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Using a Chipper/Shredder to Create Cocopith Potting Mix from Coconut Husk

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otting mixes for nurseries should be light, well aerated, flow easily when dry, and hold water and nutrients. Commercial potting mixes may be made from peat moss, perlite, or vermiculite. These imported materials are, however, expensive and often unavailable in Micronesia. Cocopith (coconut pith, or cocopeat) is the bulky material that binds together the fibers in coconut husks. Cocopith makes a good substitute for peat moss and can be produced from coconut husks using a portable chipper-shredder. This cocopith can be mixed with compost or chicken manure (composted) to produce an excellent medium for growing vegetable seedlings, tree seedlings, and various other crops. This publication covers the production of cocopith potting mix, and a video of the process is found by clicking here (https:// tinyurl.com/y98wxcb3)

Benefits of cocopith:

- Cocopith is a multipurpose growing medium
- It is 100% organic
- · It has excellent water holding capacity
- It encourages development of a strong and healthy root system
- It has high porosity and allows good air circulation
- · It is a natural soil conditioner
- · It is free from disease-causing organisms
- · It is recyclable

Steps in producing cocopith potting mix from coconut husks:

1. Let coconut husks compost outdoors for three months to soften them. Fresh husks may be used and produce a longer lasting product, however, coarse fibers need to be screened out before using. Partially decomposed husks are ideal for shredding. (fig. 1).



 Use machetes to cut up coconut husks into bits an inch or two long to fit into the shredder. This is easy to do once the coconut husks are slightly decomposed (fig. 2).



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3. Feed the cut-up coconut husks into the shredder. A machine of at least 10 horsepower is recommended to shred the tough coconut husks. Be careful of your hands and never reach into the shredder without turning it off and letting it stop first! (fig. 3)



4. A mix of the coconut fibers and cocopith will come out of the shredder (fig. 4).



5. Use a mesh screen to screen the mix and separate the cocopith from the fibers (fig. 5).



6. Mix 3 parts cocopith to one-part composted chicken manure to make an excellent potting mix (figs. 6a and 6b).



7. Although it seems like a lot of work, college students can make enough potting mix in a morning for their vegetable nursery (fig. 7).

