Phellinus spp.
Shelf Fungi

Hymenochaetaceae Family

Growth season: Spring through Fall

Fungal type: Shelf fungi.

Fruiting Body: Usually in the shape of a conk, or horse hoof. There are usually layers of growth, which will create rings. The flesh is usually tough or woody and cork-like. *Phellinus linteus* is more of a horseshoe shaped conk while *Phellinus gilvus* is flatter in appearance.

Reproduction method: It is a basidiocarp so it reproduces by forming basidospores.

Reproductive season: Spring and Summer.

Geographic range: On White Oak trees; Maine to Minnesota southward to Florida and Texas; rare in the upper peninsula of Michigan, common in the lower peninsula of Michigan.

Habitat: Typically on white oak, poplar, and mulberry trees.

Common local companions: Oak trees, Maple trees, White Pine trees, Mulberry trees, Poplar trees.

Edibility: Largely inedible.

Usages: *Phellinus linteus* has been studied and has a reputation as a medicinal mushroom as an "immune booster, especially for the prevention of cancer metastasis." (Rafael, 2007) It has been found to increase the anti-cancer activity of macrophages. (Rafael, 2007)

A Butanol extract taken from *Phellinus ignarius* has been shown to produce vasorelaxation in rat aortas, which may help people maintain their blood pressure and to treat certain cardiovascular diseases in the future if testing proves positive. (Kang, 2006) Studies have also shown that this extract can exhibit anticancer activity. (Kang, 2006) Hispolon has been extracted from this varietal, which has been reported to have antivirus activities. (Chang, 2007)

Phellinus merrillii has been found to reduce liver damage in rats and also to have antioxidant capabilities. (Chang, 2007)

The *Phellinus gilvus* varietal has had some polysaccharides isolated from it that have been shown to inhibit melanoma growth in mice (Bae, 2005-b). Some of the polysaccharides have also been shown to enhance dermal wound healing and to reduce inflammation in diabetic rats, which could be useful if it is possible to use this for humans. (Bae, 2005-a) Further study of these polysaccharides have revealed that they have an inhibitory effect on stomach cancer as well. (Bae, 2005-c)

Why is it called *that*? *Phellinus* means "made of cork" or "corky" in latin.

Prepared by: Hope Buell October 2010

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* Used as a main source of information.