

Bee Fondant Candy And Recipes

Bee fondant, also called bee candy, is a block or sheet of harden sugar used as a backup food source for feeding your bees. Fondant is also used as a safety to help prevent starvation when the bees start to come out of the winter. Fondant is sometimes confused with Queen Candy which generally is a softer product made with powdered sugar (see Queen Candy). Usually an acid is added to the sugar mixture to more mimic honey which contains inverted sugars. Table sugar (white granulated) which is pure sucrose, when heated and mixed with an organic acid (citrus, vinegar, or tartaric acid (cream of tartar)) makes some of the sugar go thru an inversion process (i.e. inverted sugar) which is easier for the bees to digest.

Cream of tartar has an additional effect on the fondant in that it helps in crystallization of the sugar into finer crystals. Vinegar helps prevent mold as I remember. It usually takes 2-3 times the amount of organic acid to equal the amount of tartar for the same effect. You can read the pro/cons on both vinegar vs tartar on the web. There is discussion on the web about whether or not tartar and/or vinegar is bad for bees. Tartar has been used in fondant since the 1800's and the bees are still here.

Most recipes are much the same. I have listed some below. What is different is the temperature of the boiling sugar. The top temperature reached will determine the hardness of the fondant. From fudgy (about 234) to rock hard (300+) see **Make Candy Without A Candy Thermometer**

I used 250 degrees which gave me some room for error. Bringing the water to full boil before adding the sugar makes it a lot easier and helps avoid burning. Stir a lot to help avoid burning the mix. As you approach your target temp, turn the heat down. Summer fondant should be harder so it does not melt down over the bees or ooze out.

Beekeeping Fondant Recipe#1, Circa 1921

12 lbs. sugar

1.5 lbs. corn syrup (non flavored, no vanilla)

1.25 quarts water

1/4 teaspoon cream of tartar

Heat mixture to 238 degrees. Add tartar at 230 degrees, mix and boil to 238, cool to 200, whip/stir with spoon or beater till white in color. Note: Whip/stirring is not required, but makes a less dense fondant.

Bee Fondant Recipe #2

10 lbs sugar

2 pints water

1/2 tsp cream of tartar

pinch of salt

Follow previous instructions above, add salt to water before boiling.

Bee Candy or Bulk Fondant for commercial applications

200 lbs sugar

30 lbs honey or corn syrup

2.5 gallons water

1 cup vinegar

Salt optional

Follow basic instructions above.

Quick bee sugar cake

5 lbs sugar

1 cup cold water with 1.5 tsp vinegar added and mixed in

Mix together in large pot well. Place mixture on a candy board or in another container. This will turn into a hard block of sugar much like when a bag of sugar gets wet. No cooking required

Bee marshmallow fondant

- 1 lb of small marshmallows
- 2 lbs of powdered sugar
- 4 table spoons of water (or maybe 3 tbs of water and 1 tbs of Honey Bee Healthy)
- A little Crisco

1. Grease a large bowl and a wooden spoon with Crisco to keep the mix from sticking
2. Add 1lb of marshmallows in a large bowl
3. Add 2 lbs of powdered sugar in a separate bowl for easy pouring later
4. Heat the marshmallows for 1 min 30 seconds in the microwave.
5. Add 4 tbs of water to the melted marshmallows
6. Knead the marshmallows into a ball in the bowl with the wooden spoon while mix in the powdered sugar.
7. Grease an area/table with Crisco to keep the mixture from sticking
8. Grease your hands with Crisco
9. Knead the ball on the table with your hands when the mix starts to cling to the side of the bowl
10. Roll the finished ball on wax paper and cut to size (about the size of a pollen patty)
11. Place on the top bars of your hives

Note on winter use: During the winter the bees must hold fecal material until a cleansing flight. If you have few warm days, it is wiser not to add any filler(s) to prevent dysentery. Do not use brown sugar or molasses.

How much do you need? Generally, you need 1 pound fondant for every two pounds of honey you are short for winter food. Depending on: how you winter, the number of bees, length of your winter and your temp. zone you will need a "honey" weight of 20-60 pounds. A 8-10 pound "fondant cap" helps guard against starved bees. Near starvation bees can consume small blocks of fondant in just a few days, check often on warm days coming out of winter.

TIP #1. Buy a digital probe or laser reader, a lot easier to clean and read, and breaks less (no glass).

TIP #2. Line a cereal box with foil to use as a form. By folding the long edges of the strip of foil together (at least three times for strength) you can make a piece any size you need. Lift the cooled cake out with the foil keeping the box to reuse.

TIP #3. Be careful. Ever see those old movies where they pour boiling oil on their enemies from the top of the castle? Well think of that, with your sticky, hot as hell pot of boiling sugar in front of you. Don't get this stuff on you or anyone nearby. Be safe and keep the kids away.

TIP #4. Use a long handled spoon and a bigger/taller pot than you think you need. Why? See tip #3 and when the liquid starts to boil it will foam or rise up several inches before it drops down, watch out for that steam too.

TIP #5. Allow it to cool about 205 or so before you pour or whip it. Pour it out before it gets to cool. If you don't, it will be more grainy.

TIP #6. Use that old plastic inside feeder as a candy feeder. Clean it. Make sure its dry inside. Pour fondant in when it has started to thicken well and cooled. Too hot and it will melt the feeder, to cold and it won't pour. Watch the sides don't bulge out. This is best used in warmer areas as the bees may not venture to the feeder in colder climates.

TIP #7. If you make the fondant thin (about 3/8 inch) you can place it directly under your inner cover and above the frames without any other device.

TIP #8. If you have Small Hive Beetles, this will also be feeding them too. Keep those SHB traps active all year. During the winter, bee eggs are what they want to eat.

TIP #9. Don't burn it. Try a small batch first and learn what you are doing. If burnt, throw it out and try again.

TIP #10. Turn that inner cover into a candy board. Remember to reopen the escape hole after making or cut an vent/entry slot in the hive side edge (if sugar on top). See this example from Long Lane using a different premade board to understand the process.