Genus	Species	Rhizomycelium	Sporangium	Zoospore*	Morphological variation	Reference[#]
Aestipascuomyces	*dupliciliberans*	Filamentous	Monocentric	Polyflagellate	Zoospore release occurs through an apical pore as well as by sporangial wall rupturing, endogenous and exogenous thallus development, sporangiophore ending with sub-sporangial swellings.	Stabel et al (2020)
Agriosomyces	*longus*	Filamentous	Monocentric	Monoflagellate	Endogenous and exogenous zoosporangial development, rhizoids are swollen below the sporangial tightly constricted neck, swollen sporangiophores.	Hanafy et al (2020)
Aklioshbomyces	*papillarum*	Filamentous	Monocentric	Monoflagellate	Mono, bi or triflagellate zoospores, endogenous and exogenous zoosporangial development, papillated sporangia, pseudo-intercalary endogenous sporangia occasionally, unbranched sporangiophores.	Hanafy et al (2020)
Anaeromyces	*mucronatus*	Filamentous	Polycentric	Uniflagellate	Zoospores are mainly uniflagellated, sporangia with acuminate (mucronate) apex, can be located on erect, solitary, unbranched sporangiophore, hyphae are highly branched, often with numerous constrictions (sausage-like appearance), sometimes with root-like appearance.	Breton et al (1990)
Astrotestudinimyces	*divisus*	Filamentous	Polycentric	Uniflagellate	Monoflagellated zoospores and a polycentric thallus development pattern. Filamentous hyphae characterized by the formation of blunted rhizoids and extensive branching. Nucleated rhizomycelia forms swellings from which multiple sporangiophores develop. Sporangia uniformly shaped (globose and subglobose). Zoospore release through an apical pore.	Pratt et al (2023)
Buwchfawromyces	*eastonii*	Filamentous	Monocentric	Monoflagellate	Extensive rhizoidal system with twisted rhizoids, sporangia with no apical projections, septum can be visible, nuclei located in sporangia, but not observed in sporangiophores or rhizoids.	Callaghan et al (2015)
Caecomyces	*communis* *equi*	Bulbous	Monocentric	Monoflagellate	Mono, bi or quadriflagellate zoospores, vegetative stage is absent of developed branching rhizoidal system, consists of spherical or ovoid bodies (holdfast or haustoria), tubular sporangiophores and bulbous rhizoids, nuclei usually present both in sporangia and vegetative cells.	Gold et al (1988)
Capellomyces	*elongatus* *foraminis*	Filamentous	Monocentric	Monoflagellate	Endogenous and exogenous zoosporangial development, unbranched sporangiophores can exhibit subsporangial swelling, zoospores released through apical pore.	Hanafy et al (2020)
Cyllamyces	*aberrensis*	Bulbous	Polycentric	Monoflagellate	Mono, bi or triflagellate zoospores, bulbous holdfast without rhizoids with multiple sporangia, which can be born on a single elongate or branched sporangiophore, nuclei present in bulbous holdfast and sporangiophores.	Ozkose et al (2001)
Feramyces	*austinii*	Filamentous	Monocentric	Polyflagellate	Extensive highly branched rhizoidal system with wide and narrow hyphae, wide hyphae with constrictions at irregular intervals, single terminal sporangium per thallus with the occasional formation of pseudo-intercalary sporangia, sporangiophores frequently coiled or wide and flattened, often forming an apophysis-like or eggcup-like swelling below the sporangium, both endogenous and exogenous zoosporangial development, zoospores are released through apical pore with the sporangial wall staying intact, or through detachment of the whole sporangium.	Hanafy et al (2018)
Ghazallomyces	*constrictus*	Filamentous	Monocentric	Polyflagellate	Endogenous and exogenous zoosporangial development, highly branched rhizoids, unbranched sporangiophores, pleomorphic sporangia with septum, sporangial necks constricted with narrow port, zoospores released through apical pore.	Hanafy et al (2020)
Joblinomyces	*apicalis*	Filamentous	Monocentric	Monoflagellate	Mono or biflagellate zoospores, both endogenous and exogenous zoosporangial development, sporangiophores vary in length, zoospores released through wide apical pore resulting in empty cup-shaped sporangium.	Hanafy et al (2020)
Khoyollomyces	*ramosus*	Filamentous	Monocentric	Monoflagellate	Endogenous and exogenous zoosporangial development, highly branched rhizoids, intercalary swellings in broad hyphae, multisporangiate thallus, branched sporangiophores with two to four sporangia, zoospores released through wide apical pore.	Hanafy et al (2020)
Liebetanzomyces	*polymorphus*	Filamentous	Monocentric	Monoflagellate	Endogenous and exogenous zoosporangial development, extensive anucleate rhizoidal system without constrictions, single terminal sporangium per thallus, sporangium with septum on sporangiophore of variable length, sometimes forming eggcup-like structure below the sporangium or showing cyst-like structure. Pleomorphism in sporangial and rhizoidal structures on different substrates is typical.	Joshi et al (2018)
Neocallimastix	*cameronii / californiae / lanati* *frontalis / giraffae/ stellae*	Filamentous	Monocentric	Polyflagellate	Rhizoid tubular or inflated below the neck of sporangia, sporangia located on unbranched or branched sporangiophores.	Heath et al (1983)
Oontomyces	*anksri*	Filamentous	Monocentric	Monoflagellate	Intercalary rhizoidal swellings, sporangia never mucronated, formed terminally, long sporangiophores can be separated from the rhizomycelium by distinct constriction.	Dagar et al (2015)
Orpinomyces	*joyonii / bovis* *intercalaris*	Filamentous	Polycentric	Polyflagellate	Polynucleate rhizomycelium of extensively branched hyphae, wider hyphae can have tightly constricted points at close intervals (bead-like or sausage-like appearance), old cultures lose the ability to produce sporangia and produce sporangiophores only initially.	Barr et al (1989)
Paucimyces	*polynucleatus*	Filamentous	Polycentric	Monoflagellate	Multiple spherical vesicles fomed on the tip of the hyphae during the early thallus development, which results into the multiple sporangiophore formation, old cultures lose the ability to produce sporangia and produce sporangiophores only initially.	Hanafy et al (2021)
Pecoramyces	*ruminantium*	Filamentous	Monocentric	Monoflagellate	Mono, biflagellate zoospores, both endogenous and exogenous zoosporangial development, single terminal sporangium formed per thallus, sporangiophores unbranched, often forming apophysis-like or eggcup-like swelling below sporangium. Extensive anucleate rhizoidal system lacks rhizoidal swellings or constrictions.	Hanafy et al (2017)
Piromyces	*communis / indianae* *rhizinflata*	Filamentous	Monocentric	Monoflagellate	Mono, bi or quadriflagellate zoospores, both endogenous and exogenous zoosporangial development, rhizoids with or without subsporangial swelling, septum often in mature zoosporangia.	Barr et al (1989)
Tahromyces	*munnarensis*	Filamentous	Monocentric	Monoflagellate	Mono, bi or triflagellate zoospores, both endogenous and exogenous zoosporangial development, branched rhizoids, short swollen sporangiophores, sporangia with septum, sporangial necks constricted.	Hanafy et al (2020)
Testudinimyces	*gracilis*	Filamentous	Polycentric	Uniflagellate	Uniflagellated zoospores and a polycentric thallus development pattern. Wide, flattened sporangiophores. Sporangia are mostly globose, subglobose, and ovoid. Zoospore release appears to occur through an apical pore, followed by the dissolution of the sporangial wall. Optimal growth temperature of 30 ^{o}C.	Pratt et al (2023)

** Uniflagellated zoospores mainly have one flagellum; monoflagellated zoospores can have 1-4 flagella; polyflagellated zoospores have >4 flagella*

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