

TITAN MEDIA

CORN MEAL AGAR

TM 076

For production of chlamydospores by *Candida albicans* & maintenance of fungal stock cultures

Composition

Ingredients	Gms/Ltr.
Agar	15.00
Corn meal, infusion from	2.00

* 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 17.0gms in 1000ml 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: Pale yellow to light tan colour, slightly hazy to hazy solution
pH (at 25°C): 6.0 ± 0.2

Principle

CORN MEAL AGAR used for production of chlamydospores by *Candida albicans* & maintenance of fungal stock cultures. **Pollack** and **Benham** described the medium for studying the morphology of *Candida*. **Walker** and **Huppert** in 1960 and **Kelly** and **Funigello** modified the formulation of Corn Meal Agar by adding polysorbate 80 or 1% Tween 80, which stimulated rapid and abundant chlamydospore formation. Corn Meal Agar is a relatively simple medium, consists infusion of corn meal and agar. The infusion product contains sufficient nutrients to support the growth of fungal species. Agar is a solidifying agent. 1% Tween 80 suppresses vegetative growth of many fungi while stimulating sporulation. The proteolytic zone indicated that the protease is actively released in the medium by the fungus and therefore it could be considered to be the measure of the availability of free protease, whereas, the size of the colony is indicative of more cell mass only.

Interpretation

Cultural characteristics observed after inoculating (10³CFU/ml), on incubation at 23-27°C for 3 - 4 days.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Chlamydospore
<i>Aspergillus brasiliensis</i>	16404	Point inoculation	Good zone diameter	-----	Negative
<i>Candida albicans</i>	10231	10 ³	Luxuriant	≥70%	Positive
<i>Saccharomyces cerevisiae</i>	9763	10 ³	Luxuriant	≥70%	Negative

References

1. Pollack and Benham, J. Lab. Clin. Med., 50:313. (1960).
2. Walker and Huppert, Tech. Bull. Reg. Med. Technol., 30:10. (1960).
3. Conant N. F., Smith D. T., Baker R. D., Callaway J. L. and Martin D. S., Manual of Clinical Mycology, 3rd Ed., USA. (1971).
4. Cooper and Silvo-Hunter, Manual of Clinical Microbiology, Lennette, Balows, Hausler and Shadomy (Eds.), 4th ed., ASM, Washington, D.C. (1985).