

FLAVOURED AND COLOURED HONEY AND PROCESS FOR PRODUCING SAME**Technical Field**

[0001] The invention relates to the field of commercial food manufacture. In particular, the invention relates to an improved flavoured and coloured honey, and a method for making same.

Background of the Invention

[0002] Honey is a traditional foodstuff with many uses. A popular use is as a spread for breakfast foods such as toast and the like.

[0003] Natural honey has a distinctive texture and flavour, the flavour typically being influenced by the nature of the plants from which the honey bees derive the pollen that goes into making the honey.

[0004] There are two main textures in which commercial honey is supplied: as a clear 'syrup' or in a 'creamed' texture which presents as a flowable paste (particularly at lower temperatures). This creamed texture is variously referred to as 'creamed' or 'candied'.

[0005] Syrup honey has been increasingly appreciated for its nutritional benefits as well as its basic flavour and consistency, whereas creamed honey has been typically created to consume lower-grade honey that does not have the desired consistency for premium honey products.

[0006] In addition to this, there have been many attempts to add value and variety to traditional honey by incorporating other flavoursome ingredients. These include dried fruit, fruit powders, fruit juices, butter, peanut butter and other edible products. Unfortunately, these tend to spoil quickly and therefore have a very short shelf life (average 1-6 months). compared with the base honey, decreasing their commercialisation potential.

[0007] These products also contain a lower percentage of honey, due to the higher percentage of these ingredients needed to achieve desired results, but still retain a distinctive honey flavour.

[0008] Accordingly, it is an object of the invention to provide a flavoured and coloured honey that provides a useful alternative to, and/or ameliorates at least some of the problems associated with, the prior art.

Summary of the Invention

[0009] The invention can be broadly described as a process of creating a flavoured and coloured honey by combining the process of creating creamed honey with the concurrent addition of flavours and colours, followed by a period of agitation at a target temperature.

[0010] The inventor has found that this process produces a coloured and flavoured creamed honey that fully adopts the intended flavour and colour of the added compounds, and which masks the natural honey flavour, but which also does not suffer from the reduced shelf life experienced in the prior art.

[0011] Creamed honey was first created by Elton J Dyce in 1935, as described in US Patent no. 1,987,893. It was recognised by Dyce that control of the crystallisation of dextrose hydrate could produce a smooth, fondant-like texture in honey, which was achieved by seeding the honey with a crystalline honey followed by agitation of the mixture at a temperature around 13.9°C.

[0012] According to a first aspect of the invention, there is provided a method of producing a flavoured and coloured honey-based foodstuff, said method incorporating the steps of: obtaining a base honey; adding to said base honey between 5% and 15% by volume of a creamed or candied honey; and concurrently adding to said base honey between 1% and 5% by volume of a flavouring agent and a colouring agent; mixing all said components together; and repeating said mixing step over three subsequent days at a temperature lower than 18°C.

[0013] The product that is made from this process still has all the natural benefits of honey, including a stable shelf life. It will retain a creamy fondant-like consistency indefinitely if stored at approximately 18°C. Otherwise, if stored at 23.8°C or more, it will return to a darker colour and more syrupy consistency, though still retain the intended flavour and colour that has been added, which differentiates it from other honey products.

[0014] The inventor has found that the shelf-life of products made according to the inventive method can extend to at least two years without loss of colour or flavour.

[0015] Preferably, said creamed honey is added at a proportion of 10% by volume of the total batch volume and said flavouring and colouring agents are added at a rate of between 1% and 3% by volume of the total batch volume.

[0016] Further preferably, said base honey is a creamed honey or a candied honey; said flavouring agent is a concentrated natural or artificial flavour; and said colouring agent is a concentrated artificial colour.

[0017] Further preferably, the method includes addition of a hydrocolloid stabiliser. Further preferably, the method includes the addition of a preservative, such as citric acid or ascorbic acid.

[0018] Artificial colours and flavours may be preferred for their sensory vividness and lack of deleterious effect on shelf life, but natural or 'clean label' extracts may also be used if it is desired to avoid any negative inferences that may be associated with some artificial flavour or colour types.

[0019] According to another aspect of the invention, there is provided a coloured and flavoured honey product made according to the method described above.

[0020] According to another aspect of the invention, there is provided a flavoured and coloured honey incorporating between 1% and 5% by volume of a flavouring agent and a colouring agent and an addition of between 5% and 20% by volume of creamed or candied honey.

[0021] Now will be described, by way of specific, non-limiting examples, preferred embodiments of the invention with reference to the figures.

Brief Description of the Figures

[0022] Figure 1 is a photograph of jars of three different varieties of honey made according to the invention.

[0023] Figure 2 is a photograph of two of the varieties shown in figure 1.

[0024] Figure 3 is a photograph of samples of the varieties shown in figure 2 partially removed from the jars.

[0025] Figure 4 is a close-up view of one of the varieties of figure 3.

[0026] Figure 5 is a close-up view of the varieties shown in figure 3.

[0027] Figure 6 is a photograph of three varieties both in, and partially removed from, their jars.

[0028] Figure 7 is a photograph of another variety shown in and partially removed from a jar.

[0029] Figure 8 is a photograph of the samples shown in figure 3 after heating.

[0030] Figure 9 is a photograph of batches of different varieties made 20 months apart.

Detailed Description of the Invention

[0031] The invention can be embodied in a process or making the flavoured and coloured honey and in the honey so produced.

[0032] As described above, the main ingredient is honey. The product according to the invention may be made with plain honey, creamed honey or candied honey, or with creamed honey/candied honey that has been partially re-liquefied using temperatures above 18°C; or any other variant that results in the honey changing to a relatively light colour, in order to enhance the colouring effect.

[0033] The preferred embodiment is to use a creamed honey as the base honey, so it can also be more readily changed to any colour desired. For this purpose, the following description refers to this ingredient as 'creamed honey'.

[0034] The second ingredient is concentrated food flavouring; this ingredient could be an essence, an extract, an oil or a paste; which may be made from any suitable extraction method well known in the art and may be natural or artificially produced. This concentrated food flavouring may or may not already contain food colour/dye, if not and if required then further colour/dye may also be added.

[0035] The product alternatively may be made with normal raw honey as the base honey. This would still result in achieving the same flavour, although possibly not the vibrant colour that will tend to be seen with the use of creamed honey. For this reason, the preferred and intended method is to use honey that has been creamed.

[0036] In the initial stages of the creaming process, whilst the seeded honey is still relatively easy to mix, the food flavouring and colouring is added until the desired flavour strength is reached. The 'creamed honey' then forms and thickens as normal, but the addition of the colour and flavour prior to full crystallisation of the base honey will cause the 'natural' honey flavour to be masked as well as the desired colour to be developed.

[0037] The resulting product that is made from this process still has the nutritional benefits of honey, but has a completely different flavour and colour, based on the flavour/colour ingredients added. The product maintains a thickened consistency indefinitely if stored at a temperature of approximately 18°C or lower.

EXAMPLE

[0038] The following example is a preferred method of making a batch of the product according to the invention.

[0039] The base honey (450ml) is filtered and warmed to remove any crystals, then left to cool to 18°C.

[0040] Seed honey (creamed honey) is then added (50ml); representing 10% of the total volume (alternatively 1%-10% can be added for a slower or faster crystallisation process if desired).

[0041] The concentrated flavour and colour components (5ml) are then added to the base honey (typically at a rate of 1%-3% of total volume depending on the desired flavour/colour profile).

[0042] All components are mixed together thoroughly, then left to stand.

[0043] The mixing step is then repeated each day for 3 days (if required, a batch containing up to 30% or greater of the creamed honey can be packaged immediately);

[0044] Then the mixture is bottled and sealed. Storage is then done at around 18°C.

[0045] Some flavours will crystallize like creamed honey, and some will remain liquid like syrup honey. This depends on the temperature of the storage environment.

[0046] Turning to the figures, there are shown a number of samples of flavoured honeys made according to the inventive process. In the figures, the flavours shown are blueberry, musk and banana.

[0047] Figure 1 shows three flavoured honey products made according to the invention, being (left to right) Musk Honey, Blueberry Honey and Banana Honey. In these cases, the flavour and colour additives used were:

[0048] Musk: Roberts Edible Craft Concentrated Musk Combined Colour and Flavour 3366/3366B (incorporating E122, E123, E124);

[0049] Blueberry: Roberts Edible Craft Concentrated Blueberry Combined Colour and Flavour 3388/3388B (incorporating E122, E123, E124, E133);

[0050] Banana: Roberts Edible Craft Concentrated Banana Combined Colour and Flavour 3352/3352B (incorporating E102, E155).

[0051] These are all typical concentrated commercial flavourings and colourings. It will be appreciated by those skilled in the art that there are many other optional edible flavouring and colouring agents that can be incorporated in this process.

[0052] In figures 2, 3, 4 and 5, the colour and consistency of the blueberry flavoured honey and musk flavoured honey products after several months' storage at approximately 18°C can be seen to be well preserved and consistent with creamed honey. Optimum stability is expected with storage between 18°C and 23.3°C.

[0053] The banana flavour shown in figure 5 is a little runnier and shows what happens when subjected to a slightly higher temperature; above 23.8°C, the flavoured honey becomes re-liquified and easier to pour. Though the colour may tend to darken, the product still remains coloured, and the flavour is also unchanged. The colour is more vibrant when the honey has been processed into 'creamed honey', compared with using normal raw honey or re-liquified honey.

[0054] If the products are stored at above 23.8°C, they will tend to change their texture to become more syrup-like, as seen in respect of the banana flavoured product shown in in figures 6 and 7.

[0055] In figure 8, there are shown small amounts of the musk flavoured honey and the blueberry flavoured honey whose temperature has been raised above 23.8°C, where

it can be seen that the consistency has become more syrup-like, but the honey remains relatively opaque, and the colours remain vivid.

[0056] In figure 9 the large bottles that contain batches of product made in the April 2023. The smaller bottles in front show batches of the same product made in August 2021. The colour, taste and relative consistency of the older batches remain virtually unchanged compared with the more recent batches.

[0057] Many other flavours are of course obtainable by using different combinations of food flavours and food colours.

[0058] It has been found by the inventors that the rheology of the product will remain stable for up to 6 weeks at room temperature. For longer storage it is preferred to keep the product refrigerated below 10°C, and preferably below 4°C.

[0059] It may also be useful to incorporate hydrocolloid stabilisers to improve the retention of the creamed texture, and citric acid, ascorbic acid or similar preservatives to maintain the vibrant appearance of the product over time.

[0060] It will be appreciated by those skilled in the art that the above-described embodiment is merely one example of how the inventive concept can be implemented. It will be understood that other embodiments may be conceived that, while differing in their detail, nevertheless fall within the same inventive concept and represent the same invention.

Claims

1. A method of producing a coloured and flavoured honey foodstuff, said method incorporating the steps of:

obtaining a base honey;

adding to said base honey between 5% and 20% by volume of a creamed or candied honey;

and concurrently adding to said base honey between 1% and 5% by volume of a concentrated flavouring agent and a concentrated colouring agent;

mixing all said components together;

repeating said mixing step over three subsequent days at a temperature lower than 18°C.

2. The method of claim 1, wherein said creamed or candied honey is added at a proportion of 10% by volume of said base honey.

3. The method of claim 1, wherein said concentrated flavouring and colouring agents are added at a rate of between 1% and 3% by volume of said base honey.

4. The method of any preceding claim, wherein said base honey is an aerated honey or a creamed honey or a candied honey.

5. The method of any preceding claim, wherein said concentrated flavouring agent is one or more of: a concentrated natural edible oil extract; a concentrated natural flavour extract; a concentrated artificial flavour.

6. The method of any preceding claim, wherein said colouring agent is one or more of: a concentrated natural colour; or a concentrated artificial colour.

7. The method of any preceding claim, wherein a preservative is added to the base honey.

8. The method of claim 7, wherein said preservative is ascorbic acid or citric acid.

9. The method of any preceding claim, wherein a stabiliser is added.
10. The method of claim 9, wherein said stabiliser is a hydrocolloid.
11. A flavoured and coloured honey product made according to the method of any preceding claim.
12. A flavoured honey incorporating a base honey, to which has been added between 1% and 5% by volume of a flavouring and/or colouring agent and an addition of between 5% and 15% by volume of creamed or candied honey.