PHM008 **Phyto Proteose Agar Medium Base**

Non selective medium used to subculture suspected isolates; on addition of antibiotics it is suitable for the detection of several *Pseudomonas* species.

Composition **:

Ingredients	**Grams/Litre**
Proteose peptone	20.00
Di-potassium hydrogen phosphate	1.50
Magnesium sulphate anhydrous	0.73
Agar	15.00

Final pH (at 25°C) 7.5
**Formula adjusted standard to suit the performance parameter

Direction:

Suspend 37.23 grams in 980 ml distilled water. Add 20 ml of 50% glycerol. Sterilize by autoclaving at15 lbs pressure (121°C) for 15 minutes .Cool to 45-50°C and aseptically add the rehydrated contents of one vial of CN supplement (PHS007) for additional selectivity. Mix well and pour into Petri plate.

Principle and Interpretation:

Plant pathogens affect plant health by consumption of plant tissues and cause various diseases in plant. This is responsible for the serious reduction in yield. Hence the detection of these patogenes is necessary (1).
Phyto Proteose Agar Medium Base is prepared as a nonselective medium for the detection of suspected organisms. With the addition of CN Supplement, it can be used to detect several pseudomonas species.
Proteose peptone provides nitrogenous compounds, carbon, vitamin B complex and trace ingredients. The inorganic phosphates in the medium serve as buffers.

Quality Control:
Appearance of Medium
Light yellow coloured, homogeneous, free flowing powder.
Gelling
Firm, comparable with 1.5% Agar gel.
Colour and Clarity of prepared medium
Yellow coloured, opalescent gel forms in Petri plates

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Reaction
Reaction of 3.72% w/v aqueous solution is pH 7.5

Cultural Response:

Cultural characteristics observed after an incubation at 30-32°C for 5-6 days.

Organism (ATCC)	Growth (w/o PHS007)	Growth (w/ PHS007)
Pseudomonas syringae pv.*syringae*	luxuriant	luxuriant
Pseudomonas savastonoi pv phaseolicola	luxuriant	luxuriant
Escherichia coli (25922)	luxuriant	-
Staphylococcus aureus (25923)	luxuriant	-
Candida albicans (10231)	luxuriant	-
Saccharomyces cerevisiae (9763)	luxuriant	-

References:

1. en.wikipedia.org/wiki/Plant_pathology.
2. King, E.O. Ward, M.K. and Raney,D.E. 1954, Two simple media for the demonstration of pyocyanin and fluorescein. J.Lab.Clin.Med. 44:301-307

Storage and Shelf-life:

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

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