

## GROWTH PARAMETERS

### Spawn Run:

Incubation Temperature: 70-80°F (21-27°C)

Relative Humidity: 90-100%

Duration: 28-40 days on compost;

60-90 days on sawdust

CO<sub>2</sub>: >5,000 ppm

Fresh Air Exchanges: 1 per hour

Light Requirements: n/a

### Primordia Formation

(after applying T/2-2 in. casing):

Initiation Temperature: 70-75°F (21-24°C)

Relative Humidity: 80-90%

Duration: 18-24 days

CO<sub>2</sub>: 400-800 ppm

Fresh Air Exchanges: 5-7 per hour

Light Requirements: minimal, 100-200 foot-candles

### Fruitbody Development:

Temperature: 75-80°F (24-27°C)

Relative Humidity: 75-85%

Duration: 4-8 days

CCh: <2,000 ppm

Fresh Air Exchanges: 5-7 per hour.

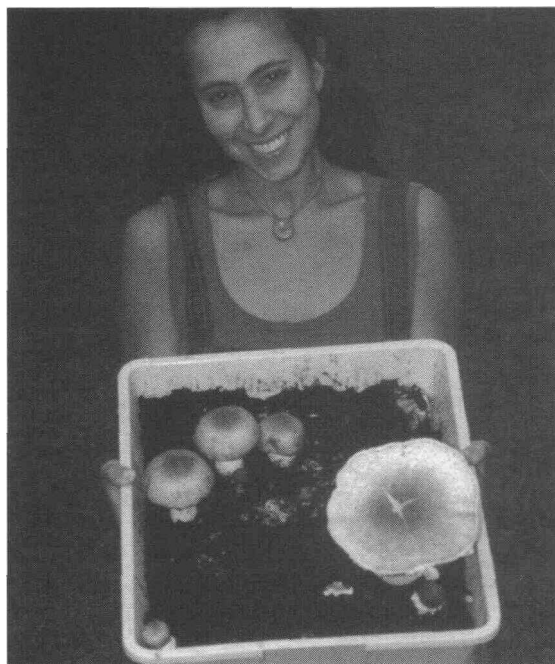
Light Requirements: minimal, 100-200 foot-candles

### Cropping Cycle:

Every 2 to 3 weeks for 2-3 flushes

cultivation is limited by seasonal temperatures, even in the tropics, as the heat-sink effects of the ground cools the substrate below optimum temperature plateaus. On composts, the second flush is often equal or larger than the first flush. The third flush markedly diminishes in yield. If growing *Himematsutake* indoors for two flushes, removal of the substrate after the second flush to an outdoor setting for subsequent fruitings allows for further cropping with minimum risk of contamination.

**Harvest Hints:** The best time to harvest *Agaricus blazei* is when the mushrooms still have an intact partial veil covering the gills. (See page 209). The convex caps become box-like in form, just prior to quickly expanding. Once the partial veil tears and falls to become a membranous annulus, the shelf life and the culinary excellence of this mushroom diminishes, but only slightly. This mushroom is one of the few that is considered an excellent gourmet mushroom through the range of fruitbody maturity. Once harvested, cultivators must drop temperature precipitously to refrigeration temperatures for storage. The closed veil and thick-fleshed characteristics of this mushroom further complicate the descent into the desired cold storage range of 35°F (2°C). Since the stems are whitish and often feature cottony mycelium, care in harvesting the mushrooms is essential to minimize cleaning of the clinging soil. If drying, mushrooms are sliced lengthwise.



*Agaricus blazei* fruiting from enriched alder (*Alnus rubra*) sawdust/chips mixture supplemented with 20% oat bran. Incubation of 3 months preceded casing, with primordia forming in 20 days.