Grower David Sumerlin with emerging flush of *Agaricus blazei.*

Form of Product Sold to Market: Fresh, dried, powdered, extracts, capsules, teas, and tablets. In quantity, the current price as listed from a variety of Internet sources is between **$ .50** and **$ 1.00** per gram.

Nutritional Content: On a dry weight basis, protein content can range from 37-48%, making this species one of the most protein-rich of all cultivated mushrooms. Analysis by this author showed, on the basis of a 100 gram sample, 9.88% moisture, 39.3% protein, 1.8% fat, 25.6% fiber, 10.1% ash, and 38.9% carbohydrate. Another uncredited analysis posted on the Internet shows that this mushroom has 36.7% protein, 3.4% fat, 6.8% fiber, 7.3% ash, 38.3% sugar, 939 mg/100 g of phosphorus, 18.2 mg/100 g iron, 41.6 mg/100 g calcium, .48 mg/100 g vitamin Bl, 2.84 mg/100 g vitamin B2, 345 mg/100 g ergosterol, and 40.9 mg/100 g niacin.

Medicinal Properties: This mushroom produces 1-3 and 1-6 D-fractions of beta glucans, polysaccharides currently under investigation for immunopotentiation. The literature reports beta glucan levels up to 14%. (A recent analysis of the author's Himematsutake showed 9% beta glucans.) Its unique polysaccharides promote natural killer cells that are selectively cytotoxic on tumor cells. This mushroom has been the subject of numerous analyses for isolating constituents, both tumoricidal and immunomodulatory, for the treatment of cancers (Fujimiya et al. 1998,1999; Ito et al. 1997; Itoh et al. 1994). The cultured mycelium also produces anti-tumor compounds (Mizuno et al. 1999). That this mushroom produces compounds specifically increasing apoptosis in cancerous cells (but not in healthy cells) and also triggers an immune response, is notable. A yellowish metabolite exuded by the mycelium apparently has bactericidal properties.

A contradition not yet reconciled at the time of this writing is a report by Stijve et al. (2000) that specimens of *A. blazei* from Brazil contained 1,000-3,200 mg/kg (.10-32%) agaritines. In comparison, another almond flavored Agaricus, *Agaricus augustus,* has up to 2.2% agaritine content (Toth 2000), while Button mushrooms have up to .87%. (See also pages 221-223 and 313.)

Flavor, Preparation, and Cooking: This mushroom imparts a sweet almond flavor, delicate but distinct, **a** symphony of flavors that linger long after consumption. The aromatics of this mushroom are