

***Phycomyces* (Dade, HA and Gunnell, J (1969) Class work with fungi. CMI)**

Phycomyces is a giant pin mould with sporangiophores that can reach 20 cm in height.

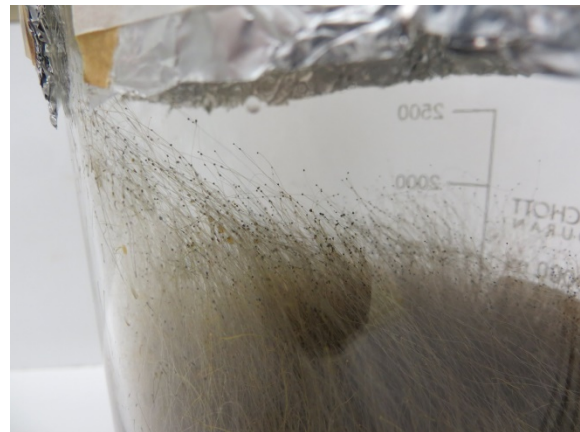
Gametangial production

It also produces large zygosporangia on agar. These are much easier to see than those of *Mucor*, and young mating plates should have all stages of development on them.

Inoculate a thick PDA plate with + and – strains of *Phycomyces* (available from Southern Biologicals) and incubate at room temperature. Giant zygosporangia begin to form in about 3 days on the surface of the agar at the junction of the two mycelia, and these are fully mature 2 days later. They can be examined *in situ* with a dissecting microscope, or under a compound microscope mounted in a cavity slide.

Phototropism

Phycomyces sporangiophores are strongly phototropic. This can be demonstrated by inoculating a sterile lamb chop with *Phycomyces* in a sterile 2 L beaker or similar tall container. Cover the container with foil or dark paper to exclude light. Repeat in a duplicate container in which a small window has been cut out at the top of the foil. Incubate for about 2 weeks at room temperature.



Phototropism of *Phycomyces* (W. D. Parkinson).