You will now have 10 tee's and 4 elbows facing up, 5 on each side pipe and 4 in the centers of the cross pipes. Glue the 14 bottle adapters into these fittings.

This is what it should look like now,

This assembly will fit on top of a reservoir and plastic storage totes work quite well for this. The pump will flow water from the reservoir into the pipe and flood the plant sites so you need to locate where on the lid of the tote you will drill a hole for the pipe to enter from the reservoir. You also need to locate where the overflow will contact the lid and drill a hole for that pipe as well. In operating the system there are times when you will sample the nutrient solution and need to add water or new nutrient. Making the hole where the overflow returns considerably larger facilitates this easily. This is what the lid with the holes will look like.

Thread on the barbed fitting to the tee with the bushing so you can connect the pump.

This is how the holes drilled line up with the barbed fitting on the left and the overflow pipe on the right.

Cutting the soda bottles

The soda bottles need to be cut so the length of the neck and bottle section that will become the planting site is about 7 ½” inches long. Try to get them all as close to that height as possible. Mark the bottles where you will cut them and start the slit with a razor knife but once the cut is started a scissor works perfectly.

Save the bottom section and cut that off as well, just where it begins to curve to the bottom shape. These will have holes in them to drain the nutrient and retain the growing media. The best way I have found to drill these holes is with a hot nail or a soldering iron. I also cut a slit about 1/8” wide up the