

None

Pilobolus spp Tode

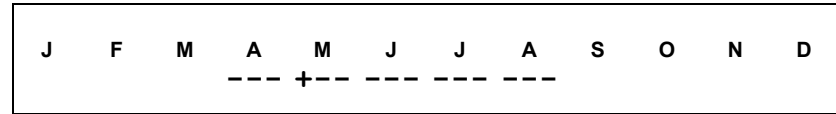


OVERALL: Schooley Mill Park, 5/9/2015, N. Magnusson .

HABITAT: Schooley Mill Park, 5/9/2015, N. Magnusson .

None

Pilobolus spp
Pilobolaceae



ID: Clear vesicle on clear stalk.

Habitat: Clusters. On herbivore manure.

Fruiting Body: 1/16" diameter on 0.5" stalk (2 mm X 12 mm]

"The life cycle of *Pilobolus* begins with a black sporangium that has been discharged onto a plant substrate such as grass. A herbivorous animal such as a horse then eats the substrate, unknowingly consuming the sporangium as well. The *Pilobolus* sporangium survives the passage through the gastrointestinal tract without germinating, and emerges with the excrement. Once outside its host, spores within the sporangium germinate and grow as a mycelium within the excrement, where it is a primary colonizer. Later, the fungus fruits to produce more spores. The asexual fruiting structure (the sporangiophore) of *Pilobolus* species is unique. It consists of a transparent stalk which rises above the excrement to end in a balloon-like subsporangial vesicle. On top of this, a single, black sporangium develops. The sporangiophore has the remarkable ability of orienting itself to point directly towards a light source. The subsporangial vesicle acts as a lens, focusing light via carotenoid pigments deposited near the base of the vesicle. The developing sporangiophore grows such that the maturing sporangium is aimed directly at the light."*

"The name means. 'hat-thrower,' a sequence that occurs in a somewhat reliable 24 hour circadian rhythm cycle (from bubbles to spores!) The pressure builds-up in the vesicle and ejects the "hat" as far as a meter! The direction of the sporangium is determined by the direction of the light."**

Sporangium (asexual): Black (2 mm diameter).

Frequency: Uncommon.

Locations: SLMLP.

References: *Wikipedia (<https://en.wikipedia.org/wiki/Pilobolus>).

**L. Biechele (*pers.comm.*)