Brewing Compost Tea: Part 2—Build Your Own Brewer
By David Dorsey, Consulting Rosarian

People have been asking about my brewing device since I started brewing compost tea two years ago but my methods were cumbersome and they would have deterred most people. A complete redesign was way overdue so, back to the drawing board. Revisions 8 and 9, seen here, are easily usable plans that will produce a high quality brewed compost tea. My requirements while designing these brewers were that they must:

- Be easy to build
- Have a minimal number of parts
- Be easy to clean
- Pass air through the trapped compost
- Use the same design concept for both a 5 gallon and a 32 gallon unit.

Figure A:
Cut a length of PVC pipe and sand the ends smooth (5 minutes with a small orbital sander).
The PVC dimensions are:
5 gal unit: 10.5" section of 4" diameter PVC.
32 gal unit: 22" section of 6" diameter PVC.

Find a plastic container for the “air chamber” and cut a length of women’s nylon hose from the toe end. The plastic container, inserted narrow end first, will tap at least 1" into the PVC.
5 gal unit: Cut a 7" piece of the nylon. Use a 1 lb plastic cottage cheese container with about six 3/8" holes drilled in the bottom.
32 gal unit: Cut a 12" piece of the nylon. Use a 1 gal plastic nursery pot. If you have none on hand that fit well into the PVC then proudly carry the section of PVC in to a nursery and monkey around until you find a good fitting one to buy. Tip: Leave the panty hose at home.

Figure B:
Pull the hose down over the bottom of the plastic pot or container and pull all of the excess length past the opening of the container. With the plastic container sitting upside down on the floor, tap the PVC firmly onto the plastic container (Not shown).

Figure C:
Pull the excess length of nylon back over the PVC and secure with 2 rubber bands (the same size used for newspapers).
5 gal unit: Cut 2 lengths of aquarium air hose about 36" ea.
32 gal unit: Cut 2 lengths of aquarium air hose about 60" ea.

Run a hose down opposite sides of the PVC and under one rubber band, insert air stones, overlap the hoses far enough to join them with a twist tie.
Figure D:
Sit the assembly on end with the plastic container on the floor and add compost.
5 gal unit: Add 4 cups of compost.
32 gal unit: Add 1 gal of compost.
From the remaining nylon hose slit the leg up far enough to cut a section that will easily cover the top opening and stretch down over the sides. The rough sanded surface helps to hold it in place while you secure with two rubber bands. Feed the excess air hose under the rubber bands to keep them manageable.

Figure E:
Caution: Every year people receive serious eye injuries while using bungee cords. BE CAREFUL. Use eye protection if you need to. Attach bungee cords from one end to other to hold the plastic container in place. This keeps the weight of the wet compost from causing the entire bottom assembly to slip out when you remove the device from the completed brew. If it does slip out then you just have to strain the Brewed Compost Tea well before using it in a sprayer. Bits of compost always get into the brew so you should strain it anyway before using in a sprayer. If you are going to use it as a soil drench then the more compost the merrier.

The resistance of the compost against the air will make the brewing tube try to float so you have to weigh it down. This is what makes the unit function efficiently. The air percolating through the compost causes it to churn and remove greater quantities of microbes from the compost putting them into solution where they can multiply more readily. Find a stone large enough so that it can’t slip down into the tube but will still let air escape.

Figure F:
This is the assembled 5 gal unit minus the prepared water. Take the entire assembly, rock included, and submerge it all at once with the bottom of the device off center in the 5 gal bucket and tip the top to the side (as shown). Hold the whole thing in place until the water percolates regularly through the top. If you try to leave it standing straight up the percolating action will eventually tip it to one side. Two or three times during the brewing process I usually tip it across to the other side of the bucket (or trash can) just to make sure the compost gets churned well. The aquarium heater should never be plugged in if it is not submerged as you may burn it out though some have an auto shut off. The air pump should be placed higher than the water level with extra hose looping down to prevent siphoning back into the air pump.

Miscellaneous:
The previous article incorrectly stated a 30 gal unit. I actually use a 32 gal heavy duty trash can with a lid that can be set on loosely. You could use a smaller size, such as a 25 gal with a length of PVC cut 6” shorter than the can is tall. Use the 6” diameter PVC and not the 4”. Trying to force air through tall narrow volume of compost will cause problems.

People have asked me “So you drink this stuff?” It may seem obvious but be clear with people that this “tea” is not a beverage. Show them the articles if they are gardeners. Above all, have fun, read more and I hope that you have the good results that I have with brewed compost tea.