

Claims:

1. A method of producing a coffee powder, the method comprising:
 - a) providing an aqueous coffee extract comprising from 30 to 55wt% soluble coffee solids and from 1 to 10wt% oil, wherein the aqueous coffee extract consists of water and coffee-derived components;
 - b) subjecting the aqueous coffee extract to a two stage homogenisation process, wherein the first stage is conducted at 200 to 1000 Bar and the second stage is conducted at 10 to 100 Bar, to provide a homogenised coffee extract;
 - c) spray-drying the homogenised coffee extract.
2. The method according to claim 1, wherein the aqueous coffee extract comprises from 1.5 to 5wt% coffee oil.
3. The method according to claim 1 or claim 2, wherein the aqueous coffee extract is an aromatised coffee extract and is provided by:
 - (i) providing roast and ground coffee;
 - (ii) contacting the roast and ground coffee with water to form a coffee composition;
 - (iii) subjecting the coffee composition to an aroma-separation step to recover a coffee aroma fraction and to form a deaeromatised roast and ground coffee, wherein the aroma-separation step recovers from 1 to 15wt% of the coffee composition as the coffee aroma fraction;
 - (iv) subjecting the deaeromatised roast and ground coffee to one or more aqueous extraction steps to provide an intermediate coffee extract having 35 to 70wt% coffee solids;
 - (v) adding the coffee aroma fraction to the intermediate coffee extract to form the aromatised coffee extract.
4. The method according to claim 3, wherein the aromatised coffee extract contains the coffee aroma fraction and the intermediate coffee extract in a weight ratio of coffee aroma fraction to intermediate coffee extract of from 2:5 to 1:20.
5. The method according to claim 3 or claim 4, wherein:
 - the roast and ground coffee provided in step (i) has a mean particle size of from 100 to 600 microns,
 - step (ii) comprises mixing the roast and ground coffee with water to form a first slurry containing 15 to 30wt% coffee solids, and

wherein the dearomatised roast and ground coffee is a dearomatised slurry.

6. The method according to claim 5, wherein step (iii) comprises:
- (A) passing the deaeromatised slurry to a first filtration device at a temperature of
5 from 90 to 150°C to form a first coffee extract and a first filter cake;
- (B) adding water to the first filter cake to form a reconstituted slurry having at least 12 wt% coffee solids;
- (C) thermally treating the reconstituted slurry at a temperature of from 150 to 205°C;
- (D) then passing the thermally-treated reconstituted slurry to a second filtration
10 device to form a second coffee extract and a second filter cake;
- (E) combining the first and second coffee extracts to form a third coffee extract; and
- (F) concentrating the third coffee extract to form the intermediate coffee extract.
7. The method according to claim 6, wherein the water in step (ii) and/or step (B) is at a
15 temperature of from 80 to 100°C.
8. The method according to claim 6 or claim 7, wherein the reconstituted slurry formed in step (B) has 12 to 30wt% solids.
- 20 9. The method according to any of claims 6 to 8, wherein the second filter cake is subjected to a further high temperature extraction process to obtain a further coffee extract to be combined in step (E) with the first and second coffee extracts to form the third coffee extract.
- 25 10. The method according to any of the preceding claims, wherein the method further comprises packaging the coffee-extract product.
11. The method according to any of the preceding claims, wherein the method is a continuous process.
- 30 12. A spray-dried coffee powder for forming a coffee beverage,
wherein the powder comprises particles comprising soluble coffee solids and insoluble coffee solids, the insoluble coffee solids comprising coffee oils and an insoluble coffee sediment fraction which is the non-oil portion of the insoluble coffee solids,

wherein the powder comprises at least 6wt% of the insoluble coffee sediment fraction, the insoluble coffee sediment fraction comprising, when analysed after acid hydrolysis, 1wt% or less arabinose,

- 5 wherein the powder comprises at least 0.8wt% coffee oils by dry weight, and
 wherein the particles exhibit less than 20wt% surface coffee oil, based on the total weight of coffee oils.

13. The spray-dried coffee powder according to claim 12, wherein when the powder is reconstituted in water it has a particle size distribution of oil droplets having a D50 oil droplet
10 size of less than 7 microns, preferably 1 to 5 microns, and more preferably 2 to 4 microns.

14. The instant coffee composition according to claim 12 or claim 13, wherein the composition comprises from 7.5 to 15wt% of the insoluble coffee sediment fraction.

- 15 15. The instant coffee composition according to any of claims 12 to 14, wherein the insoluble coffee sediment fraction comprises, when analysed after acid hydrolysis, from 0.5 to 1wt% arabinose.

16. The instant coffee composition according to any of claims 12 to 15, wherein the
20 powder comprises from 1 to 5wt% coffee oils by dry weight and/or wherein the particles exhibit less than 15wt% surface coffee oil, preferably less than 10wt% surface coffee oil, based on the total weight of coffee oils.

17. The spray-dried coffee powder according to any of claims 12 to 16 obtainable by the
25 method according to any of claims 1 to 11.