Hyalohyphomycetes

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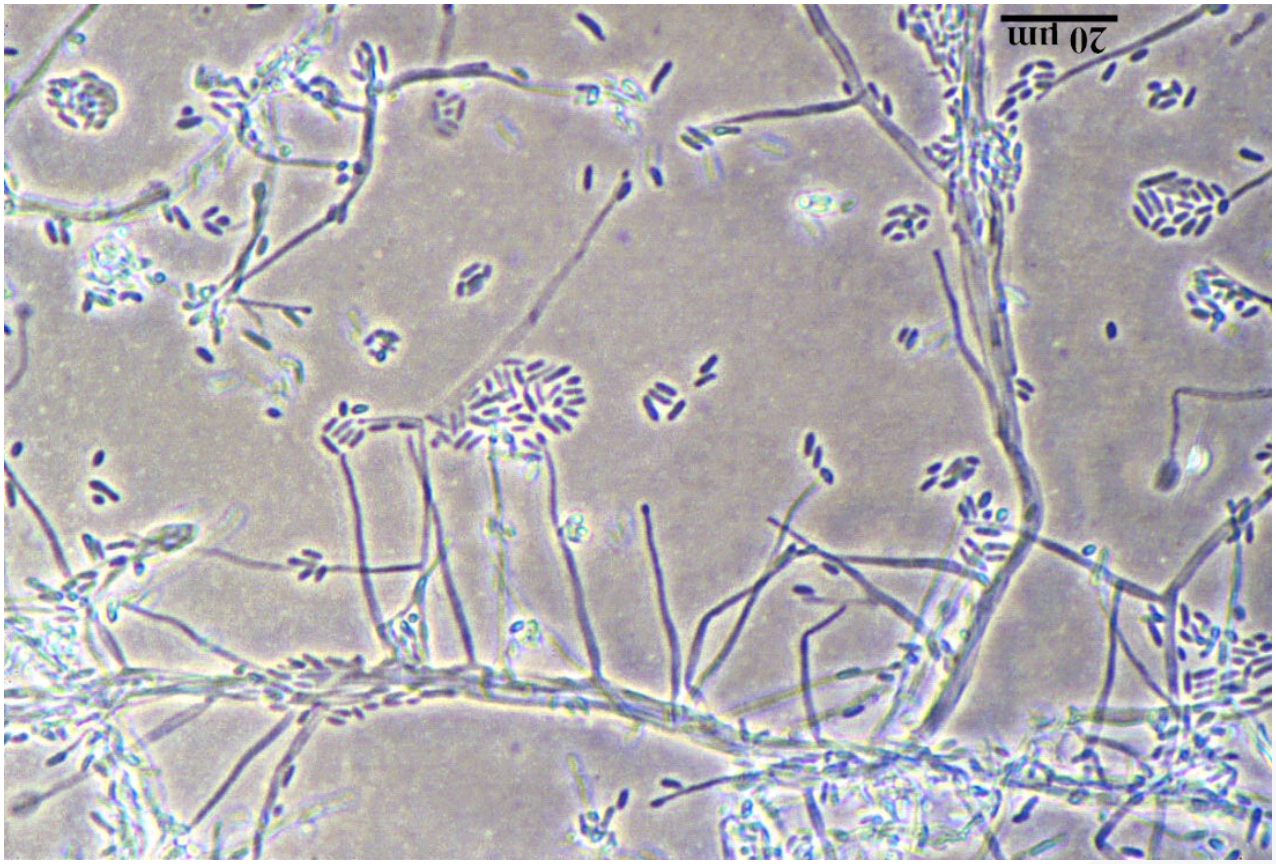
Acremonium species

Showing long awl-shaped phialides producing cylindrical, one-celled conidia mostly aggregated in slimy heads at the apex of each phialide.



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Arthrographis kalrae

Colonies slow growing, initially, yeast-like, creamy white to tan-coloured Arthroconidia are one-celled, hyaline, smooth-walled, oblong to cylindrical, with truncate ends. Chlamydospores may also be present. Growth at 42C, and on media containing cycloheximide.

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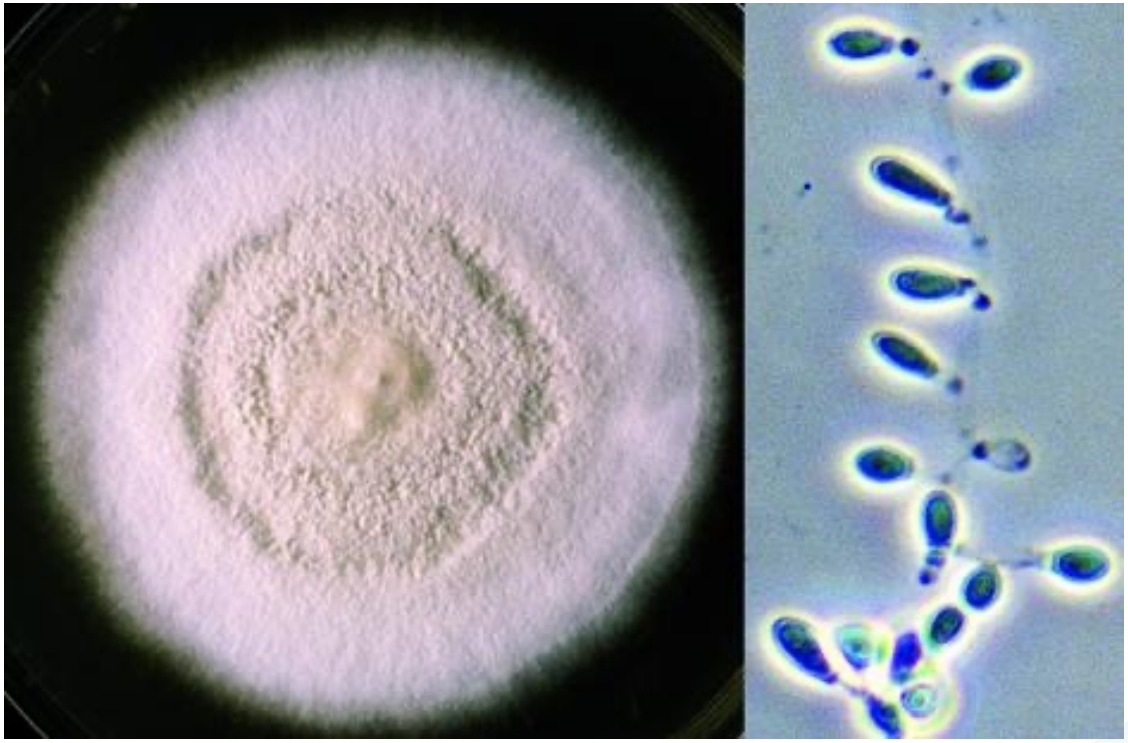
Chrysosporium tropicum

Colonies are flat, white to cream-coloured with a very granular surface. Conidia are hyaline, single-celled, clavate to pyriform, smooth, slightly thick-walled and have broad truncate bases and pronounced basal scars.



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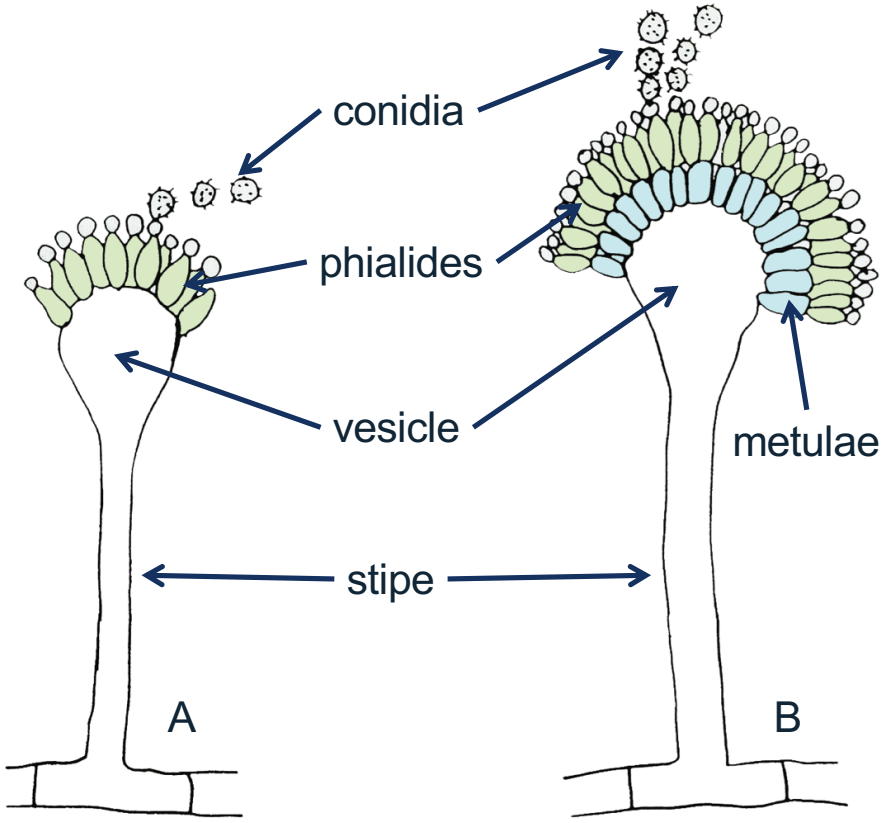
Conidial head morphology in *Aspergillus* (a) uniseriate, (b) biseriate.



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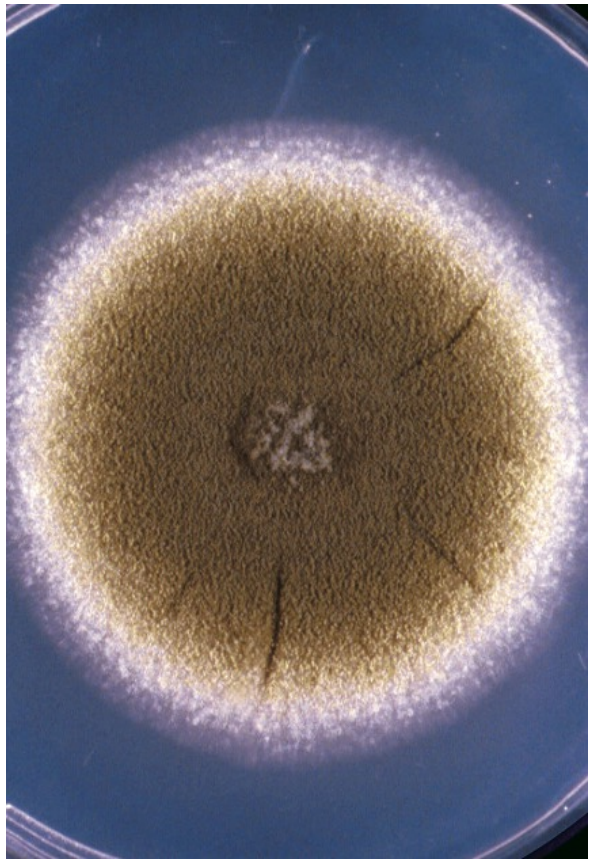
Aspergillus flavus

Culture and conidial head showing rough-walled stipe near vesicle and that both uniseriate and biseriate conidial heads may be present.



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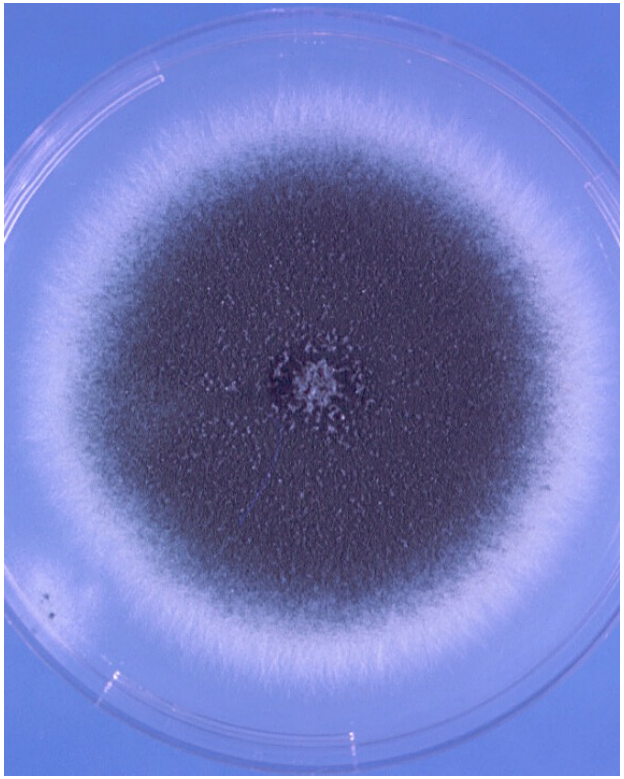
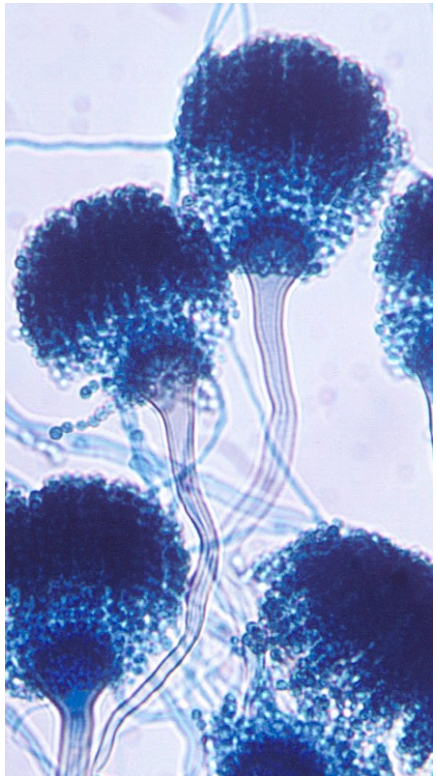
Aspergillus fumigatus

Culture and conidial head morphology showing uniseriate row of phialides on the upper two thirds of the vesicle.





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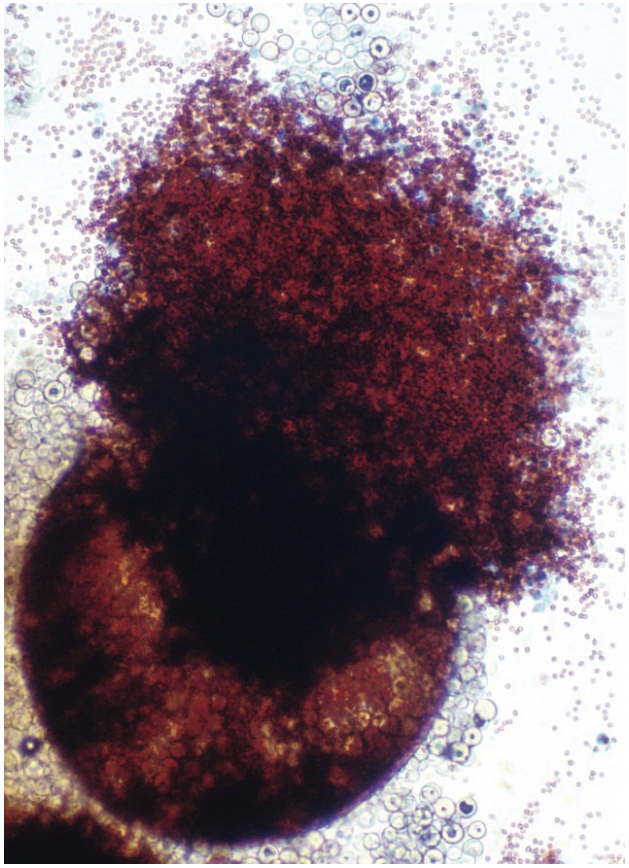
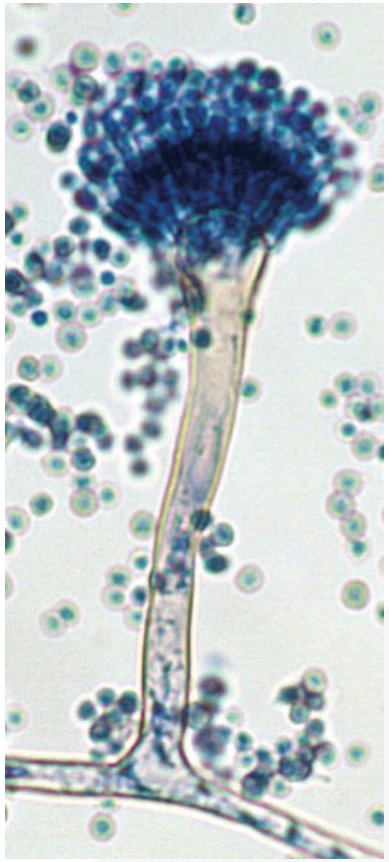
Emericella nidulans **(anamorph** ***Aspergillus nidulans*****)**

Cleistothecium showing numerous reddish-brown ascospores and thick-walled hülle cells; conidial head and stipe and culture of *A. nidulans*.





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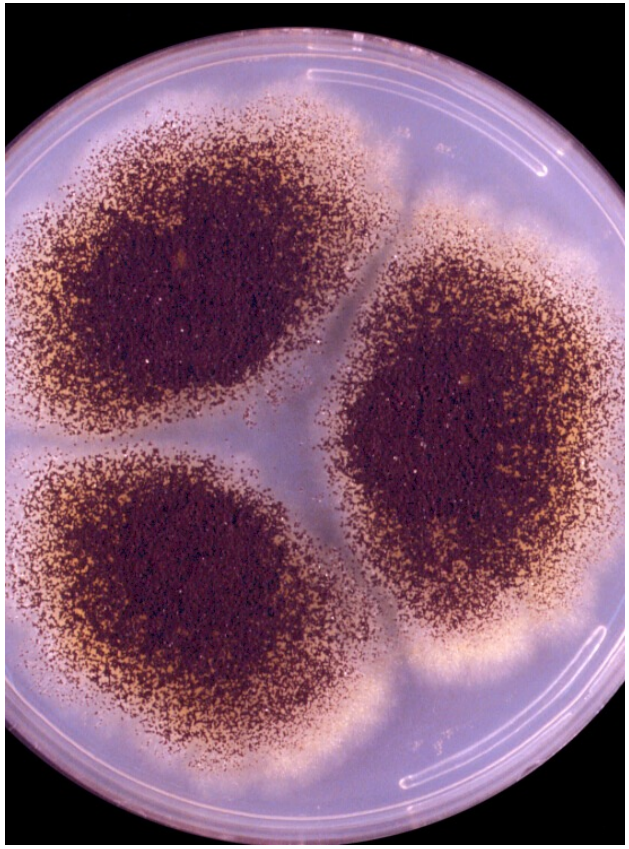
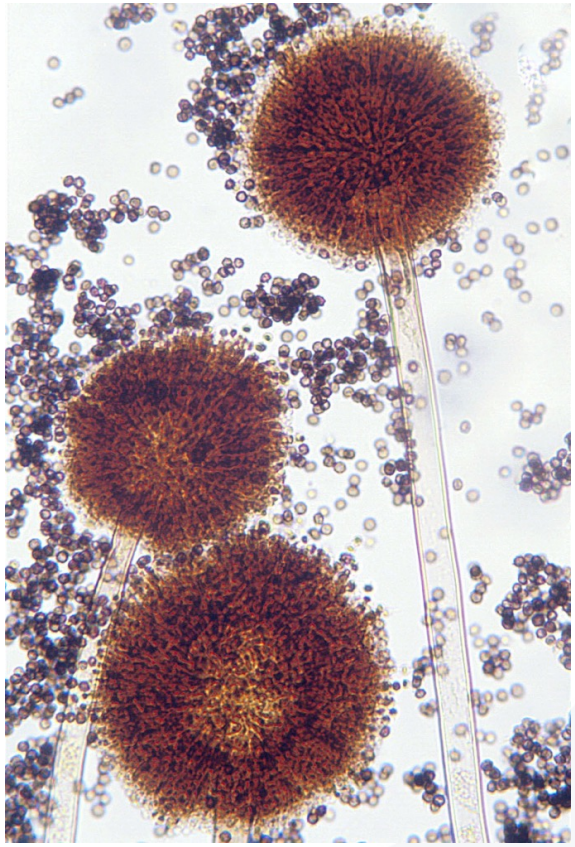
Aspergillus niger

Culture and conidial head morphology showing *conidial heads are biseriate, large, globose, dark brown, becoming radiate with the phialides borne on metulae.*





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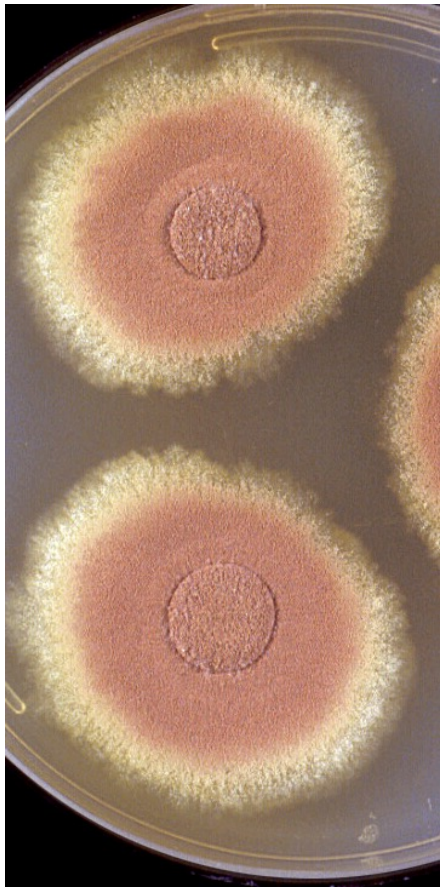
Aspergillus terreus

Culture and conidial head and conidiophore showing *conidial heads are biseriate.*



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Beauveria bassiana

Sympodial development of conidia on a geniculate or zig-zag rachis.

Conidia are hyaline and globose or ovoid in shape, 2-3 mm diameter.

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Coccidioides immitis/posadasii

Culture and arthroconidia separated from each other by disjunctor cells.

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Dipodascus geotrichum

Arthroconidium by fragmentation of septa. Conidial secession is by the centripetal separation (schizolysis) of a double septum and concomitant rupture of the original outer hyphal wall layer.

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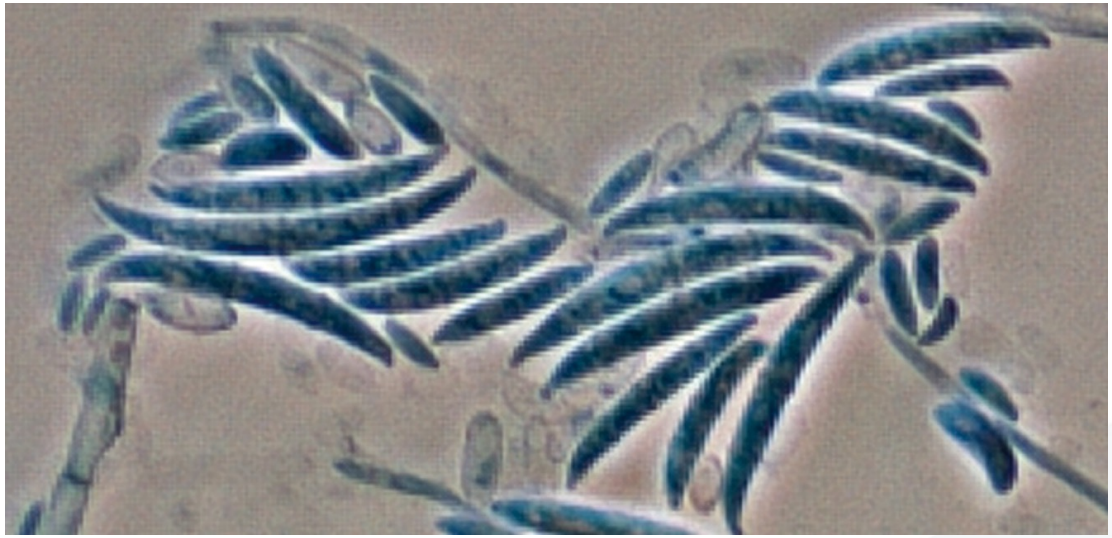
Fusarium oxysporum

Microconidia on short phialides and macroconidia.



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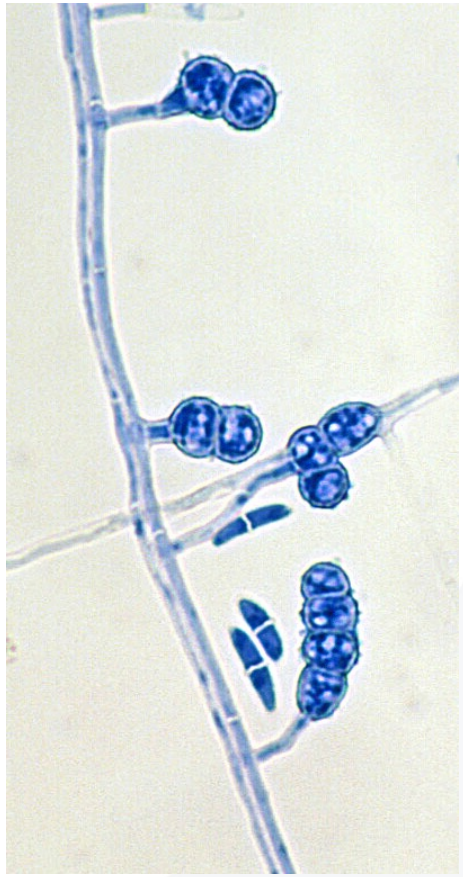
Fusarium solani

Microconidia on long phialides, macroconidia and chlamydospores.



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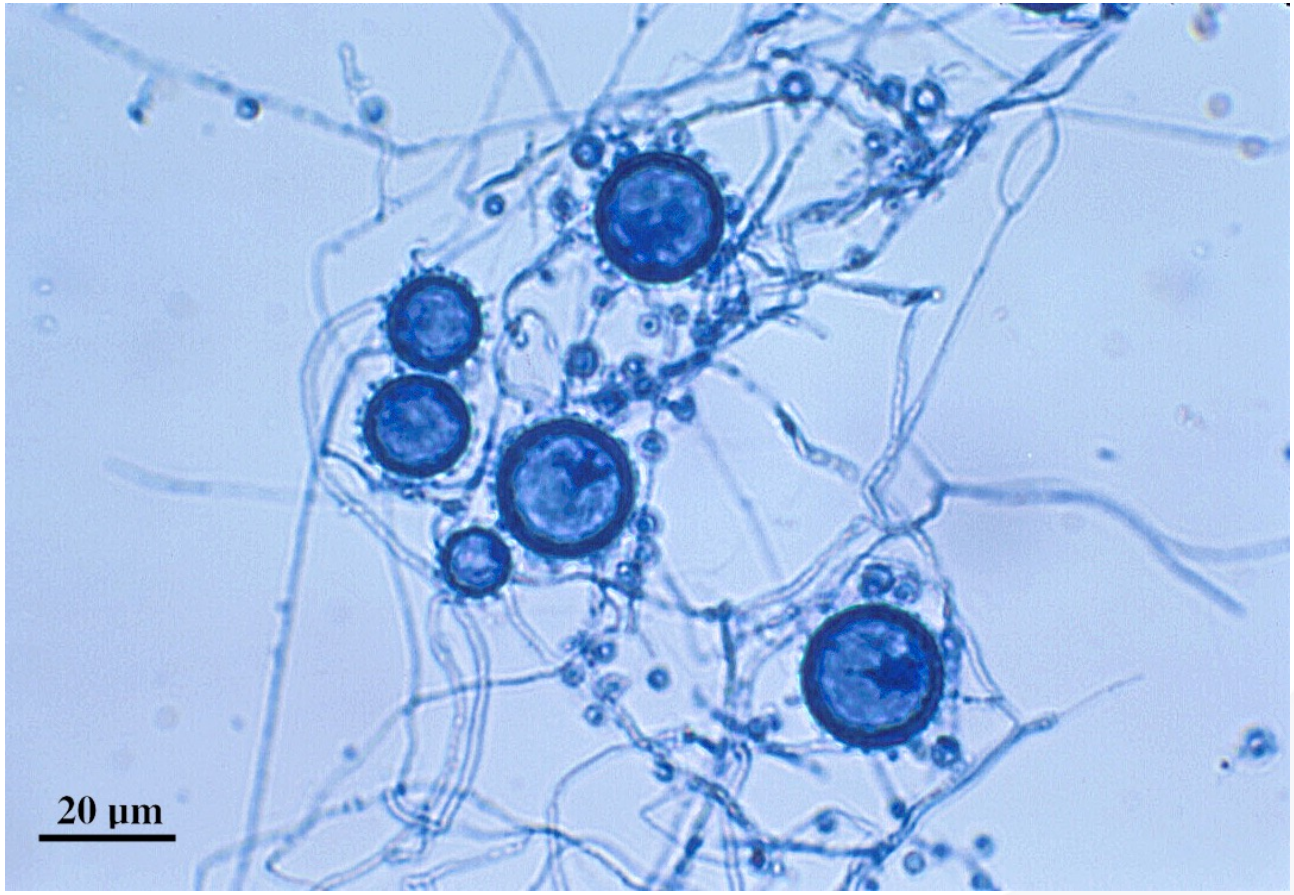
Histoplasma capsulatum

Showing characteristic large, rounded, single-celled, tuberculate macroconidia formed on short, hyaline, undifferentiated conidiophores.



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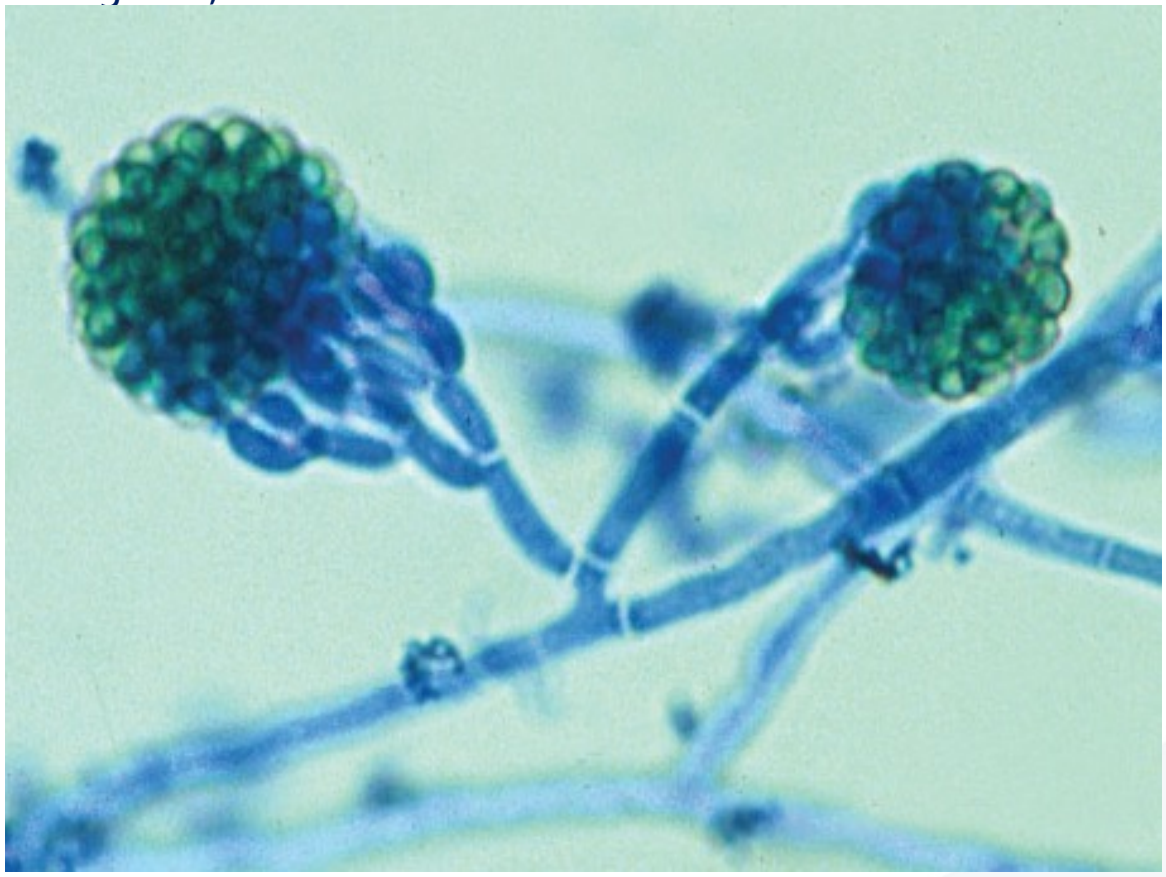
Gliocladium species

The most characteristic feature of the genus is the distinctive erect, often densely penicillate conidiophores with phialides which bear slimy, one-celled hyaline to green, smooth-walled conidia in heads or columns.



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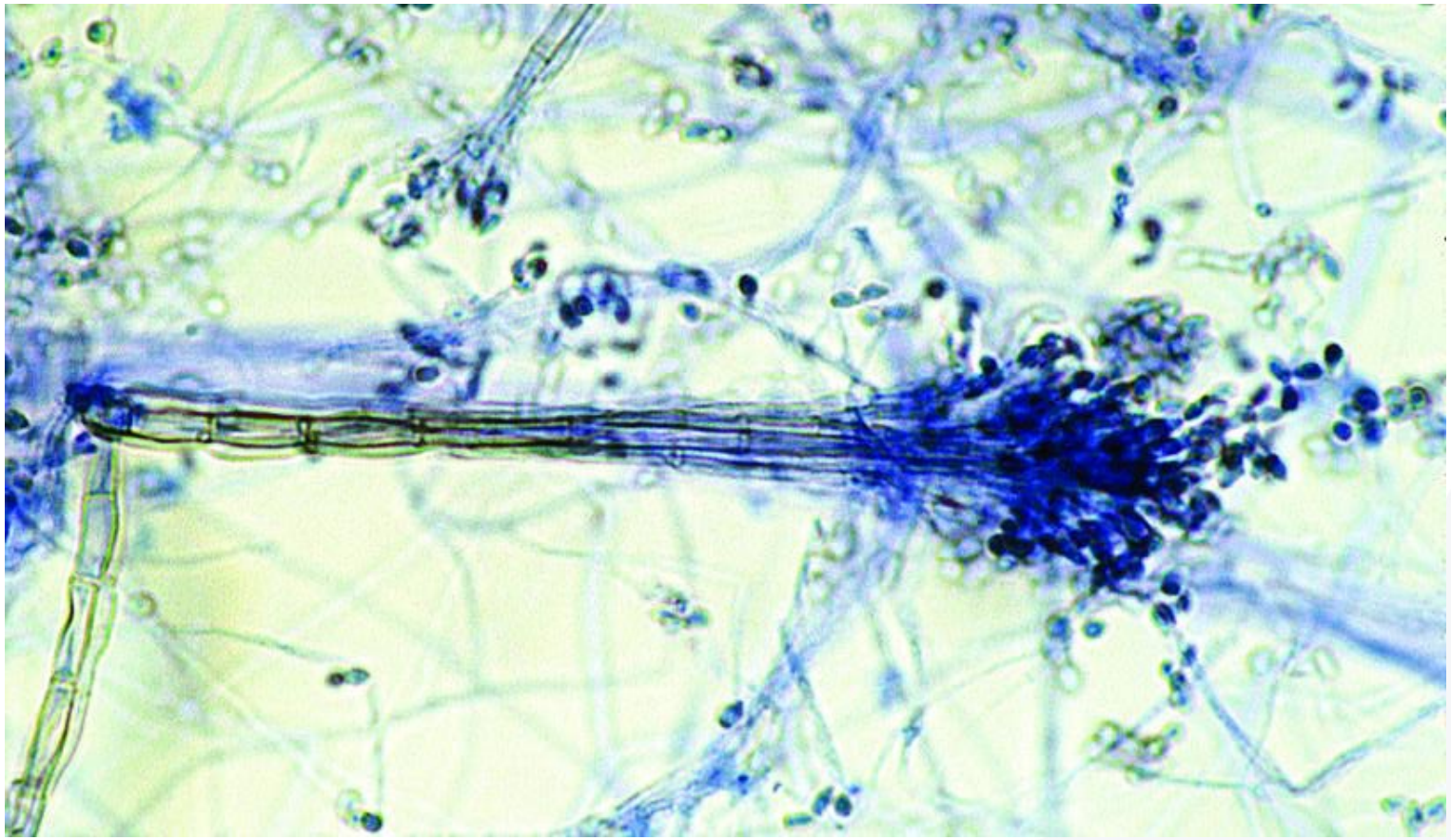
Graphium spp.

Synnemata and conidia



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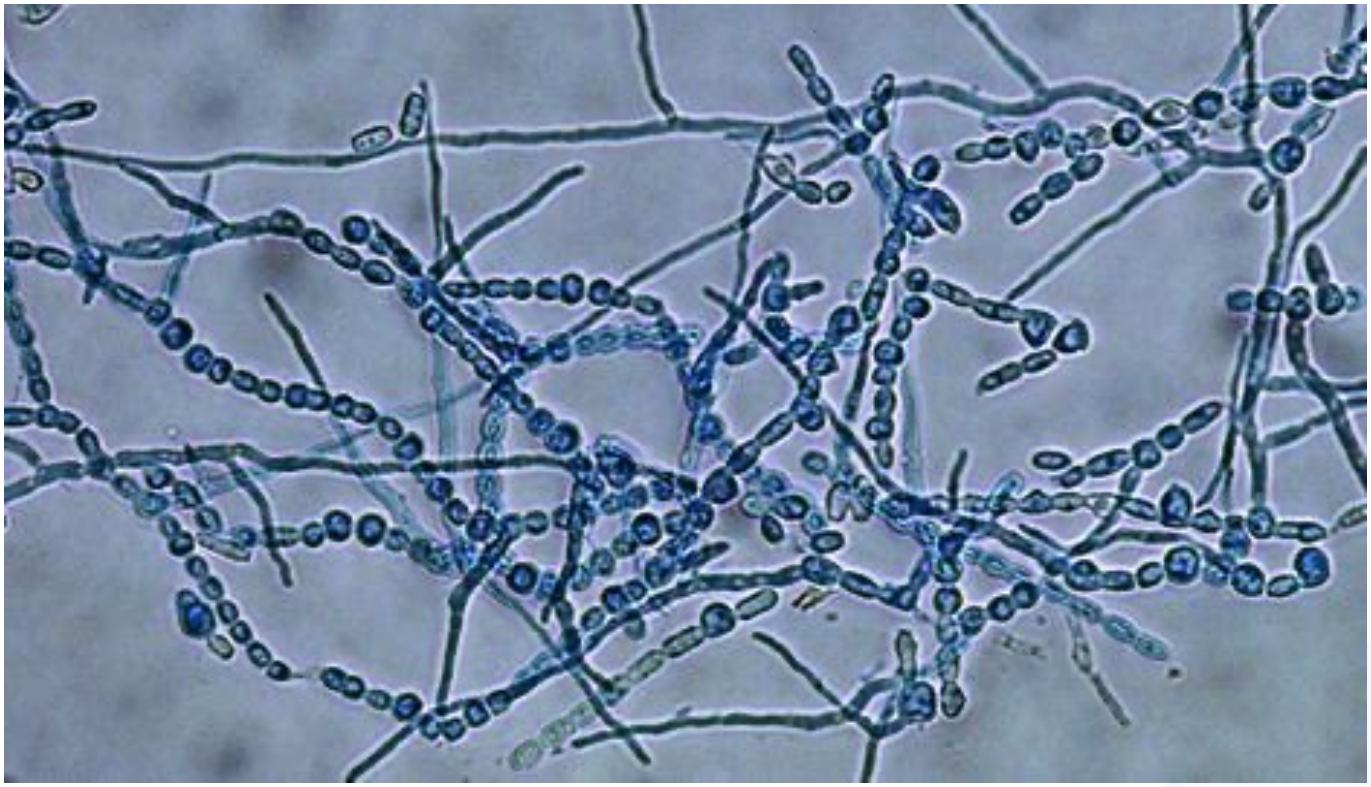
Onychocola canadensis

Arthroconidia are cylindrical to broadly ellipsoidal, one to two-celled, hyaline to subhyaline forming long chains.



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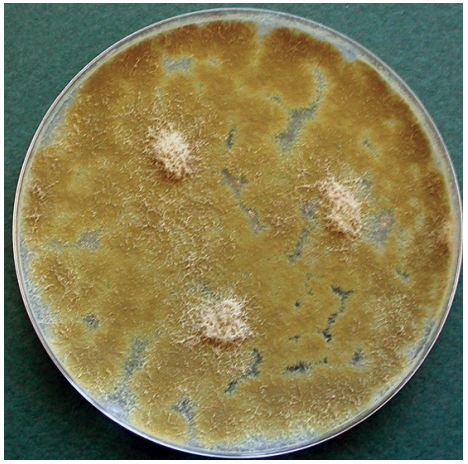
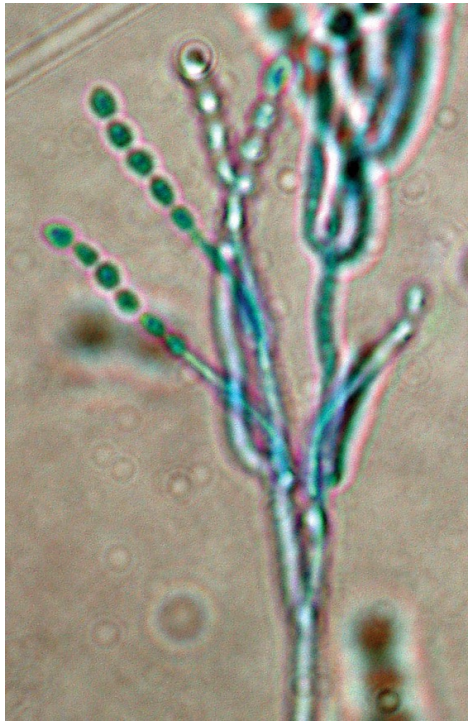
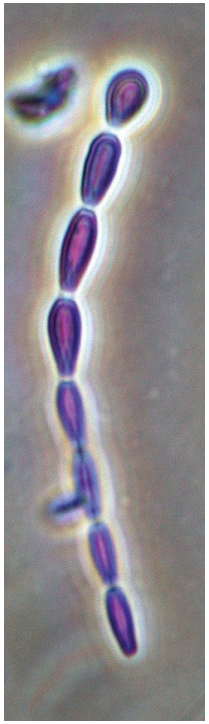
Paecilomyces variotii

Colonies are fast growing, powdery to suede-like, funiculose or tufted, and yellow-brown or sand coloured. Conidiophores bearing dense, verticillately arranged branches bearing phialides. Chlamydospores are usually present, singly or in short chains, and are subspherical to pyriform.







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Purpureocillium lilacinus

Colonies are fast growing, suede-like to floccose, vinaceous to violet coloured. Conidiophores are erect, bearing branches with densely clustered phialides. Conidiophore stipes are rough-walled. Phialides are swollen at their bases, gradually tapering into a slender neck.

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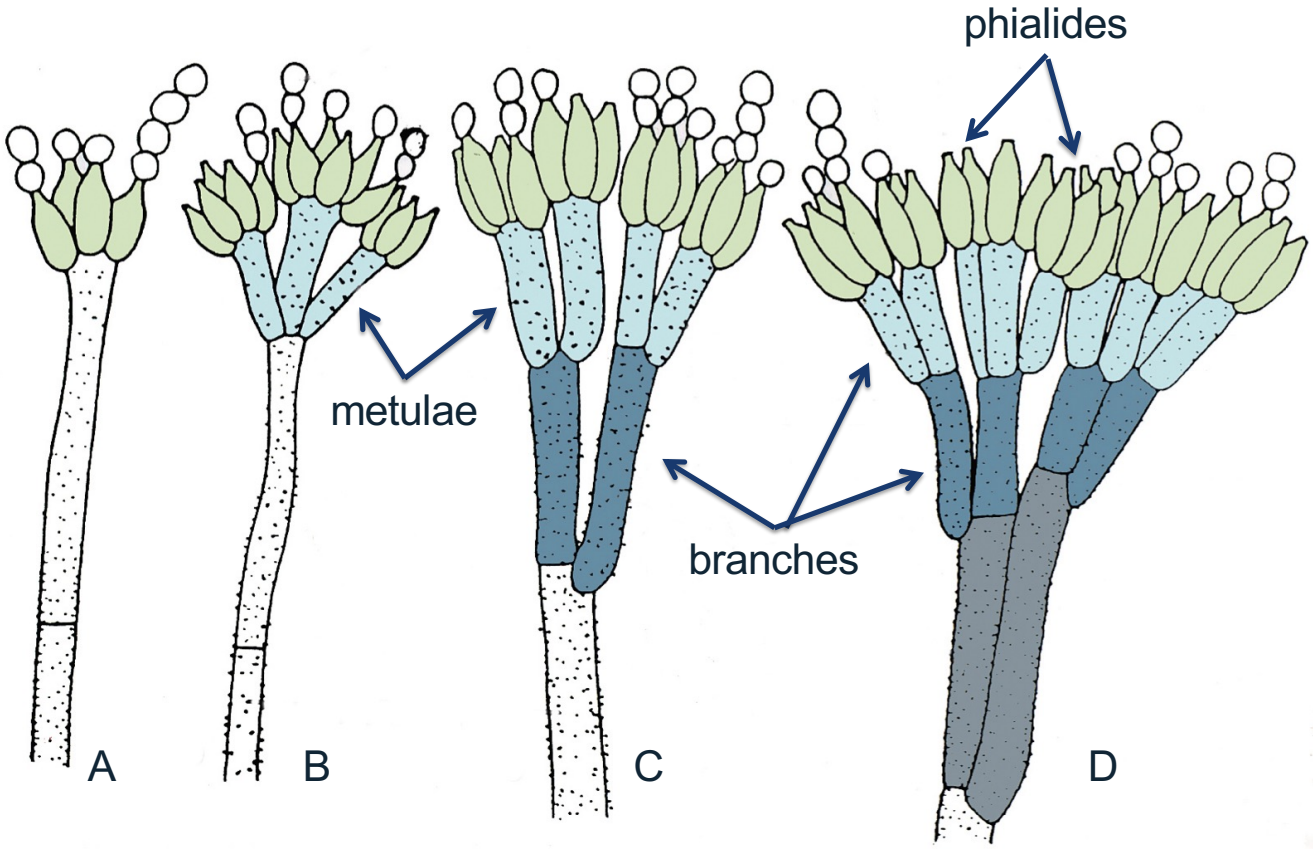
Penicillium species

Types of conidiophore branching in *Penicillium*. (a) simple; (b) one-stage branched; (c) two-stage branched; (d) three-stage branched.



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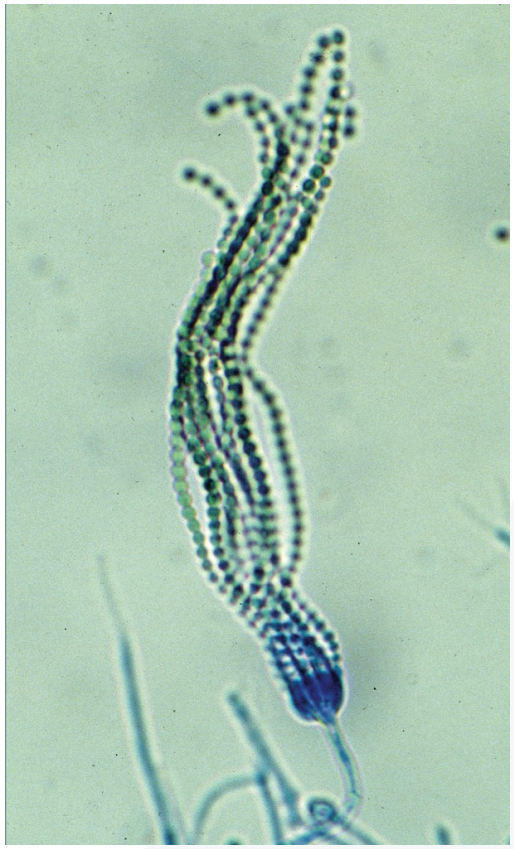
Penicillium species

Conidiophores of *P. verrucosum var. cyclopium* showing two-stage branching. Simple conidiophore of *P. cheresanum* showing long chains of single-celled conidia.



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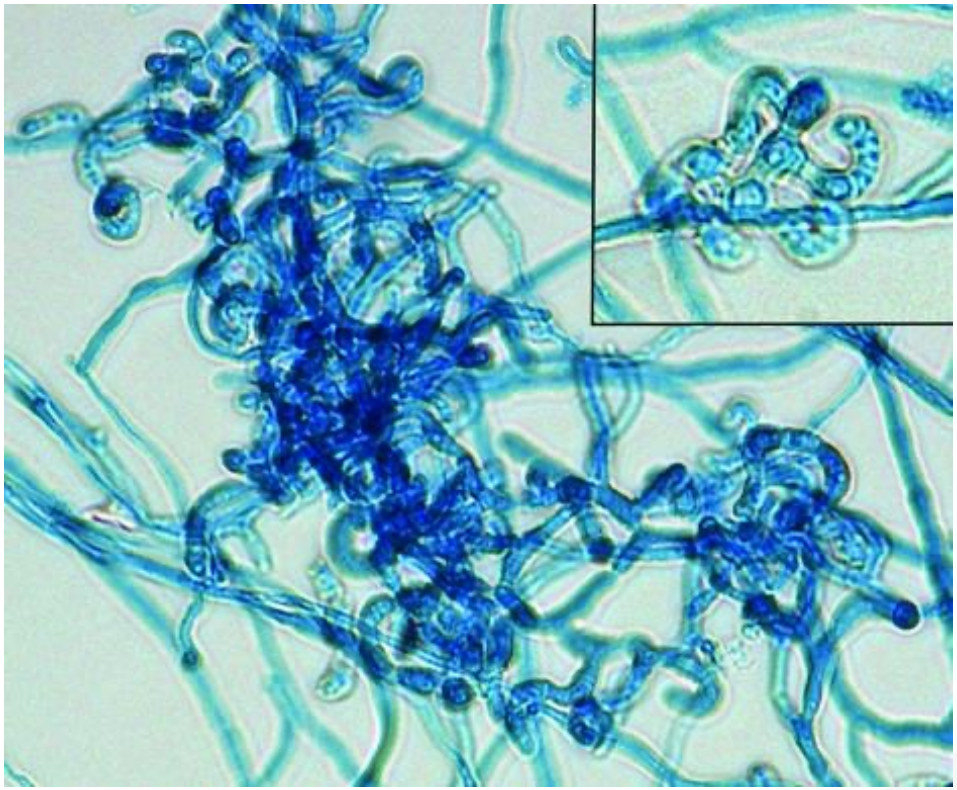
Malbranchea pulchella

Arthroconidia produced in tightly coiled, terminal fertile branches of the hyphae.



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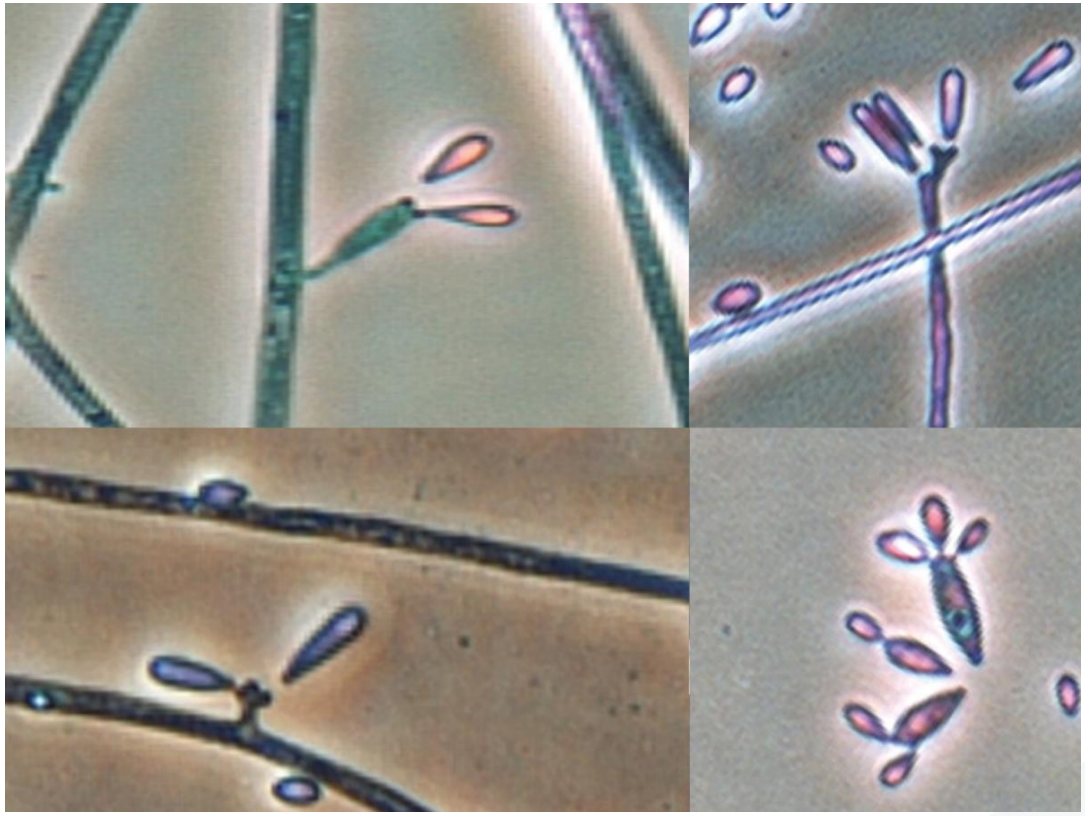
Quambalaria cyanescens

Conidiogenous cells with small denticles and conidia,
and mature conidium bearing secondary conidia.



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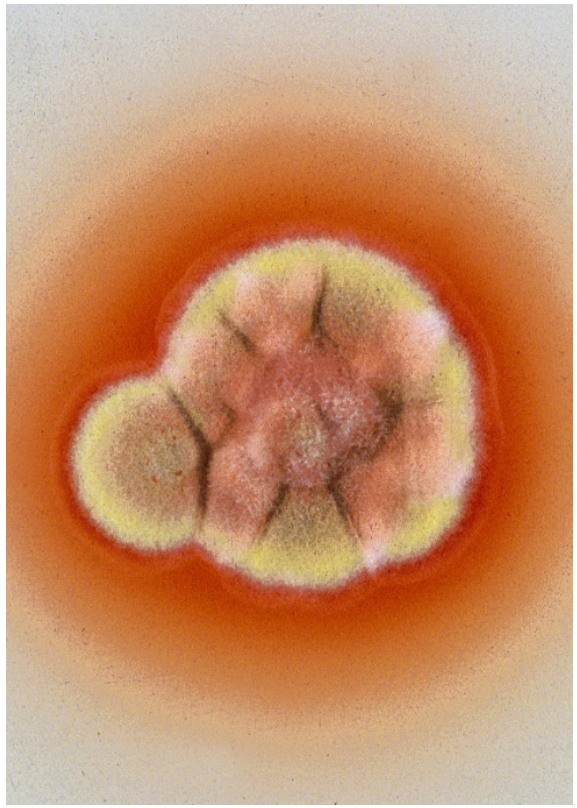
Talaromyces marneffei

Colonies produce a diffusible brownish-red to wine-red pigment. Conidiophores bear terminal verticils of 3-7 phialides. Conidia are globose to subglobose, 2 to 3 µm in diameter and are smooth-walled.



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Sarocladium strictum

Slender phialides with conidia in slimy heads.

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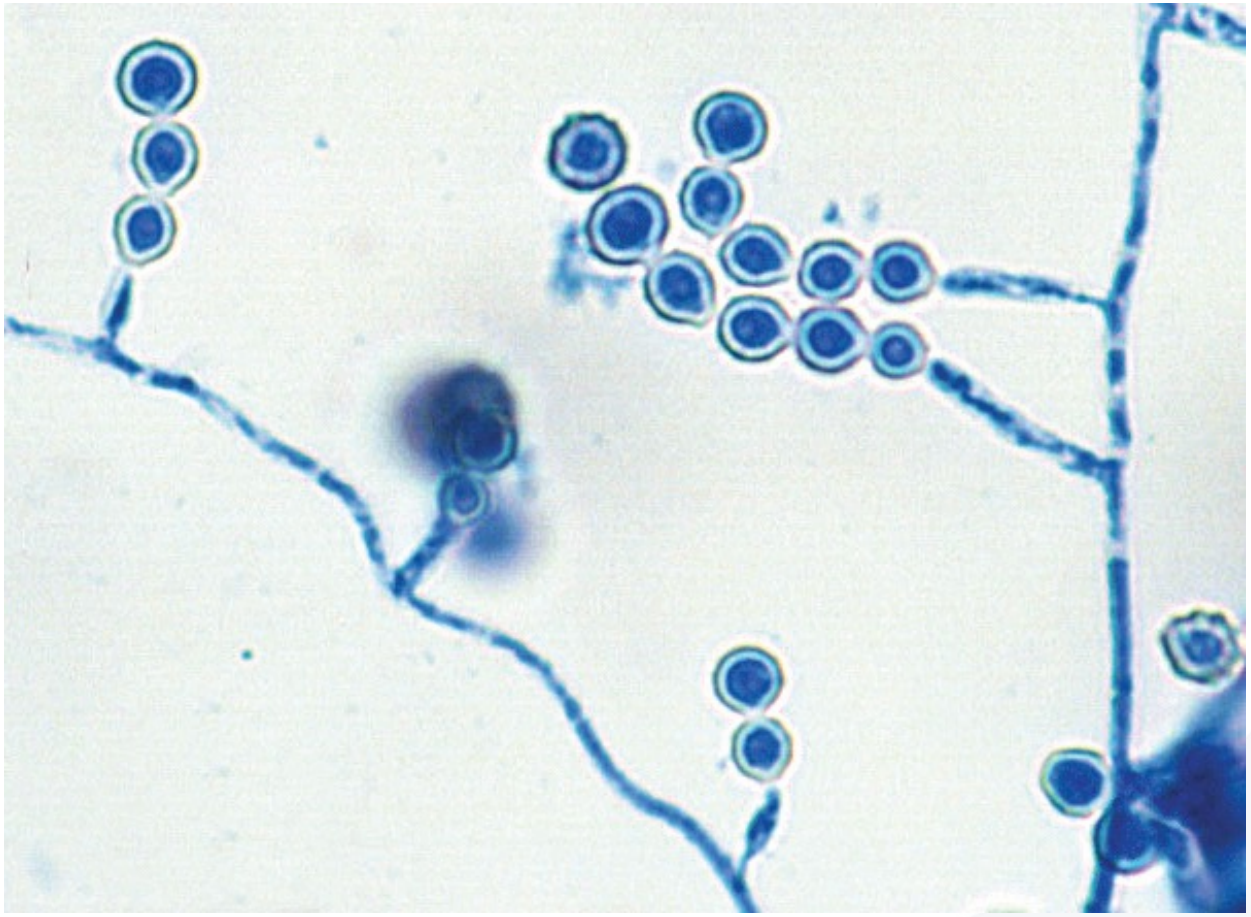
Scopulariopsis brevicaulis

Chains of single-celled conidia produced in basipetal succession from by a specialised conidiogenous cell called an annellide.



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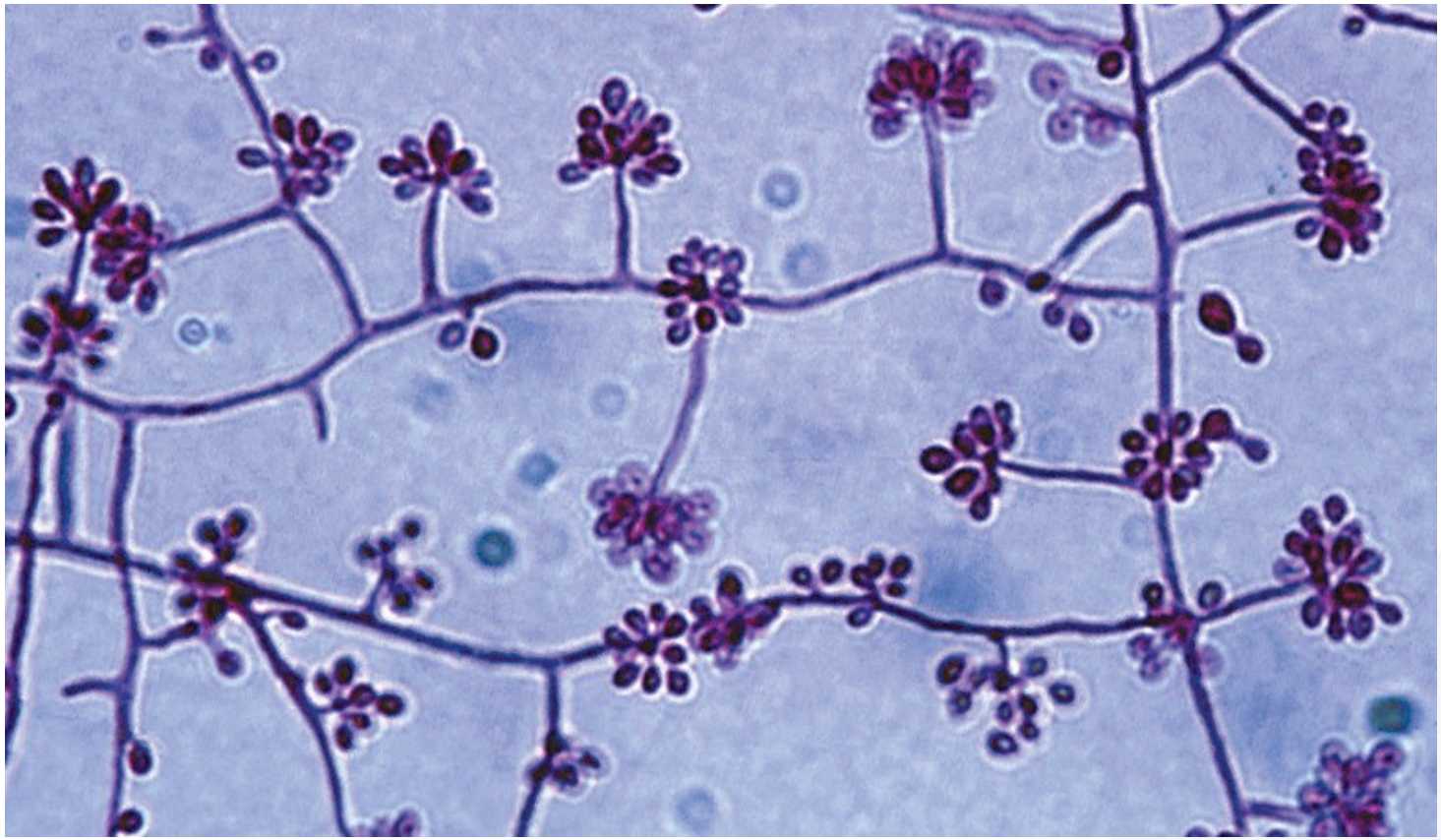
Sporothrix schenckii

Conidia are formed in clusters on tiny denticles by sympodial proliferation at the apex of the conidiophore, their arrangement often suggestive of a flower.



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Trichoderma harzianum

Conidiophores are repeatedly branched, irregularly verticillate, bearing clusters of divergent, often irregularly bent, flask-shaped phialides. Conidia are mostly green, sometimes hyaline, with smooth or rough walls and are formed in slimy conidial heads clustered at the tips of the phialides.

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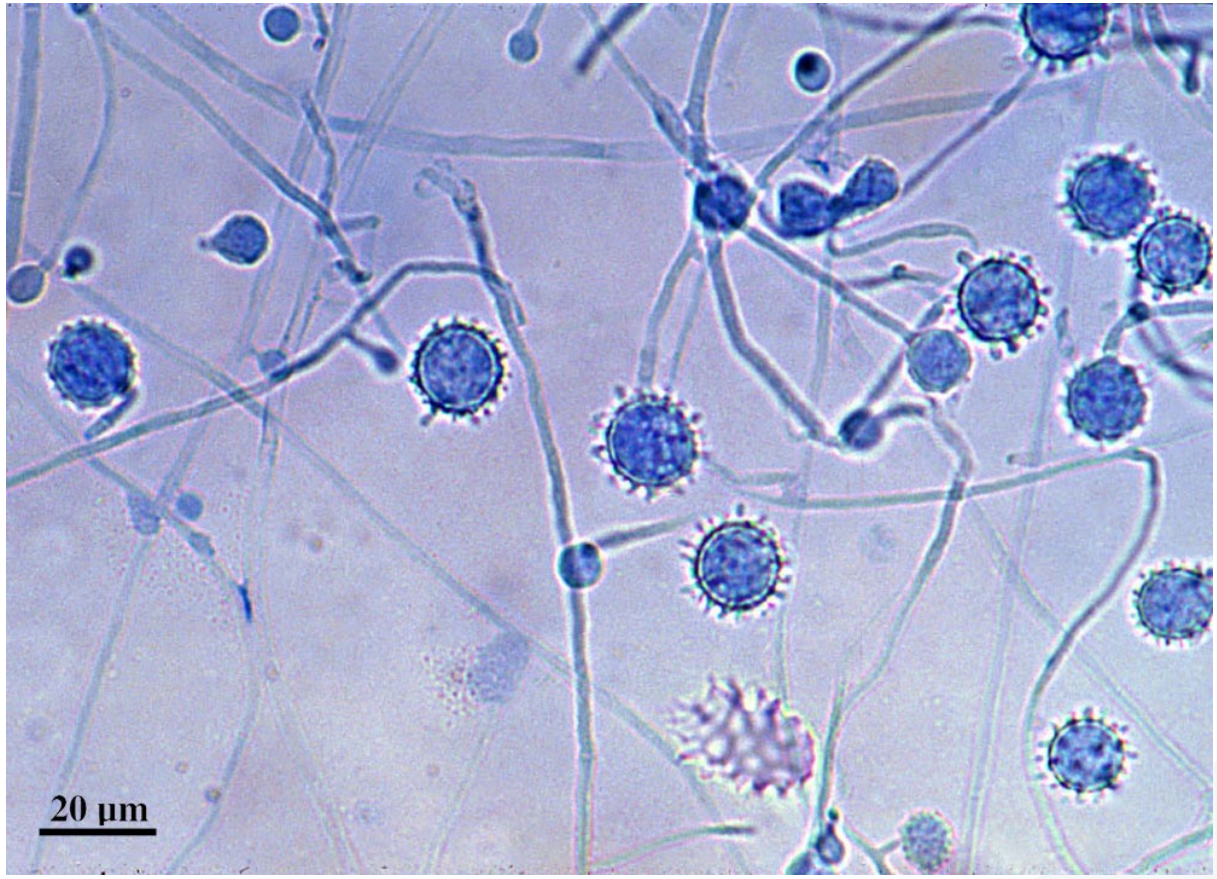
Sepedonium species

Conidia are terminal, solitary, or in clusters, one-celled, globose to ovoid, hyaline to amber, smooth to verrucose and usually with a thick wall.



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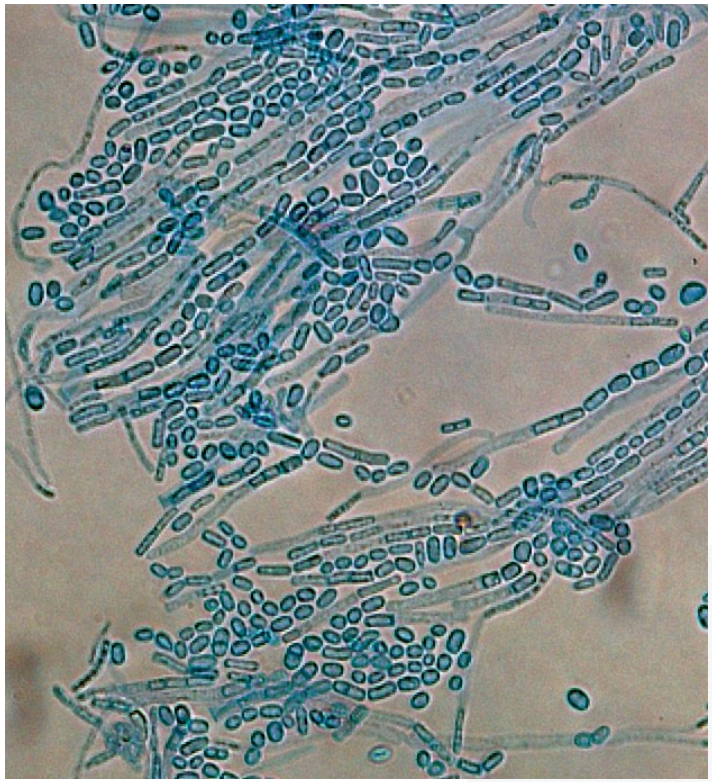
Trichosporon asahii

Colonies are white to cream coloured, powdery, suede-like to farinose with radial furrows and irregular folds. Budding cells and lateral conidia are absent. Arthroconidia are barrel-shaped.



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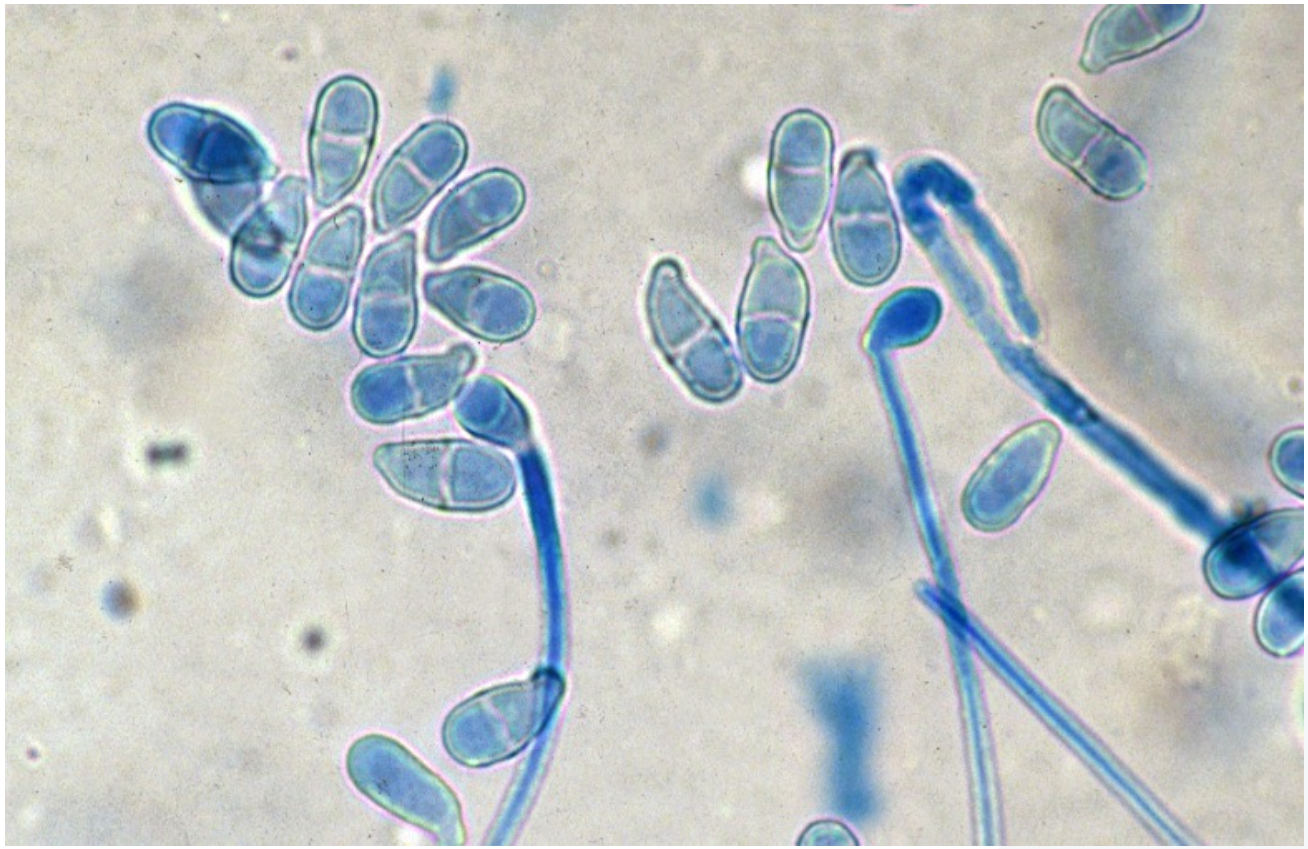
Trichothecium roseum

Conidiophores are erect, unbranched, often septate near the base, bearing basipetal zig-zag (alternating) chains of conidia at the apex. Note the conidiophore is progressively shortened with the formation of each conidium i.e. retrogressive conidial development.



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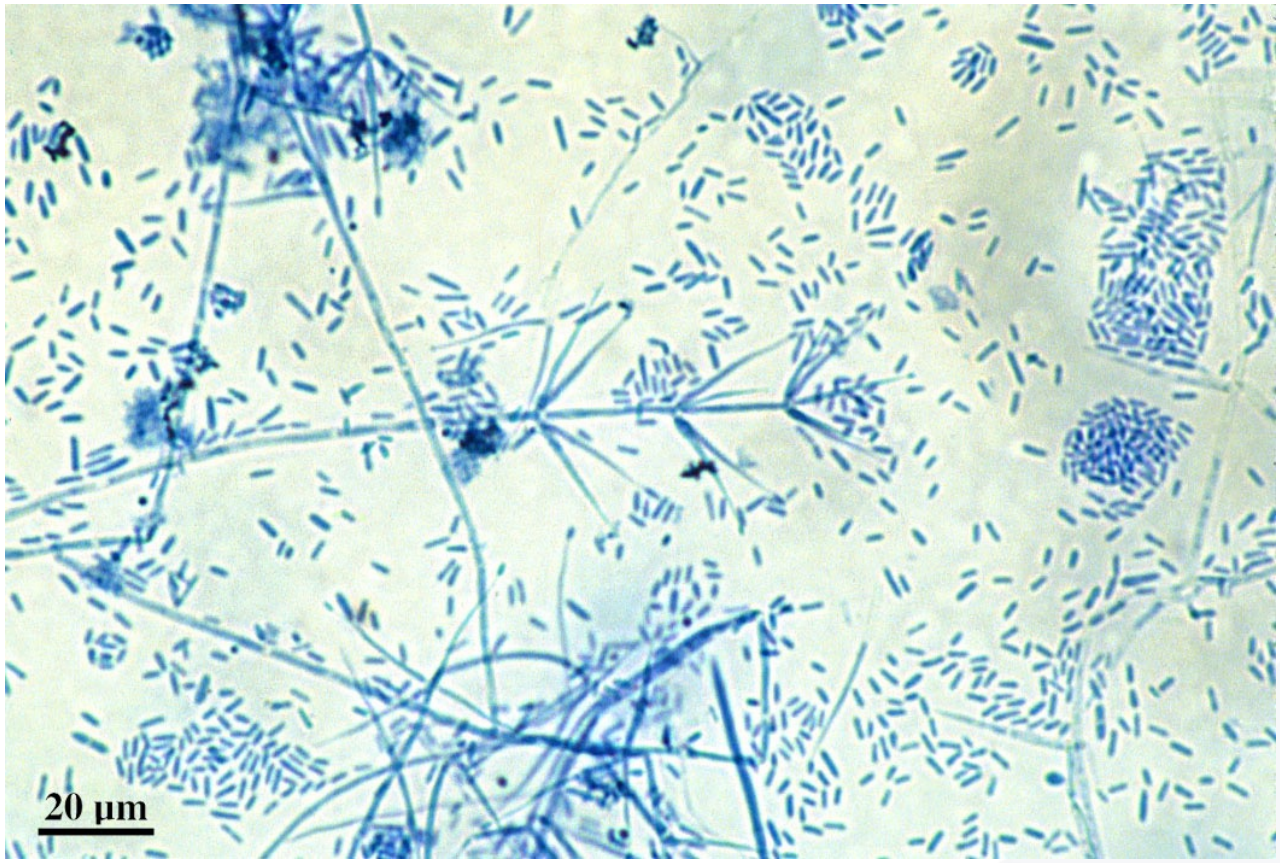
Verticillium species

Conidiophores are usually well differentiated and erect, verticillately branched over most of their length, bearing whorls of slender awl-shaped divergent phialides.



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