

CLAIMS:

1. A method for stabilising a volume of soil, the method comprising:
 - applying a coating agent comprising one or more salts of fatty acids derived from coconut oil to the soil, 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 one or more 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 one or more salts of fatty acids derived from coconut oil comprises a mixture of salts of lauric, myristic and stearic acids.
10. The method of any one of claims 1 to 9, wherein the one or more salts of fatty acids derived from coconut oil are the sodium and/or potassium salts of the fatty acids.
11. The method of any one of claims 1 to 10, wherein the coating agent is provided in a liquid composition that further comprises an alcohol.

12. The method of claim 11, wherein the alcohol is 2-propanol.
13. The method of any one of claims 1 to 12, wherein the coating agent is provided in a liquid composition that further comprises a dispersing agent.
14. The method of claim 13, wherein the dispersing agent is ethylene glycol monostearate.
15. The method of any one of claims 1 to 14, wherein the setting agent comprises an aluminium salt.
16. The method of any one of claims 1 to 15, wherein the setting agent comprises aluminium sulphate.
17. The method of any one of claims 1 to 16, further comprising mixing an additional material into the volume of soil before the setting agent is applied.
18. The method of claim 17, wherein the additional material is mixed into the volume of soil before the coating agent is applied.
19. The method of claim 17 or claim 18, wherein the additional material is selected from one of more of the following materials: shredded waste plastic, sand, aggregate and crushed glass.
20. The method of any one of claims 1 to 19, further comprising adding lime to the volume of soil.
21. The method of any one of claims 1 to 20, wherein the stabilised volume of soil defines a road base or a road sub-base.
22. The method of any one of claims 1 to 20, wherein the soil comprises clay.
23. A kit for stabilizing soil, the kit comprising a first container and a second container,

the first container containing a coating agent comprising one or more salts of fatty acids derived from coconut oil 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 one or more salts of fatty acids derived from coconut oil and which, when applied to the soil, causes the coated soil particles to consolidate.
24. The kit of claim 23, when used in the method of any one of claims 1 to 22.

25. A composition comprising one or more salts of fatty 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 22.
26. The composition of claim 25, wherein the one or more salts of fatty acids derived from coconut oil comprises a mixture of salts of lauric, myristic and stearic acids.
27. The composition of claim 25 or claim 26, wherein the one or more salts of the fatty acids derived from coconut oil are the sodium and/or potassium salts of the fatty acids.
28. The composition of any one of claims 25 to 27, wherein the alcohol is 2-propanol.
29. The composition of any one of claims 25 to 28, wherein the dispersing agent is ethylene glycol monostearate.