

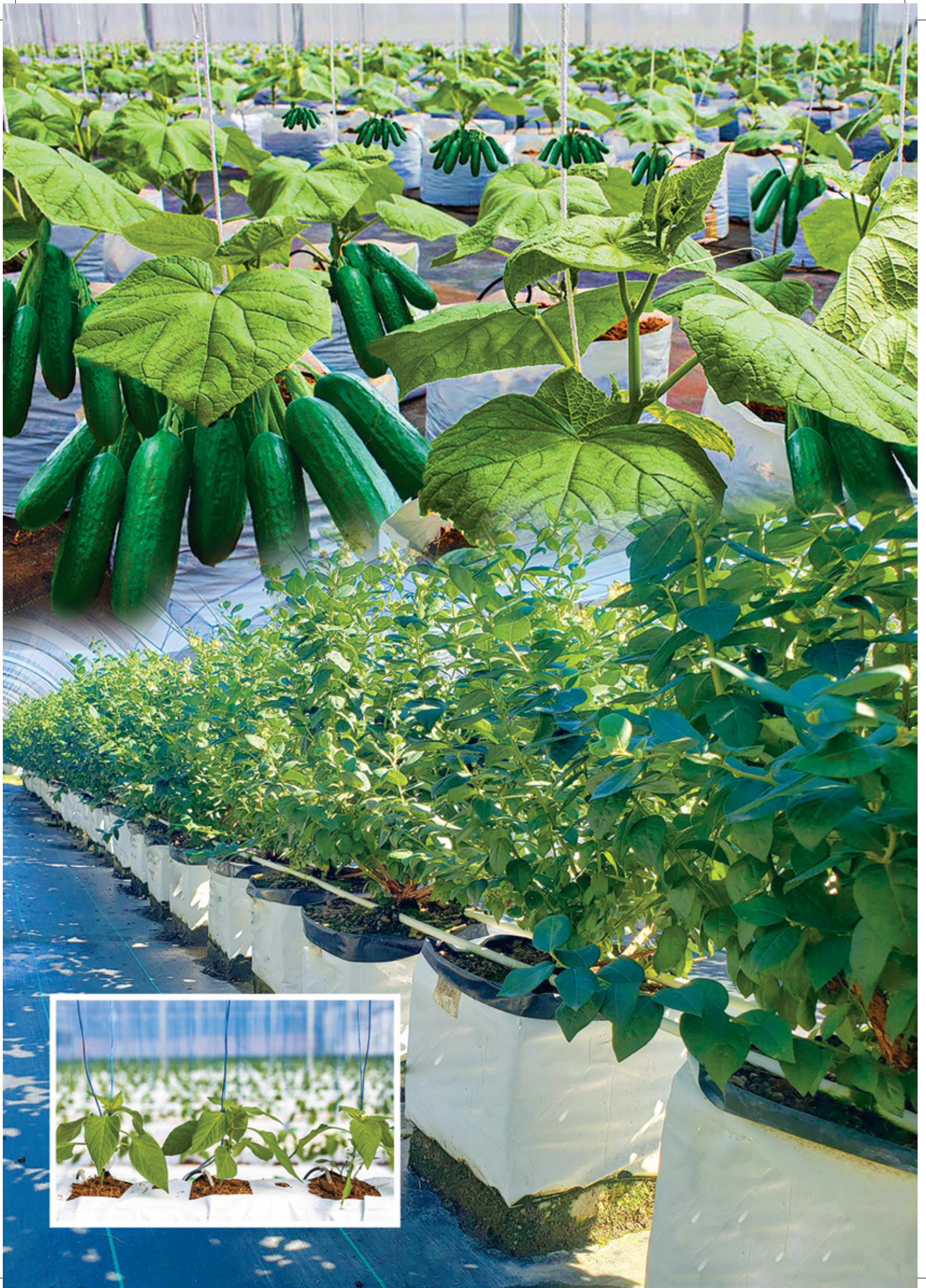


# **DISPENSE SYSTEMS TECHNOLOGIES**

**MODERN/ ADVANCE ROOTING SUBSTRATE**

**COIR | GROWING | MEDIA**  
**PRODUCT CATALOGUE**







## All about Coir Growing Media

Cocopeat is the best alternative to traditional peat moss and Rock wool. Its air filled porosity and high water holding capacity makes it, an ideal growing medium for the plant crops. It is 100% organic and eco-friendly, free from soil borne pathogen and weed. It has a pH of 5.7 - 6.5, EC level 200 + 300 us/cm, K\* level <200mmol/L is ideal for plant growth.

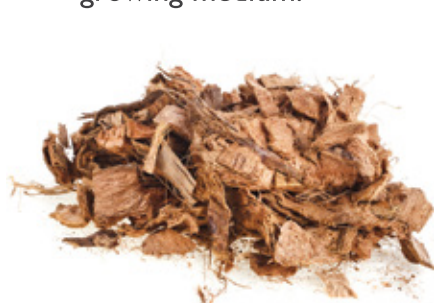
It increases water retention, aeration and provides antifungal benefits when used alone or incorporated into the soil as an ingredient.

## Types of Coir

Coconut Coir is a hydroponic soil-less growing media made from the broken husk of coconuts. There are two types of fibers that make up coir - brown and white. Brown coir comes from mature, ripe coconuts and is a lot stronger, but less flexible. White fibers come from pre-ripe coconut husks and are far more flexible, but much less strong.

Almost all of the coconut coir used for hydroponics is brown coir since it's processed even more after initial harvesting.

Most coconut coir products carry three types of coconut coir: the fiber, the pith (or coconut peat), or the coco chips. Each type brings specific benefits and together they provide a powerful growing medium.



### Coco Chips

Coconut chips are a natural type of expanded clay pellet, except it's made from plant matter instead of clay, so they do break down eventually. The chips are large enough to create air pockets, but also absorb water so plants won't dehydrate.



### Coco Fibers

Coconut fiber adds air pockets into your medium. It's not very absorbent, which is beneficial since your growing media needs air pockets in order to provide oxygen to the root zone. The fibers are made of cellulose so they break down fairly quickly, resulting in the collapse of the air pockets over time.



### Coco Peat or Pith

The pith looks like finely ground coconut or peat moss. It's very small and absorbent, so if you were to use just coco peat as your only growing medium, you would drown the roots of your plants.



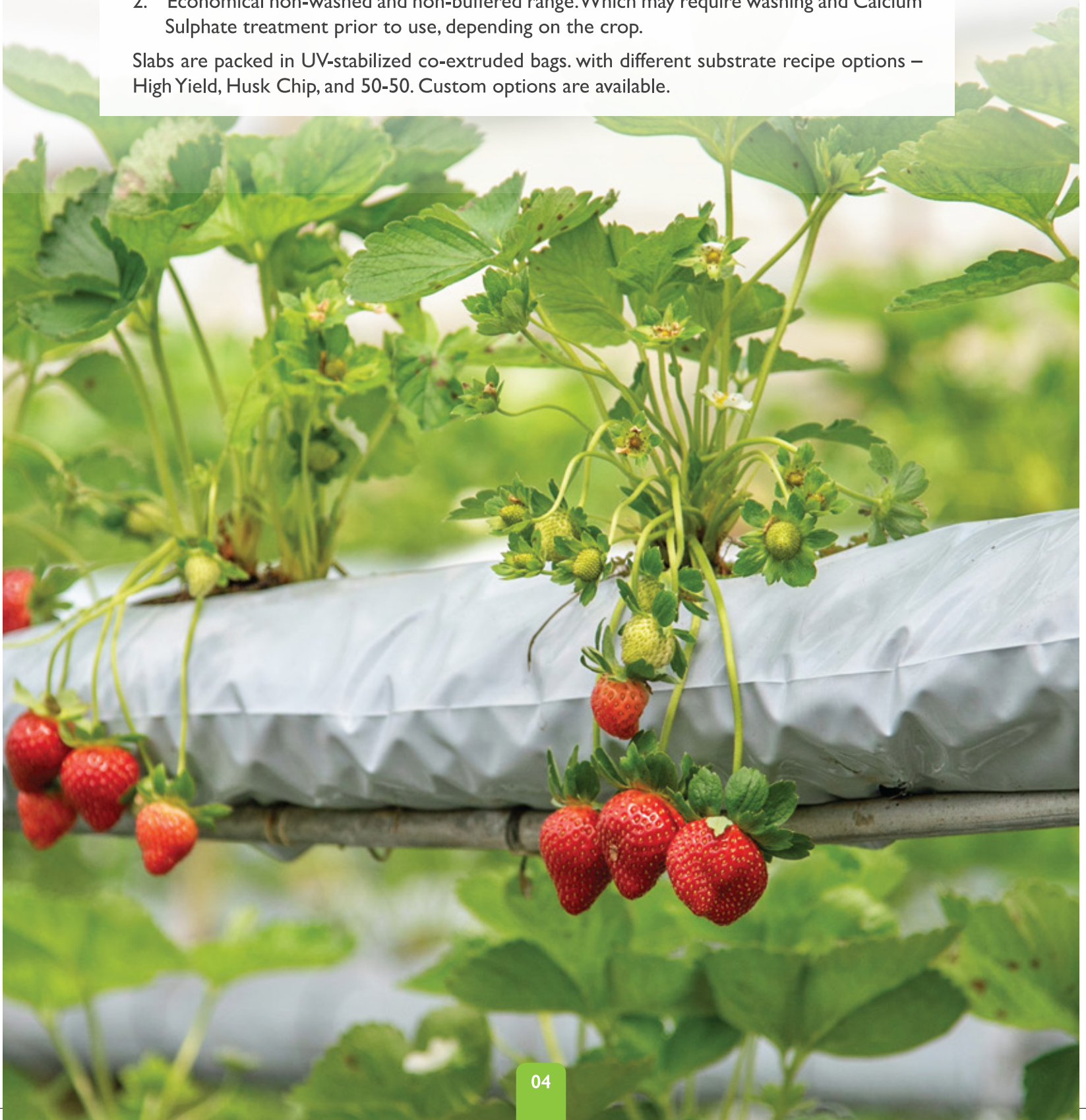
## Grow Bags

We offer a range of mixes for different crops incorporating coir pith, coir chips and short fibre in varied ratios to offer the required water content. The homogenous distribution of coir and chips have observed and experienced their plants with evenly distributed roots, faster root growth and healthier stems.

**Grow bags are available in two categories**

1. Ready To Grow low EC, washed & buffered premium quality.
2. Economical non-washed and non-buffered range. Which may require washing and Calcium Sulphate treatment prior to use, depending on the crop.

Slabs are packed in UV-stabilized co-extruded bags. with different substrate recipe options – High Yield, Husk Chip, and 50-50. Custom options are available.



### 100% Coco Peat

1000 Growbags contain 100% coco pith for plants that needs higher water holding capacity in the growing media

The substrate has a 75% water-holding capacity and 5% air filled porosity which makes it perfect for use in hot climates. This best fits for cut flowers & tomatoes

- Faster root growth
- Distributed roots
- Healthier stems



### 80:20 Mix

8020 Growbags has a top layer of coco pith, which stimulates faster root growth.

The bottom layer of with high air filled porosity made of husk chips.

This ensures optimal oxygen diffusion in the root zone. This best fits for carnation & cucumber.

- Faster root growth
- Distributed roots
- Healthier stems



### 50 :50 Mix

5050 Growbags contain a special combination of 50% coco pith and 50% husk chips, mixed for the best possible results.

The substrate has a 60% water-holding capacity and 20% air filled porosity which makes it perfect for use in hot climates. This best fits for roses & strawberries.

- Faster root growth
- Distributed roots
- Healthier stems



### 30: 70 Mix Formulation

3070 Growbags contain a of 25% coco pith and 75% husk chips for plants that needs oxygen diffusion in the root zone.

The substrate has a 45% water-holding capacity and 35% air filled porosity which makes it perfect for use in cold climates. This best fits for gerbera Tulip & for multiple short growing cycles

- Faster root growth
- Distributed roots
- Healthier stems



**We can customize formulation and packing according to your specifications.**

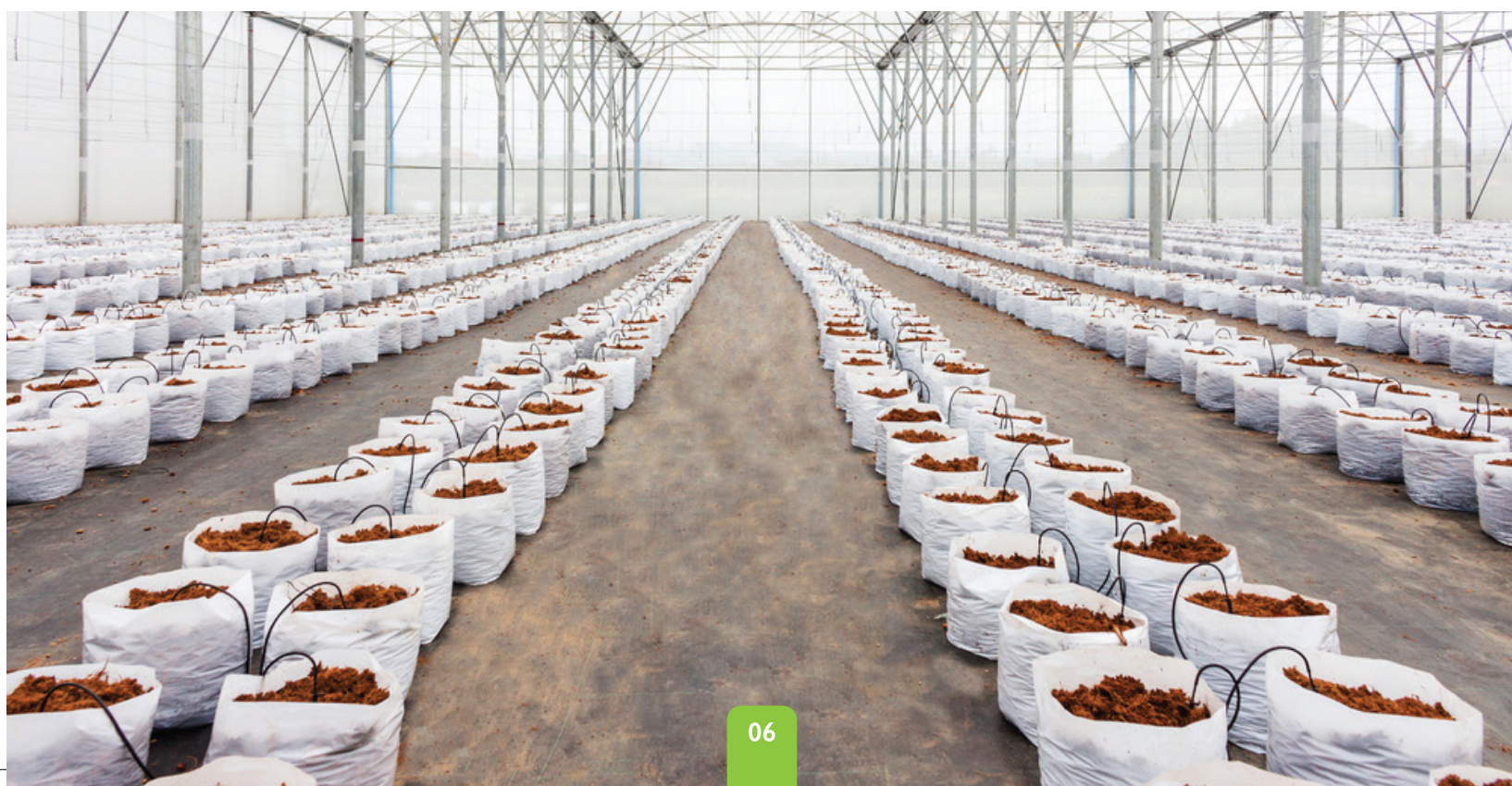


## Chemical Parameters

Material Quality	CHEMICAL PARAMETERS	Grow bag 5050	Grow bag 3070	Grow bag 8020	Grow bag 0001
Un-buffered	PH	5.5 - 6.5	5.5-6.5	5.5 - 6.5	5.5 - 6.5
	EC	< 2500 $\mu\text{S}/\text{cm}$	< 2500 $\mu\text{S}/\text{cm}$	< 2500 $\mu\text{S}/\text{cm}$	< 2500 $\mu\text{S}/\text{cm}$
Semi un-buffered	PH	5.5-6.5	5.5 - 6.5	5.5-6.5	5.5 - 6.5
	EC	< 1000 $\mu\text{S}/\text{cm}$	< 1000 $\mu\text{S}/\text{cm}$	< 1000 $\mu\text{S}/\text{cm}$	< 1000 $\mu\text{S}/\text{cm}$
Washed	PH	5.5-6.5	5.5 - 6.5	5.5-6.5	5.5 - 6.5
	EC	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$
Buffered	PH	5.5 - 6.5	5.5 - 6.5	5.5-6.5	5.5 - 6.5
	EC	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$	300 $\pm$ 200 $\mu\text{S}/\text{cm}$
	K <sup>+</sup> conc	< 2.0 mmol/l	< 2.0 mmol/l	< 2.0 mmol/l	< 2.0 mmol/l

## Physical Parameters

PHYSICAL PARAMETERS	Grow bag 5050	Grow bag 3070	Grow bag 8020	Grow bag 0001
Material Type	50% coco pith + 50% husk chips mix	30% coco pith + 70% husk chips mix	80% coco pith + 20% husk chips double layered	100% husk chips
Organic Matter	96	96	96	96
Particle size	0.2 - 8.0 mm	0.2 - 8.0 mm	0.2 - 8.0 mm	6.0 - 10.0 mm
Dry Bulk Density	75 - 85 g/l	75 - 85 g/l	70 - 80 g/l	65 - 75 g/l
AFP	25	30	34	44
WHC	70	65	60	50
Total Pore Volume	95	94	94	94







## STARTER PELLETS

Starter pellets are compressed coir substrate manufactured in different sizes and in different air/water ratios, particle structures making tailor made for specific customer needs. The pellets comes with different coco peat and crushed coconut husk mixes in unwashed, washed or pre-fertilized material.

Starter pellets are lightweight, highly compressed, dry discs which makes it easy to work with and economical to ship. After propagation discs transplant well, either into larger containers, or directly into the ground.

They can also be used in advanced applications, such as culture and afforestation. The unique wrapping breaks down via micro-organisms in the pot or in the ground, enabling easy rootlets' penetration. Different substrates and lengths are available according to use.

## Starter Pellets Sizes

Disc Size	Initial Height *	Expansion Height*	Dry Weight*	WHC *	AFP*
24 mm	8.00 mm - 9.00 mm	34 mm - 38 mm	1.8g -2.2g	65%-70%	20%- 22%
32 mm	6.00 mm - 7.00 mm	28 mm -34mm	2.8 g -3.2g	70%-75%	15%-18%
40 mm	9.00 mm -11.5mm	35mm - 38mm	4.8 g -5.5g	65%-70%	18%-20%
50 mm	12.00 mm - 15 mm	42 mm - 50 mm	6.5g - 7.00g	65%-70%	18%-20%
120 mm		190 mm -200 mm	350 g	65%-70%	18%-20%
135 mm		190 mm - 200 mm	420g	65%-70%	18%-20%
150 mm		190 mm -200 mm	600g	65%-70%	18%-20%

## Starter Blocks



Starter block is a renewable organic propagation media, that offer excellent drainage and aeration properties for healthy seed germination and strong rooting. This product is made of special particle blend buffered coco pith material which ensure quality plant germination. Grow block enclose with a degradable bag to hold the shape of the block. This can be used as an alternative for widely used rockwool media.

This product maintains WHC of 60-75% and AFP of 20-35% which ensuring optimum oxygen level to the roots and water requirement in the vegetative stage of the plant to grow rapidly. Grow block remain stable in the propagation stage of the plant due to naturally high lignin content of the substrate. This product can be optimized to any EC or PH range and can be used with different range of fertilizers.

## Physical and Chemical Properties

### Physical

PRODUCT	MATERIAL	WHC	AFP	Particle Size	Bulk Density
Grow Block common sizes	100% Coco pith 5x5 cm, 8x8 cm, 10x10cm	60 - 75	20 - 35	0.2 -4.0 mm	75 - 85 g/l

### Chemical

PRODUCT	FC	PH
Grow Block (without fertilizer!)	300 ± 200 µS/cm	5.0-5.4
Grow Block (with standard fertilizer)	1250 - 2300 µS/cm	5.0-5.4





### 5Kg Blocks

5 kg blocks comes in a high compressed ratio of 5:1 makes the transport costs low and affordable. It has a moisture capacity below 20%. Electronic conductivity can be customized according to the buyer's request. These bales can be made with 100% coco pith, 100% husk chips with different particles size or mixers of Coco pith and husk chips

Bales have Extensive Applications in Horticulture by Virtue of its Excellent Drainage Properties and Ability to retain high Oxygen Levels. Coir pith contains high quality of nutrients that keep the soil healthy in a natural way. It acts as a top dressing that helps maintain moisture and reconditions the soil



It is an environmentally-friendly & sustainable organic alternative to peat moss. Bales can be used in greenhouses, vertical gardens, landscaping, exclusively alone as a growing medium, blended together or mixed with expanded clay pellets, perlite or topsoil. It's a great bedding material for worm farms and perfect for all types of plants including fruits, flowers, vegetables, bonsai, cactus, orchid, roses, succulents, mushrooms and hydroponics.

### Physical and Chemical Properties

Dimensions	Moisture	EC	PH	Volume
75x45x30cm	40-50 %	Adjustable	5.5 - 6.5	190-200 liters



## 25 Kg Growing Media

These blocks comes with a lesser compression ratio 2:1 easy to loosen up and have multiple applications. Product material consist of coco pith or husk chips or different combination according to the customer needs.

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## Physical and Chemical Properties

Dimensions	Moisture	EC	PH	Volume
28x28x14cm	20%>	adjustable	5.5 - 6.5	65 liters



## 25kg Blocks - Animal Bedding



Coco Peat is a comfortable and best suitable material for animal friendly bedding. It is ideal as bedding for as floor layer for animal sheds due to its moisture absorbing quality and soft bed cushioning effects. It is easy to lay and remove and free from dust particles.

Coco Peat helps to keep your pets at best comfort levels and healthy. Coco Peat also avoids bad odours and reproduction of flies and the midge flies about 90%. Cocopeat is replacing all other animal bedding products all over the world.

### Advantages of using Cocopeat for Animal Bedding

- Cocopeat is 100% Organic and cost-effective
- It is easy to lay remove and comes without fine dust particles
- It carries no pathogenic agents
- Cocopeat has cushioning effects for Horses and reduces discomfort in Limbs and Ligament by preventing fatigue of them.
- It absorbs moisture better than any other medium
- Can be used in all spreading systems
- Easily disposable as a Coir Compost for soil It maintains optimal phytosanitary conditions.

## Coco Bricks

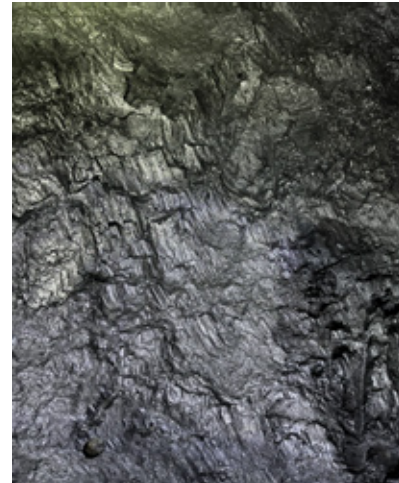
The Coco Bricks are similar to the 5kg bales, but for smaller volumes, allowing growers to place them directly in pots or growing bags at a volume of 9 liter. The Brick weight is 650 grams and each pack contains 8 pcs.





# **We supply**

**Conductive graphite , Quartz , Activated carbon,  
Emulsion paints, Carbon dust , Silica and minerals**



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