

Pasteurizing Growing Media or Garden Soil in An Oven

If you want to reuse growing media or to blend your own using finely screened compost or garden soil, it is best to kill any harmful fungi, bacteria, nematodes, or weed seeds that might be present. A microwave is not the best choice as they tend to heat unevenly.

An oven is the best technique. Pay close attention to the temperature and time, as overheating media or soil in an oven can leave some “earthy” odors, and that is an understatement!

Here are the target temperatures for ½ hour to destroy various soil pathogens and pests:

- 140 degrees - most fungal diseases
- 160 degrees - most harmful bacteria and insects
- 180 degrees – most weed seeds

Foil Covered Pan

- 1) Preheat oven to the target temperature.
- 2) Place premoistened (not soggy wet) media or finely pulverized garden soil in a large pan up to 4” deep.
- 3) Cover the pan and soil with aluminum foil.
- 4) Place pan in oven away from heating element
- 5) Check the temperature of the media or soil periodically with a meat or candy thermometer placed through a hole in the foil.
- 6) When the temperature of the media or soil reaches the target temperature. Leave it in the oven for 30 minutes longer before removing it to cool.

Oven Bag

An alternative option is to place the media up to 4” deep in a large plastic bag made for oven baking, such as a turkey bag. Make a hole or small slit in the bag for air to escape and for inserting the thermometer.

