

None

*Massospora cicadina* Lebert



*Magicicada septendecim* (overall): Beaverbrook, 6/3/2021, R. Orr.  
*Magicicada septendecim* (addomen): Beaverbrook, 6/3/2021, R. Orr.  
*Massospora cicadina* (spores): Beaverbrook, 6/3/2021, R. Orr.

None

[Massospora cicadina](#)  
 Entomophthoraceae

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**ID:** White powder infecting Periodical Cicadas (both 13-year and 17-year)..

**Habitat:** Parasite Periodical Cicadas..

**Fruiting Body:** Powdery white spores emerging from mycelium particularly in abdomen of cicada.

**Spores:** White, Round, smooth, hyaline.

**Frequency:** Uncommon.

**Locations:** HAMVL, OTHER(3).

Notes: Text by R. Orr: "Massospora cicadina infects only Periodical Cicadas (both 13 year and 17 year species). This fungus is synchronous with the Periodical Cicadas and is believed to have the longest life cycle of any fungus. The cicada shown (all photos are of the same individual) got infected as a nymph as it dug its way to the surface. Our poor cicada has now become a factory of fungus spores (asexual stage -- haploid conidia). The fungus changes the behavior of the cicada by producing cathinone (a substituted amphetamine alkaloid). The infected cicadas become hyperactive and spreads the spores around where they might come in contact with other cicadas. It also alters the cicada's sexual behavior to increase infection rates through mating (Note -- it is probably not a good idea to attempt sex with a partner whose reproductive parts have been eaten away by a parasitic fungus regardless of what species you are). Once a cicada is infected by another cicada the fungus now produces resting spores (in the newly infected cicada) that reach the ground when the cicada dies. The spores will lie dormant in the soil until the next generation of cicadas emerge. It should be noted that cathinone, produced by the fungus that affects the cicadas, also affects humans. It is one of the amphetamines (like speed or ecstasy)."

**References:** [https://en.wikipedia.org/wiki/Massospora\\_cicadina](https://en.wikipedia.org/wiki/Massospora_cicadina)