

A QUARTERLY OF THE FOREST RESEARCH INSTITUTE MALAYSIA

FRIM IN FOCUS



ISSN 1394-5467

MARCH 2006



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Fungi Focus

We are all quite familiar with mushrooms or larger fungi. Take a peek at a local supermarket; the succulent oyster mushroom, the ever-famous shiitake, the canned button mushroom and the popular medicinal Ling-zhi. These cultivated or imported fungi are household names that need no introduction.

However, there are local larger fungi which are equally delicious and are said to contain high medicinal values which are less known to the Malaysian public. Names like 'cendawan sisir' or 'cendawan busut', though very rarely found in supermarkets, are sometimes sold at 'pasar malam' or the night market.

The indigenous people of Malaysia and other rural communities consume certain wild mushroom for food and medicine. However, not much is known about this and there has been very little documentation on the types and species of fungi they consume.

FRIM researchers took to the task in documenting the indigenous knowledge of fungi utilization as it has never really been systematically recorded. They subsequently met up with the sub-tribes of Semai, Temuan, Bateq, Che Wong and Jakun from the three states of Selangor, Perak and Pahang.

Armed with pictures of some commonly encountered forest fungi, the researchers carried out interviews with the indigenous people who were mostly represented by the 'tok batin' or elders of the village. They were shown



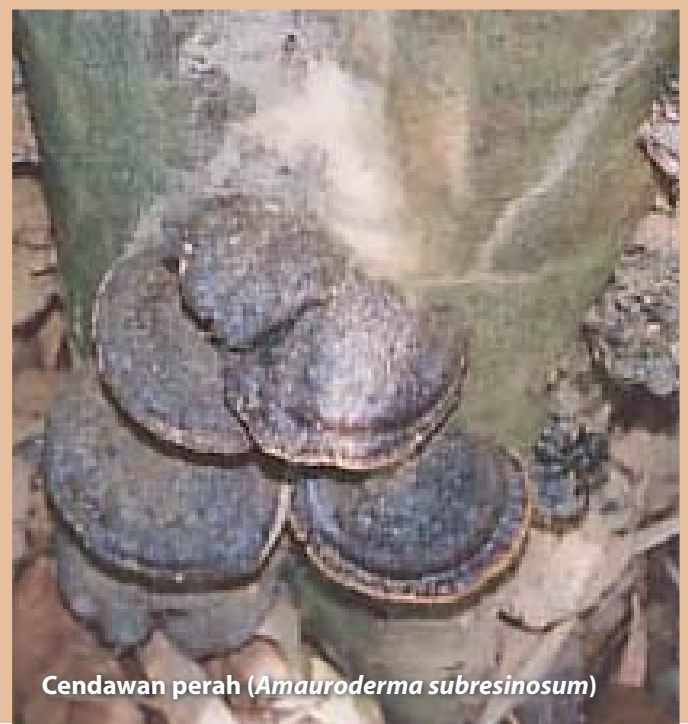
Cendawan busut (*Termitomyces* sp.)



Cendawan merbau (*Clavulina* sp.)



Betes kismas (*Lignosus* sp.)



Cendawan perah (*Amauroderma subresinosum*)

pictures of the fungi and asked to give their names for the fungi. Whenever possible, the researchers went together with them to collect the fungi. Unlike collecting plants, this activity has to be carried out during the fruiting season of the fungi.

Many compounds useful to humans have been discovered from fungi and these include antibiotics, immunosuppressants, immunopotentiators and anti-tumour. Besides this, most edible fungi have rich taste. Orang asli are more versatile in their consumption of fungi as food or medicinal purposes. As with most folk tradition, the knowledge of these fungi was passed down verbally from one generation to another.

FRIM researchers recorded 38 species of edible fungi from the survey. Among the edible ones are 'cendawan busut', 'cendawan perah', 'cendawan merbau' or *Clavulina* sp. There

are about 19 species of medicinal fungi used for treating various ailments such as itchy skin, sore eyes, and even as birth control.

One particular fungus known to the Semai as 'Betes kismas' or *Lignosus* sp. has many uses including for the treatment of asthma, cough, fever, cancer, liver-related illnesses, joint pains and they are also used by men to revitalize their bodies and as medicines for women after child-birth. However, to the Semai, this fungus is usually used to enhance paddy yield.

According to Dr Chang Yu Shyun, a Senior Research Officer from the Medicinal Plants Programme at FRIM, approximately 25% of the fungi in Malaysia have been properly studied, and there is still much that we do not know about this particular group of organisms.

Photos: Dr Y.S. Chang & Dr S.S. Lee



FRIM researchers interviewing the indigenous people