

SOIL EXTRACT AGAR
TM 858

For isolation of soil bacteria

Composition

Ingredients	Gms/Ltr.
Soil extract	17.75
Agar	15.00
Glucose	1.00
Dipotassium phosphate	0.50

* Dehydrated powder, hygroscopic in nature, store in a dry place in tightly- sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 34.25gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool to 45 - 50°C and pour into sterile Petri plates.

Appearance: Light amber colour, clear to slightly opalescent gel

pH (at 25°C): 6.8 ± 0.2

Principle

SOIL EXTRACT AGAR is used for isolation of soil bacteria. Soil is a natural medium for many organisms because they provide an abundant source of organic matter and carbon, nitrogen in the form of nitrates & nitrites including various essential minerals and vitamins required for their growth. This medium consists of Glucose which serves as readily metabolizable carbon source whereas Dipotassium phosphate acts as buffering agent.

Interpretation

Cultural characteristics observed after inoculating (10^3 CFU / ml), on incubation at 30°C for 4 days.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth
<i>Aspergillus niger</i>	16404	10^3	Luxuriant
<i>Candida albicans</i>	10231	10^3	Luxuriant
<i>Nocardia asteroides</i>	19247	10^3	Luxuriant
<i>Pseudomonas aeruginosa</i>	27853	10^3	Luxuriant
<i>Saccharomyces cerevisiae</i>	9763	10^3	Luxuriant

References

1. Subba Rao N. S., Soil Microorganisms and Plant Growth, p-251., Oxford and IBH Publishing Co., New Delhi. (1977).