

## ***Agaricus bisporus* (J. Lge) Imbach and Its Close Relatives: Their Present Status, Use, and Future in Commerce and Research**

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The Netherlands is the largest exporter of button mushrooms in the world and the third largest producer after China and the United States. The production volume has increased dramatically over the last 30 years, from an annual production of 30,000 tonnes in 1970 to an expected 300,000 tonnes in the year 2001.

This successful development can be attributed to several factors:

- From its beginning in the early 1950s the industry was cooperatively organized, which led to the production of inexpensive casing soil and compost, in cooperative auctions and in cooperative canning facilities. Standardization of buildings, equipment, and cultivation has also played an important role.
- The Ministry of Agriculture supported further development of the industry through its coherent research, extension, and educational system. In return the system was partly financed by the industry.
- The driving power of political decisions concerning public health and the (prevention of) emission of harmful chemicals and odorous substances led to advanced methods and materials.
- The strict attitude of national and international chain stores toward control of quality and price has led the way to optimal quality/price ratio and to a strong market position.

The industry has stabilized, the ministry has suspended its activities, and further development will now be influenced by harmonization of European law and acceptance of new EU partners in the coming years.

In the honorary lecture the role of research, extension, and education is elucidated. The results of experiments in compost technology, in breeding, and in the control of pests and diseases are reported. Studies on carbon and nitrogen metabolism are also described. This is especially directed toward the cultivation of two well-known agaricales, that is, of *Agaricus bisporus* and of *Pleurotus ostreatus* (Jacq.: Fr.) Kumm. Further, directions for future research will be indicated that could lead to better management of the cultivation of both valuable sources of nutrition and to better planning of production in a changing society of consumers.