

Beekeeping Class Supplement

Bee-Bliography

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Syrup and Fondant Recipes

1:1 Essential oil recipe for syrup:

5 cups water
2 1/2 pounds of sugar
1/4 cup apple cider vinegar
1/8 teaspoon lecithin granules
15 drops spearmint oil essential oil, therapeutic grade
15 drops lemongrass oil essential oil, therapeutic grade
7 drops red thyme (thymol) essential oil, therapeutic grade

Multiplying everything by a factor of four gave me:

20 cups water
10 pounds of sugar
1/2 cup apple cider vinegar
1/2 teaspoon lecithin granules
60 drops spearmint oil essential oil, therapeutic grade
60 drops lemongrass oil essential oil, therapeutic grade
30 drops red thyme (thymol) essential oil, therapeutic grade
Makes 9 to 10 quarts of syrup

If you do not wish to use the essential oils, omit the lecithin and spearmint, lemongrass, and red thyme essential oils.

For 2:1 syrup:

20 cups water
20 pounds of sugar
1/2 cup apple cider vinegar
1/2 teaspoon lecithin granules
60 drops spearmint oil essential oil, therapeutic grade
60 drops lemongrass oil essential oil, therapeutic grade
30 drops red thyme (thymol) essential oil, therapeutic grade

If you use essential oils in your syrup:

I heat two cups of water in a measuring cup while 18 cups of water heats to a boil. I then dissolve the 1/2 teaspoon of lecithin granules in the measuring cup. When I take the boiling pot off the heat, I dump in the 10 pounds of sugar and dissolve the sugar.

The key is to dissolve the lecithin granules in very hot water (separately from the sugar water) and let it cool down to room temperature, stirring occasionally. Once at room temperature, add

the essential oils. Stir occasionally while the batch of sugar water is cooling. By the time the sugar water is cool, the color of the essential oil emulsion should be a straw yellow. The odor of the essential oils is very strong and they are volatile, which is why you wait to add the emulsion to the sugar water after it has cooled. Add the essential oil emulsion and the apple cider vinegar to the cooled sugar water and stir. It is ready then to go into the feeder jars.

The lecithin acts as an emulsifier and the apple cider vinegar lowers the pH of the normally base sugar water to bring it more into line with the pH of honey. This made 9 2/3 full quart jars of syrup or roughly 38 2/3 cups.

With red thyme oil, use 25 to 30 drops for the 60 drops of the other essential oils (essentially, half).

The conversion factors that I found were:

20 drops = 1 milliliter

1 teaspoon = 5 cubic centimeters (or milliliters)

1/2 ounce = 300 drops

20 cups = 960 teaspoons

60 drops = roughly 2/3 teaspoon

I counted the drops into a 1/2 teaspoon measure when I was putting the oils into the measuring cup. The 60 drops were somewhat more than the 1/2 teaspoon measure.

Fondant

10 lb granulated sugar

1 quart water

1 tablespoon vinegar or lemon juice

5-8 drops essential oil (optional)

Prepare molds in advance. You can use paper plates, pie pans, or take-out boxes. Spray lightly with oil and place on a flat, heat-proof surface.

Measure the water and the vinegar (or lemon juice) into a large pot and bring to a slow simmer.

Pour in the sugar, stirring until it dissolves completely. Keep stirring until you feel no "grits" in the water. If the sugar won't dissolve add more water, little by little, until all the crystals disappear.

Once the sugar is completely dissolved, you can gently turn up the heat to medium high and stop stirring. Insert your candy thermometer. (Because the crystals are gone, there is nothing to settle on the bottom and burn; the sugar is in solution.)

Boil the mixture until the thermometer reads **234 degrees F**, then remove the pot from the heat. If you wish, you can test the candy at this point. Place a drop of syrup into a glass of cool water. Reach in and get the drop. The drop of candy should flatten and run down between your fingers.

Set the pot aside to cool to about 200 degrees F. You can set the pot in a sink of ice water to speed up the process, but it is not necessary.

Pour the fondant into a stand mixer with a paddle attachment and slowly beat until the mixture turns light-colored and smooth. Alternatively, you may knead the fondant with your hands, but be careful of the heat.

Divide the mixture into 8 or 10 paper plates and then allow it to cool completely. It will need to be thin enough to fit on the top bars of the frames.

Once cool, wrap the fondant in plastic wrap or wax paper. You can store the fondant for several weeks in a cool place, or for long periods in the freezer.

Hard Candy

10 lb granulated sugar
1 quart water
1 tablespoon vinegar or lemon juice

Prepare molds in advance. Use paper plates lightly sprayed with canola oil. Lay them out on a flat, heat-proof surface.

Measure the water and the vinegar (or lemon juice) into a large pot and bring to a slow simmer.

Pour in the sugar, stirring until it dissolves completely. Keep stirring until you feel no "grits" in the water. If the sugar won't dissolve add more water, little by little, until all the crystals disappear.

Once the sugar is completely dissolved, you can gently turn up the heat to medium high and stop stirring. Insert your candy thermometer. (Because the crystals are gone, there is nothing to settle on the bottom and burn; the sugar is in solution.)

Boil the mixture until the thermometer reads **250 degrees F**, then remove the pot from the heat. If you wish, you can test the candy at this point. Place a drop of syrup into a glass of cool water. Reach in and get the drop. The drop of candy should hold its shape, but you can flatten

it between your fingers.

Carefully pour the mixture into 8 or 10 paper plates. It will need to be thin enough to fit on the top bars of the frames.

Allow the candy cakes to cool completely and then pop them out and store between layers of wax paper.

You can store the candy cakes for long periods. Just keep them away from insects, mice, and moisture.