decay and yield losses on plants inoculated with Pythium ultimum as well as treated plants being more productive than those not treated with Si.



Silicon application to plants described in the diagram above.

Mode of action

Silicon is transported from the roots to shoot through the transpiration stream and deposited either as hydrated silicon dioxide, silica gel or polysilicic acid. Once the silicon is incorporated into tissue, it doesn't move, so a regular supply is necessary. Cucumbers are shown to take up Si passively. Soluble Si taken up by plants tends to accumulate in the apoplast, particularly in epidermal cell walls, thus investigators hypothesized that Si inhibits fungal disease by physically inhibiting fungal germ tube penetration of the epidermis.



Subsequently investigators have found that only the trichome bases on the cucumber epidermis tend to become silicified.

Observation

Si has now been observed to accumulate around fungal hyphae and infection pegs in infected host plant cells and investigators have shown that phenolic materials and chitinases also rapidly accumulate in these infected host cells. Cucumber plants treated with Si accumulate phenolic materials much more quickly than infected cells of non-amended plants.

Si fertilization

These phenolics were also conclusively shown to be fungitoxic as fungal hyphae penetrating the phenolic-laden cells of Si amended plants were found to be seriously damaged by the accumulated phenolics. It therefore appears likely that Si fertilization reduces disease susceptibility primarily by stimulating host-plant defenses, although it may be possible that silicified epidermal cells may play a role in disease inhibition.

The question comes to mind, why has Si not been added to hydroponic nutrient solutions as is often done in Europe? Do farmers buy Si based sprays and treat crops themselves or are fertilizer companies going to take the plunge? Besides being an effective fungicide, Si may well reduce the need for synthetic fungicides as well as being beneficial to our health. **By: Mike Haupt**

DYNATRADE CELEBRATING 25 YEARS, WHILE FULLY EMBRACING THE FUTURE

DYNATRADE: Pioneering Excellence in Horticultural Solutions

A Rich Legacy: The History of Dynatrade

In the dynamic world of horticulture, few names stand out as prominently as Dynatrade. Established in 1999, Dynatrade has carved a niche for itself through unwavering dedication to quality and innovation. From its modest beginnings Dynatrade has been a supplier of greenhouses in South Africa. The company supply and install screening systems, commercial greenhouses, greenhouse tunnels, greenhouse control equipment and many other products to the professional horticulture industry for the intensive cultivation of flowers, bedding plants, vegetables and cannabis.

Dynatrade imports the most technologically advanced products and systems from Europe; undoubtedly the worldwide cradle of intensive growing. With its strong International supply matrix, the company has grown into a global leader in horticultural solutions.

Dynatrade's journey is marked by a relentless pursuit of excellence. The founders envisioned a company that would provide top-tier horticultural products and solutions, empowering farmers and commercial growers to achieve their best yields. Today, that vision is a reality, with Dynatrade offering an extensive range of products, from state-of-the-art greenhouses, screening systems, irrigation systems, to advanced fertigation equipment all linked and controlled by high-tech world leading computerized control systems.

Innovative Leadership: The Management Team

The driving force behind Dynatrade's success is its innovative management team. Led by Managing Director Dries Henning, a luminary in agricultural and horticultural technology, the leadership team is committed to steering the company toward new heights. Together with his director, Peter Dekker, Dries' expertise and forward-thinking approach have been pivotal in embracing cutting-edge technologies and sustainable practices.

Under his leadership, Dynatrade has not only kept pace with industry advancements but has also set new benchmarks. The management's focus on continuous improvement and customer satisfaction has positioned Dynatrade as a trusted partner in the horticulture industry.

Strong Partnerships: The Supplier Network

A key component of Dynatrade's success is its robust supplier network. The company has established strategic partnerships with leading manufacturers and suppliers globally, ensuring a steady supply of high-quality materials and components. This network allows Dynatrade to maintain rigorous quality control standards while offering a diverse product range to meet the varied needs of its customers.

These partnerships are built on trust and mutual respect, enabling Dynatrade to source the best materials and leading technology to stay ahead of market trends. By working closely with suppliers, Dynatrade ensures that their products

are at the forefront of innovation, providing customers with reliable and effective horticultural solutions.

Uncompromising Standards: Commitment to Quality

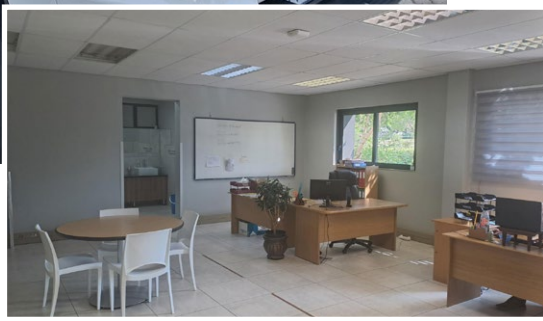
Quality is the cornerstone of Dynatrade's philosophy. Every product that carries the Dynatrade name undergoes stringent testing and quality assurance processes. This commitment to excellence ensures that customers receive products that are not only efficient but also durable and dependable.

Dynatrade's quality assurance team employs advanced testing methodologies to evaluate the performance and longevity of their products. By adhering to international quality standards, the company guarantees that its offerings meet and exceed customer expectations. This dedication to quality has earned Dynatrade numerous industry accolades and a reputation for reliability.

Beyond the Sale: Exceptional After-Sales Service

Dynatrade's dedication to customer satisfaction extends far beyond the point of sale. The company prides itself on offering comprehensive after-sales service, ensuring customers get the most out of their purchases. From installation guidance to maintenance support, Dynatrade's team of experienced technicians is always ready to assist.

Customers have access to a wealth of resources, including detailed product manuals, online tutorials, and a dedicated customer service hotline. This extensive support network ensures that customers can use Dynatrade's products with confidence, achieving optimal results in their horticultural endeavors.



Managing Director Dries Henning

Future-Focused: The Path Ahead for Dynatrade

As Dynatrade continues to evolve, the company remains steadfast in its commitment to innovation, quality, and customer satisfaction. The future is bright for Dynatrade, with plans to expand its product offerings and strengthen its presence not only in the South African market, but also in global markets.

Dynatrade is investing heavily in research and development, poised to introduce groundbreaking solutions that will further revolutionize the horticultural industry. The company's emphasis on sustainability and eco-friendly practices will also play a crucial role in shaping the future of horticulture, helping growers worldwide adopt more sustainable farming methods.

Conclusion: Partnering for Success

Dynatrade's remarkable journey from a small supplier to an industry leader is a testament to its unwavering commitment to excellence. By prioritizing quality, innovation, and customer service, Dynatrade has earned the trust and loyalty of horticultural professionals around the world.

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TEMPERATURE INTEGRATION – a strategy to reduce energy consumption

Year-round greenhouse vegetable production in areas with cold winters is a tough business, and heating costs can easily range from 15% to 40% of the total production cost depending on the degree of coldness. Therefore greenhouse vegetable producers experiencing cold winters, requires careful planning of their heating strategy because of the ever increasing cost of fuel to operate heating equipment.

Most producers have a weekly market contract with multiple buyers, and therefore it is essential to avoid just surviving winter by heating with a minimal strategy to save on fuel. The inevitable result is a large reduction in yield and failure to reach market targets.

However, it is not always economically feasible to heat the greenhouse to temperatures optimal for plant growth because of the high energy requirement. In addition, low natural light conditions during winter results in photo-assimilate production which are not sufficient to keep-up with the high respiration resulting from high temperature, and thus heating to optimal conditions may not lead to increased production levels.

Therefore, it is important to consider the natural adaptability of plants to maintain productivity despite of environmental variations.

Research conducted in the Netherlands, Canada and the USA, where heating is a very prominent part of production, has indicated that the developmental rates of many crops are determined by long-term average temperature, rather than immediate temperature.

What this strategy suggests is that the producer should aim to maintain a mean target temperature over 24 hours (temperature integration). Therefore, periods of low temperature can be compensated for by periods of higher than normal temperature and vice versa.

Experimentation with temperature integration has suggested target mean temperature values of 18.5°C per 24 hours for tomatoes and 19°C per 24 hours for cucumbers. The extent of energy savings with the temperature integration concept will depend on a crop and/or cultivar's tolerance to low and high temperature (temperature bandwidth), as well as the variation in the local climate.

Using tomato crop as example, a two-sided bandwidth value of 5.5°C may be used, given that the crop can tolerate a minimum temperature of 13°C and given that the mean day time temperature can reach 24°C within the greenhouse (18.5±5.5°C).

This is opposed to maintaining a fixed minimum temperature throughout the night in order to maintain optimal tomato production.

If a producer can establish the ideal temperature bandwidth suited to the local crop and climatic conditions, a simple equation can be run every 5 minutes to determine whether the target mean temperature will be reached.

Making optimal use of daytime sunlight and using thermal screens wisely may reduce the pressure to increase nighttime temperature above the lower threshold in order to maintain the target mean temperature.

In conclusion, the producer may conserve energy when using temperature integration compared to implementing fixed temperatures for starting heaters.

By: DR. R van der Westhuizen

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SA BLUEBERRY PRODUCERS Optimistic

Blueberry producers in South Africa, although relatively young in existence in comparison to other countries, has seen a steady increase in production and exports.

Blueberry producers in South Africa, although relatively young in existence in comparison to other countries, has seen a steady increase in production and exports.

For 2024 growers are optimistic about the country's output, anticipating a 10% growth in exports and expecting to achieve its target of 25,000 tons of blueberries, a magnificent increase from the 2023 exports of just over 22,000 tons.

Although South Africa was confronted during 2023 with challenges because of a long winter and delayed harvest particularly in the Western Cape, Brent Walsh, CEO of Berries ZA anticipates a fruitful season and is looking ahead at exploring new trading markets and marketing new blueberry varieties for both local and international markets.

Walsh remarked they are supplying local markets until July-August, since that's when the industry sees an increase in supply in Northern South Africa. "After that, production starts to move south of the country into the Western Cape and then by September you'll see a lot of the harvest happening," he said.

Main export seasons for blue berries are October, November, and halfway through December. Therefore, for a while one will observe only some berries marketed. Berries from Zimbabwe are imported currently as they're even earlier than locally produced.

According to Walsh, although there was a significant worldwide shortage of blueberries in the market last year, which led to an overall price markup, the local industry didn't do badly by comparison. "We were about 12.5% short on what our exports were the previous season, but I think the pricing certainly helped growers and exporters in terms of the commercial aspect," he explained.

Exports should be back around the 25,000-ton mark and some improvements in the logistics channels, specifically the container terminal management, which caused uncertainties before.

Walsh reported the price uptick helped BerriesZA do more air freight than sea freight and helped with logistics challenges along the way. He urged the fresh produce industry to work together with the organization to find a reasonable solution.

The organization right now is looking to develop new varieties and reach new markets. Said Walsh, "Our growers rely on a relationship with the nurseries who can provide them with the genetics from development houses, and those are all internationally marketed blueberries; they're certainly not unique to South Africa."

Walsh also reported an improving relationship with Middle Eastern countries, which are seeing a significant increase of 50% in blueberry imports from South Africa year-on-year. However, India is the nearest new market on the horizon and BerriesZA will try to begin chasing the Chinese market as soon as possible after that door is open. **IBO**

ANOTHER EVIL WEEVIL ENTERS THE FRUIT INDUSTRY

Blue berry producers in the Langkloof area in the KouKamma Local Municipality, Eastern Cape Province was notified about the detection of drosophila suzukii in October 2023.

The National Plant Protection Organization of South Africa (NPPOZA) in collaboration with different role-players and stakeholders initiated a delimiting survey to determine the spread of the pest in the country, according to the D. suzukii national action plan and relevant standards.

The pest was later detected in November 2023 in the Overberg District Municipality in the Western Cape Province and again on 24 January 2024 and 24 February 2024 in the Mopani District Municipality in the Limpopo Province and in the uMgungundlovu District Municipality in Kwa-Zulu Natal Province.

The detection of the drosophila pest was carried out by using the McPhail Yellow bucket trapping system baited with E.G.O. PheroLure® and SWD (fermentation products with ethanol and acetic acid components) lures.

Samples from these areas where morphologically identified and the results were confirmed with DNA barcoding. A 100% positive match to D. suzukii was returned for both repositories.

Drosophila suzukii was detected on Blueberry orchards in four provinces in South Africa. The official samples were collected after random surveys in collaboration with the research institutions and government in the reported areas.

The pest was positively identified in Limpopo Province and confirmed by recognized entomologists and fruit fly experts in the country.

Surveys in other parts of the country are conducted where host plants are produced, and all other phytosanitary measures are implemented.

Removal and/or Movement of host material from affected areas to unaffected areas in the rest of the Republic of South Africa is restricted in accordance with the Agricultural Pests Act No. 36 of 1983 (Act No.36 of 1983) and Control Measures R.110 as amended to prevent further spread of this pest to other Provinces. **Source: Plant Protection Dept. DALLRD**

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