**Aspergillus terreus:**

**Macroscopic Morphology:** Aspergillus terreus is a rapid grower, producing a colony with a cinnamon brown surface.

**Microscopic Morphology:** Septate hyphae often bear solitary conidia, or aleurioconidia (at right, see arrow). Short conidiophores are smooth. Biseriate phialides form on the upper half of vesicles and bear chains of round conidia.

**Clinical:** Aspergillus terreus may produce infections in a variety of body sites often with dissemination.

**Comment:** Aspergillus terreus is intrinsically resistant to amphotericin B. Formation of aleurioconidia in vivo may produce positive blood cultures in infected patients. Not all strains of Aspergillus terreus produce aleurioconidia.
**Aspergillus versicolor:**

**Macroscopic Morphology:** *Aspergillus versicolor* grows rapidly, producing usually green or tan, downy colonies. A clear or red exudate may be produced.

**Microscopic Morphology:** Hyphae are hyaline and septate. Conidiophores are smooth and long. Biseriate phialides cover one-half to all of a vesicle and support chains of round conidia. Hülle cells may be present.

**Clinical:** *Aspergillus versicolor* may cause nail infections and is a rare agent of pulmonary infections.

**Comment:** *Aspergillus versicolor* may produce some phialides with reduced conidial heads (at right, see arrow) that may be confused with *Penicillium*.
**Rhizopus:**

**Macroscopic Morphology:** *Rhizopus* rapidly produces a wooly, white-to-grey or brown mold and is inhibited by media containing cycloheximide.

**Microscopic Morphology:** Hyphae are hyaline, wide, and sparsely septate. Rhizoids appear on hyphae in continuity with groups of sporangiophores that usually do not branch. Sporangia are large, dark, and round.

**Clinical:** *Rhizopus* is the major agent of zygomycosis affecting patients with diabetic ketoacidosis, those who are immunosuppressed, or those who are otherwise debilitated.

**Comment:** Pathogenic species of *Rhizopus* grow at 37°C or higher. Grouped, unbranched sporangiophores comprise a distinct feature of *Rhizopus*. 
**Syncephalastrum:**

**Macroscopic Morphology:** *Syncephalastrum* is recognized as a white, fluffy mold that grows rapidly and turns gray-to-black over time.

**Microscopic Morphology:** Broad, hyaline, sparse-septate hyphae produce short, often branched, sporangiophores that terminate in vesicles surrounded by tubular sporangia. Rhizoids are usually present.

**Clinical:** *Syncephalastrum* is usually a contaminant, rarely causing human disease. *Syncephalastrum* can superficially be confused with *Aspergillus niger.*