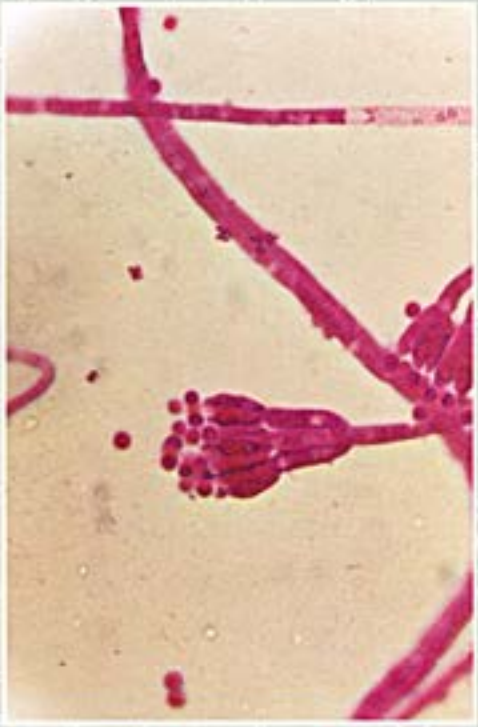
PENICILLIUM NOTATUM



PETRI DISH CULTURE
TOP OF COLONY



MICROSCOPIC STRUCTURE
MAGNIFICATION 1000X

PENICILLIUM NOTATUM

CLASS: Fungi Imperfecti
ORDER: Moniliales
FAMILY: Moniliaceae
GENUS: Penicillium
SPECIES: notatum

MACROSCOPIC VIEW: (Sabouraud Agar) The colony is white when young and turns blue-green at maturity. The colony has a compact wool-like appearance with ridges running from the center of the colony to the edge.

MICROSCOPIC VIEW: Conidia or spores are borne in chains which typically form a brush-like head. Conidia are spherical to oval and are 2.6 to 3.2 microns in diameter. Conidia are borne by budding from flask shaped cells which grow in whorls at the tip of the conidiophore.

COMMON SOURCE: Normally a soil inhabitant, but grows readily on fruits, breads, cheese and other foods. Mutant strains are used to produce the antibiotic penicillin.

ALLERGENIC IMPORTANCE: Allergies to the air-borne spores and mycelial fragments are less frequent than the members of the Dematiaceae family. Injection of the by-product penicillin often induces an allergic response which may, upon continued usage, induce anaphylactic shock in the patient. However, penicillin is produced from only a few strains of penicillium which occur rarely in normal exposure. The highly purified antibiotics made today do not cross react with the allergens of the spores and mycelia.