



AGRISUN REFLECTIVE SOLUTIONS



REFLECTIVE ORCHARD FILM

Better Light. Applied With Evidence.
Redirecting available orchard-floor
light back toward the canopy.

A reflective ground-cover solution
developed for commercial fruit
orchards where effective light
distribution matters.

**APPLES • PEARS • CHERRIES • STONE
FRUIT • CITRUS**

**Research-Informed Orchard Light
Management**

South Africa

**AGRISUN DOESN'T CREATE MORE SUNLIGHT.
IT HELPS MAKE BETTER USE OF THE LIGHT
ALREADY AVAILABLE IN THE ORCHARD.**





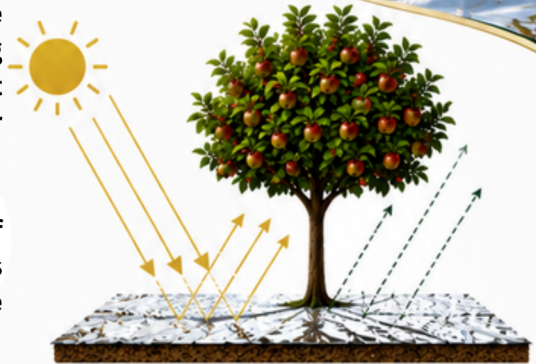
WHY ORCHARD LIGHT DISTRIBUTION MATTERS

NOT ALL FRUIT RECEIVES THE SAME LIGHT

Sunlight entering an orchard is distributed unevenly.

Leaves, branches, canopy density, tree architecture and protective netting can reduce the amount of light reaching fruit in lower and interior canopy positions.

At the same time, a portion of incoming solar radiation passes through the canopy and reaches the orchard floor.



AGRISUN REDIRECTS THAT AVAILABLE LIGHT

AgriSun Reflective Orchard Film creates a highly reflective orchard-floor surface.

Instead of allowing as much available radiation reaching the ground to be absorbed by soil, vegetation or other orchard-floor surfaces, the film redirects a portion of that radiation upward toward the canopy.

WHY THAT CAN MATTER

Published orchard research has shown that reflective ground covers can alter light availability within fruit-tree canopies.

The actual response depends on the crop, cultivar, canopy architecture, film placement, timing and orchard conditions.



BACKED BY PUBLISHED RESEARCH REFLECTIVE LIGHT. MEASURABLE RESPONSES.

Independent orchard research has shown that reflective ground covers can alter canopy light and influence fruit responses under specific growing conditions.

APPLES

Research in Fuji and Gala demonstrated increased reflected or within-canopy light, with improved red fruit coloration reported under the conditions studied.

SWEET CHERRIES

A commercial Regina study compared reflective film applied 21 and 34 days before harvest, measuring colour, fruit size, maturity and post-harvest quality.

PLUMS

Research comparing 1, 2, 3 and 4 weeks before harvest found different responses between application timings — demonstrating that timing matters.

THE IMPORTANT PART

Results depend on the crop, cultivar, timing, material and orchard conditions. That is why AgriSun uses published research as a foundation — and local measurement to build better recommendations.

Full research, study limitations and references are available in the AgriSun Technical Library.





RESEARCHED AROUND THE WORLD DECADES OF ORCHARD RESEARCH

Reflective orchard ground-cover technology has been investigated in commercial fruit-growing regions internationally.

CHILE

Sweet Cherries — Regina

Commercial orchard research has evaluated reflective ground film in Regina cherries, including different pre-harvest exposure periods and fruit-quality measurements.

GERMANY

Apples — Gala, Jonagold & Braeburn

Research has investigated reflective ground covers in apple orchards, including their use beneath protective hail netting and their effect on orchard light distribution and fruit coloration.

CHINA

Apples — Fuji

Published research compared different reflective orchard-floor materials and demonstrated that highly reflective treatments could increase light within the canopy and influence red fruit coloration.

SOUTH KOREA

Plums

Researchers compared several pre-harvest reflective-mulch timings and demonstrated that the timing of deployment can influence the measured fruit response.



DON'T LET GOOD LIGHT GO TO WASTE





Traditional Orchard Floor

Reflective Orchard Ground Cover

**Different crops have different objectives.
AgriSun follows crop- and cultivar-specific evidence
rather than applying one programme to every
orchard.**

RESEARCH INCLUDES

APPLES

Supporting light availability for red and blush colour development.

SWEET CHERRIES

Research into colour, fruit quality and canopy light.

STONE FRUIT

Studies in peaches, nectarines and plums.

PEARS

Applications investigated across commercial pear production.

CITRUS

Research into reflected light, rind colour and orchard conditions.

UNDER PROTECTIVE NETTING

Redirecting available orchard-floor light back toward the canopy.

BUILT FOR COMMERCIAL ORCHARDS

**Reflective ground-cover technology has been studied
across a range of fruit crops and orchard systems.**





AgriSun Reflective Orchard Film is a metallised polyethylene film developed for orchard-floor light management.

A REFLECTIVE SURFACE

A bright metallised surface redirects available radiation that reaches the orchard floor back toward the canopy.

A FLEXIBLE PE BASE

Polyethylene provides a lightweight, flexible film that can be rolled out along commercial orchard rows and adapted to the orchard floor.

DESIGNED FOR OUTDOOR USE

UV stabilisation supports the film's use under demanding outdoor orchard conditions.

MADE TO WORK AT ORCHARD SCALE

The film is supplied in long commercial rolls, allowing continuous deployment along orchard rows rather than small individual sheets.

That means practical performance also depends on:

Correct placement

Secure anchoring

A reasonably clean reflective surface

Good canopy management

Appropriate timing

Published commercial-orchard work also shows why installation and anchoring matter: metallised PE can be affected by wind, vegetation and field operations if deployment is poorly managed

A reflective film is only useful while its reflective surface is exposed to available light and positioned effectively within the orchard.



MEET THE FILM

AgriSun SIMPLE MATERIAL. PURPOSEFUL DESIGN.





LIGHT THAT WOULD OTHERWISE BE LOST TURNING THE ORCHARD FLOOR INTO PART OF THE LIGHT ENVIRONMENT

Every orchard has light that passes through the canopy and reaches the ground.

AgriSun gives that light another opportunity. By creating a highly reflective orchard-floor surface, available radiation can be redirected upward into parts of the canopy that may otherwise receive less light.

ESPECIALLY RELEVANT WHERE:

COLOUR MATTERS

Light exposure plays an important role in red and blush colour development in many fruit cultivars.

CANOPIES CREATE SHADE

Lower and interior fruiting zones can experience a very different light environment from exposed fruit.

NETTING CHANGES AVAILABLE LIGHT

Shade and hail protection can alter the amount and distribution of light within the orchard.

UNIFORMITY MATTERS

The aim is not maximum reflection everywhere — it is better management of available light across the target canopy.



CAPTURE THE OPPORTUNITY. REFLECT THE LIGHT.





MORE THAN A SILVER SHEET

AgriSun is not simply supplying reflective plastic.

We are supplying the film together with the application guidance, crop-specific research and practical tools growers need to evaluate it responsibly in their own orchards.

**The film provides the reflection.
The orchard determines how that light is used**

LET'S GROW BETTER TOGETHER

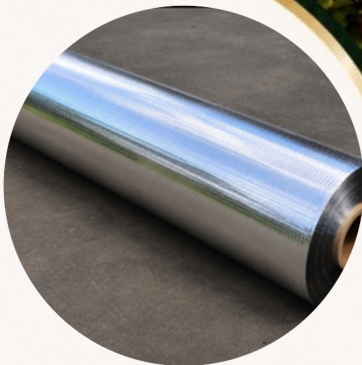
**YOUR ORCHARD. YOUR CULTIVAR.
YOUR CONDITIONS.**

AgriSun combines reflective orchard film with research-informed guidance and practical application support.

Whether you are exploring colour development, light distribution beneath protective netting, or simply want to understand whether reflective film has a place in your orchard – start with the orchard itself.



THE ORCHARD FLOOR CAN DO MORE.



WHY AGRISUN?

Research-informed

Our guidance is built around published orchard research.

Crop-specific

We don't assume one programme fits every crop or cultivar.

Locally focused

Where South African evidence is still needed, we identify it and encourage measured local trials.

Technically supported

Growers have access to installation guidance, crop-specific resources and our scientific research library.

WANT TO KNOW IF AGRISUN FITS YOUR ORCHARD?

Talk to us about your crop, cultivar and production system.



Scan to explore the AgriSun Grower Technical Library



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South Africa

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