CLAIMS

1. A method for dewatering microbial cellulose, the method comprising:

   contacting a wet microbial cellulose material with a hydrophilic polymer solution;

   maintaining contact between the wet microbial cellulose material and the hydrophilic polymer solution for a treatment period to remove at least a portion of the water from the wet microbial cellulose material; and

   removing the dewatered microbial cellulose from the hydrophilic polymer solution.

2. A method according to any of the preceding claims, wherein the hydrophilic polymer solution comprises one or more polysaccharides, optionally wherein the polysaccharides are selected from one or more of guar gum, gum acacia, iota-carrageenans, carboxymethyl cellulose (CMC) and alginates.

3. A method according to any of the preceding claims, wherein the hydrophilic polymer solution is a CMC solution.

4. A method according to any of the preceding claims, wherein the concentration of the hydrophilic polymer solution is less than 20 %.

5. A method according to any of the preceding claims, wherein the ratio of hydrophilic polymer solution to wet microbial cellulose is at least 0.5:1.

6. A method according to any of the preceding claims, wherein the treatment period is at least 6 hours.

7. A method according to any of the preceding claims, wherein the contact of the wet microbial cellulose material and the hydrophilic polymer solution is conducted at elevated temperature.

8. A method according to any of the preceding claims, wherein the weight of the dewatered microbial cellulose is less than 40 % of the weight of the wet microbial cellulose material.

9. A method according to any of the preceding claims, wherein the method further comprises the step of:

drying the dewatered microbial cellulose to produce a dried microbial cellulose material.

10. A dewatered microbial cellulose material, the dewatered microbial cellulose material comprising:

    25-95 % microbial cellulose by dry weight; and

    5-75 % hydrophilic polymer by dry weight.

11. A dewatered microbial cellulose material according to claim 10, wherein the hydrophilic polymer comprises one or more polysaccharides, optionally wherein the polysaccharides are selected from one or more of guar gum, gum acacia, iota-carrageenans, carboxymethyl cellulose (CMC) and alginates.

12. A dewatered microbial cellulose material according to any of claims 10 to 11, wherein the hydrophilic polymer is CMC.

13. A dewatered microbial cellulose material according to any of claims 10 to 12, wherein the hydrophilic polymer content is 5-60 % by dry weight.

14. A method for producing a plant growth medium, the method comprising:

    subjecting a wet microbial cellulose material to the dewatering method of any one of claims 1 to 8 to obtain a plant growth medium.

15. A method according to claim 14, wherein the method further comprises the step of:

    drying the dewatered microbial cellulose to obtain a dried plant growth medium.

16. A method according to claim 15, wherein the dried plant growth medium is subjected to a size reduction process.

17. A plant growth medium, the plant growth medium comprising:

    25-75 % microbial cellulose by dry weight; and

    25-75 % hydrophilic polymer by dry weight, optionally wherein the hydrophilic polymer comprises one or more polysaccharides.