

Semisynthetic medium for cultivation of fungi

Composition

Ingredients	Gms/Ltr.
Sucrose	30.00
Sodium nitrate	3.00
Dipotassium phosphate	1.00
Magnesium sulphate	0.50
Potassium chloride	0.50
Ferrous sulphate	0.01

* 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 35gms 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 to room temperature prior to inoculation.

Appearance: Light yellow colour, clear to slightly opalescent solution
pH (at 25°C): 7.3 ± 0.2

Principle

CZAPEK DOX BROTH is a semi-synthetic medium used for cultivation of fungi. The medium contains Sucrose as the source of carbon. Sodium nitrate is a source of nitrogen. Dipotassium phosphate acts as a buffer in the medium. Magnesium sulphate, Potassium chloride, Ferrous sulphate is added as the source of mineral in the medium.

Interpretation

Cultural characteristics observed after inoculating (10^3 CFU/ml), on incubation at $25 \pm 2^\circ\text{C}$ for 3 - 5 days.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth
<i>Aspergillus niger</i>	16404	10^2 - 10^3	Luxuriant
<i>Candida albicans</i>	10231	10^2 - 10^3	Luxuriant
<i>Candida tropicalis</i>	750	10^2 - 10^3	Luxuriant
<i>Saccharomyces cerevisiae</i>	9763	10^2 - 10^3	Luxuriant

References

1. Czapek. Beitr. Chem. Physiol. Pathol. 1:540. (1902-1903).
2. Dox. U.S. Dept. Agr. Bur. Anim. Ind. Bull. 120:70. (1910).
3. Thom and Church, The Aspergilli, 39. (1926).
4. Thom and Raper, Manual of Aspergilli, 39. (1945).