

Symbiotic yeasts in Anobiid beetles

Bachelor of Science

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Starting: flexible

Anobiid beetles harbor symbiotic yeasts in gut associated organs, called mycetomes. These yeasts were described to supplement nutrient during larval development in the tobacco beetle *Lasioderma serricorne* and bread beetle *Stegobium panicaeum*.

Originally described to harbor two different species of the genus *Symbiotaphrina*, recent superficial screens of reared tobacco and bread beetles revealed to seemingly harbor the same species.



This thesis aims at unambiguously identifying the yeast species *in situ* & *ex situ* of different cultures of long term lab reared as well as recently caught individuals of the bread beetle *Stegobium panicaeum*, the tobacco beetle *Lasioderma serricorne* and the common furniture beetle *Anobium punctatum*. To this end, molecular marker genes will be sequenced and diagnostic tools including diagnostic and qPCR primers as well as *in situ* hybridization probes developed.

