The Himematsutake Mushroom of the Genus Agaricus Agaricus blazei Murrill

Introduction: A rising star in the lexicon of medicinal mushrooms, this unique Agaricus was first recognized as a novel species by an American mycologist, W. A. Murrill, who found it on the lawn of a Mr. R. W. Blaze in Gainesville, Florida (Murrill 1945). Associates of Japanese coffee growers in Brazil rediscovered this mushroom, which was well known to the locals. Upon obtaining specimens, Japanese mycologists pioneered its cultivation and are credited for bringing this species to the forefront. Cultivation centers in China and Brazil are now well established, but the primary market for Agaricus blazei is Japan, where it is called Himematsutake and has an excellent reputation as one of the most expensive of all edible medicinal mushrooms.

Commercial cultivation in the United States has just recently begun. Because of its preference for warmer temperatures, outdoor cultivation is practical only in the southern United States, or during the summer months in the temperate regions of the world. Under controlled conditions, this mushroom can easily be grown in a fashion similar to *Agaricus brunnescens*. Responsive to light stimulation to a degree yet to be determined, *Agaricus blazei* has

Common Names: Royal Sun Agaricus Himematsutake Kawariharatake Cogmelo de Deus (Mushroom of God) Murrill's Agaricus or ABM King Agaricus Almond Portobello

Taxonomic Synonyms and Considerations: The mushroom that shares the closest resemblance to *Agaricus blazei* is the slender, but almond-flavored



Classic, aggressive Agaricus blazei mycelia at 10 days.

the general appearance of an oversized Portobello (brown *Agaricus brunnescens*) Button mushroom, but with a beguiling almond fragrance and flavor that is comparable to The Prince, *Agaricus augustus* and The Almond Agaricus, *Agaricus subrufescens*.

Agaricus subrufescens Peck, its taxonomic cousin, differing slightly in the shape of the spores. The spores of Agaricus blazei tend to be more ovoid whereas the spores of Agaricus subrufescens are more ellipsoid. The spores of the similar Agaricus augustus Fries are much larger, 7.5-10 x 5-6 u compared to the smaller spores, 5-4 u, seen in Agaricus blazei. Freshly picked, Agaricus blazei usually bruise bright yellowish when cut, while A. subrufescens bruises only along the outer cuticle, if at all. Once Agaricus blazei has been harvested the tendency for yellow staining diminishes and is replaced by a dull browning reaction. Differences in the staining reac-