

***Lentinula edodes* (Berk.) Singer syn.
Lentinus edodes (Berk) Singer**
**Shiitake Mushroom Fruiting
Body (Sporocarp)**

Pinyin: Xiang xun, xiang gu

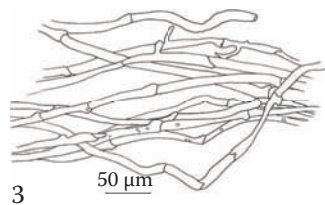
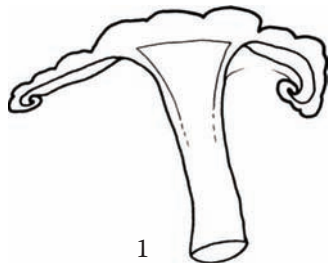
Tricholomataceae

Shiitake mushroom is one of the most popular of all the edible medicinal mushrooms. Most scientific research has focused on its potential treatment for various forms of liver disease. Both fruiting body and mycelium biomass products are used. The following characterization was based on the fruiting body.

A. Cap

Surface view (paradermal section) of upper cap: Compact network of brown, thickened hyphae, some radially aligned, some running diagonal to the radius.

Longitudinal section: Monomitic, composed of generative hyphae (4–7 μm broad), branched, septate, with clamp connections and few inclusions; the upper ~400 μm consists of compact brown hyphae radially aligned;



interior to this layer is a slightly brown layer of loosely arranged hyphae (aeroplect); further inside the cap is a broad layer of colorless aeroplect; closer to the gills, the hyphae become dense and radially aligned again; gill tissue is composed of very narrow hyphae with numerous inclusions that look like small droplets; rare basidiospores are ovate.

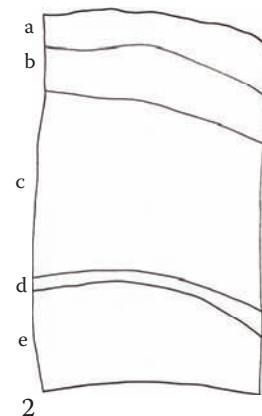
Surface view of gills: Hyphae gently curving, running perpendicular to the cap surface.

Transverse section of gills: Gills ~100 μm broad; the spore-bearing surface (hymenium) is 15 μm broad, consisting of an irregular network of hyphae with inclusions.

B. Stipe

Transverse section: Consists of slightly brown generative hyphae, septate, with clamp connections; strands axially oriented, mostly unbranched.

Powder: Spores, sections of gills, various hyphae (e.g., pileus), basidium, and basidiospores present.



Drawings

1. Sporocarp in longitudinal section showing the stipe and cap.
2. Cap longitudinal section: (a) upper surface; (b) brown aeroplect; (c) colorless aeroplect; (d) dense hyphae, radially aligned; (e) gills.
3. Cap interior showing colorless aeroplect composed of loosely arranged generative hyphae with septae, clamps, and inclusions (*ls*).