



Cyanophycean Agar

M699

Cyanophycean Agar is used for the isolation and cultivation of Blue green Algae.

Composition**

Ingredients	Gms / Litre
Potassium nitrate	5.000
Dipotassium phosphate	0.200
Magnesium sulphate	0.100
Agar	15.000

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 20.3 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 3 minutes. Cool to 45°C and aseptically add one drop of 1% separately autoclaved solution of ferrous ammonium citrate to 100 ml sterile medium. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Blue green algae are a type of photosynthetic bacteria, called *Cyanobacteria* that rely on sunlight for energy. They are present in almost all aquatic ecosystems, including creeks, rivers, lakes and wetlands. Algal blooms can cover large areas of a water supply. Like all photosynthetic organisms, blue-green algae rely on sunlight for energy, with their growth rate determined by the level of nutrients available in the water.

Cyanophycean Agar is used for the isolation and cultivation of blue green algae.

Potassium is required for maintenance of maximum growth rate of blue green algae (1). Nitrate serves as nitrogen source. Dipotassium phosphate buffers the media. Magnesium sulphate is a source of divalent cations.

Quality Control

Appearance

White to cream homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium

Colourless clear to slightly opalescent gel forms in Petri plates

Cultural Response

M699: Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Growth
<i>Anabena cylindrica</i>	luxuriant
<i>Anacystis nidulans</i> ATCC 27344	luxuriant
<i>Plectonema boryanum</i> ATCC 18200	luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on label.

Reference

1. William A., Kratz, Jack Myers, 1955, Nutrition and Growth of Several Blue-Green Algae, American Journal of Botany, Vol. 42, No. 3, pp. 282-287

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