

## NOTES

### USE OF FRANCIS' GLUCOSE CYSTINE BLOOD AGAR IN THE ISOLATION AND CULTIVATION OF SPOROTRICHUM SCHENCKII

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Francis' glucose cystine blood agar is an excellent medium for the rapid isolation and identification of the fungus *Sporotrichum schenckii*. On this medium, incubated at 37 C, the organism appears as a yeast and remains in the yeastlike phase of growth. This yeastlike phase becomes a valuable adjunct to the identification of the organism. Other media routinely used in the culture of *Sporotrichum schenckii* support only the hyphal phase of growth, in which form identification depends solely upon the worker's ability to recognize certain hyphal and spore arrangements characteristic of the species.

For isolation, several plates of the medium are streaked with infected material (usually pus from subcutaneous nodules) and incubated aerobically at 37 C. Small grayish-yellow colonies, having a consistency similar to that of *Staphylococcus*, become apparent in 36 to 48 hours. Microscopically, the organisms appear as gram-positive, oval to elongated (cigar-shaped) cells that bud from one or both of the pointed ends; a form seen in experimentally infected animals but rarely demonstrated in human lesions. The fungus grows luxuriantly on this medium and will remain in its yeastlike phase as long as incubation is continued at 37 C.

When transferred to Sabouraud's maltose or glucose agar and incubated at room temperature, the light or dark waxlike colony with characteristic microscopic spore arrangement on slender hyphae develops within 48 hours. Conversely, the organism will revert to the yeastlike phase when transferred from Sabouraud's to glucose cystine blood agar and incubated at 37 C. In identification of the organism it is suggested that the two media be used, each incubated at the appropriate temperature.

In this laboratory 20 strains have been reverted from the moldlike to the yeastlike form by means of this medium. Older stock strains required several transfers before reversion was complete, but those isolated within the past two years reverted on the first attempt.

Glucose cystine blood agar also readily supports growth of *Blastomyces dermatitidis* and *Blastomyces braziliensis* (both in yeastlike phase) as well as *Pasteurella tularensis* for which the medium was originally devised. Inasmuch as the more complex forms of sporotrichosis must frequently be differentiated from North and South American blastomycosis and tularemia, the use of this medium in such cases is especially advantageous.