

OAT MEAL AGAR
TM 243

For cultivation of fungi particularly for macrospore formation

Composition

Ingredients	Gms/Ltr.
Oatmeal,	60.0
Agar	12.5

* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 72.5gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool at 45 - 50°C and pour into sterile Petri plates.

Appearance: Off white to opaque, with non - homogenous particles in gel
pH (at 25°C): 7.2 ± 0.2

Principle

OAT MEAL AGR is used for the cultivation of fungi particularly for macrospore formation. Isolations can be made directly from infested material by transferring spores or whole fruit bodies to a suitable medium. Identification and classification of fungi is primarily based on the morphologic differences in their reproductive structures. They usually grow easily on Malt extract agar or **Oat meal agar**. Many pathogenic fungi, however, cannot be cultivated on artificial media. Oat meal provides a source of nitrogen, protein and essential nutrients for the growth of fungi. Agar is a solidifying agent. Studies proved that colonies diameter on Oat Meal Agar larger than 70 mm in 28 days at 25°C, effuse, plane to more or less floccose, white to pale yellowish white; reverse pale yellowish white. Mycelium partly immersed, partly superficial, composed of branched, septate, smooth, hyaline 1.4-5.4 µm wide hyphae. Conidiophores macronematous, mononematous, single, simple, straight or slightly curved, septate, smooth to verrucose. Conidia ellipsoidal or fusiform, smooth, hyaline to subhyaline, 11.5-22.4 × 5.6-8.4 µm.

Interpretation

Cultural characteristics observed after inoculating (10³CFU/ml), on incubation at 32± 2°C for 18- 72 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth
<i>Aspergillus niger</i>	16404	10 ³	Luxuriant
<i>Candida albicans</i>	10231	10 ³	Luxuriant
<i>Saccharomyces cerevisiae</i>	9763	10 ³	Luxuriant

References

1. Koneman, Allen, Janda, Schreckenberger and Winn. Color atlas and textbook of diagnostic microbiology, 5th ed. Lippincott-Raven Publishers, Philadelphia, Pa. (1997).



PRODUCT DATA SHEET

2. Dixon, Rhodes and Fromtling. In Murray, Baron, Pfaller, Tenover and Tenover (ed.). Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C. (1999).