

## Using Coco Media in Horticulture

### Overview

The various parts of the coconut husk and pith, when ground and cut, can be used in horticultural production. Greenhouse vegetables, forestry seedlings, flowers and other ornamental greenhouse and nursery crops are increasingly grown in media that is partly or completely comprised of coco. Growers have several options to choose from based on the different textures offered by the various parts of the coconut husk and pith.

#### Husk:

The hard outer layer of the coconut, the husk can be cut or crushed into chips to provide structure to your media and to improve air porosity and drainage. This product can be further graded to produce chips of a set size, if desired.

#### Pith:

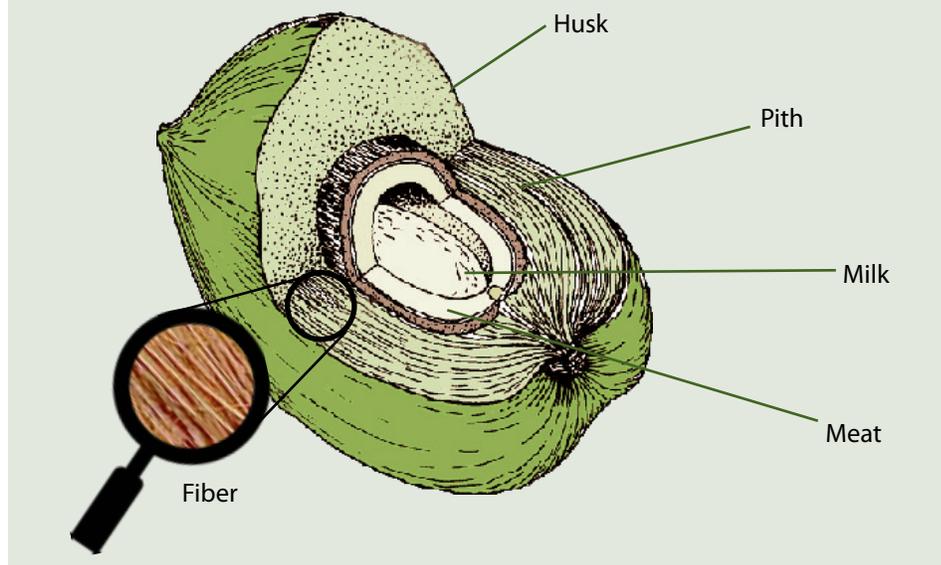
Inside the husk of the coconut is the pith, also referred to as coco "peat". The pith is the fine material in the coconut. Pith is used to assist water retention and substantially improves rewetting. In slabs or growbags, the finer pith material assists rooting of young plants.

#### Fiber:

Throughout the husk and pith is found the coconut fiber, also called "coir". These fibers or strands were the vascular bundles in the coconut as it developed. This fiber can be collected and used separately. Like crushed chips from the husk, this fibrous material adds structure to media and allows for air porosity. Lignified fiber in planting media affects the surface tension of water droplets by spreading it along the fibers, making the water more available to root hairs.

### The Parts of a Coconut

In horticulture, the hard husk and the fibrous pith provide the different textures needed in greenhouse and ornamental production. The various parts can be used independently or blended to impart different qualities to the media. Coco fibers can also be mixed with any other media, such as peat moss, perlite, wood chips and others depending on the requirements of drainage, air porosity and other factors.



*Cocos nucifera*

Growers can use 100% chips, 100% fiber, 100% fine coco peat, or a blend of chips, fiber and peat many ways in horticultural production. Whatever the combination, depending on the requirements of the grower, it will be processed into compressed blocks or slabs (growbags) at the factory in Sri Lanka, for shipment to TerraLink. Regardless of pith, husk or fiber, coco is aged to stabilize it against initial decomposition. Aging the coco helps to lignify it so it is less susceptible to degradation. RichGROW brand is unique in having low EC levels based on washing, which leaches out most of the salts. Or, it can be purchased unwashed, depending on demand.

## Suggestions for Using RichGROW Coco Media:

Our RichGROW Coco media can be used in a wide variety of ways in horticultural production in greenhouses and nurseries.

### Coco Slabs:



Currently in use in greenhouse vegetable production, slabs can also be used for greenhouse strawberries. Slabs can be made with 100% of any one textural ingredient, or layered, for example with coarser chips and fiber at the bottom and fines on top. This gives young plants the best chance of rooting and taking hold quickly, while allowing lots of drainage and air spaces closer to the bottom. TerraLink stocks RichGROW "Control" slabs with 100% crushed chips, with a top layer of peat fines to encourage rooting. "Performance" slabs, a blend of crush and fines, are available by custom order.

### Coco Blocks:



Our 5 kg compressed blocks will expand to 4-5 times their size, depending on how they are hydrated. There is much potential in using blends of different textures, such as 60% chips / 40% peat in floral production, ornamental nurseries and silviculture nurseries. Try using it in bedding plants, potted plants or hanging baskets.

### Fiber:



The fibers from the coconut have not been used independently of other ingredients in media. Coco fiber, or coir, is beneficial in water distribution through the media, and assists in rewetting. Water travels along the fibers, helping to consistently wet the substrate.

### Peat:



Use 100% coco peat fines for situations in which water retention and rewetting is important (e.g. hanging baskets).

### Chips:



100% crushed chips are ideal for orchids and gerberas, where a lot of air spaces and good drainage are critical.