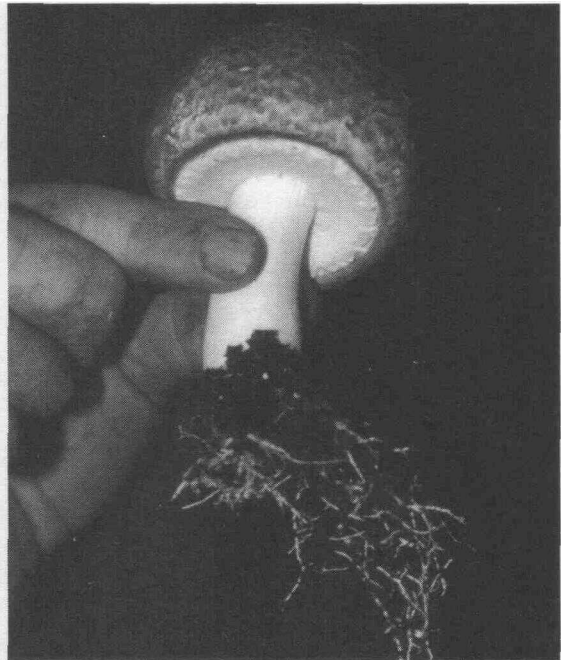


Spawn of *Agaricus blazei* on rye grain—note rhizomorphs and stellar centers, nexus points of growth, which can give rise to primordia.



Ideal stage for harvesting Himematsutake. Note abundant rhizomorphs at base of stipe. Himematsutake easily pulls from the casing layer and care must be taken to prevent the casing from soiling the white stems.

tion between these two species may or may not be taxonomically significant. From this author's experience, the staining reaction in *Agaricus blazei* is not a dependable taxonomic character and appears to be associated with an unstable chemical reaction of damaged tissue activated by exposure to air.

In culture, the mycelia of *Agaricus blazei* and *Agaricus subrufescens* share many similarities, in contrast to the mycelium of *Agaricus augustus*, which is anemic in its growth when compared on standard PDA or MEA media. Careful comparative DNA analysis is needed for delineating the phylogeny of *Agaricus blazei* from populations of *Agaricus subrufescens*.

Description: A classic large *Agaricus* species, this mushroom is grander in culture than most wild forms. Cap 7-25 cm broad, convex at first, soon hemispheric, then broadly convex, eventually flattening. Often cap margin is smooth, white, and splitting only in age. Cap surface covered with

brownish fibrillose patches. Partial veil membranous, floccose with patches of the veil, typically tearing to form a median membranous annulus, but sometimes with remnants attached to the margin at maturity. Gills pallid at first, soon gray, and then chocolate brown when mature. Stem cylindrical, solid, tall, whitish, smooth, flesh thick, often quickly staining yellowish (ochraceous) when bruised. Growing singly or in clusters, arising from stellar sites of dense rhizomorphs leading to and often attached to the stem bases. Imparting strong scent of almonds, especially during cooking. Spore deposit dark chocolate brown en masse.

Distribution: First collected in Florida and thought to be scattered throughout the southeastern United States, this mushroom is more common in southeastern North America than most realize. In Brazil, in the Sal Hose do Rio Preto district northwest of Sao Paulo (the city), this mushroom is common in the fields and mountainous regions. Probably more