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M373

Hmsdmcdc Trd9

Recommended for primary isolation of pathogenic fungi

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Ingredients	Gms / Litre
Peptone	10.000
Dextrose (Glucose)	10.000
Oxgall	15.000
Crystal violet	0.010
Agar	20.000
Final pH (at 25°C)	7.0±0.2

**Formula adjusted, standardized to suit performance parameters
#Equivalent to Oxgall

Directions

Suspend 55.01 grams in 1000 ml distilled water. Heat to boiling, to dissolves the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add sterile Streptomycin to a final concentration of 30 mcg/ml of medium. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Littman Oxgall Agar Base was formulated by Littman (1,2). Littman Oxgall Agar is used for the primary isolation of pathogenic selective isolation of pathogenic skin fungi (dermatophytes) and saprophytic fungi from various clinical specimens. It provides effective isolation even when the test samples are heavily contaminated with bacterial flora. Littman Oxgall media are also used for the enumeration of fungal populations of air, soil, foodstuffs and other materials of sanitary significance (3). Crystal violet and Streptomycin has inhibitory effect on most of the bacteria. Oxgall restricts spreading of fungal colonies. The neutral pH favours the growth of many pathogenic fungi. Littman (2) reported the isolation of fungi on this medium three times more than isolated on Sabouraud Dextrose Agar.

For inoculation, skin or nail scraping or infected hair is directly placed on the surface of agar while sputum, faeces etc. are spread over the surface with sterile swab or the specimen are first enriched in broth and then cultured on agar medium. The incubation should be carried out for upto 8 days. Whenever *Nocardia asteroides, Streptomyces* or any Streptomycin sensitive microorganisms are to be cultured use the medium without Streptomycin (3).

For best results, isolation plates should be made with about 30 ml of medium per plate. Plates should be allowed to stand, preferably for about six hours, before using.

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Clinical samples - skin or nail scraping or infected hair etc

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4).

After use, contaminated materials must be sterilized by autoclaving before discarding.

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In Vitro diagnostic Use. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the dwohqx odqhnc vgdm rsnqdc s recommended temperature.

Quality Control

Appearance
Light yellow to light brown may have green tinge homogeneous free flowing powder

Gelling
Firm, comparable with 2.0% agar gel.

Colour and Clarity of prepared medium
Blue coloured clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 5.5% w/v aqueous solution at 25°C. pH : 7.0±0.2

pH
6.80-7.20

Cultural Response
Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.

Organism	Growth (Plain medium)	Growth with Streptomycin
Aspergillus flavus ATCC 22547	luxuriant	good-luxuriant
Candida albicans ATCC 10231	good - luxuriant	good - luxuriant
Escherichia coli ATCC 25922	luxuriant	inhibited
Microsporum audouinii ATCC 9079	luxuriant	good-luxuriant
Saccharomyces cerevisiae ATCC 9763	good - luxuriant	good - luxuriant
Saccharomyces uvarum ATCC 28098	good - luxuriant	good - luxuriant
Trichophyton mentagrophytes ATCC 9533	moderate-good	moderate-good
Trichophyton rubrum ATCC 28188	good	good

Reference

1.Littman M. L., 1947, Science, 106:109.
2.Littman M. L., 1948, Am. J. Clin. pathol., 18:409.
3.MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol.1, Williams and Wilkins, Baltimore.

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