



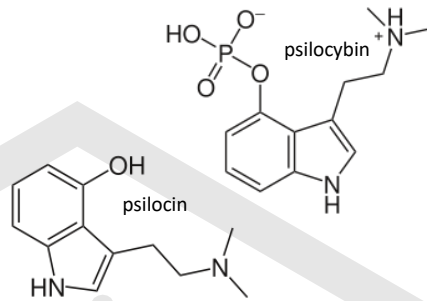
Various Mushroom Stones (approx. 1 ft tall - 1000 B.C. to 500 A.D.)
Images from Plants of the Gods by Schultes & Holmann

Algerian cave painting hypothesized to be of a mushroom shaman



Plant of the Month

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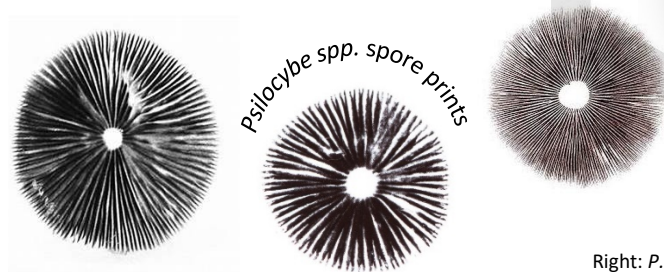
Pharmacology

Almost all fungi in the genus contain the alkaloids psilocybin and psilocin, which are responsible for their psychoactive effects.¹ Psilocybin affects glutamate levels in the hippocampus and the medial prefrontal cortex, causing distortions in the subjective experience of one's self.² The compounds produce a very unique mental state characterized by altered emotions as well as open and closed-eye visuals. These effects are felt 10-40 minutes after ingestion and can last 2-6 hours.⁵ If psilocybin is ingested more than once per week, a tolerance will quickly build and twice the dose will be required to achieve the same effects.¹

History/Traditional Use

Humans on every continent have consumed hallucinogenic mushrooms since ancient times and have left behind many records in written and artistic form. The earliest record of mushroom use can be found in Algeria, in the form of cave paintings dated to 5,000 BCE.⁴ Ancient civilizations in Central and South America had cultures of ritual mushroom use, until Catholic colonizers forbade it and forced the mushroom cults to practice in secrecy. Psilocybin mushrooms were widely rediscovered in the 1950's when Mazatec shaman María Sabina led a ceremony in which two amateur mycologists from the US participated.⁴ They returned home and published an article about the experience in Life Magazine. Thus, the psychedelic movement began.

Psilocybe spp.



Right: *P. mexicana* (top) *P. cubensis* (bottom)



Psilocybe cubensis spores, 1000x magnification

Cultivation/Preparation

Psilocybe mushrooms can be found in the wild or cultivated at home. In the wild, they grow on the dung of grazing animals or other nutrient-rich spots. There are a wide variety of techniques for growing them at home, and the process is straightforward as long as one's tools are properly sterilized to prevent the growth of wild molds. The fruiting bodies are typically consumed after they've been dried. Potency can vary greatly and can even differ between the stems and the caps. Homogenizing the material before consumption helps to get a more uniform dose.¹ A light dose can be approximated at less than a gram, and a stronger dose is around 2.5 grams or more.⁵

Characteristics

Most of the species in the *Psilocybe* genus are relatively small and have cone-shaped caps. The spore prints of every species in the genus are brown-violet to dark violet-black in color. Another unique characteristic is that the stem will turn blue when damaged. Every mushroom which has that particular color of spore print and turns blue when bruised contains psilocybin.¹

References

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