

Coir pith - Wealth from waste

FACT
SHEET

Soils are destroyed

With the introduction of farm machineries, farmers have become less dependent on animal traction. As a consequence, there is less farm yard manure available and farmers use chemical fertilizers as replacement. Soils quickly deteriorate which leads to poor yield.



Coir pith contains lots of lignin, which is not easily biodegradable

Making coir pith more biodegradable

Coir pith is the dust that remains after the fibre has been extracted. Coir pith contains lots of lignin, which is the woody material that gives plants their strength. This lignin does not easily decompose. Cowdung contains good microbes that can decompose lignin. Good microbes need nitrogen to grow. Mushroom spawn or beneficial fungi like Trichoderma also break down lignin.

How to prepare and apply coir pith compost

Soak the coconut husks to separate the coir pith from the fibre. Sieve the coir pith until there are no more fibres in it. Select a shaded or sheltered area to make the compost.

Prepare an organic decomposer rich in good microbes. Pour 100 litres of water into a plastic barrel and add 5 kg of cow dung, 10 mashed bananas, 3 litres of cow urine, half a kg of jaggery or raw sugar, half a kg of flour of any pulse and finally a handful of soil. Stir this twice a day and cover it with a gunny bag and use it after one week.

Build up the compost in 5 layers. Spread out a first layer of about 20 kg of sieved coir pith. Sprinkle 10 litres of organic decomposer on the layer of coir pith. Add 4 kg of decomposed poultry waste or other material rich in nitrogen, such as urine, Azolla or soya hulls. Add additional good microbes by spreading a slurry of a handful of cow dung over the coir pith bed. Add a new layer of sieved coir and in the same way, make five layers.

You can also decompose the coir pith by spreading 100 grams of mushroom spawn over each layer. Or add 100 grams or 10 tablespoons of Trichoderma powder on each layer. Sprinkle water onto the heap daily to keep it moist. Open up the compost once every 10 days. After a month the coir pith is completely decomposed and ready for use.

Apply 100 kg of the compost on 200 square meters of soil. For nurseries, mix 1 part of coir pith compost with 4 parts of soil before filling the planting bags or seed trays.

You can grow vegetables and ornamental plants in pots filled with coir pith compost. For new trees, add a few handfuls of compost in the planting pits. For fruit trees or coconut trees up to 10 years, apply up to 10 kg of compost on the top of the soil once every 6 months. For trees older than 10 years, apply up to 15 kg once every six months.

Watch a full video on this topic at www.accessagriculture.org or contact one of the people below to get the video on DVD.

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