Dermatophyte Test Medium (D.T.M.)

LAB 117

Description
A modification of the formulation of Taplin, Zaias, Rebell and Blank for the detection of dermatophytic fungi. This medium helps in the differentiation between saprophytic and environmental fungi.

Formula	g/litre
Balanced Peptone No. 1	10.0
Glucose	40.0
Agar No. 2	12.0
Phenol Red	0.2

Method for reconstitution
Weigh 62 grams of powder, disperse in 1 litre of deionised water. Allow to soak for 10 minutes then bring to the boil with frequent stirring. Dissolve 2 vials of Chloramphenicol X009 (X209) in ethanol and add these to the agar, mix well and distribute into tubes or universal containers. Sterilise at 121°C for 15 minutes, allow to cool in the sloped position.

Note: Do not exceed the times stated for sterilisation, overheated acidified agar loses gel strength and the sugars are caramelised.

Appearance: Orange, clear gel.

pH: 5.5 ± 0.2

Minimum Q.C. organisms: *Aspergillus* sp. NCIMB 50097
Trichophyton sp.

Storage of Prepared Medium: Slopes – up to 1 month at 2-8°C in the dark.

Inoculation: Surface plating or stab inoculation.

Incubation: 22-25°C aerobically for 10-14 days.

Interpretation: Dermatophytes appear as fluffy colonies, colour varies with species, the medium is reddened. Fungi other than dermatophytes cause the medium to become yellow due to acid production. If incubation is prolonged the medium may become reddened. Yeasts appear as white creamy colonies. Blastomyces, Histoplasma and Coccidiodes may also turn the medium red, though these are rarely encountered in lesions associated with ring worm.

References
Taplin, D., Zaias, N., Rebell, G., Blank, H. (1969). Isolation and recognition of dermatophytes on a new medium. (DTM) Arch. Dermatol. 99: 203-209.