Product Specification

cdhfinechemical.com

Technical Information

Phyto Pspi Agar Base

Product Code: PHM1009

Application: Semi- selective medium for the detection of *Pseudomonas syringae pv. pisi* on seeds of pea.

Composition**

Ingredients	Grams/Litre
Tryptone	5.00
Peptone	3.00
Sodium chloride	5.00
Sucrose	50.00
Agar	15.00
Total	**78.0 gm/liter**

**Formula adjusted standard to suit the performance parameter

Principle And Interpretation

Pseudomonas syringae pv. Pisi is a plant pathogen which can infect wide range of plant species. These bacteria tend to be seed borne, and are dispersed between plants via rain splash (1). Bacterial blight of pea is caused by *Pseudomonas syringae pv.* Pisi which is a seed-borne disease occurring in most pea growing areas all over the world, occasionally causing serious reduction in yield and seed quality follows epidemics (2). Pathogen attacks all ground parts of plant (stems, leafstalks, leaves, stipules, beans). On leaves, stems, and beans, it forms brown round spots with a dark center, which is surrounded by a wide border. Spots are yellow, round and, poorly pressed-in on seeds. Bacteria penetrate into vascular bunches and cause withering of peas. Pathogen also attacks sweet pea, pea vine, cowpea, and other leguminous cultures (3). Phyto Pspi Agar Base is a semi- selective medium developed for the detection of *Pseudomonas syringae pv.* pisi on seeds of pea. Tryptone and peptone are used as nitrogen sources in the media. The media becomes selective with the addition of CN Supplement 1 (PHS1008)

Directions

Suspend 78.0 grams in 990 ml distilled water. Add 1 gram of boric acid to 10 ml of distilled water. Heat to boiling to dissolve the medium completely. Separately sterilize the solutions by autoclaving at 15 lbs pressure (121°C) for 15 minutes .Cool to 45-50°C and aseptically add the rehydrated contents of one vial of CN supplement 1 (PHS1008) and boric acid. Mix well and pour into Petriplate.

Quality Control

Appearance:
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

Cultural Response:
Cultural characteristics observed after an incubation at 30-32°C for 5-6 days with added CN Supplement 1 (PHS1008) and Boric acid.

Organism (ATCC)	Growth	Colony Colour
Pseudomonas syringae pv. pisi	luxuriant	white to transparent ,mucoid and dome shaped
Candida albicans (10231)	inhibited	-
Saccharomyces cerevisiae (9763)	inhibited	-

Storage and Shelf Life

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

Further Reading

- Hirano, S. S. and C. D. Upper (1990) Population biology and epidemiology of *Pseudomonas syringae* Annual Reviews in Phytopathology 28:155-177
- Typing of *Pseudomonas syringae pv. pisi* strains by fluorescent AFLP fingerprinting, Journal of Plant Pathology (2007), 89 (3), 421-425
- *Pseudomonas syringae pv.pisi* (Sackett) Young et al. - Bacterial Blight of Peas, Interactive agricultural Ecological Atlas of Russia and Neighboring Countries.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conforms solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.
- Do not use the products if it fails to meet specifications for identity and performens parameters.