



Ethnobotanical Leaflets



The Miraculous Reishi: Mushroom or Medicine?

By Dylan Kosma

Ganoderma lucidum, otherwise known as the Reishi or Mannentake has been heralded by Asian cultures for many centuries. It is a polypore mushroom of corky or woody texture that appears to have a coat of varnish on the top. It is a shelf mushroom that grows on dead and dying trees. There are many varieties of Reishis. Akashiba is the red Reishi, the most potent; Kuroshiba--the black Reishi; Aoshiba--the blue Reishi; Shiroshiba--the white Reishi; Kishiba--the yellow Reishi; and Murasakishiba--the purple Reishi. (www.canited.com/w-reshi.htm) The Reishi mushroom is attributed with many health stimulating properties from general good health and recuperation, to longevity, sexual prowess, wisdom, and happiness. In certain cases it is used as sculptural artwork. Under certain conditions the fruiting body takes on what is referred to as an "antler" shape, that to some is aesthetically pleasing. According to Paul Stamets, this is a result of elevated carbon dioxide levels in the surrounding environment. Reishis may prove useful to the fight against cancer as well. More and more research is being conducted about compounds, in reishis, that stimulate the immune system.

Historical Usage

Reishi, Ling Zhi, or Saiwai-take, a mushroom of many names and uses. It has been documented with some pretty amazing properties for over two thousand years. "The earliest mention of Ling Chi was in the era of the first emperor of China, Shi-huang of the Ch'in Dynasty (221-207 B.C.)" (Stamets, 355) The Reishi is credited with longevity, increased virility and sexual prowess; the Chinese considered it one of the "Herbs of the Gods". In China it was believed that a tincture of this type of mushroom could bring the dead back to life. Often sold in Chinese medicine shops, commonly in tinctures with Ginseng. *Ganoderma lucidum*, or a closely related species, can be used to combat high altitude sickness. Himalayan guides sometimes employ the Reishi for this purpose. Mayan Indians have used reishis to fight and prevent communicable diseases. In China, sometimes a woman will give a man Reishis to express sexual interest. The antler form mentioned previously is favored for this purpose. Interesting considering that the Reishi is supposed to stimulate sexual virility.

Medicinal Usage

The Reishi is a mushroom of many medicinal properties. Supposed to cure cancer, arthritis, chronic fatigue syndrome, and a whole slew of other ailments. It is no wonder that it is supposed to grant its user a long healthy life. Used for thousands of years in Asia, it is relatively new to the Western world of medicine. It is gaining quite a bit of popularity rather quickly, though. Much research is being conducted currently. Research has shown that use of reishis; improves hypertension, nervous tension and neurosis, bronchitis, and hepatitis. (www.canited.com/w-reishi.htm) Much research is being done on compounds in reishis that stimulate the immune system. "A complex group of polysaccharides have been isolated from this mushroom...one theory is that these polysaccharides stimulate helper T cell production which attack infected cells." (Stametes, 367) Certain polysaccharides in reishis have shown strong anti tumor activity as well. According to Kyotan.com/lectures/lecture/Lecture2.html, cancer patients that ingest five to ten dry grams of the fruiting body a day, may have reduced side effects from chemotherapy and radiation treatment, as well as increased likelihood of survival. Reishis aid in increasing blood circulation as well, and may have some cholesterol lowering properties. As well they may have some anti-inflammatory applications for those suffering from arthritis.

Availability

Many commercial preparations are available, such as extracts, tinctures, dried fruiting bodies, teas and teabags, tonics, pills, etc. You can find these at local health food stores. For those adventurous types, *Ganoderma lucidum* and many related species can be found in our own forests here in the Southern Illinois area. Found primarily in the southwest in North America, it can also be found in the Amazon and is very widespread throughout Asia. Typically found in subtropical climates, it can be found in more temperate regions though. Generally found in deciduous forests on hardwoods like oak, maple, elm, willow, etc. Frequently grows on dead tree stumps or dying trees, it is considered one of the "white rot" fungi. (Stamets, 359)

Not only are wild specimens collected and used, but also through the technology of tissue culture, it has become a domesticated crop. Reishis can be grown a variety of ways. One method is to inoculate hardwood logs with hardwood plugs that have been colonized with the mycelium, or vegetative growth of the Reishi. The logs are drilled with holes of the appropriate size and the plugs are gently tapped into the holes. The holes are then covered with a sealing agent, generally paraffin or beeswax. The logs are laid on their side or partially buried in the ground, in a shaded, moist location. A hoop frame is constructed above the growing area. The hoop frame is covered with shade cloth to retain moisture and filter light, making a good environment for fruit body formation. The hardwood plugs mentioned above are inoculated with pure cultures grown in the lab on test tubes, petri dishes, or sometimes quart or 1/2 gallon jars of sterilized rye grain that have been colonized with the mycelium, termed spawn. With this method it takes six months to two years before substantial harvests are produced. Another method geared towards indoor, environmentally controlled production focuses on rapid cycled crops. With this method a combination of hardwood sawdust and woodchips is the growing media, as opposed to logs. Colonized jars of Reishi mycelium (spawn) growing on rye grain or hardwood sawdust are used to inoculate sterilized bags of the sawdust/woodchip mixture. The bags are sealed and allowed to incubate. The bags have a special filter that allows for gas exchange while screening out possible fungal or bacterial contaminants. After the proper amount of time has passed for incubation the bags are opened or

removed and the environment is manipulated to initiate fruit body formation. With this method you can have two crops in 90-120 days. The growing popularity of alternative medicines, and pursuit of cultivation in North America and Asian countries has increased the availability of Reishi mushrooms and products in the U.S. as well as Asia, making them an economically important crop.

Preparation and Usage

Tea is the favored form of ingestion. Either fresh or dried specimens are boiled in hot water for five minutes, allowed to steep for thirty minutes, and then reheated. The tea is then strained and served. A daily dosage of 3-5 grams is recommended.

Summary

A potent medicine that has been revered for many years, the Reishi has quite a bit of potential with modern medicine. More and more unknown medicinal properties are currently being discovered and researched. Technology is allowing us to unlock the many secrets this fungus possesses. The domestication of Reishis as a crop fungus has created a prosperous industry in the horticultural and medicinal fields of study. The rising interest in alternative medicines, in the Western world, is making the Reishi quite an economically important crop. **References**

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