Integrated Pest Management (IPM) Materials

Woven Fabric Sheet with Adhesive

Contrast of light and shade due to irregular translucency of the warp and weft threads of the fabric

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Three-dimensional contrast created by the uneven surface structure peculiar to the textile





Translucency and surface unevenness of the sheet



When the sheets are placed on paper with printed text, the text remains visible due to the translucency of the sheets







Leafminers - Stable flies Thrips palmi Thrips tabaci - Fruit flies Planthoppers Whiteflies



-House flies -Stable flies etc. -House flies

-Flower thrips -Fruit flies - Thrips palmi -Thrips tabaci etc.





The values in the test data are measured values, not guaranteed values. Please feel free to contact us. We'll be happy to answer your questions.

KOZUMISEIMA 🕹 Since1890

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Agricultural Materials Catalog



Dattanda! Koizumiseima's Agricultural Materials

What does "dattanda!" mean?

Japanese phrase "dattanda!" has two key meanings:

1.An expression of amazement.

2.A phrase for discovering something previously unknown.

We aim to be an indispensable force that steadfastly supports agriculture and makes a lasting global impact beyond Japan, even if unnoticed in daily life. We hope that when people notice us, they say with surprise and inspiration:

"Koizumiseima dattanda! We've been using Koizumiseima's products for a long time!"

Greenhouse Inner Curtains

Improves light environments thanks to a unique folding method





Reflective PP/PE Sheet

Installation around crops improves light environments



Reflective PP/PE Sheet

Heat Diffuse eflectior

Reflective PE Sheet UV Plus

Reflective PE Net UV Plus

Installation around a greenhouse keeps pests out









Contributes to reducing extreme heat

Woven Fabric Sheet with Adhesive

Attractive effect with two types of contrasts





Reflect light of a wide range of wavelengths to create a suitable environment for crops

Reflectance comparison

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Reflective PP/PE Sheet | Japanese Patent No.6319853







80

Heat Shielding

Suppresses temperature rise on the ground surface by highly reflecting light in the infrared region



Improvement of Light Environment

Increases yield, enhances coloring

by highly reflecting light in the 400–700 nm region

Photosynthetic rate and light intensity



- Gray colored sheet - Reflective PP/PE Sheet Measured on the lowest leaf of a tomato plant Test Institutes: Ehime University

YouTube 📘 Case study of yield 同時

Yield and fruit weight of tomatoes



Yield Gray colored sheet Fruit weight - Gray colored sheet Reflective PP/PE Sheet - Reflective PP/PE Sheet Test Institutes: Ehime University







Reflective PE Screen | Japanese Patent No.6319853





Heat Shielding

Contributes to reducing extreme heat and improving the working environment through its high reflectivity and light diffusion



Strawberry Fruit Protector

Guards strawberries

against pest damage, water accumulation, and thermal burn



900

increases



*Successful Applications in Japan



Improvement of the Growing Environments

Increases yield

by preventing high-temperature damage





YouTube D

Heat shielding test in a greenhouse





YouTube

Case Study on Improving High-Grade Produce Ratio

Reflect light of a wide range of wavelengths to create a suitable environment for crops



Japanese Patent No.6319853 **Reflective PE Sheet UV Plus**





Pest Control

Causes "flight confusion" of tiny pests

due to high reflection in the UV region.



5

Installation location

Corridors in

the greenhouse

Corridors in the greenhouse, elevated bed

Corridors in

the greenhouse

Open-field, Furrow

Repellent effect test results (Sheet) Crop yield increase test results (Sheet)

Product	Pest*1 Reduction Rate (%)	Installation Location		Product	Increased rate (%)		
	95				105		
Strawberry	52	Around the greenhouse		Strawberry			
	63				113		
	75				107		
Grape	85	Open-field		Tomato	108		
Dry Onion	90	Open-field,		Dry onion	120		
	50	Furrow	,	*Comparison with normal are			
Perilla	51			A ANA			
	50						
Chrysanthemum	90		Ĩ				
Flowers	85	Around the greenhouse					
	90			a sta			
Green onion	Green onion 75			a rentered			
Strawberry	80						

*1 Thrips (Thysanoptera) *2 Comparison with normal area

Reflectance comparison Reflective PE Sheet UV Plus Reflective PP/PE Sheet 450 660 870 1040 1250 1460 1670 1840 2050 2260 2470 **POINT!** High reflection in the UV region

YouTube Thrips' behavior after dropped on the sheet





Pest reduction test on citrus trees





Enhances ventilation with a mesh size of 0.6 mm

Airflow and working environments in greenhouses can be improved

Pest repelling mechanism

-Reflective PE Sheet UV Plus -Reflective PE Net UV Plus -Reflective PE Screen



Tiny pests receive UV rays on their backs, which helps them maintain their flight posture.

6

Reflective PE Net UV Plus



-Green onion -Paprika -Spinach -Avocado







Pest Control

Boosted repellency rate with synergistic effect of the sheet

Repellent effect test results(Sheet & Net)

Product	Pest*1 Reduction Rate (%)					
Strawberry	Sheet 98 & Net	Sheet 87				
Green Onion	Sheet 96 & Net	Sheet 62				

*1 Thrips (Thysanoptera)

*2 comparison witt normal areas (without the sheet, with a normal 0.4mm mesh size net)

Ventilation





POINT! High reflection in the UV region





Our reflective material diffuses and reflects UV rays. As a result, pests become disoriented in flight and fall

Greenhouse Inner Curtains

Venus Series



International Patent Pending PCT/JP2024/033013

Our unique weaving method improves the way the curtains fold



White Strong



- White film with heat-shielding performance equivalent to aluminum foil
- High heat-shielding and insulation with multiple internal air pockets
- Applicable to both inclined and horizontal systems
- Certified with PET Bottle Environmental Recycling Mark



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White

- 🗄 EVOH film
- Excellent moisture absorption and permeability
- 🗄 High heat retention



Natural

💿 EVOH film
Excellent moisture absorption and permeability
High heat retention

Reduces drip-off



White Strong

Warp

Film

Wef



White #50

White #30

Plain Weave

with high density

Durable, tightly woven fabric



Natural



Jul .

Superior

Endurance

Metal #65

Approximate

5

Years



Metal #50

Item	Item number	Shading Ratio (Approx. %)	Thermal Insulation	Heat Shielding	Air Perme- ability	Moisture Permeability	Conver- gence	Film Structure	Material
White Strong	#50	50	0	\bigcirc	_	_	\bigcirc		Polyester, Polyethylene
White	#50	50	0	0	_	\bigcirc	\bigcirc		- EVOH (White), Polyethylene
white	#30	30	0	0	_	\bigcirc	\bigcirc		
Natural	_	20	0	_	_	_	\bigcirc		EVOH (Transparent), Polyethylene
Metal	#65	65	0	O	_	—	\bigcirc		Aluminum Foil, Polyethylene Film, Polyethylene Yarn
Metai	#50	50	0	O	—	\bigcirc	\bigcirc		

8



Metal

- 🗄 Aluminum foil
- High heat-shielding performance
- Excellent heat retention
- Reduces heating costs in winter
- Superior durability with a unique high-density weave



International Patent Pending

Achieves neat folding lines with minimal bulging





Covering Materials

Support the growth of open-field vegetables



Covering PE Screen



Heat shielding Light blocking Wind shielding Heat retention



Best for

-Home gardening -Outside / inside greenhouses -Tea leaves Can be used directly on tea leaves without causing damage



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Covering PE Black&Silver Screen



- Excellent heat shielding
- Superior light blocking
- Excellent ventilation
- Protects tea leaves from strong sunlight

Best for

-High-grade tea leaves



Clear EVOH Screen

High transparency ensures ample sunlight

- Excellent heat retention
- Enhances photosynthesis

-Lettuce -Chinese -Potato -Green or

Heat Retention

Provides 26% higher heat retention than polypropylene nonwoven fabric

Test conducted by Japan Textile Products Quality and Technology Center



Breathable



Reduces moisture buildup and helps prevent pests and diseases

Comparative test on lettuce

Applied Materials	Weight (g)	Diameter (cm)	High-Quality Product Rate(%)
Clear EVOH Screen	493	15.8	62
PP nonwoven fabric	444	15.8	46
PVC film	457	15.2	53.2

Test conducted by Awaji Island Japan Agricultural Cooperative



*Note: Due to the nature of the film, it may shrink lengthwise when it dries. Please ensure an adequate allowance shrinkage when installing.



Best for

	-Broccoli
cabbage	-Celery
	-Tea leaves
nion	-Corn

-Green pepper and more



Transparency

Ensures ample sunlight with 94% light transmittance



Strength



Reinforced edges resist tearing, even with pins in use



With a center line mark

Comparison with PP Nonwoven Fabric

- No fuzzing
- Woven structure resists abrasion and prevents crop damage
- E Less fiber contamination