

Shi-take mushroom

Mushroom Shi-take (*Lentinus edodes*), grows on broadleaved trees like the Oyster mushroom. In East Asia, it grows wild in nature, but as a cooking delicacy, it is produced in millions of tons a year on special farms. It also contains anticancer, antibacterial and antiviral substances, regulates blood pressure, cholesterol or sugar in blood, strengthens immunity, and it is said that it has an effect on sexual potency. From the forestry point of view, it is interesting that remains after-felling decompose three-to eight times faster in comparison to natural wood decomposition in the forest. Research focused on its role in after-felling decomposition of remains takes place also at the branch enterprise of Lesy SR, š.p. in Krupina (OZ Krupina), so far in specific areas outside the forest.

OZ Krupina belongs to the enterprises with two levels management. It consists of 12 forest management districts, two centralized conversion landings and head office with 17 employees. Total cadastral area is 119 217 ha (woodiness 35.1%). 92% of the vegetation belongs to broadleaves with an annual volume of timber felling 98 400 m³.

On the territory of Ladzany village is situated out of use forest nursery Šipice. In this place were allocated small fields, where was launched a project with Oyster mushroom and Shi-take mushroom in cooperation with Technical University in Zvolen (TU). Management of OZ Krupina supports this project also because of Shi-take's therapeutic effects. Waste wood after felling from surrounding forests concentrate in the forest nursery and is grafted by mushroom. Approximately 10 people work on this process, occasionally. OZ Krupina covers costs for this project from their own sources. Up to now, they use harvested product only for their own consumption, there is a space also for restaurants and shops, but suitable technology is missing. Mushroom is grown near by rent cottages for hunters, too. OZ Krupina provides them with some mushroom specialty, in case of interest. Growing mushrooms is also one of the attractions for children, for example on the occasion of Earth day.

Chronology:

2004 - Within the Lesy SR, š.p. was set up a branch enterprise Semenoles, that covered nursery production. Some nurseries of OZ Krupina remained out of use. At the same time, was on TU in Zvolen stated a research project focused on mushroom and wood waste. The aim of this project was to test how fast could be wood waste decomposed by activity of Oyster mushroom and Shi-take mushroom.

2005 - Launching of test of wood decomposition by mushroom

2005 - 2008 - Various activities towards the diversification of forestry activities (game, hunting cottages, growing mushrooms, production of Christmas trees)

2007 - Project of the Agency for Science and Research within the Slovakia - China call, was not supported on the end

OZ Krupina employees propose an initiative on the basis of previous experience with the growing of mushrooms that offers free forest nursery area and interest on innovative practices. TU staff provided know-how and with the help of project of connection between science and practice, they obtained some finances for testing hypotheses about speeding up decomposition of wood by shi-take mushroom. Local businessmen, testing users, in the area of catering, were interested in this product, but cooperation, however, failed due to technological requirements. Project and business plan that was a part of former not successful project proposal of Slovak-China cooperation has been already developed. An important partner in the area of knowledge transfer of diversification towards non-traditional forest

products and services is IPOLY Ltd., partner from Hungary, co-operating in the network of Ipeľ euroregion.

Future challenges: To find resources for refinancing already developed technology project, to rent unused halls at the former cooperatives, to complete the technology according to the hygiene requirements, which would serve not only to produce mushrooms, but also for packing of game or other not wood products (e.g. raspberry).

The possibility of cross-border cooperation projects in the euroregion IPOLY through an Interested association of corporate bodies Ipeľský Euroregion is developing. Currently operate another 11 euro-regional associations on Slovak territory. One of their main objectives is to exchange experiences, searching for contacts and the promotion of tourism. Foresters from OZ Krupina make use of these possibilities of cross-border cooperation, especially when applying the experiences of Hungarian colleagues in the field of hunting, purchase and sale of wood and forest tourism.