

## ***Living Earth School of Herbalism Materia Medica***

### ***Ganoderma applanatum*** **ARTIST'S CONK FRUITING BODY**

#### (A) Botany

**Family:** Ganodermataceae.

**Synonyms:** *Fomes applanatus*, *F. leucophaeus*, *F. megaloma*, *Ganoderma megaloma*, *Polyporus applanatus*, artist's bracket, shelf fungus, white mottled rot mushroom.

**Harvesting:** The herb consists of the fruiting body of *Ganoderma applanatum* harvested when it matures and is producing spores, usually mid-August to early September. Only the living fruiting body is harvested from two year or older specimens while they are still growing, which is evident from the narrow white band along the edge. Only harvest the current and previous years growth. The growth of each year can be distinguished as distinct rings of tissue.

**Related Species:** There are many species of *Ganoderma*, many of which have been used for medicinal purposes. *G. lucidum* (lacquered polypore) is the best researched and most commonly used member of this genus. It grows on hardwood trees. *G. tsugae* (hemlock varnish shelf) is also used medicinally. It grows on dead or dying conifers, especially *Tsuga* spp. (hemlock). All three species are believed to have similar properties and are sold as *ling zhi* in Asia, although *G. lucidum* is considered the preferred species.

**Habitat:** Perennial. *Ganoderma applanatum* is a woody bracket fungus that grows on many species of dead deciduous trees as well on dead or dying parts of living trees. It occasionally grows on conifers. In northeastern North America it occurs most commonly on *Acer saccharum* (sugar maple) and *Fagus grandifolia* (American beech).

**Distribution:** Native. *Ganoderma applanatum* is a circumboreal species that occurs throughout the temperate regions of the northern hemisphere south of the treeline.

#### (B) Therapeutics

**Administration:** Systemically: Fresh or dried fruiting body tincture or infusion. The fresh fruiting body tincture is preferred. Locally: Fresh or dried fruiting body poultice, compress, infused oil or ointment.

**Primary Therapeutic Properties:** Adaptogen, antiallergenic, antibacterial, anticatarrhal, antihepatotoxic, anti-inflammatory (local, neural, systemic), antineoplastic, antioxidant, antiulcerogenic, antiviral, astringent, cardiac, diaphoretic, hypocholesterolemic, hypolipidemic, immune tonic, nervine, pancreatic, relaxant, tranquilizer, vasodilator (neural, peripheral).

**Secondary Therapeutic Properties:** Adrenal tonic, analgesic, anticonvulsant, antidepressant, antineurotoxic, anxiolytic, aperient, appetite stimulant, bitter, blood pressure normalizer, cholagogue, decongestant, depurative, diuretic, emmenagogue (tonic), expectorant (relaxing, secretolytic), immune stimulant, sedative, splenic, vulnerary.

**Primary Organ Systems:** Immune system, cardiovascular system, endocrine system, nervous system, liver.

**Secondary Organ Systems:** Respiratory system, digestive system.

**Primary Indications:** Chronic immune and autoimmune conditions (allergies, rheumatoid arthritis, Hashimoto's thyroiditis, ulcerative colitis, lupus erythematosus); weak immune system (frequent acute infections); severely depleted immune system due to toxicity (chemotherapy, radiation poisoning, pesticide exposure); chronic viral infections; cardiovascular conditions (poor peripheral circulation, weak heart, palpitations, elevated blood fats and/or cholesterol, high and low blood pressure); liver damage due to toxicity (fatty liver, sclerosis); endocrine conditions (adrenal exhaustion, hypoglycemia, diabetes, hypothyroid, hyperthyroid); neurological conditions (poor concentration, poor memory, dementia, neuralgia); cancer. Locally: Skin and epithelial cancers.

**Secondary Indications:** Stress-related conditions (nervousness, depression, anxiety); inflammatory conditions of the digestive tract (gastritis, gastric and duodenal ulcers, colitis); chronic respiratory conditions (bronchitis, asthma).

**Research:** *Ganoderma applanatum* has demonstrated antibacterial, antidiabetic, antineurotoxic and antioxidant properties *in vitro*; antidiabetic, antineoplastic, antiulcerogenic, antiviral, hypocholesterolemic, hypoglycemic, hypolipidemic, immune stimulant and immune tonic properties in animal studies. There is considerably more research on *G. lucidum*. Both species have similar chemical constituents.

**Formulating:** 20-35% (15-100%). Astringency 3, bitterness 2, emmenagogue 1, pungency 0.

**Synergistic Combinations:** *Ganoderma applanatum* combines well with *Astragalus membranaceus* root (Chinese milkvetch), *Curcuma longa* rhizome (turmeric), *Eleutherococcus senticosus* root (Siberian ginseng), *Inonotus obliquus* fungus (clinker polypore), *Panax quinquefolius* root (American ginseng), *Piptoporus betulinus* fruiting body (birch polypore) and *Zingiber officinale* rhizome (ginger) in chronic and autoimmune conditions; and with *Astragalus membranaceus* root, *Curcuma longa* rhizome, *Eleutherococcus senticosus* root, *Ginkgo biloba* leaf (maidenhair tree) *Panax quinquefolius* root, *Rosmarinus officinalis* herb (rosemary) and *Zingiber officinale* rhizome in the later stages of the treatment of conditions of the endocrine, nervous and cardiovascular systems. In all applications it is synergistic with other *Ganoderma* species.

**Toxicity:** None known.

**Contraindications:** Not recommended in pregnancy, lactation, for infants or for concurrent use with immune suppressant medications. Use with caution if taken concurrently with oral contraceptives, anticonvulsant, sedative or mood-altering medications.

**Dosage and Duration Restrictions:** Class 1a. No restrictions.

**General Comments:** Like other *Ganoderma* species, *G. applanatum* is primarily used as an immune tonic and adaptogen. It has the ability to support and balance overall immune function in addition to stimulating an immediate immune response. It normalizes function of the immune system. It is a specific for autoimmune conditions. The overall action of *G. applanatum* is adaptogenic, similar to *Panax*, with a stronger immune component. Like all adaptogens it is best used in the later stages of treatment, however, I find that most adaptogenic mushrooms are also excellent in transitional formulations as we transition into the final adaptogenic phase of treatment. The *Ganoderma* species are among the best herbs I know for restoring immune function after it has been weakened by chemotherapy. They are also synergistic with chemotherapy, increasing its effectiveness while decreasing its side-effects. In this role they are synergistic with *Astragalus* and especially *Inonotus* and *Piptoporus*. On the basis of the available literature, it is difficult to differentiate the properties of the different *Ganoderma* species due to the lack of information on *G. applanatum* and *G. tsugae*. Having worked with all three, my sense is that they are very similar overall with a slight difference in potency, *G. applanatum* being slightly more potent, followed by *G. lucidum* and then *G. tsugae*. In my practice I use a 50/50 mix of the tinctures of *G. applanatum* and *G. tsugae*, as *G. lucidum* is rare in Ontario.