

ROVERO FRUIT COVERS

# VARIOUS SUPER-STRONG FILMS FOR OPTIMAL RESULTS.

SINCE 1968 ROVERO HAS BEEN

HIGH-QUALITY GREENHOUSES.

MANUFACTURING

The production takes place in the Netherlands. Thanks to large inventories,

fast delivery is ensured.

Our structures are equipped with high-quality films, with the choice of transparent, high diffuse, or self-ventilating.



# A heavy rainstorm can damage an entire harvest. With a poly film greenhouse or fruitcover, you create a safe growing environment.

Soft fruit is extremely sensitive to extreme weather conditions, and a poly film fruit cover / greenhouse offers the ideal protection against this. By shielding fruits and crops from weather conditions, they are protected from damage, diseases, and pests that can affect quality and yield. With a Rovero house, you are investing in the protection of your vulnerable harvest and ensuring the continuity and quality of your production.

Rovero, the smart way to grow





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Self-ventilating Poly

Amazing results for soft fruit!



# Protect your harvest and enhance growth with a fruit canopy.

**AS A FRUIT GROWER,** you know how important it is to best protect your crops from the changing weather conditions. Rain, hail and strong winds can significantly affect your yield and cause considerable damage. With a fruit cover, you can effectively protect your crop while improving growing conditions to ensure high quality and stable production year after year.

In this brochure, you will find information about the fruit covers we offer. Discover how you can protect your valuable and delicate fruit from weather conditions while increasing your yield and profitability. In addition to the solutions shown, we also offer customized solutions if needed. Feel free to contact us if the solution you are looking for is not in this brochure. We will be happy to help you find the best solution for your specific situation.

### Quality

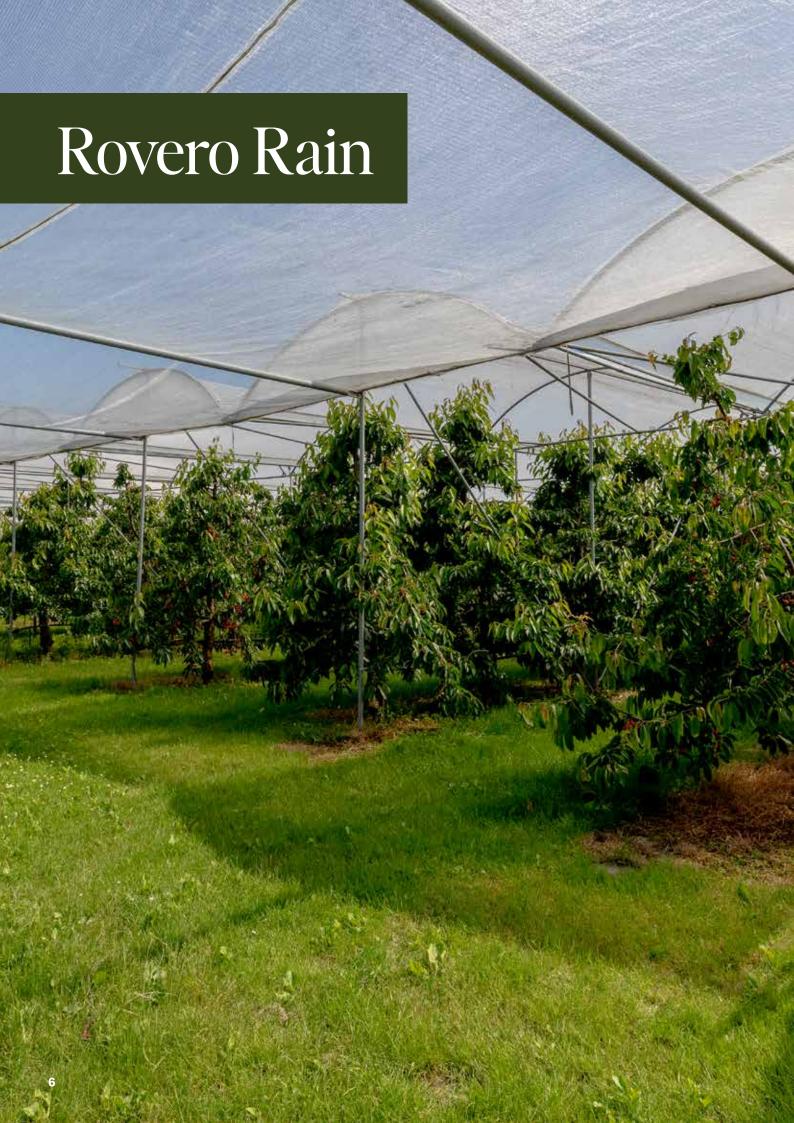
Rovero works exclusively with high-quality materials, which guarantee a long service life and reliable performance. Thanks to their robust structure, our products can withstand changing weather conditions and are a sustainable investment. Thanks to high-

quality materials, Rovero's products not only provide excellent performance, but also significant long-term cost savings.

### Custom made

Every crop has specific needs and every grower has unique requirements. Rovero strives to meet your needs in the best way possible. We offer a wide range of options, and every greenhouse is customized. We are happy to work with you to create the optimal climate for your crop and maximize your yield. Contact us to explore the possibilities!

Protect your fruit and increase your yield with *custom solutions of the highest* quality."





# The perfect fruit cover for protection *against unpredictable weather.*

THE ROVERO RAIN, IS IDEAL FOR SOFT FRUIT GROWERS, especially now that the weather is becoming more unpredictable and severe. This cover uses sturdy film that can be either roll-up or fixed. This protects the crop from various weather influences such as frost, wind, rain, and hail. In addition, the Rovero Rain also provides protection against birds and insects.

This protected form of outdoor cultivation ensures that the crop remains dry and safe during extreme weather. As a result, the fruit can grow better, and the quality and volume are improved. In soft fruit cultivation, a successful harvest is crucial as there is only one harvest per year. If the harvest fails, it brings several problems and risks. Therefore, it is essential to safely cultivate soft fruits and deliver them consistently.

### Advantages of the Rovero Rain:

Always dry harvesting conditions:

- The fruit (and your workforce) remains dry regardless of the weather, improving harvest quality.
- Protection against extreme weather conditions and damage from birds and insects.
- Extended harvest: The protected climate allows for an extended harvest period, ensuring a continuous and reliable supply of fresh fruit.

### Convenient film management:

The film can stay rolled up on the frame of the cover, so it doesn't need to be removed and stored.

The front of the fruit cover can be left completely open, or netting or mesh can be added, such as bird netting, hail netting, or insect mesh. With the arrival of the Suzuki fruit fly, insect mesh plays an increasingly important role. To prevent pests from damaging crops, an insect mesh corridor can also be added to the structure.

The Rovero Rain offers soft fruit growers a reliable way to protect their crops and ensure a successful harvest, regardless of the weather.

The Rovero Rain comes in two versions: Fix and Move. The Fix version has a fixed roof where the film always covers the crops. The Move version has a roll-up roof that must be manually rolled up.

The Rain Move is beneficial because trees prefer to be in the open air. By rolling up the roof when weather conditions allow, the trees can benefit from natural airflow, sunlight, and rain. This not only helps maintain the health and quality of the trees but also promotes an optimal growing environment.

Trees that are regularly exposed to the outdoors can breathe better and access natural rainwater. Moreover, exposure to natural elements reduces the risk of diseases that can often develop in enclosed spaces. The roll-up roof of the Rovero Rain ensures that growers can take advantage of these benefits while also having the flexibility to close the roof and protect the trees from unfavorable weather conditions, such as heavy rain, hail, or strong winds.

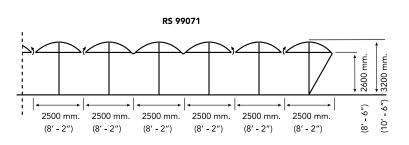
This flexibility contributes to the overall quality of the tree and the fruit it produces. By regularly exposing the trees to natural outdoor conditions, they remain stronger and healthier, ultimately resulting in a higher quality harvest. The roll-up roof of the Rovero Rain thus offers a perfect balance between protection and natural growing conditions, essential for successful and sustainable fruit cultivation.

Additionally, we offer a middle-ground solution: the Rain Fix. This combines the use of our self-ventilating film, ensuring that warm air no longer accumulates in the ridge because it can escape through the perforations. In this way, there's a suitable solution for every grower and budget.

## "With the roll-up roof of the Rovero Rain Move, your crops enjoy *optimal growth and protection* against unfavorable weather."

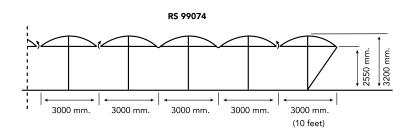


### Dimensions Rovero Rain



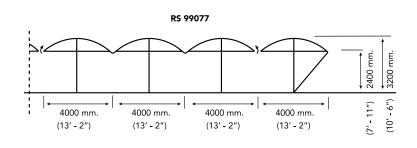
### **ROVERO RAIN 250**





### **ROVERO RAIN 300**





### **ROVERO RAIN 400**





# Retractable Rovero Rain canopy protects cherries from precipitation and birds

IT'S GOOD CHERRY EATING AT FERRYCHERRY IN HEDEL (NL). Ferdie van Eck has been growing them since 2008. After a modest start on 1 ha, he expanded his business by 2.5 ha in 2010. Another hectare was added in 2020. In mid-May, the roll-up film of the Rovero Rain canopies is pulled over the arches to protect the fruit from birds and precipitation. "A dry crop keeps fungi at bay," he says. "These cause yield loss and limit shelf life."

### ransparent foil from mid-May to early August

For most of the year, wind and weather have free rein in Van Eck's cherry orchard. The transparent Film that he uses to protect the cherries from mid-May to early August is then rolled up tightly against the ridges of the arched shelters that he had installed by Rovero. Mid-May lies a few weeks

before the start of the harvest period. In the Netherlands, this gets underway in June. Two months later, the last cherries have been picked and the foil is rolled up again from the roofs and facades.

### No rain, no birds

"Once the cherries start to color, I want to keep them dry," says the fruit grower. "Moisture on the fruit quickly produces weak spots and allows some fungi, such as Botrytis, to germinate easily. Hailstorms are completely disastrous in this regard. Mold not only causes direct yield loss on the tree. Problems with mould also mean that you have to make tighter selections during harvesting and that you spend more time on quality control. Both yield loss and time cost money, so it's best to stay away from them."

The canopy serves a second purpose: keeping birds out. These also love ripe and ripening cherries. "Birds are a growing problem, especially pigeons," explains the cherry grower. "Some even eat unripe cherries. For that reason, we pull the canopy shut around mid-May these days. Previously, this was done just before harvest."

In the past - to some extent still today - birds and hail damage were kept out by stretching hail nets over the orchard. Growers

then had to continue to put up with rain. Retractable canopies made of sturdy, transparent film offer additional protection. They are available in several types. According to Van Eck, the Rovero Rain shelters are in the higher market segment.

### Labor savings

A strong point in a figurative sense is the labor-friendly nature of the Rovero Rain canopies. Van Eck: "Rolling out takes much less time than, for example, the Vöen system, which is still in use. I save costs every year. I've never regretted knocking on Rovero's door for my first canopy in 2014, knowing I'd be spending a little more money there. I still like that canopy after eight years."

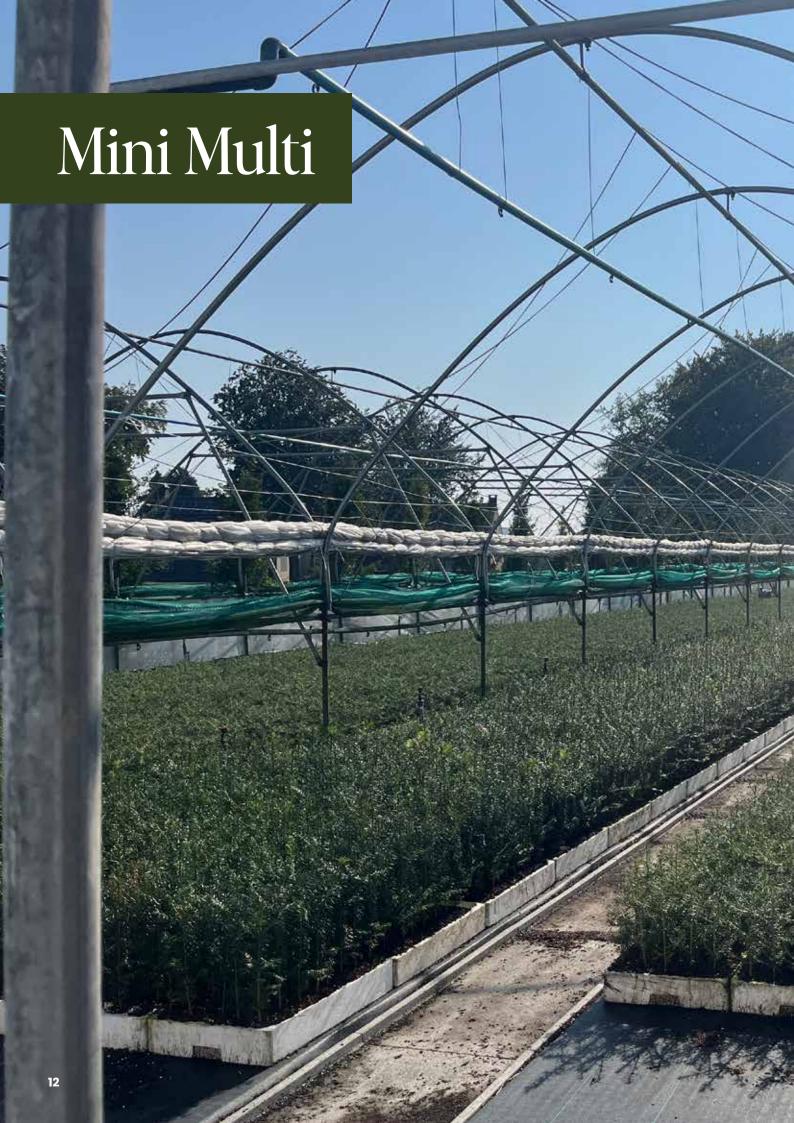
In 2020, the final expansion of over 1 ha followed on a nearby plot. For this, he chose a Rovero Rain 400 canopy.

### Value for money

Rovero is not the cheapest provider, but it offers great value for money, the Gelderland entrepreneur believes. "The canopies are well designed and worked out. They have a robust construction, which does not require anchors and tethers on the outside," he says. "Foundation piles, screw anchors under the uprights and cross braces at the ends of the rows give the structure ample strength. Moreover, the reinforced foil lies nice and tight, so it won't flap if the wind picks up for a moment."

### Foil and hail net

The facades (including two 6.4 m wide 'bird-proof' corridors for tools and internal logistics) and the lower part of the facades consist of hail netting. This also applies to the lower part of the Film screens that lie across the arches. Through these mesh strips, which touch each other at the lowest point, each canopy can drain to two sides over its entire length, right above the grass strips between plant rows. "That's where it's allowed to rain, because nothing beats natural irrigation, "Says Ferdie van Eck".





# Discover the *new*Rovero Mini Multi: Outstanding Price/ Quality Ratio and *Innovative*Ventilation.

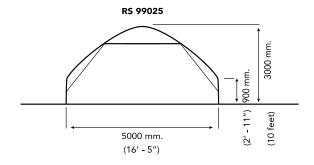
### THIS INNOVATIVE GREENHOUSE IS DESIGNED WITH PATENTED SELF-VENTILATING FILM

and features the revolutionary Vento ventilation system. This ensures optimal air circulation, reducing daytime temperatures by 3 to 7 degrees while helping the greenhouse maintain temperature at night. Ideal for optimal growing conditions in any season! The Mini Multi consists of interconnected tunnels. The tunnels are connected using a screw anchor to which both pipes are attached.

The Mini Multi comes standard with Rovero's self-ventilating film featuring Vento technology, which significantly improves the growing climate compared to regular film. The Mini Multi is fully produced in the Netherlands, and thanks to our large inventory, delivery times are relatively short.

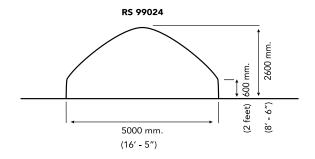
"Ideal for optimal growing conditions for soft fruit."

### Dimensions *Mini-Multi*



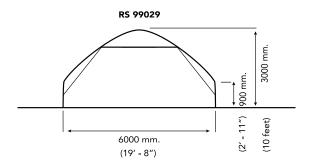
### **ROVERO 500**





### **ROVERO 500 ECO**

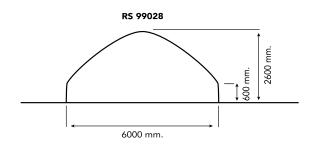




### **ROVERO 600**



### Inches toevoegen?



### **ROVERO 600 ECO**





# Self-ventilating film with Vento technology for *crop protection*

**THE NEW SELF-VENTILATING FILM WITH VENTO TECHNOLOGY** is an advanced, high-quality solution for crop protection. The multi-layered film technology outperforms other protection mechanisms by supporting optimal indoor conditions for soft fruit cultivation.

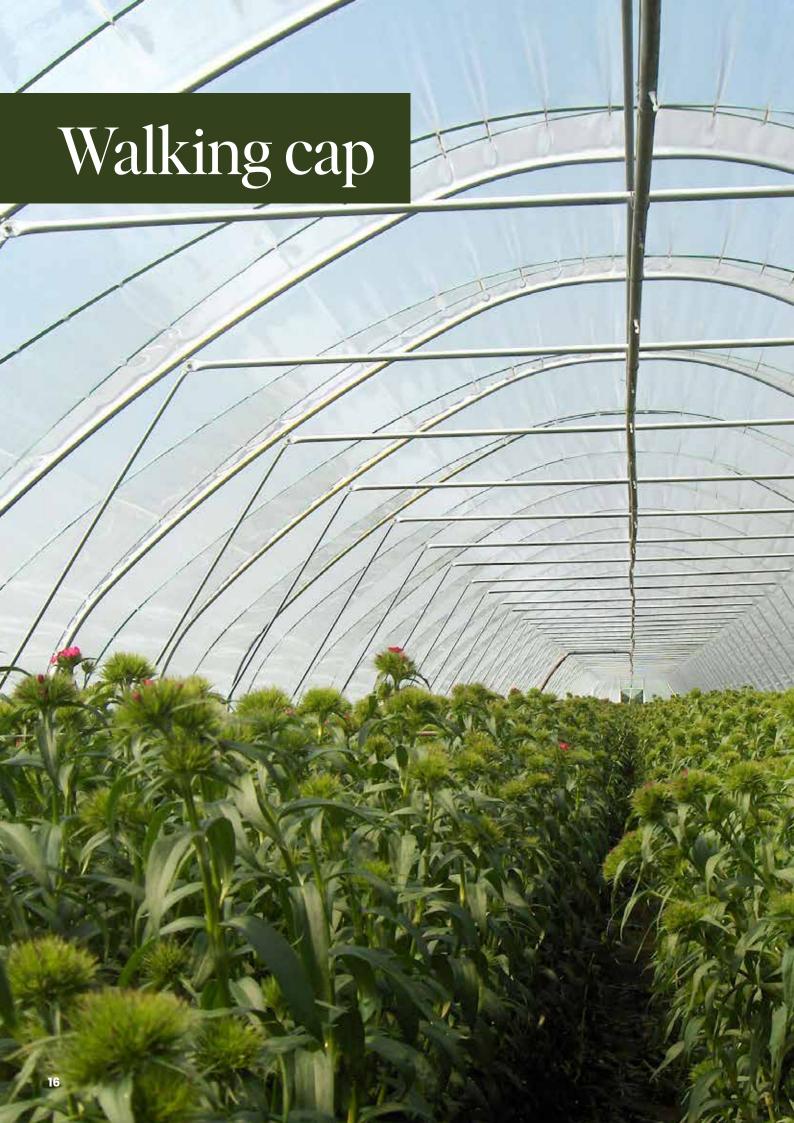
The film allows natural ventilation at the highest point of the tunnel, where humidity and warm air accumulate. This results in lower daytime temperatures and humidity, while at night, the temperature remains consistent with that of film without Vento technology.

"Optimal for strawberries, raspberries, blueberries, blackberries, and other soft fruit crops"

### **KEY FEATURES**

- ✓ Multi-layered film
- √ 180 micron thickness
- ✓ UV-stabilized for 4 years
- ✓ High mechanical resistance
- Available in transparent and diffused versions
- √ Thermicity

- ✓ VENTO® technology: warm and humid air escapes through perforations in the upper part of the tunnel
- ✓ An additional layer of film is applied on the outside above the perforations, sealed in a wave pattern to prevent water from entering while allowing warm air to escape





"The mobile cover offers flexible, temporary protection for vulnerable crops, perfect for any cultivation need."

A WANDELKAP (WALKING CAP) IS SUITABLE FOR GROWERS looking for a tunnel that provides temporary protection. Since the lightweight structure doesn't require a concrete foundation, it is easy to move. This allows it to "walk" over the crops, which is where the name walking cap comes from.

Fruit growers mainly use walking caps when they want to offer temporary protection, for example, during the blooming or ripening of fruit, when crops are most vulnerable to weather conditions. By moving the walking cap over different rows of crops, you can flexibly respond to the needs of the crops and weather conditions.

One of the greatest advantages of a walking cap is that it can be relocated, allowing it to be used in different places throughout the season. This can be useful with changing crop rotations or when protecting various crops from specific weather conditions.

"Light and *easy* to assemble."



### **Application in Fruit Cultivation**

In fruit cultivation, the mobile cover is often used during crucial periods, such as flowering or the ripening process. During these times, crops are particularly vulnerable to weather conditions like frost or heavy rain. By quickly and easily placing the mobile cover over a row of crops, growers can efficiently provide protection without the need for a permanent structure. This makes the mobile cover a cost-effective and practical solution, especially when protection is only needed temporarily.

### **Benefits for Various Crops**

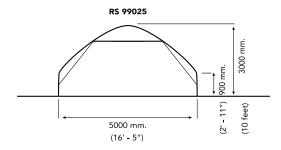
In addition to fruit growers, other agricultural sectors can also benefit from the advantages of a mobile cover. In vegetable farming, for instance, a mobile cover can be used to protect delicate young plants during their early growth stages or to shield newly planted crops from sudden weather changes. Thanks to its portability, the same mobile cover can be used multiple times per season for different crops, making it a versatile investment.

In short, the mobile cover offers an efficient, movable solution for growers seeking temporary protection from weather conditions. With its lightweight and maneuverable structure, the mobile cover provides flexible protection that can be adjusted to the specific needs of crops throughout the season. This innovative cover is a valuable addition for growers looking for a practical and economical way to optimize and protect their cultivation.

"The mobile cover offers an efficient, *portable solution for growers* seeking temporary protection against weather conditions"

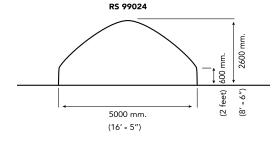
### Greater yield with the Rovero mobile cover

We offer the mobile cover in 4 models: the 600 eco, the 600, the 500 and the 500 eco. The 600 eco has a ridge height of 2.60 meters and a straight sidewall of 0.60 meters. The 600 has a ridge height of 3.00 meters and a straight sidewall of 0.90 meters. With the higher straight sidewall of the 600 mobile cover, there is more space for placing crops and working. The 600 eco is more economical because fewer materials are used, making it suitable for milder climates. When weather conditions are harsher, it is wiser to choose the 600 mobile cover, as it is better suited to withstand severe weather.



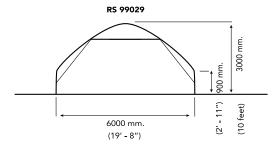
### **ROVERO 500**





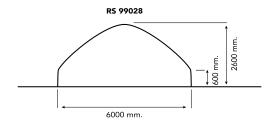
### **ROVERO 500 ECO**





### **ROVERO 600**

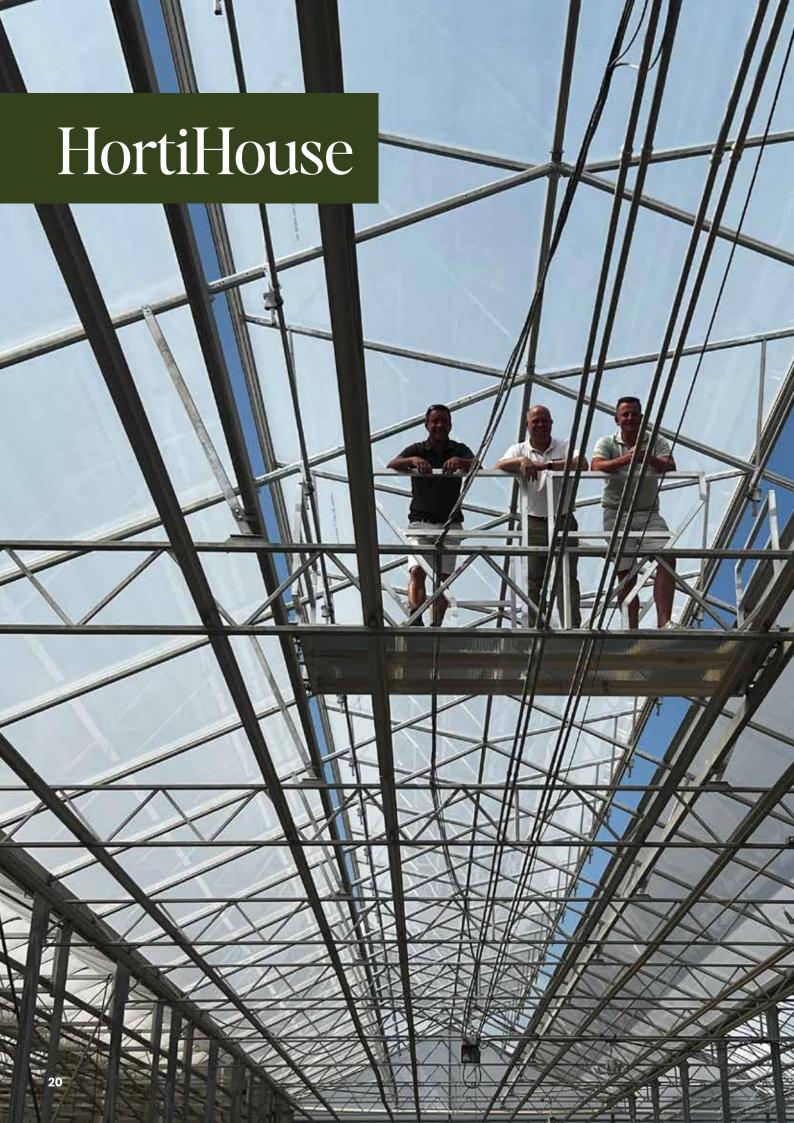




### **ROVERO 600 ECO**

## 6,00 mtr. ± 2,60 mtr. 2 mtr. tot/to/bis/à 100 mtr.

Inches toevoegen?





# Rovero HortiHouse is a *Real Game Changer* in the widespan greenhouse market!

THE HORTIHOUSE WIDE-SPAN GREENHOUSE provides the highest high-light polyethylene greenhouses in the market but that is not all. The HortiHouse also provides superior natural ventilation with two very large roof vents as well as OSHA compliant safety trolley in the roof, a first in the industry! Rovero's Horti Trolley makes construction and poly recover safe and super easy as well as making roof maintenance much easier and OSHA compliant.

### Like a flying carpet from end to end under the roof!

The large spans and corresponding ridge height of wide-span greenhouses present additional challenges and risks during construction and maintenance work at heights. Measures to address these issues can slow down construction, re-cladding and increase costs. Nothing can be done about it. Or can it?

Rovero offers a solution that is as simple as it is effective. In many greenhouse complexes, harvest carts and scissor-lift work platforms travel over parallel heating pipes, which act as rails in the work paths.

This principle can also be applied at gutter height directly beneath the ridge by allowing a work platform to travel over two sturdy structural beams.

One crucial innovation was still needed: the rack-and-pinions mechanisms of the double-sided continuous ridge ventilation had to leave enough space in the ridge to allow unimpeded passage of the crew-carrying platform. Thanks to our Horti-Trolley, this requirement is now available.

### **Efficient and Safer Construction**

The Horti-Trolley work platform proves its value throughout the entire lifespan of the greenhouse. This starts during construction and the installation of the double-sided ridge ventilation, followed by the pulling and securing of the film cover. Virtually all tasks that take place in the ridge space can be safely, comfortably, and efficiently carried out from the platform. This also applies to maintenance and installation work occurring at later stages.

### Super smart Rovero's Poly film installation

Another feature that makes the Rovero HortiHouse unique is its method of Polyfilm installation. Normally, three steps are required to cover the roof of a wide-span greenhouse with Polyfilm: one for the Polyfilm for the ridge ventilation and two for the remaining roof surfaces.

Thanks to Rovero's unique, patented attachment method to various profiles, the cover Polyfilm for the HortiHouse widespan greenhouse can be pulled in a single operation over the entire structure. This should be done with partially opened roof vents. Once the Polyfilm is pulled through the ridge profile and in place, the roof vents are slightly closed, and the sides of the Polyfilm strip are attached to the gutters. The remaining work is carried out from the mobile work Horti Trolley moving platform under the roof; safer and much more comfortable. The Polyfilm for the window opening is now cut. Both sides are then pulled inside, tensioned correctly, and attached to the underside of the window and roof profiles.

**THIS EFFICIENT PROCESS** not only saves a considerable amount of time but also introduces a new Rovero Concept: attaching the Polyfilm to the underside of the window profiles. In traditional wide-span greenhouses, the Polyfilm is always attached from and on the outside of the deck

surfaces on both sides. This process consumes a significant amount of time and money. This can also lead to (minor) roof leakage during periods of precipitation. Attachment on the inside of vents and roof slopes, reduces this risk of leakage significantly.

### THREE CRUCIAL PATENTS

The unique concept of the HortiHouse widespan greenhouse ensures efficient, safe, and comfortable work, resulting in a surprisingly low total cost of ownership. This is largely due to three unique, patented Rovero features: the mobile work Horti-Trolley moving platform at height and the special ridge and window profiles. Combined with the traditionally durable construction and the very high-quality Polyfilm, the result is a wide- span greenhouse that sets a new benchmark in the greenhouse industry.









# Discover the revolution in greenhouse ventilation: *the HortiHouse insect screen*

AT ROVERO, WE ARE PROUD TO INTRODUCE OUR LATEST INNOVATIVE PRODUCT: the HortiHouse Insect Screen. This advanced system ensures superior airflow in your greenhouse while keeping 'unwanted guests' out. Its unique design offers exceptional ventilation capabilities for a healthier greenhouse climate and optimal crop growth in wide-span or polytunnel greenhouses. No other screen system provides the same ventilation benefits, minimal light obstruction, and comparable durability!

### **Double-sided ventilation**

Our ventilation windows are larger than ever, with an impressive depth of 2.15 meters and an opening of 1.70 meters on both sides, creating an enormous ventilation exchange surface. An optimal balance has been developed between the ventilation mechanism and the number of slats. This makes the HortiHouse screen ideally suited for greenhouses where ventilation is a key factor.

### Accordion design

The accordion shape provides a greater exchange surface, further enhancing the ventilation capacity when the window is open. This efficient foldable system also creates a very compact screen package when closed. This results in minimal light obstruction, allowing optimal use of sunlight.

### **Integrated ventilation system**

With our aluminum cover profiles and cleverly designed rubber seals, installation is a breeze. The integrated ventilation system consists of aluminum cover profiles, into which the rubber can be easily clicked. This not only makes installation quick and easy, but the smart shape of the rubber also ensures an optimal seal. Since the screen slats are perfectly concealed in the profiles, the system is barely visible.



# How do growers increase crop yields with EVO AC®

### "WE CAN'T AFFORD TO HAVE CONDENSATE FALL IN THE GREENHOUSE."

It has been six years since the EVO AC® poly film was tested. According to the development team, EVO AC, which stands for Evolution in Anti-Condensation, is the longest-lasting anti-drip poly film on the market for polyethylene greenhouse poly film. Now that the poly film has been in use for several seasons, growers see how it maintains the anti-drip and anti-mist properties over a longer period, far beyond the lifespan of conventional poly films.

Polyethylene (PE) poly films have transformed the greenhouse industry due to their superior functional properties, lower initial investment, and easy maintenance compared to alternatives like glass and polycarbonate. Although it has been the most popular choice for several decades, conventional PE poly films fall short in providing extended Anti-Condensation (AC) (or Anti-Drip) functionality due to the composition of migrating additives used in the materials. The composition of traditional poly films results in a gradual loss of these properties long before the poly film's lifespan ends, usually within 18-24 months. Moreover,

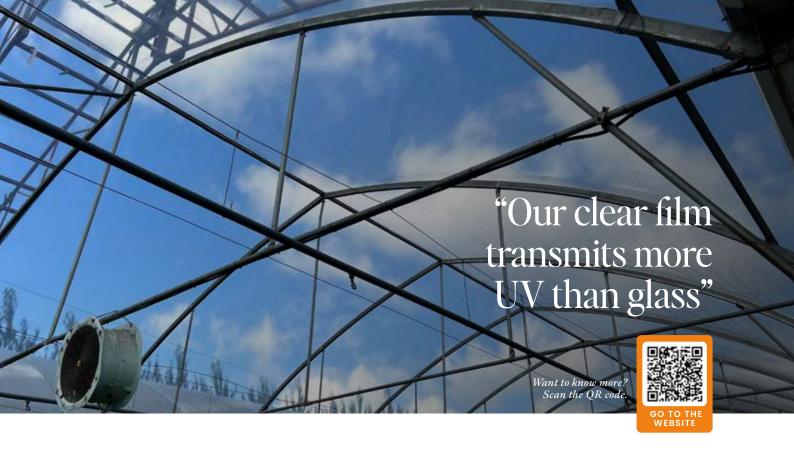
conventional AC often causes mist in the greenhouse during early morning and before sunrise when sharp temperature fluctuations occur.

### Condensation

The negative impact of condensation, drops, and mist on crops is well-known as they reduce the quality and quantity of light, harm crops, and create conditions for the development of fungal diseases. This leads not only to reduced yields and slower crop cycles but also to lower crop quality. As a result, growers often replace their poly films years before they reach their lifespan. Therefore, Rovero's poly film supplier has developed a solution using nanotechnology. Their innovative 8-layer EVO AC poly film offers powerful anti-drip and anti-mist effects with superior mechanical strength and clarity. Importantly, it maintains these critical properties for much longer periods. In many cases, EVO AC lasted as long as the poly film itself, even when the poly film exceeded its guaranteed lifespan of 5 Years, depending on the location.









### o drops

Since its launch in 2016, EVO AC has become the preferred poly film for thousands of professional growers worldwide for a diverse range of crops, from vegetables to flowers and fruits. During a recent interview, Robbie Johnson, general manager at California Transplants, a large vegetable seedling

nursery, said: "We can't afford to have drops fall in the greenhouse. They severely affect germination and plant growth. High humidity and mist are equally undesirable as they cause diseases. With other poly films, when we noticed drops after one or two years, we would immediately replace the plastic. This meant extra costs for replacing the poly film and a crew to install it. We now have all greenhouses on our 300,000 square meter nursery covered with EVO AC."

### Great success in North America

Growers in Canada, Mexico, Europe, China, and other regions use EVO AC with great success. The benefits described by Mr. Johnson are observed worldwide and under all climatic conditions. For example, in areas with very cold climates, it is known that regular AC may not be effective because when the outside temperature drops below 15°F (-10°C), the additives in the poly film crystallize, rendering AC ineffective. EVO AC functions effectively at extremely low temperatures. Paul Dyck, owner of Great Lake Greenhouses in Ontario, Canada, was one of the first to convert his entire nursery to this product in North America. When asked about the subject, he stated: "... condensation blocks valuable light. We need as much light as possible, which is why we use EVO AC because of its extreme clarity and effective anti-drip. We've had the same poly films for over 4 years, and they work just as well as on day one. Moreover, it is clearly a much stronger, more rigid poly film."

### Healthier grow environment

All these features create a healthier growing environment, leading to higher yields and earlier harvests. In Turkey, a tomato nursery reported that using EVO AC increased production from 3 kilos per plant to 6 kilos per plant, while trials conducted on cannabis by Professor Bilalis at the Agricultural University of Athens, Greece, showed that EVO AC UV-open outperformed regular poly films in terms of yield and qualitative characteristics. This is not surprising given the sensitivity of cannabis plants to humidity and drops and the need for the highest amount of light at the right times.

### Rovero & EVO AC

"The development of the EVO AC poly film has transformed the greenhouse industry by offering the longest-lasting anticondensation and enabling more efficient and sustainable farming practices for all types of crops," says Jacco van Delden, General Manager of Rovero. "Years ago, poly film was considered the cheap protective solution, but with advances in knowledge, we can now deliver plastic poly film as a valuable addition for nurseries worldwide. We believe in groundbreaking poly films that meet growers' needs and positively impact a nursery's finances." Along those lines, starting in 2024, Rovero will exclusively sell the EVO AC poly film for their tunnels and the wide-span greenhouse: HortiHouse. "Rovero sells both crystal-clear and high-diffuse versions, depending on the type of greenhouse, area, and crop."

### Superior Anti-Drip Performance

### **Superior Anti-Drip Performance**

Traditional anti-drip poly films contain additives that migrate to the surface and gradually deplete within 1-2 years, resulting in a poly film covered with drops that reduce light and damage plants. For growers, this means reduced yield, lower crop quality, and increased pesticide use. In many cases, growers replace their poly films before their useful lifespan is over, solely due to problems caused by drops.

EVO AC® poly films are equipped with a non-migrating antidrip system that lasts much longer, offering a decisive advantage in moisture management and allowing the poly film to be used for more years.

### No Fogging

A serious issue that occurs with traditional anti-drip poly films is the formation of fog (mist) inside the greenhouse, usually at sunrise and sunset. Fog reduces light and causes moisture to settle on plants, creating conditions favorable to fungal diseases. Many growers actually avoid using anti-drip poly films out of fear of fogging.

### More Light

Due to their special composition, EVO AC® poly films allow more light to enter the greenhouse. This becomes even more apparent when light levels are low.

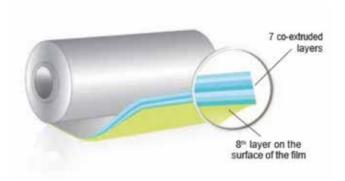
### Performs Perfectly at Very Low Temperatures

In extremely cold climates, when the temperature drops below -10°C (14°F), many traditional anti-drip poly films lose their effectiveness within a very short time, as the anti-drip molecules crystallize inside the poly film and lose their mobility. EVO AC® poly films perform excellently at very low temperatures, resulting in a crystal-clear, drop-free appearance, as our experience in Scandinavia, Canada, and northern China has shown.

### **Effective at Lower Slopes**

EVO AC® poly films are effective at lower roof slopes than traditional anti-drip poly films, which require a slope of 30° to perform well.

### "EVO AC® films do not cause mist"





Traditional film EVO AC® film



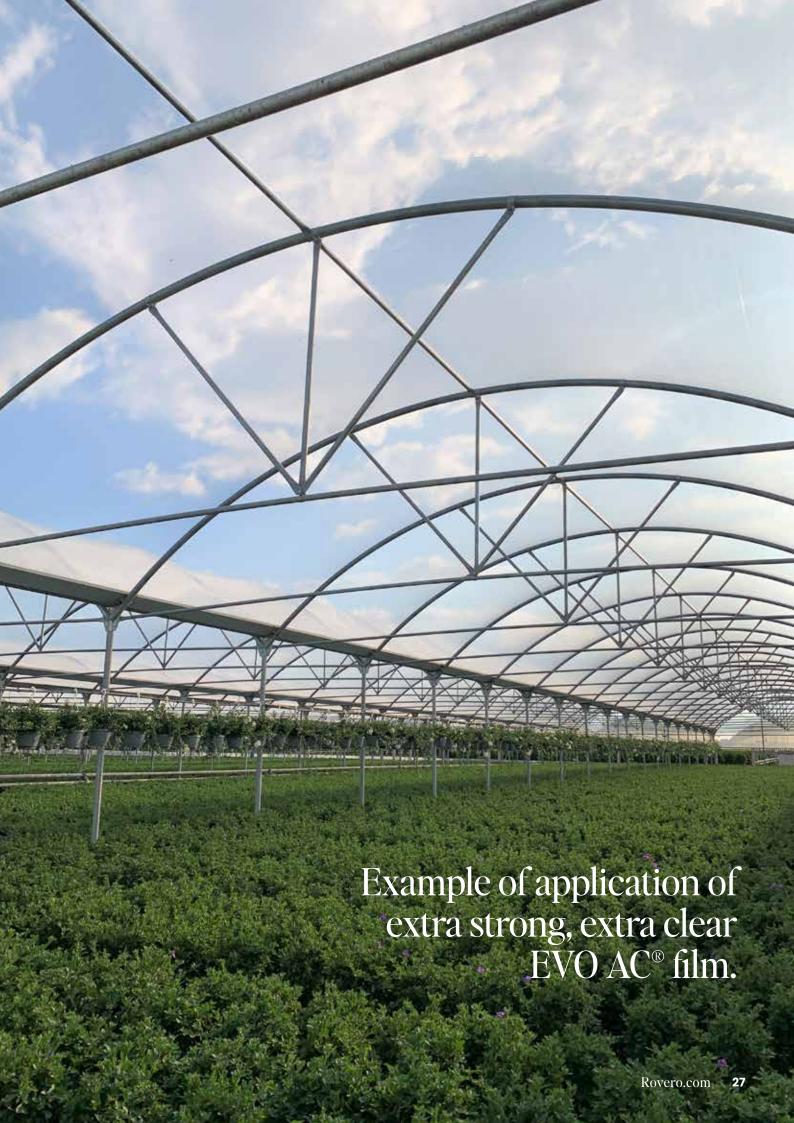
Traditional film EVO AC® film



Traditional film EVO AC® film



Traditional film EVO AC® film



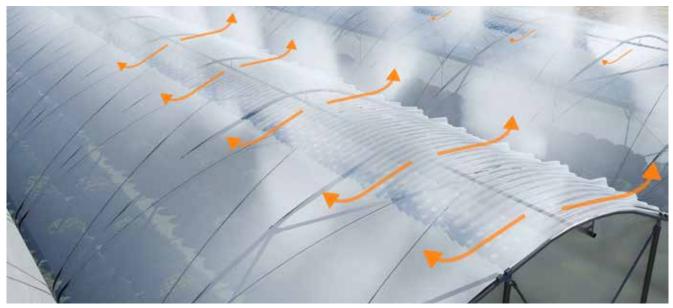
### The self-ventilating Vento film

VENTO FILM WAS SPECIALLY DEVELOPED FOR THE CULTIVATION OF CAPITAL-INTENSIVE CROPS SUCH AS SOFT FRUIT, WHICH ARE GROWN IN TUNNELS AND ARCHED GREENHOUSES WITHOUT AIR VENTS. THANKS TO THE INNOVATIVE VENTILATING FILM, A MORE FAVORABLE AND HOMOGENEOUS CLIMATE IS ACHIEVED, FROM WHICH THE CROP BENEFITS NOTICEABLY

Vento film features perforations in the ridge, which ensures constant air circulation in the cultivation space. Warm and moist air can now be exhausted through these openings. To keep rain and hail from entering the tunnel, a horizontal strip of protective film is applied over the vents in a corrugated profile. The corrugated profile creates passages above the vents through which the relatively dry outside air can blow freely.

In addition, warm, humid air is drawn in and exhausted from the greenhouse. By reducing absolute humidity by allowing fresh air in, condensation in the film is greatly reduced or even prevented. As a result, no drops get on the fruit. Droplets could damage the skin of the fruit, reducing the quality of the crop and increasing the risk of diseases and pests.





### "Constant air circulation creates a homogeneous climate."

n greenhouses and tunnels without vents, warm and humid air can accumulate in the ridge, which may lead to heat stress, disturbed growth, yield loss, increased disease pressure, and higher water users.

disease pressure, and higher water usage. Rovero's self-ventilating film helps mitigate these problems by improving air circulation, resulting in more even temperature and humidity levels within the greenhouse.

During the day, the temperature inside the greenhouse remains a few degrees cooler compared to conventional film. At night, the temperature is similar to that of ordinary film, despite the perforations in the selfventilating film. This is because the main cause of nighttime cooling is the loss of heat through radiation, which is the heat emitted by plants and soil to the colder air outside. The perforations in the film don't affect this process, so heat retention is just as effective as with conventional film. Additionally, there is some convective heat loss, but since the film covers the perforations, this is minimal. As a result, the temperature remains comparable to that of conventional film. Because daytime temperatures are



slightly cooler, and nighttime temperatures remain stable, there are fewer temperature fluctuations. This positively impacts the crops.

When it's very warm outside, the film ensures that the temperature inside the greenhouse stays lower than outside, preventing the plants from overheating. On hot days, the film prevents extreme heat spikes, which can occur with standard film. When the outside temperature drops, the inside of the greenhouse remains a few degrees warmer than the outside, which is beneficial for growth.

In essence, a uniform climate helps maximize productivity, minimize risks, and achieve high and consistent crop quality. The self-ventilating film offers a good balance of durability, high light transmission, and effective removal of warm, humid air. Good ventilation is crucial to creating optimal conditions for plants, ensuring the production of high-quality crops.

# Significantly advance your harvest with high-quality fruit covers

### Cerima Cherries, Spain

**CERIMA CHERRIES ORCHARD IN BENIFALLET,** located in the Catalan province of Tarragona, participated in a 2021 trial where 12,000 m² of Royal Tioga cherry trees were covered with Safe-D M Thermic UV Open polyfilm. The goal of the trial was to accelerate the blooming, fruit set, and harvest period. An earlier harvest typically means that the fruit can be sold at higher prices.



**FEBRUARY 16**Full Flowering



MARCH 3

Ovary and vegetive growth

**FEBRUARY 25**First petals falling



MARCH 23
Start of maturation



In the first week of February, just before the start of blooming, the canopy was installed. A week later, the first trees began to bloom. It was clear that the trees under the canopy had a slight advantage compared to those that were not covered. This lead expanded in the weeks that followed. Under the SAFE-D canopy, blooming was completed earlier, and vegetative growth and fruit set started sooner. Additionally, the ripening period for the cherries was shortened, and the fruit grew more uniformly into full-sized, Grade I cherries.

Earlier harvests and more... Ultimately, the harvest period (April 7th to 23rd) in the covered part of the orchard was advanced by 15 days. Both the total yield (approximately 12,000 kg, 1 kg/m²) and the share of Grade I cherries were significantly higher. At an average price of €9/kg, the total yield under the Safe-D film amounted to €115,200. Both the grower and the

project managers concluded that a fruit canopy with Safe-D film in this practical scenario could pay for itself within a few years.

The secret behind the success Safe-D fruit canopies protect crops, flowers, and fruit from the harmful effects of precipitation (rain, hail) and excessive radiation (UV). Under the canopy, a more consistent, milder climate is maintained, with a higher average daily temperature and more stable relative humidity. The reduced direct radiation and wind exposure also result in lower water and fertilizer consumption.



**APRIL 7**First ripe fruits; beginning of harvest



**APRIL 23** End of harvest



APRIL 16
Ripe fruits



## Vento<sup>®</sup> Tunnel – *RCG Fruits, Mexico*

RCG FRUITS IN ZAMORA, located in the state of Michoacán, Mexico, had five polytunnels covered with Vento® PE-film in 2023 to compare this new, self-ventilating polyfilm with adjacent conventional polytunnels. The trial took place in a one-year planting of blackcurrants (cultivar Sultana) and covered two sets of five tunnels, each 100 meters long and 6.7 meters wide. Each tunnel contained three rows of plants.

The goal of the trial was to compare the climate conditions under both types of polyfilm and determine their impact on crop development, yield, and disease pressure. Unlike conventional polytunnels, the newly developed Vento Tunnels have ventilation openings at the ridge, equipped with a protective layer to prevent rain ingress. These openings promote natural air circulation and facilitate the removal of evaporated moisture and excess heat from the growing area through the ridge. The idea is that plants in more uniform, slightly drier, and milder conditions experience less stress and are less susceptible to moisture-related diseases like Botrytis. This allows for higher levels of photosynthesis and potentially greater fruit production with an overall better quality.

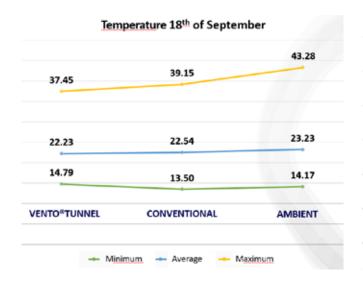
### Dozens of sensors

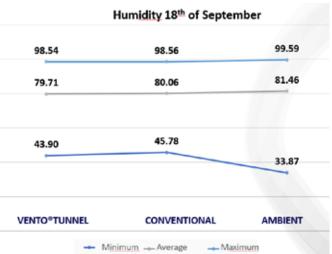
Throughout the trial, which began after the end of the harvest in April, the climate in both trial groups was monitored with dozens of sensors. The health status of the blackcurrant bushes was also tracked, along with yield parameters starting from the beginning of the new harvest in August. The data showed that the Vento Tunnels more than met expectations. Although the average daily temperatures in both tunnel types varied only slightly, the maximum temperatures in the Vento Tunnel were consistently lower than in the conventional tunnels. Temperatures above 40°C were not recorded at all. At night, the temperature tended to drop less, which was also beneficial. The same applied to relative humidity



### **RCG FRUITS**

RCG Fruits was founded in 2016 by a group of young, enthusiastic growers with a fresh perspective on sustainable soft fruit cultivation. They now supply their products worldwide, with markets in Japan, the USA, Canada, and Europe. Their range includes delicious strawberries, raspberries, blackberries, and blueberries.



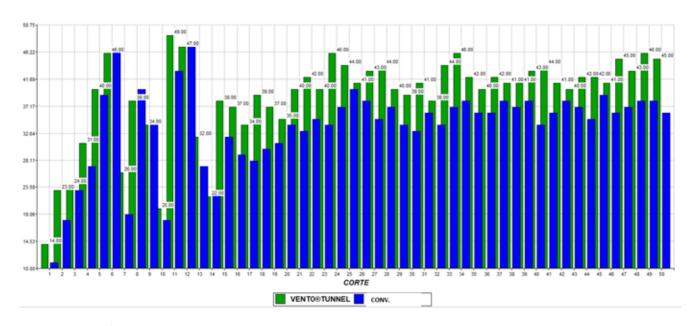


### Impressive yield increase

The differences in yield were striking but very real: overall, 15% more kilos were harvested in the Vento Tunnels, and the share of Grade I fruit was slightly higher than in the conventional

tunnels. Due to these excellent growing results, RCG Fruits has ordered 80 hectares of new self-ventilating film for the upcoming season.

### "With the vento poly you *create more high quality products* and overall more products per square meter."



By using the self-ventilating poly with Vento technology, a 15.5% increase was achieved compared to conventional plastic coverings. Thanks to the optimal temperature ranges maintained by the new poly, the quality of the fruit has improved.

**ROVERO'S STORY** 

## Rovero greenhouses: the smart way to grow!

### THE STORY BEHIND ROVERO

## 55 Years of Innovation and *Sustainable Quality*







**SINCE 1968, ROVERO** has been developing and building high-quality poly film engineered greenhouses, tunnels, shade houses, and fruit covers for growers, green professionals, and retailers. At Rovero, the focus is on quality, innovation, and sustainability, which has resulted in a wide range of high-quality products. Our solutions are known for their long lifespan, reliable performance, and high yield. We have made a name for ourselves both domestically and internationally, and we are proud of that.

### **Pushing Boundaries Together**

Rovero is building a thriving and sustainable future. We do this with a passionate team, our valued customers, and our 'premium partners,' such as dealers and suppliers who are a perfect fit for us. Together, we push boundaries and shape the future of sustainable and efficient cultivation.

We are grateful for our diverse and growing customer base. Our customers are pioneers, innovators, and professionals who strive for perfect conditions for their crops. They all share a passion for quality and efficiency, and it is this dedication that inspires and motivates us to continuously innovate and improve.

### **Responsible Growth**

Respect for each other, for others, and for our environment is embedded in our company culture. The development of our employees is highly valued; through courses and training, they can continue to grow. This results in very low turnover, which is good for the continuity and quality of our operations.

Rovero aims to realize its growth ambitions in a socially responsible manner. Efforts are demonstrably made towards sustainability and reducing our environmental footprint. As the first greenhouse builder, Rovero has been a part of the Horti Footprint Chain Program since 2022.

Curious? Scan the QR code and find your nearest dealer. Rovero is proud that quality companies in many countries sell Rovero products. Thanks to our dealer network, you can always count on quick assistance when you need it. Our local dealers are ready to support you and provide information.

### Rovero, the smart way to grow.



Curious? Scan the QR code and find your nearest dealer.

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