

## Woodchip compost powered propagation bench

A simple, low cost, off-grid propagation bench. I wanted something that did not need electricity as it would have been a big cost outlay. I heard that Fred Bonestroo at Duchy Home Farm had built a simple bench out of pallets, using wood chip as a source of heat, so I went to see his and copied it.

My design was to put 3 pallets on their sides to make each side wall with one more pallet to make the end. I joined them together using a couple of lengths of wood I had lying around and used a pallet divider to make the other end easily accessible for loading and removing woodchip. c.3m<sup>3</sup> of fresh woodchip is loaded in January (1<sup>st</sup> load was leylandii, which seemed to heat up nice and quick). I made some simple slatted shelves to sit on top of the chip as I didn't want to have to reach down as the chip composted. Fred lays his straight on the chip I believe. I lay bubble wrap over the top of some cloche hoops I have fixed into the wood. A piece of PVC pipe joins the cloche hoops to create stability and allow the bubble wrap to slide back and forth without ripping. The bench maintains a temperature of at least 5°C higher than the temperature in the rest of the tunnel



It can fit 14 x 216 trays = 3000 modules. It has gone down to just above freezing on the thermometer, but I've had no problems with damage, damping off etc. last year. Didn't use for tomatoes, peppers or celeriac as was concerned they might be too sensitive (I think Fred probably has done these as he says he does all his plant raising in his - might just have to sow a bit later?).

Positives: Cheap (or even free!), easy to make, part decomposed woodchip can be used for other purposes (composting or soil amendment - I used mine for a path in a poly-tunnel, which will be used as a soil amendment on the bed the following year), atmosphere in the bubble is kept moist which is good for germination.

Negatives: Bit of effort loading and unloading (about 4 hours each time, but good to warm you up on a cold winters day), sourcing material on time and getting it near the bench could be tricky (especially without a tractor/loader), it is not very controllable, I had to get mine going again by watering the chip and moving it about a bit with a fork (although Fred said he didn't need to do this)

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