

## Online Extras

### Micropropagation – The Culture of Tissue

by Brian Johns

MaximumYield – USA Edition, April 2009

“Many of the prepared grow mediums are plant specific, which means they contain all of the appropriate minerals, nutrients and hormones needed for your specific plant.”

Another option that is available is to mix together your own grow medium. Below is a simple grow medium recipe to get you started. This recipe can be customized to meet the specific needs of your plant.

Measurement	Ingredient	Instructions
1 Cup	Water	Distilled works best, but at the very least, use purified.
1/8 Cup	Table Sugar	Use an organic variety if you can find one.
1/2 Cup	Stock Solution	This is basically diluted liquid plant food. Use 1/4 Teaspoon of plant food per four quarts of water. If you have a hydroponic nutrient that has worked well for the specific variety of plant you are working with, it is recommended that you use it as your liquid plant food.
1/2 Capsule	Inositol	This is essentially a B-complex vitamin that contains nutrient structures that are essential for growth. I recommend the gel capsule varieties if you can find them.
1/4 Tablet	Vitamin Tablet with Thiamine	Again, the gel capsule varieties are recommended, as their contents break down much faster in the grow medium.
2 Tablespoons	Agar Flakes	Gelling Agent

Heat the water, sugar, stock solution and the contents of vitamin capsules while stirring vigorously. Once this solution is heated almost to a boil, continue to stir and add the agar flakes. Once fully dissolved, you can place approximately .4 to .6 inches of the solution into your sterilized jars/containers. When putting the solution into the jars, be careful not to get any solution on the rim or sides of the jars, as this will cause a pathway for contamination later. Place the sterilized lids on the jars (not tightly, since you want there to be air exchange).

