Claims

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1. A soy whey-fermented beverage, comprising:
   a fermented liquid waste of soybean curd manufacturing having a soy whey with at least one yeast,
   characterised in that the yeast is Metschnikowia pulcherrima, Pichia kluyveri, Williopsis saturnus, or a combination thereof, and the yeast having an energy source from the 70–100% liquid waste with 0–30% of at least one type of added sugar, such that the beverage is non-alcoholic having a plurality of organic compounds having ≥10 mg/L free soy isoflavones and a 5–10 mg/L ester content to mask odour of the liquid waste.

2. The beverage according to claim 1 or 2, wherein the beverage has an alcohol content of < 0.5% by volume.

3. The beverage according to claim 1, wherein the yeast imparts characteristic flavour and aroma profile to the beverage by producing varying concentrations of organic compounds comprising alcohols, aldehydes, glycerol, and organic acids, 2-pentylfuran, and gamma amino-butyric acid (GABA).

4. The beverage according to claim 1, wherein the beverage has a total soy isoflavone content of ≥ 20 mg/L.

5. The beverage according to claim 1, wherein the beverage has a pH of 2–6.

6. The beverage according to claim 1, wherein the beverage has a sugar concentration of 3–20 °Bx.

7. A method of producing a non-alcoholic beverage, comprising steps of:

   obtaining a liquid waste of soybean curd manufacturing having a soy whey;
   pasteurising the liquid waste for removal of contaminants;
   adding a yeast to the pasteurised liquid waste for initiating fermentation;
   adding 0–30% v/v of at least one sugar to 70–100% v/v of the pasteurised liquid waste as an energy source for the yeast; and
   fermenting the pasteurised liquid waste with the yeast added at a pre-determined duration of time and temperature for obtaining the beverage,

characterized in that the yeast is *Metschnikowia pulcherrima*, *Pichia kluyveri*, *Williopsis saturnus*, or a combination thereof, wherein the yeast imparts a plurality of organic compounds having ≥10 mg/L free soy isoflavones and a 5–10 mg/L ester content.

8. The method according to claim 7, wherein the edible acid is malic acid, citric acid, lactic acid, tartaric acid, gluconic acid, succinic acid, or a combination thereof.

9. The method according to claim 7, wherein the pre-determined duration of time for fermentation is 2–21 days.

10. The method according to claim 7, wherein the pre-determined temperature for fermentation is 13–35°C.

11. The method according to claim 7, wherein pH of the soy whey is adjusted prior to addition of the yeast to said soy whey.

12. The method according to claim 7, wherein sugar is added to the soy whey for increasing carbohydrate content prior to addition of yeast to said soy whey.

13. The method according to claim 7, wherein the soy whey is heated prior to addition of yeast to said soy whey.