

***Psilocybe* indole alkaloids**

Species of the mushroom genus *Psilocybe* produce indole alkaloids, among them psilocybin, the principal natural product of *P. cubensis* and *P. cyanescens*. Psilocybin is a *prodrug*. After uptake in the body it is rapidly dephosphorylated into psilocin, the actual psychoactive agent. Currently, it receives increased attention as studies have shown its pharmaceutical potential to treat depression and anxiety.

Current work revolves around characterization of the biosynthesis enzymes and in-depth analysis of the natural product profile of *Psilocybe*.