



Coir Physically

Fine tuning with raw materials

www.klasmann-deilmann.com

Fine tuning with raw materials

The coconut husk, the mesocarp, serves as the basis for our coir products. In principle, three basic products can be produced from this; coir pith, coir crush or chips and coir fibre. Different fractions can be made through different ways of cutting, sieving and grading. The mix of the various basic products, along with the stability, ultimately determines the physical properties, whereby final coarseness is determined by the fine particles.

Coir Pith

The husk of the coconut consists of fibres with coir pith in between. Separating the fibres and the pith creates two separate products. Different particle sizes are produced by sieving the coir pith, each of which has its own application. The most commonly used is the ¼" sieved material with an air content of about 20%. Several other fractions are possible.

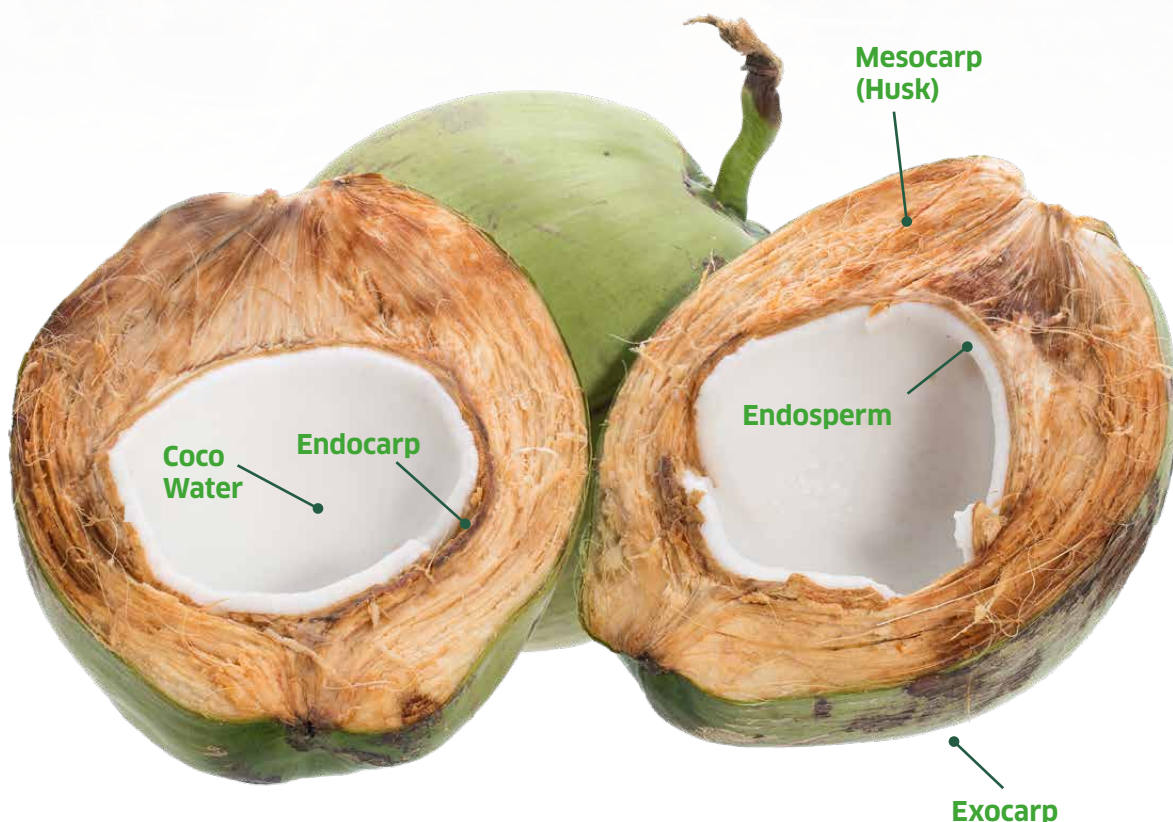
Coir Crush or Chips

The use of coir crush increases the air content of a mixture. Depending on the quantity, size and shape of the crushings, the air content can be increased by 10 to 40%. In addition, the naturally present

fibre increases the distribution of water and air. Therefore, the use of coir crush makes a mixture drier.

Coir Fibres

A large part of the husk consists of fibres. This fibre is mainly used in products such as mats, brooms, mattresses and geotextiles. By cutting the fibre, this can also be used in substrates. Therefore, the use of coir crush makes a mixture drier. This may be from top to bottom for a better drainage, from bottom to top for a better absorption like in ebb and flood systems and for water distribution in the substrate.



Uniformity

Coir pith and coir crush can both be used as pure material or in mixes, coir fibre always has to be mixed with other constituents. The different products can all be mixed with each other and with other constituents to achieve the desired substrate. Uniform mixing and a good connection between the different components are essential for a uniform and even distribution of air and water and thus for a uniform root growth. The connection between the different particle sizes is crucial to distribute water and allow air flowing into the substrate to the plant roots.

Stability

Due to the high proportion of cellulose in relation to lignin in the young coconut, the material is physically unstable. The physical structure therefore changes during cultivation; the material becomes finer and wetter and the air content decreases. Klasmann-Deilmann overcomes this by allowing the material to age in the factories under clean conditions. This reduces the cellulose content and our premium coir raw materials become stable so that they do not change physically during cultivation. Young coir contains phenols. During aging these are removed from the coir in a natural way. Phenols are toxic for plants.



DISCLAIMER

The information in this brochure is based on our current knowledge and does not claim to be complete or correct. We reserve the right to make changes. We do not assume any guarantee or liability for successful cultivation, as the use of our products must be adapted to the individual site, storage and cultivation conditions of the respective nursery, which is beyond our knowledge and influence. The information in this brochure cannot replace individual advice. They are neither binding nor part of a consulting or information contract.



Find out more
about our premium
coir raw materials

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we make it grow

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