Technical Information

Potato Carrot Agar

Product Code: DM 1696

Application: - Potato Carrot Agar is recommended for the reproduction of *Pyronema domesticum*.

Composition**

Ingredients	Gms / Litre
Carrot, infusion from	4.00
Potatoes, infusion from	5.00
Agar	15.000
Final pH (at 25°C)	6.5±0.2

**Formula adjusted, standardized to suit performance parameters

Principle & Interpretation

Potato Carrot Agar is recommended for the reproduction of *Pyronema domesticum* and for the cultivation and maintenance of *Actinoplanes awajinensis*, *Actinoplanes nirasakiensis*, *Amorphosphorangium auranticolor*, *Streptomyces flavus* and *Thermoactinomyces vulgaris*.

The medium is prepared based on formula originally designed by Langeron and Vanbreuseghem in 1952 (1) and recommended by Onions (2) and Atlas and Parks (3). This is a weak or starvation medium suitable for conservation of organisms. The medium restricts mycelial growth and promotes relatively high proportion of spores. The fungi grown on this medium when subsequently inoculated into richer medium yield rich growth (2).

Carrot and potato infusions provide the necessary carbohydrates, proteins, minerals and vitamins for limited growth of organisms, thereby providing an environment only for the existence rather than their growth.

Methodology

Suspend 24 grams of dehydrated powder media in 1000 ml distilled water. Mix thoroughly & heat to boil to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Shake well before pour into sterile Petri plates.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder.

Gelling
Firm, comparable with 1.5% Agar gel.

Colour and Clarity
Yellow coloured clear to slightly opalescent gel forms in Petri plates.

Reaction
Reaction of 2.4% w/v aqueous solution at 25°C. pH : 6.5±0.2

pH Range
6.30-6.70

Cultural Response
DM1669: Cultural characteristics observed after an incubation at 20-25°C for 48-72 hours.

Organism	Growth
**Aspergillus brasiliensisATCC 16404*	good-luxuriant
Pyronema domesticum	good-luxuriant
Saccharomyces cerevisiaeATCC 9763	good-luxuriant
Saccharomyces uvarumATCC 9080	good-luxuriant

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and prepared media at 2-8°C. Use before expiry date on label.
Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

1. Langeron M. and Vanbreuseghem R., 1952, In "Precis de Mycologie", p.408, Masson et Cie, Paris.
2. Onions A. H. S., 1971, In "Methods in Microbiology", Edited by Booth C., The Series edited by Norris J. R. and Ribbons D. W., Academic Press, London.
3. Atlas R. M. and Parks L. C., (Ed.), 1993, Handbook of Microbiological Media CRC Press, Boca Raton / London.

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