CLAIMS:

1. A method for stabilising a volume of soil, the method comprising:

   applying a coating agent comprising salts of fatty acids derived from coconut oil to the soil, wherein the salts of fatty acids derived from coconut oil comprise a mixture of salts of lauric, myristic and stearic acids and whereby soil particles in the soil are coated with the coating agent;

   applying to the soil a setting agent comprising a metallic salt that is capable of reacting with the salts of fatty acids derived from coconut oil, whereupon a set product is formed; and

   compacting the soil, whereby the coated soil particles are consolidated.

2. The method of claim 1, wherein the volume of soil is disturbed before the coating agent is applied.

3. The method of claim 1 or claim 2, wherein the coating agent is sprayed onto the top of the volume of soil.

4. The method of any one of claims 1 to 3, wherein the coating agent is physically mixed into the volume of soil.

5. The method of any one of claims 1 to 4, wherein the coating agent is mixed into a volume of water before its application to the soil.

6. The method of any one of claims 1 to 5, wherein the setting agent is sprayed onto the top of the volume of soil.

7. The method of any one of claims 1 to 6, wherein the setting agent is physically mixed into the volume of soil.

8. The method of any one of claims 1 to 7, wherein the setting agent is mixed into a volume of water before its application to the soil.

9. The method of any one of claims 1 to 8, wherein the salts of fatty acids derived from coconut oil are the sodium and/or potassium salts of the fatty acids.

10. The method of any one of claims 1 to 9, wherein the coating agent is provided in a liquid composition that further comprises an alcohol.

11. The method of claim 10, wherein the alcohol is 2-propanol.

12. The method of any one of claims 1 to 11, wherein the coating agent is provided in a liquid composition that further comprises a dispersing agent.

13. The method of claim 12, wherein the dispersing agent is ethylene glycol monostearate.

14. The method of any one of claims 1 to 13, wherein the setting agent comprises an aluminium salt.

15. The method of any one of claims 1 to 14, wherein the setting agent comprises aluminium sulphate.

16. The method of any one of claims 1 to 15, further comprising mixing an additional material into the volume of soil before the setting agent is applied.

17. The method of claim 16, wherein the additional material is mixed into the volume of soil before the coating agent is applied.

18. The method of claim 16 or claim 17, wherein the additional material is selected from one of more of the following materials: shredded waste plastic, sand, aggregate and crushed glass.

19. The method of any one of claims 1 to 10, further comprising adding lime to the volume of soil.

20. The method of any one of claims 1 to 19, wherein the stabilised volume of soil defines a road base or a road sub-base.

21. The method of any one of claims 1 to 20, wherein the soil comprises clay.

22. A kit for stabilizing soil, the kit comprising a first container and a second container,

    the first container containing a coating agent comprising salts of fatty acids derived from coconut oil, wherein the salts of fatty acids derived from coconut oil comprise a mixture of salts of lauric, myristic and stearic acids, and which, when applied to a soil, coats soil particles in the soil; and

    the second container containing a setting agent comprising a metallic salt that is capable of reacting with the salts of fatty acids derived from coconut oil and which, when applied to the soil, causes the coated soil particles to consolidate.

23. The kit of claim 22, when used in the method of any one of claims 1 to 21.

24. A composition comprising salts of fatty acids including a mixture of salts of lauric, myristic and stearic acids derived from coconut oil, an alcohol and a dispersing agent, when used as the coating agent in the method of any one of claims 1 to 21.

25. The composition of claim 24, wherein the salts of the fatty acids derived from coconut oil are the sodium and/or potassium salts of the fatty acids.

26. The composition of claim 24 or claim 25, wherein the alcohol is 2-propanol.

27. The composition of any one of claims 24 to 26, wherein the dispersing agent is ethylene glycol monostearate.