

# Mold of the Month February 2009

## *Cryptococcus neoformans*



Colonies of *Cryptococcus neoformans* Encapsulated Yeast of *Cryptococcus neoformans*

### Colony Description

*Cryptococcus neoformans* is rapidly grown and can mature in 3 days. The colonies are flat, shiny, mucoid, and with smooth edges. Color is cream at first, later becoming tannish. They usually grow equally well at 25 and 37 oc.

### Microscopic Morphology

On cornmeal tween 80 agar, *Cryptococcus* produces round, budding yeast cells. No true hyphae are visible. Pseudohyphae are usually absent or rudimentary. The capsule is best visible in India ink preparations. The thickness of the capsule depends on strain types and the environmental conditions.

### Ecology

*Cryptococcus* is encapsulated yeast. It was first identified from peach juice. The major environmental sources are soil contaminated with pigeon droppings, eucalyptus trees, and the hollows of decaying trees. The genus of *Cryptococcus* includes 37 species. *Cryptococcus neoformans* is the only pathogenic species.

### Health Effect

*Cryptococcus neoformans* is the causative agent of cryptococcosis. Cryptococcal meningitis is extremely common in AIDS patients. Cryptococcosis occasionally produces lesions in the skin, bones, lung, prostate gland, urinary tract, eyes, myocardium, and joints.