

Species Productivity Schedule for the *Inonotus obliquus*

By Ringo Parent

LATIN NAME: *Inonotus obliquus*

COMMON NAME: Chaga mushroom, Birch conk, True tinder polypore

ANISHINAABE NAME: Jibi jabosiganug

Winter

- The snow-covered mushrooms are easy to spot with tree leaves gone

Summer/Spring/Fall

- Most common time to harvest
- Mushrooms available all year round
- May be obscured by tree leaves



(Ringo Parent, 6/11/12)

Morphology

- Fruiting body rarely seen in the wild
- Mass of mycelium known as the sclerotium appears black and cracked on outside of living birch trees

Habitat

- Cold regions of North America, Europe, and China
- Found almost exclusively on birch trees

Preparations

- Most commonly used as an infusion, although decoctions extract additional medicinal components
- Can be made into a tincture or put in capsules as well
- Can be powdered and smoked or smudged for social occasions

Cultural Uses

- Lighting fires
- Medicinally used for treatment of cancer, gastritis, ulcers, and tuberculosis
- Smoke used to sedate bees when harvesting honey
- Added to smoking mixtures to potentiate effects and ensure ignition
- Dyeing of paper or fabrics gives a sepia or yellow color

Nomenclature:

Family: Hymenochaetaceae

Scientific Name: *Inonotus obliquus*

Common Name: Chaga mushroom, Birch conk, True tinder polypore

Anishinaabe Name: Jibi jabosiganug - spirits that cause mighty purging (Herron 2002)

Description:

The *Inonotus obliquus* is a black, parasitic fungus ranging from 5-15 cm (Rogers 2012). It is a polypore fungus, meaning it has a multitude of pores in lieu of gills. A hardened mass of mycelium, called the sclerotium, forms on the outside of living trees. It is dense, hard, black to reddish-brown, and deeply cracked on the surface resembling something that has been burned. The yellow to yellow-brown interior flesh can have specks of white and is firm with a corky texture (Spahr 2012). Unlike most fungi, the fruiting body is rarely seen in the wild, and it is this sclerotium that is useful.



Fig 1. *I. obliquus* growing on a paper birch tree
<http://wildplanthealing.com/>



Fig 2. A close up view of the corky texture of *I. obliquus*
<http://www.drterrywillard.com/>

Life Cycle:

The *I. obliquus* has a 20-year life cycle, which begins when a carpophore, the fruiting body of a higher fungus, finds its way into a scar on a birch tree (Herron 2002). The scars can be from natural causes or purposefully from humans trying to cultivate *I. obliquus*. The fungus develops under the bark where it turns into a black protrusion. This protrusion, or conk, grows with the tree for 5-7 years. After this, it has sucked all the nutrients from the host tree, and it may die shortly afterward (“Chaga Mushroom Guide”, 2012).

Habitat:

I. obliquus is restricted to cold habitats and grows slowly. It can be found in wooded, northern regions of Russia, North America, Europe, and Korea on paper birch and yellow birch trees (“Chaga Mushroom Guide”, 2012). It forms on the tree where it has been scarred, either naturally or intentionally by humans (Herron 2002).

Time of Harvest:

I. obliquus can be harvested year round, though it is most commonly done in the summer and spring when simultaneously harvesting bark (Herron 2012). Patches of snow that form on top of the fungus can make it easy to spot in winter as well (Spahr 2012).

Cultural Uses:

I. obliquus has been used medicinally since the 16th century as a remedy for cancer, gastritis, ulcers, and tuberculosis in Russia and Northern Europe (Zheng 2010). This preparation usually involved an infusion. The anti-disease properties of *I. obliquus* have been corroborated by modern research and are attributed heavily to sterols (Yong 2006, Zheng 2007). Although infusions are the most popular method of consumption, decoctions extract non-water soluble compounds and are also a relatively common method (Hobbs 2003).

The Ojibwe have used the fungus for many different purposes. It is used for the lighting of sacred fires and thus valued highly (Herron 2002). It is also set on fire and the resulting smoke used to sedate bees in order to harvest honey without being stung (Keewaydinoquay 1978). The Ojibwe have also used powdered Chaga mushrooms in a variety of ways. It has been traditionally placed in a smoking mixture to potentiate the narcotic effects of tobacco and ensure proper ignition (Keewaydinoquay 1978). It has also been used as a cauterizer—either by itself or in combination with gunpowder (Keewaydinoquay 1978). It can also be used as a dye and results in a sepia or yellow color depending on the mordant used (Spahr 2012).

The fungus can be found in various preparations today, including extracts, teas, and capsules (Willard 2011). The Great Lakes Lifeways Institute offers workshops in which Chaga tea is prepared (“Great Lakes Lifeways Institute”, 2009).



Fig 3. Chaga tincture
(50 mL – \$58.97)

<http://www.surthrival.com/>



Fig 4. Chaga tea
(50 g - \$16.95)

<http://www.vendio.com/>



Fig 5. Chaga extract
(90 capsules - \$23.99)

<http://livesuperfoods.com/>

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