

## **Wild Plants and Fungi of New England that can protect against and help treat swine flu**

16 September 2009

There has been a great deal of coverage in the news media concerning the H1N1 virus, commonly referred to as swine flu. This virus is thought to have originated in Mexico and has subsequently spread to other countries, including the United States. The virus causes influenza, an infectious disease that presents fever, coughing, sore throat, head and body aches, weakness, nausea, diarrhea, vomiting, and/or overall discomfort. People have been hospitalized due to swine flu and a very small proportion of those infected have died. In the United States, the mortality due to swine flu appears roughly comparable to other similar types of influenza (i.e., despite the media hype, swine flu is no more deadly than the common strains of flu that affect people every year). However, swine flu can create a lot of discomfort and loss of wages due to missed work. Further, people are at risk of developing complications from swine flu, especially young children (under the age of five years). Though a vaccine is being developed, its safety has been called into question by many people, particularly due to the adjuvants and preservatives added to the vaccine. For example, thimerosal is a mercury-containing preservative that is far more toxic than mercury and poses serious health risks. Laboratory studies have shown that other adjuvants (substances that potentiate the effects of the vaccine) added to influenza vaccines caused arthritis, paralysis, and immune system disorders in animals. Because of these issues (and others), some people may wish to avoid swine flu vaccines.

Influenza prevention is important and can be effected through the normal precautions people should take during flu season (e.g., washing hands, avoiding frequent touching of face and eyes, avoiding households and public buildings where people with influenza have visited). Proper diet consisting of nutrient-dense foods is also important for strong immune systems (this includes foods high in natural-occurring vitamin A, such as butter, eggs, liver and other organ meats, fish, shellfish, and wild greens). Most people infected with influenza (including swine flu) completely recover in one or two weeks. Laboratory tests are needed in order to determine what strain of flu a person is infected with. For the purpose of using natural remedies to prevent infection or shorten the duration of symptoms, it is not important to know which strain is present, only that the symptoms are being caused by influenza viruses. The following list of plants and fungi are able to provide definitive and/or symptomatic relief. The antiviral plants should be used at the onset of symptoms (or even prior to possible exposure). Most of them are available commercially if you have not already harvested them. There are many more wild species that could be discussed.

### ***Thuja occidentalis* (northern white cedar)**

This evergreen tree has been shown to be both an antiviral and an immune system modulator. It activates the immune system through several different channels (e.g., increasing numbers of antibodies, inducing cytokine production, activating macrophages) and is known to be beneficial for people who contract influenza. Though it is generally not antibacterial, it is active against some bacteria that infect the upper respiratory system; therefore, *Thuja occidentalis* helps prevent some of the possible bacterial infections while the body is stressed with the flu. The leaves are the part of the plant used in medicine. Because some of the pharmacologically active compounds are aromatic, volatile oils, such as thujone, fenchone, borneol, camphene, etc., alcohol-based preparations (tinctures) are more potent than water-based preparations (infusions). For those making medicinal teas, it is recommended to cover the cup while the plant material infuses to prevent loss of volatile oils. Pregnant women should probably avoid this herb as it has traditionally been considered to be a uterine stimulant (this information largely comes from traditional use, recent study and use has not found this claim to be supported).

### ***Sambucus nigra* (black elderberry)**

This deciduous shrub protects cells against viruses through a couple of different mechanisms. Clinical trials have shown that people using *Sambucus nigra* recover from influenza faster than those using no treatment. This shrub also assists with some symptoms of influenza (and colds), such as congestion in the nasal passages, fever, and sore throat. Elderberry syrup, made from the ripe, purple-black fruits, has long been used as a route of administration for this plant's medicine. The syrup can be purchased but is easily made at home. The flowers can also be used as an infusion.

### ***Fallopia japonica* (Japanese knotweed)**

This robust, colonial herb is a relatively recent arrival in North America, where it is only just becoming widely known for its healing abilities. It is a very potent immune system modulator and is antiviral (it has been experimentally shown to be active against a number of viruses, including influenza). *Fallopia japonica* also has antitussive action, so it is also useful in helping allay coughing during upper respiratory tract infections. The rhizome (i.e., underground stem) is the portion of the plant used in medicine. It can be decocted as an herbal tea or tinctured. Pills are also commercially available for this plant.

### ***Eupatorium perfoliatum* (boneset thoroughwort)**

This herbaceous plant has a long history of folk use for flues and colds. It is a strong immune system stimulator and studies have shown it to increase phagocyte activity better than species of *Echinacea* (coneflower). Phagocytes are the cells that engulf and destroy dead, foreign, and pathogenic cells within the body. *Eupatorium perfoliatum* is also an analgesic, so it can reduce the achy symptoms that accompany influenza. It is also helpful with fever. Some will not enjoy the bitter and distasteful nature of this plant. Alcohol-based tinctures are easier to take than infusions (simply because you consume less liquid). For those having difficulty drinking the tea, add a little honey, some mint leaves, or better yet, some elderberry syrup for a strong flu remedy.

### ***Ganoderma lucicum* and *G. tsugae* (red reishi and hemlock reishi, respectively)**

These annual fungi of tree stems and stumps are important preventative remedies. Species of *Ganoderma* are strong immune system modulators and both stimulate and support the immune system on many levels. These fungi are also antiviral through their ability to stimulate production of interferon, which are specialized proteins that inhibit viral replication and activate other immune system cells that destroy pathogens (among other actions). Studies also suggest expectorant and antitussive action, helping with the symptoms of flues and colds. These fungi can be taken in a variety of forms, including decoctions, tinctures, powders, and pills. For those collecting wild fungi, double-extraction is recommended to access both the water-soluble and alcohol-soluble constituents. Powders are commercially available (Mushroom Harvest carries a good supply of easy-to-use products).

### ***Achillea millefolium* (common yarrow)**

This aromatic, herbaceous plant is antiviral and anti-inflammatory. Some of the ethereal oils contained in the leaves are known to help reduce the pain and discomfort associated with influenza. It can also assist with fever through its diaphoretic action. The aerial portions of the plant can be infused as an herbal tea or tinctured in alcohol for medicine. This is another herb that pregnant women should probably avoid due to its stimulating action on the uterus. Likewise, some studies suggest this plant may temporarily reduce sperm production, so men actively seeking to become fathers might want to utilize a different remedy.

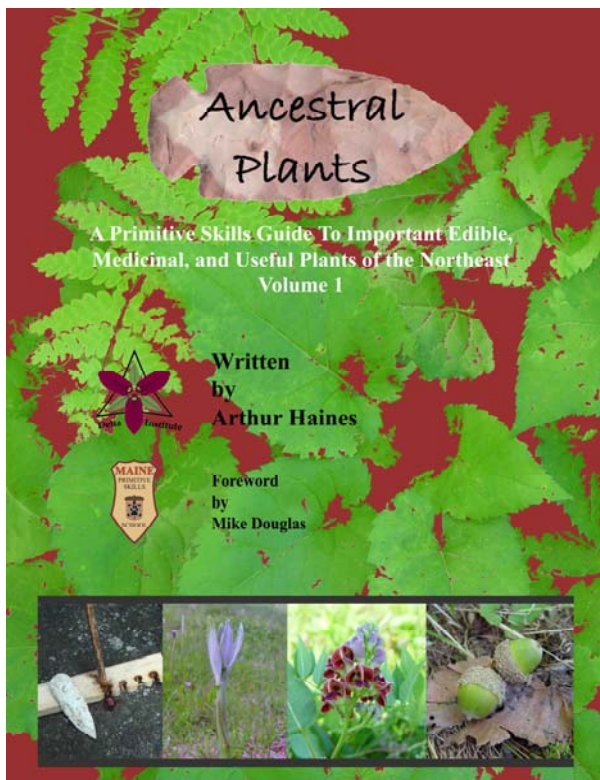
### ***Allium tricoccum* (wild leek)**

This herbaceous plant is both an antiviral and an immune system stimulator. Further, it is antibacterial and can prevent associated bacterial infections of the upper respiratory tract. The fresh bulbs should be consumed raw for antimicrobial action. They are strong tasting and can be emetic in large quantities. However, the bulbs can be consumed in quantity if diced or minced and mixed with tomato (best) or carrot (acceptable) juice. For treatment of infections, consume 3–9 fresh bulbs three times a day. For severe infections, this dosage can be repeated every hour. For those that don't have access to *Allium tricoccum*, substitute *Allium sativum* (cultivated garlic), which is available fresh in many grocery stores. Note that this plant is relatively rare in Maine and should not be gathered in large numbers this state.

### ***Scutellaria lateriflora* (mad-dog skullcap)**

This herbaceous plant is an antiviral and acts through stopping replication of the virus itself. Species of skullcap have been experimentally shown to be active against multiple strains of influenza. This species is not an immune system stimulator, so it is useful for people with autoimmune disorders (i.e., *Scutellaria lateriflora* will not cause increased symptoms of the autoimmune disease). Preparations of this plant also assist with vomiting, helping deal with one of the possible symptoms of influenza. Teas and tinctures are appropriate routes of administration.

If you have any questions about the plant remedies discussed here or would like to share your experiences with these species, feel free to contact me using the email address below.



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This is an invaluable reference for anyone interested in the foraging, wildcrafting medicine, survival, self-sufficiency, and the out-of-doors. This book treats approximately 100 species of wild plants in New England and discusses their uses, including food, medicine, hafting agents, dyes, friction fire, archery, basketry, and cordage fiber. Each species is provided with at least two color photographs. If you would like to be contacted when the book is available, please email [arthurhaines@wildblue.net](mailto:arthurhaines@wildblue.net).