6. A method according to any one of the preceding claims wherein the microbes are cultivated alone or as a mixture of several strains.

7. A method according to any one of the preceding claims wherein the cellulase-producing microbes are *Trichoderma reesei* RUT-C30 (ATCC 56765) or a variant derived therefrom, optionally in combination with a β-glucosidase producer.

8. A method according to any one of claims 1 to 6 wherein the microbes are isolated from nature or obtained from any culture collections.

9. A method according to any one of the preceding claims, wherein the first temperature is selected from the group consisting of 10-50°C, 15-45°C, 20-40°C, 25-35°C and 27-33°C.

10. A method according to claim 9 wherein the first temperature is ~~about~~ 30°C.

11. A method according to any one of the preceding claims wherein:

(a) the first temperature is selected from the group consisting of: 10-50°C, 15-45°C, 20-40°C, 25-35°C and 27-33°C; and

(b) the second temperature is selected from the group consisting of: 45-100°C, 50-100°C, 50-80°C, 50-70°C or 50-60°C.

12. A method according to claim 9 wherein the first and/or second higher temperature is from 45-55°C.

13. A method according to claim 10 wherein the second higher temperature is ~~about~~ 50°C.

14. A method according to any one of the preceding claims wherein the method further comprises:

d) fermenting the glucose produced in step c) by one or more thermophilic lactic acid bacteria~~fermenting micro-organisms~~.

15. A method according to claim 14 wherein the one or more thermophilic lactic acid bacteria ~~fermenting micro-organisms~~ comprises or consists of a *Bacillus* species, preferably *B. coagulans*.

16. A method according to claim 14 or ~~16~~ 15 wherein step d) is performed simultaneously with step c).

17. A method according to claim 15 wherein cellulose hydrolysis and glucose fermentation is conducted simultaneously by adding thermophilic lactic acid bacteria and supplementing nutrients to produce lactic acid.

18. A method according to any one of claims 14 to 16 wherein the fermentation product is selected from the group consisting of: alcohols; organic acids; ketones; amino acids; gases; enzymes; and vitamins.

19. A method according to any one of the preceding claims wherein one, two or all three of the following conditions are met: (i) steps a) to c) are performed in a single reactor; (ii) steps a) to c) are performed without any separation steps; (iii) steps a) to c) do not comprise the addition of enzymes to the reaction broth.

20. A method according to any one of the preceding claims wherein one, two or all three of the following conditions are met: (i) steps a) to d) are performed in a single reactor; (ii) steps a) to d) are performed without any separation steps; (iii) steps a) to d) do not comprise the addition of enzymes to the reaction broth.

21. A method according to any one of the preceding claims wherein the method further comprises: