

Stem biology project formula

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Ingredients

Item	Amount
Distilled water	300ml
Agar	3g
Propionic acid	1.2ml
Methyl 4-hydroxybenzoate	0.3g
Ethanol	1.3ml
Brewers yeast	15g
Sucrose	15g
30ml vials	20x

Method

1. Weigh out agar and place in 1 litre Simax reagent bottle.
2. Add 200ml distilled water, leave cap loose and autoclave.
3. Add propionic acid and methyl 4-... in dissolved 1.3ml ethanol.
4. Pour over sterile 30ml vials filling to approximately $\frac{1}{3}$ volume.
5. In a different solution, dissolve 15g of yeast and 15g of sucrose in 100ml of distilled water.
6. Prepare 2 more solutions, one of them being 15g of sucrose dissolved in 50ml of distilled water, and the other one being 15g of yeast dissolved in 50ml of water.
7. Autoclave to sterilise the two solutions.
8. Add 10ml of the solution containing agar to each vial. (Do I do this myself?)
9. I'm going to add a different amount of the two solutions to each vial at this step. At this point, I will need 20 30ml vials each with 10ml of the solution containing agar, 50ml of yeast solution, 50ml of sucrose solution, and some amount of distilled water.
10. Place all vials in a 55°C water bath to allow equilibrate.
11. Cap vials and store in fridge, wait for it to set.