



South Tipperary Beekeepers' Association

Fact Sheet no. 25

Making a cake of wax for the honey show

Before you commence to produce a cake of wax for any show it is very important that you study the schedule. Most shows have weight and thickness requirements. Although skill level is very important patience and attention to detail will produce very good results. Start preparation during the active season by inserting foundation in your supers. Only use cappings from frames drawn this year as bees incorporate some of the old wax into the sealing of frames which are contaminated with old brown comb or propolis etc. Avoid hives which propolis a lot. Wax produced while bees are on white cover or ling heather is the best, giving a nice white capping and a most pleasant aroma. Sources like dandelion give a very deep colour and are best avoided. During extraction select the best most attractive frames and leave to one side. When all frames are together, wash out uncapping tray and uncap them separately. Leave cappings to drain overnight. Do not press cappings as it would make it almost impossible to wash out all of the honey before melting

The capping should be washed out with rain water the following days and not left any longer as the honey may start to ferment and could taint the wax.

This first washing would contain high honey content and is suitable for mead. Wash three times and allow to drain after each over night. All water in contact with wax must be clean soft rainwater. After washing spread out on a few sheets of newspaper to dry. When dry remove any piece that is discoloured or foreign bodies. Take great care as this will determine the quality of the finished product.

When happy that the cappings are clean melt down into a block either in the solar wax extractor or in a water bath using a clean Pyrex jug as a container for the wax.

If using solar wax extractor make sure it is clean, put wax into micromesh tights and secure it in the extractor. Put in a clean plastic container to catch the melted wax, put 25mm of water in the bottom, will help to separate debris. When all has melted remove immediately otherwise the wax will get damaged. If using a water bath with a solid base saucepan into which you put the Pyrex jug. Pyrex is more suitable than metal or aluminium as it will not react with wax.

To melt the wax keep adding the cappings a small amount at the time until the container is full. It should then be filtered through surgical lint fluffy side up. Whichever method you use always have twice the amount of wax you need for the cake as things seldom go right the first time.

To make the cake you will require surgical lint, filter paper, two Pyrex jugs, a mould, a pane of glass 25mm bigger than the mould (6mm thick), a rectangular basin, a wire tray, two thermometers, a 150mm plastic sieve. The mould is the most important part of your equipment, have sloping sides and preferably be round which helps even cooling and prevents blemishes or cracking. Inner surface of the Pyrex mould must be blemish free. Examine closely as this will transfer on to the cake of wax. It is better if the surface of the cake comes close to the top of the mould when poured as the heat from the glass cover will be of more benefit to the finished surface. It is better to work at night when house is quiet. Never wear wax/or hairy fabric Polyester or nylon are better, ideally a white coat.

To make the cake

- Melt the wax in Pyrex jug by standing in water bath filter through the plastic sieve lined with surgical lint into another Pyrex jug.
- Do not allow water (rain) to boil strongly as it could splash into the wax.
- A wire rack underneath the jug will help circulation around the jug and prevent hot spots.
- Never cover the saucepan with the lid.
- While still warm return the wax to the heat and melt again, then filter through filter paper into the cleaned jugs. Before you do this wash the sieve with boiling water to remove any hairs. Always discard the end of your wax because this will contain most of the debris. Cover the jug with plastic or cling film.

To pour the cake put the jug into the water bath to heat.

- While the wax is melting prepare the mould firstly determine the quality of wax needed. Weigh the mould then add the equivalent weight of water. Mark the water mark on the outside with marker.
- Place the mould in the basin, again on a wire rack and mark a water line 3mm underneath the wax level wash the mould in very hot water and some washing up liquid rinse and allow to drip dry. When almost dry add a few drops of conc. Wash up liquid and glycerine to the mould and rub it in well until it feels dry to the touch wash 6mm glass and drip dry.
- When the wax has melted allow it to cool. Place a thermometer in the jug and monitor until at 70°C, stirring occasionally with the thermometer to ensure the temperature is uniform.
- Be careful not to introduce any foreign bodies. When the wax is nearly 70°C fill the basin with water at 66°C Adjust if necessary.
- Take the mould from the oven and float it on the water. Pour the wax into the mould gently and avoid splashing or waded up the side. Cover with plate glass and leave to cool overnight. In the morning if the cake has not cracked or rippled immerse it in the water and it should float out, otherwise place in fridge for a while. Handle cake with care, dry it with a towel but do not rub moulded side. This prevents pieces breaking off when the judge is testing for plasticity.

The wax cake is now ready for showing. If unsuccessful at the show pay attention to the judges' comments and try again. Remember practice makes perfect.