

VERTICILLIUM SOIL ASSAY FOR DETERMINATION OF COLONY FORMING UNITS PER GRAM OF SOIL

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For each sample:

1. Break up soil into an even consistency.
2. Shake soil to allow for mixing.
3. Take a subsample using a 30 ml beaker to transfer 4 full beakers to another bag. Or use whatever sub-sampling method you use normally.
4. Shake soil to allow for mixing.
5. Weigh 6 g of soil into a 125 ml beaker.
6. Add 120 mls sterile 0.1% water agar.
7. Stir mixture for 5 minutes.
8. As mixture is stirring, withdraw 250 ul. Plate onto 10 plates of Vert selective medium.
It is a good idea to withdraw sample from the same depth in flask.

This is 12.5mg soil/plate x 10 plates = 125mg soil assayed

Detection limit = 8 cfu/gram soil

This is 12.5mg soil/plate x 15 plates = 187.5 mg soil assayed

Detection limit = 5.3 cfu/gram soil

To Autoclave:

Beakers-50 ml

Graduated cylinder-100 ml

Water agar

Pipet tips-1 ml (Cut tip for easier use with soil)

Flame Sterilize:

Stir bar