

# NATURAL REMEDIES FOR EMERGING AND RESISTANT VIRAL INFECTIONS



# ESTER MEDICRONE

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## **INTRODUCTION**

Antiviral drugs are a class of drugs that are specifically used to treat viral infections and not bacterial infections. Most antivirals are used for certain viral infections, but broad-spectrum antivirals work against a wide range of viruses. In contrast to most antibiotics, antivirals do not destroy the target pathogen. Instead, they hinder their development.

## "Antiviral drugs are drugs that reduce the ability of the influenza virus to reproduce."

The concept of herbal antibiotics as the primary intervention has been widespread in non-western developed cultures in recent decades. Health systems in Africa, Asia, South and Central America are avoiding medication as a primary treatment for bacterial infections due to resistance problems, mainly because pharmaceutical companies earn too much money from their suffering. Non-Western cultures recognize that they can no longer afford corporate greed and therefore, do not attempt to kill the poor of their people. Researchers from cultures around the world have found that herbal antimicrobials are often more effective than drugs.

## ➢ EMERGING VIRUSES

Viral diseases caused by pathogenic viral infections with high morbidity and mortality are still the leading cause of death in humans worldwide. In addition, the appearance of virus resistance to the drug and the serious side effects caused by antiviral drugs have caused serious medical problems, especially when given in combination over a long period of treatment. And these drugs are very expensive and therefore limit their use in developing countries where infections are most common.

For most of the 20th century, infectious diseases declined in Western European populations because they learned to disinfect cities, clean water supplies, improve household hygiene, use antibiotics, control vector organisms, and vaccinate. As a result, the industrialized countries have become much more generous and have welcomed the wrong start of life with few infectious diseases. However, things have become much less certain since the 1980s, as many previously unidentified infections have occurred, and well-known infections that were considered to be under control have returned. This trend has continued to this day, and many infectious agents, especially viruses, have been newly identified.

In the summer of 2006, a little-known viral disease spread to large and diverse islands in the Indian Ocean. On Reunion Island, 265,000 of the 770,000 inhabitants were seriously ill. Very few were asymptomatic. The disease was severe in almost all cases. Healthcare workers and the island's hospital system were overwhelmed. Even if they weren't there, there was little they could do. So, they provided "support". In other words, they were watching. They waited. Human immunity and the body's system will either ward off them or not. This was not the case with many. The virus quickly jumped to India and killed an estimated 1.3 million people. Who's the culprit? Chikungunya fever, a relatively unknown viral disease. 1 This virus is known in medicine, but not very well. It is not a common illness. But it was mutated. The subsequent analysis showed that the mutation occurred between spring and autumn 2005. The area became pandemic within six months. By the end of 2006, more than 2 million people were infected. The disease is accompanied by severe joint pain (such as dengue fever). Ankles and wrists are most affected. Conjunctivitis and rashes are common. Cumulative injury can persist for weeks or months and is debilitating. There is no remedy or an antidote.

Doctors recommend the use of acetaminophen for pain. Causes of death of many people. Paracetamol damage to the liver. People who visited areas that returned to their home in the United States and Europe brought diseases. More than 1,000 people have been diagnosed in the United States. A large number of cases have led to the human-to-human transmission and infected new hosts. The disease is mainly transmitted by mosquitoes (like most diseases covered in this book), mainly Aedes aegypti. This is a mosquito that used to have a limited geographical area but has spread to all continents of the world in the past 50 years.

This is an example of how quickly new viral pathogens can spread to villages around the world. It started with the African virus entering Asian mosquitoes and travelling by plane and boat to the Indian Ocean and India. And from there it went everywhere. This dynamic is now developing all over the planet. Chikungunya is not uncommon. A pandemic caused the West Nile encephalitis virus in the United States in 1999. It soon spread around the world and is now common in Europe and Asia. In the fall of 2002, SARS appeared in China and quickly spread throughout Asia. Epidemiologists who investigated the SARS outbreak initially found that it had occurred in a small area of China. The sick doctor visited Hong Kong and infected 16 people. Some of them have travelled, which has spread the disease worldwide within a few weeks.

## ➢ <u>VIRUSES</u>

Scientists generally believe that viruses do not live. Many claims that these are just organic structures that interact with living organisms. They say that they are "creatures on the edge of life", but they are not really meaningful creatures. This is because they say that they have no cell structure, do not have their own metabolism and can only regenerate within the cell structure. In addition, we do not do this with cell division.

There are many viruses on this planet. It is estimated that the earth contains 1031 viruses or ten viruses with 31 zeros. Technically (in the case of winks) it is between billions and billions (although it is enough to say Baijiu). Basically, many and there are also different types. There are about 5,000 different viral genotypes per 200 litres of water (about 50 gallons or the content of a typical hot water tank). The virus is the coldest and most difficult to live on this planet, and the virus is found in boiling hot springs. There are high viruses in the atmosphere and the deepest wells on earth. They live in the mountains and most profound in the sea. And sometimes they even move into space.

You are part of the life of this planet. You cannot avoid them. Unlike bacteria, viruses have neither nuclei nor cell walls. They are a minimal lifespan that is matched to the simplicity of the design. There are many types, but in general, viruses are strands of

DNA or RNA that are surrounded by mathematically elegant polyhedral, called capsids, whose shape is virus-specific. In a so-called "envelope virus", the capsid is surrounded by one or more protein envelopes. Because of this simplified structure, they are no less alive than bacteria, for example. They are unique life forms (but that is not the reason to discriminate against them).

They are very similar to seeds (or spores): they only grow if they find the right soil. And like seeds, they continuously monitor the outside world, even when they are floating. The surface of the protein envelope of the virus is littered with receptors, which are certain types of sensory organs that bypass the virus. Viruses use these elegant senses to analyze their surroundings and find the best cells. Like Dr Ryan, a doctor and researcher commented that the virus has a certain sensation that can be divided between rudimentary smells and tactile sensations. There is a method for the detection of the chemical composition of the cell surface. This gives the virus the best able to recognize the correct cell surface [to find its own host cell]. Recognize them through 3D recognition of surface chemistry. Viruses sense the environment, assess their nature, find the most easily reproducible cellular organisms in them, and then stimulate the organisms in which they exist to spread very new viruses to highly developed ones. The host has the ability. And they can survive very well.

You can analyze the type of immune response against them and change yourself to bypass them - or change the host's immune response itself. They can be derived from useful definitions of terms. That is, it analyzes the inputs and creates new behaviour based on what determines the meaning of those inputs. Viruses can be classified in several ways: size or shape, presence or absence of encapsulated capsules (but not all), DNA or RNA-based (and single or double-stranded, positive or negative meaning), protein structure and how you type duplicate it. DNA viruses are reasonably reliable because infections are a kind of "copy-checking mechanism" that cannot be found in RNA viruses. This means that if the DNA virus makes more of itself in the host cell, it uses a biofeedback loop to ensure that its copy is reasonably accurate. In contrast, RNA viruses cannot. As a rule, a large number of copies are made that differ from the original. Some of these copy differences are deliberately triggered by the RNA virus and improve its genetic variation and thus the viability of the host. For this reason, permanent vaccines against DNA viruses are often designed, but the production of vaccines against RNA viruses is complicated, if not impossible. This also makes it very difficult to treat RNA viruses with drugs. They start making synthetic drug solutions as soon as they are found, like bacteria. For example, hepatitis C virus mutation rates have been shown to accelerate in response to interferon and ribavirin therapy in the same way that bacterial changes occur in the presence of antibiotics. RNA virus infections such as West Nile and Japanese encephalitis are fundamentally different from DNA virus infections. We exist in a period of swiftly growing global landscape and the local environment. Viruses with RNA as a genetic material can quickly adapt to these different conditions and take advantage of them. Therefore, it is not surprising that RNA viruses cause some recent prominent examples of newly emerging or re-emerging infections. - Stuart Nicol and other DNA viruses produce billions of microorganisms, while RNA viruses produce billions of similar viruses, but they are not the same virus. It's like a swarm of bees - all similar, but all different. In fact, it is much more accurate to consider an RNA infection as being caused by a

group of viruses. The most similar is that the human immune system is activated or dies first when using drugs that it can recognize. This allows others to multiply freely without being checked, and actually increase very quickly (some viruses generate a new generation every minute), but subtly for each newly created virus and make the necessary changes.

There is also evidence that both DNA and RNA viruses such as bacteria exchange information because they are not affected by the medical or immune systems. Similar viruses actively share the gene structure and cause infections that are very difficult to treat. For example, influenza viruses (and intentionally) regularly (and intentionally) use completely new genes to restore their genetic structure and make them invisible to the human immune system. And collect these new gene sequences from Asian pigs and birds. For this reason, a new flu vaccine is needed every year.

Viruses transmitted by ticks or mosquitoes use compounds in the saliva of arthropods to penetrate new hosts. Salivary compounds reduce the host's specific immune response, provide them with arthropods, and often numb the site of the bite. If the immune response is reduced in this area, the virus can enter new hosts where there is little resistance. Once in the virus, it reaches the draining lymph node closest to the site of the bite and is transported through the lymph to the spleen. So, they begin to change the host's immune function and decrease the ability of immune cells to recognize and kill invading microorganisms. In this case, the virus begins to spread throughout the body, usually on immune cells, macrophages or monocytes. For example, this is common with the encephalitis virus. It then travels through the lymph to the barrier between the brain and the rest of the body, releasing connections that make the boundary more porous, get into the mind and find brain neurons, cells that it really likes. Other viruses occur through inhalation (influenza), sex (HIV) or through eating (enterovirus). As soon as they are in the body, they ride on their personal cells (usually immune cells, these cells move everywhere) and actively search for their favourite places. This is the case with HIV, which considers T4 lymphocytes as complete host cells, the Epstein-Barr virus, which has an affinity for human B cells, or the Japanese encephalitis virus, which prefers monocytes.

## EMERGING PATHOGENIC VIRUSES

Here are some of the critical changes affecting the planet that researchers have identified for the emergence of so many new (and old) pathogenic viruses. They have not escaped anywhere in the world.

 Demographic change: increasing population and refugees, accelerating migration, global urbanization, increasing population density in confined spaces such as urban centres and prisons, blood transfusions, organ transplants, reuse of medical devices, drug contamination, resistance to viruses and antibiotics.

- Economic and commercial trends: Excessively widespread industrial agriculture with consequent damage to the hemodynamics of the ecosystem. Worldwide expenditure on commercial edible animals, edible plants and agricultural medicines.
- Ecosystem disturbances: deforestation, waterway disturbances, reduced predators, destruction of wild plants.
- Climate change: Disruptive viruses in climate hemodynamics due to • anthropogenic factors such as global warming, increased CO2 and environmentally harmful gases have been in balance with host species (such as wild bee and buffalo populations) for millions of years. Stay alive. The destruction of healthy ecosystems by human invasion and the resulting loss of host species and their habitat encourages the virus to jump across species. And one of the species they jump into is us (or animals that survive with us: pigeons, rats, pigs, chickens - then they quickly move into us). After all, we (and our feed animals) are far more present than any other large life form. It is not that difficult to find. In fact, many of us live in the same places as previous hosts of the virus. And the house is at the house. Our body is not very different from other animals on this planet. It's simple customization for the virus to become a new host. Some of the most common, resistant or newly toxic infections are dengue virus (infects millions of people worldwide every year), hepatitis C, enterovirus 71, HIV, and cytomegalovirus and Epstein virus, including eight members of the herpes family that affect people. Bar virus. The world's biggest problems (except HIV) are caused by influenza and encephalitis viruses. Influenza seems to be a somewhat mild illness in the minds of many people, but only another "flu case" is a dominant viral pathogen. Our factory farms (swine and chicken viruses increase pathogenicity), growing populations, the outdated nature of stroke diseases and health systems, and the intelligence of the virus will ensure that pandemic strains reappear. It is a matter of time. As Robert Heinlein once said: "Population problems have terrible opportunities to solve themselves."

## VIRAL RESPIRATORY INFECTIONS AND THEIR TREAMENT

Persistent host-specific virus pathogens are the source of emerging acute epidemics after the virus has been adapted to new host species. These dangerous viruses are linked to the structure of the host population, as explained by seemingly accurate mathematical models that resemble the dynamics of predators and prey, the infections of which act as predators for host predators. It really matters. Acute human influenza A represents a host species jump from a persistent viral pathogen in waterfowl. The primary animal reservoir for influenza A is migratory birds, from which possible combinations of the HA-NA subtype were isolated.

## ➢ THE INFLUENZA VIRUS

The influenza virus belongs to the Orthomyxoviridae family. It is an RNA virus, which means that it changes its genetic structure very quickly. Therefore, new flu shots are needed every year (Western people who have access to them). Older vaccines prevent infection from strains that occurred during that particular year. The following year, it's not the same virus, just a similar virus. The influenza virus spreads worldwide with epidemics in every season. 250,000 to 500,000 people die each year. About a third of those infected remain asymptomatic. The rest will be "flu". The first symptom is usually a cold or painful feeling, probably the beginning of a fever. As the infection spreads, high fever and severe chills alternate. When the virus penetrates the lung and sinus tissue, mucus congestion begins. Cough, body pain, fatigue, headache, and inflammation of the eyes, nose, and throat are frequent. Some people have diarrhea and abdominal pain. Vomit. Sometimes. Yes.

Infection symptoms usually start on the third day after infection. But by then the virus had already taken root. Start replication on the second day and then release the virus particles that increase for 5-7 days. The higher the heat, the more viral organisms are released. Children have a very high viral load and are much more contagious than adults. The fever also tends to be very high. When the virus gets into the lungs, it stimulates tissue inflammation. Lung cells filled with viruses quickly bulge outwards and explore - the essence of virus release. Secondly, the virus stimulates a cough and spreads to new hosts via breath droplets. The disease is a critical infection of the lungs with considerable fluid retention and shortness of breath and the most common cause of death.

There are 3 distinct combinations of influenza viruses called A, B and C. Influenza A is the most pathogenic. Influenza B is a relatively stable virus that mutates much more slowly than A. Most people develop at least some immunity in childhood. Not that dangerous. Influenza C is rare. It can infect people but sometimes causes serious but usually mild illnesses. When people talk about pandemic influenza, they're talking about influenza A, which is in one of its many genetically modified forms. The 1918 pandemic was caused by disease A strains.

## INFECTION DYNAMICS AND THE CYTOKINE CASCADE

Cytokines are physiological signaling molecules that are produced by the body for various reasons. They are most commonly created during an infection. Cytokines (and their cousins, chemokines) are generally (not adapted) part of the innate immune system. They should react to the entry of viruses and bacteria into our body. Another way to look at them is by inflammatory molecules. They cause various types of inflammation in the body - if you cut yourself, the wound will become red, soft and swollen. Cytokines that pour into the area make it difficult for many bacteria and viruses to survive.

## > <u>CYTOKINE STORMS</u>

More serious pandemic viruses (1918 H1N1, 2009 H1N1, 2004 H5N1) cause severe lung damage and inflammation. In these cases, the cytokine cascade becomes stormy, and mortality increases accordingly. For example, the mortality rate of people infected with H5N1 due to acute shortness of breath and organ failure is typically around 60%. In 1918, the mortality rate was much lower at approximately 20%, but the burden was much more contagious and reached about a third of the population.

In particular, the inhibition of TNF-? IFN-? IL-1? And IL-6 is essential in severe pandemic influenza infections. In such cases, these cytokines are found in very high concentrations, and lung damage is unique to them. When their levels are high enough, the inflammation goes beyond the airways and becomes systemic. This type of condition is called sepsis and is essentially a systemic inflammatory condition. In severe cases, organ failure or cardiac arrest can occur.

Cytokine-like proteins are involved in sepsis-induced cytokine storms: High Mobility Group Box 1 protein (HMGB1). This cytokine-like protein is very high in all patients who have died from sepsis, including those caused by influenza.

## LUNG AND TISSUE PATHOLOGY DURING SEVERE INFLUENZA INFECTIONS

The influenza virus penetrates the lung tissue explicitly and causes both direct and inflammatory damage. There are four significant pathological changes

- 1) Diffuse alveolar injury.
- 2) Necrotizing bronchiolitis.
- 3) Heavy alveolar bleeding.
- 4) Strong fluid accumulation.

Viruses infect specific cell structures. In fact, everything is contaminated with sialic acids (alpha-2,6 and alpha-2,3) bound to its surface. However, respiratory cells express these acids differently, and different strains of influenza produce different infection profiles. Ciliate-free lung cells contain a higher percentage of alpha-2,6-

linked sialic acid, and ciliate include both alpha-2,6- and alpha-2,3-linked sialic acid. The H3N2 virus prefers sialic acid without ciliary cells, while avian influenza (H5N1) only infects cilia. This is one of the reasons why bird strains are more deadly. Cilia are often killed when infected, which destroys their ability to remove mucus from the lungs. This significantly increases the mucus accumulation in the lungs. The H5N1 strain prefers  $\alpha$ -2,3 linked sialic acids, which are most abundant in ciliated cells, but these acids are abundant in cilia cells in the lower respiratory tract. As a result, the H5N1 strain infects not only cilia, but also the lower respiratory tract, causing a deeper infection.

In severe cases, alveolar bleeding is standard regardless of tone, as is intra-alveolar edema and interstitial inflammation. All tissues surrounding blood vessels, lymph nodes and channels are inflamed (perivascular). Microthrombi or small thrombi form in the blood vessels of the lungs. IFN- $\gamma$  levels are elevated in macrophages, alveolar epithelial cells and blood vessels. TNF- $\alpha$  levels are high in alveolar macrophages as well as in smooth bronchial and vascular muscles. There is extensive infiltration around the airways and alveolar walls. The spleen typically withers and shows a non-reactive white pulp. Non-reactive follicles and sinus phagocytosis of the red blood cells are common in the lymph nodes. The protection of the spleen and lymph structures and their functions, as well as the ciliary and mucous membrane structures, is essential.

## > MEDICAL INTERVENTIONS

When influenza is pharmaceutically treated, neuraminidase inhibitors such as oseltamivir (Tamiflu) and zanamivir (Relenza) are commonly used. The same applies to adamantane (amantadine and rimantadine). Inhibits the M2 ion channel. These drugs are commonly called antivirals, but at least antibiotics are not the same as antibiotics that specifically kill bacteria. More specifically, to prevent the virus from entering the host cell (stopping or delaying the infection), to prevent the vacuole envelope virus from releasing viral proteins in the host cell (thereby stopping or delaying the infection). Let it do). They do not kill the virus directly. Ribavirin, a drug that disrupts RNA metabolism, is sometimes used, but its effects are mixed and have many serious side effects.

If there is significant inflammation, corticosteroids can be used to reduce the inflammation. However, when HMGB1 levels work, corticosteroids do nothing to reduce inflammation. Hospitalization is common in severe cases, but very little can be done apart from passive treatment and use of oxygen. The main approach is to use a combination of nutrient solution and glucose IV to keep the patient's nutritional / energy level high so that intravenous fluids can be administered, but with serious side effects. Unfortunately, the use of glucose during influenza infection has been shown to significantly increase the viral load and disease parameters. Insulin, on the other hand, reduces them considerably, with the additional advantage that the HMGB1 levels are lowered.

## NATURAL TREATMENT PROTOCOLS FOR INFLUENZA

Natural treatment protocol for influenza

Influenza infections can range from very mild to very severe.

- 1) Start early
- 2) Slight infection
- 3) Moderate infection
- 4) Severe infection.

#### **Early-Onset Treatment**

There are two approaches that can short a developing episode before it is held firmly in the body: a combination of Oscillococcinea and herbal tincture.

#### Oscillococcinum

This homeopathic remedy is very good at stopping the onset of influenza when you feel the first signs of influenza, the first tingling sensation in your body that tells you that you are sick. Oscillococcinea is supplied in small tubes as small sugar granules. Take one bottle every 6 hours, three bottles a day, two days or three days a day. This is often enough to stop the infection.

#### **Herbal Tincture Combination**

A combination of 2 parts Roma, two parts red root, two parts licorice and 1-part Isanti's tincture (e.g. the first three 2 ounces, the latter 1 ounce). Dosage: 30-60 drops per hour until symptoms improve.

#### To Protect Cilia Structures and Lung Mucosa

several herbs are only suitable for protecting cilia. Cordyceps, olive oil and leaves, berberine and my favourite Bidens pilosa. Biden is a very effective systemic antibiotic and is used for systemic bacterial infections (including the respiratory tract) and influenza in Asia and Africa (but has not been tested against the virus). When the mucous membrane is infected with microorganisms, it feels better and repeats better and repeats itself. This is the herb to use. Herbs specialize in the healing and protection of mucosal structures, including cilia. You need to use the fresh herbal tincture. Dry herbs are not antibacterial but still help with mucosal tone. Dosage: 1/4 to 1/2 teaspoon up to 6 times a day.

#### Supplements

Zinc and selenium are beneficial for flu infections. Both mice have been shown to protect against severe strains of influenza. Dosage: 200 µg selenium daily. 25-40 mg zinc daily.

#### Inhalation agent for essential oils

The essential oils of thyme, eucalyptus, rosemary and sage help. They are all antiviral (to varying degrees) against influenza, reduce cough reflexes, thin, excrete mucus and improve the bronchial airflow. Instructions: Put 1 gallon of water in an oven pot and bring to a boil. Turn off the heater, add 20 drops of essential oil to the pot, and move the pan to a comfortable place where you can sit with your head raised. Maintain your top covering the pot and inhale steam every few hours.

## > **SUPPORTIVE ADDITIONS**

Some additional things can be beneficial during an acute flu episode. These are the treatment of high fever, severe headache, cough, high HMGB1 levels during cytokine storms and the protection of the ciliary structure and the mucous membranes of the lungs. Two additions have also proven useful. Inhalers of essential oils can help with lung infections, cough, mucus flow and secretion.

fever

Various interventions can help. The ginger juice tea mentioned above (page 49) often reduces the high fever that occurs during the flu, but further if necessary:

Boneset tea: The boneset is specific for the flu and some of the cytokines it stimulates. It is also peculiar for diseases that alternate between fever and chills. If you want to use a boneset and are already sick, it is easier to balance many at once. It is difficult to get out of bed repeatedly. So add 3 ounces of dry bone herbs to a gallon of hot water, let them soak for about 30 minutes, and then drink 8 ounces every few hours. Tea needs to be consumed at high temperatures to fight the fever. Herbs stimulate sweating and reduce fever. Helps stop cold / warm, cold / warm cycles. Add honey because it's bitter.

Okanagan flower tincture (pulsating): 10 drops per hour as needed.

Hot tea: Peppermint is a good choice and children like it and can also help soothe the stomach. Yarrow is bitter but is also suitable for it. Both have some anti-viral activity against influenza.

Wet wipe: A damp wipe that is regularly applied to the whole body mimics the sweat effect and helps reduce fever. The higher the fever, the more often you have to do it.

If you have a headache

Pipe tincture (Monotropy unfloral): The best kind of annoying problem that I occasionally have during the flu that I found. The dosage is 30 drops per 1 teaspoon every few hours.

Coralroot (Calorize spp.) Tincture: 1 teaspoon every few hours. It helps and is specific to some people.

Motherwort (Leon urus heart) and American wood Vietnamese (Pedicular is spp.) Tincture: combined, in equal parts. The dosage is up to 1 ounce in combination in water (yes, yes). I usually use 1/4 ounce, but high doses can sometimes be helpful if I don't do anything else. Exercise slowly every 4 hours

## SAARS AND CORONAVIRUSES

SARS is very similar to acute influenza in its effects on the body and has initially been viewed as a newly emerging strain of flu. However, SARS (Sudden Acute Respiratory Syndrome) is a newly emerging viral pathogen that suddenly appeared in China in 2002. The disease is characterized by fever and subsequent respiratory symptoms that eventually lead to progressive respiratory failure in some infected people. The type of virus was unknown at the time, but it ultimately turned out to be a coronavirus that jumped over the species for us. Coronaviruses are enveloped plus-strand RNA viruses. They have the largest genome of all RNA viruses. This group of viruses is very often involved in RNA combinations and is continually creating new variants. Of the dozen coronaviruses, only three are infected. Among them, SARS is the most serious. The development of the virus in the body takes about six days and, like the flu, mainly spreads through breath droplets, but can also be transmitted through direct contact with body secretions. The virus often releases particles in feces and urine for weeks and can spread the infection after a serious illness. Temperature, tussis and brevity of breath are the first symptoms of the disease. Headache, stiff muscles, muscle pain, anorexia, malaise, chills, confusion, dizziness, rash, night sweats, nausea and diarrhea, occur in many people.

Deaths increase with age. People under the age of 24 are less sensitive. For people aged 25 to 44, the mortality rate is 6%. It is more than 15% for 45 to 64 people and more than 50% for people over 65 years.

In contrast to influenza, SARS binds to angiotensin-converting enzyme 2 (ACE-2) rather than to sialic acid. It is an essential membrane protein for many cells throughout the body, including the heart, vascular cells and kidneys. It is closely related to the regulation of the renin-angiotensin system (RAS). RAS is closely related to the vasoconstriction and hemodynamics of the kidney electrolyte, and its primary effects have been thought to be. However, RAS is also essential for the functioning of most organs such as the lungs, spleen and lymph nodes. ACE-2 converts angiotensin II to a less potent molecular form. Angiotensin II is a powerful vasoconstrictor, among other things, but it is very biologically active along with a variety of cellular effects.

The virus targets explicitly (and replicates in) fibrillation cells, destroys cells and destroys the ability to remove mucus from the lungs. (Ciliary herbs are Cordyceps, Olive Oil and Leaves, Berber Cactus, and Biden's Pilosa.) Autoantibodies have created that cause to tackle host epithelial and endothelial cells and promote destruction. It is essential to reduce autoimmune reactions (Robiola, Vetch, Cordyceps) and to protect endothelial cells (Citatory).

The autopsy of the deceased revealed severe damage to the lungs from the alveoli. There was an extensive injury to the lymph nodes of the lungs, acute necrosis of the edges of the white flesh and spleen, destruction of the germinal centers of lymphocytes, apoptosis of lymphocytes and infiltration of monocytes. Protection of the anger and lymph is essential (red root, stinging root, Chinese skull).

#### **Medical Treatment**

Ribavirin is slightly effective against SARS but is still used despite side effects. Corticosteroids are used to reduce inflammation. The non-steroidal anti-inflammatory drug indomethacin must be used because it has potent antiviral activity against the virus. Both rimantadine and lopinavir were found to be active in vitro.

## FEW OTHER RESPIRATORY VIRAL INFECTIONS

The most important things that people come across are adenovirus, parainfluenza virus, respiratory syncytial virus and rhinovirus.

## > <u>ADENOVIRUSES</u>

Adenovirus infections are usually mild and generally more comfortable to treat. However, acute symptoms such as pharyngeal conjunctival fever, dangerous respiratory diseases, pneumonia and meningitis can also occur. Adenovirus 14 is a new serotype that can cause serious infections, mainly severe respiratory disorders, and can be fatal. Conjunctivitis, high fever, pneumonia and gastrointestinal problems can occur. The virus is released both in droplets of breath and in faces and can continue to infect the faces for long periods. Herbs that are specific for adenovirus infection include vetch, Chinese skullcap, elderberry, Isanti's and liquor ice. Other herbs that are active include Ardisia Sculls, Artemisia Primus, BassanioGracilize, CaesarianPuerperia, OsmiumBasilica and Serosa Japonica.

**Treatment:** Like mild flu. If it's severe, it's the same thing as moderate to severe influenza.

## > PARAINFLUENZA VIRUSES

The Parainfluenza virus causes a so-called croup. It is an acute infection of the upper respiratory tract with a cough bar (croup part) and a voice. The throat often swells and can affect breathing. Herbs that only occur in parainfluenza are Chinese skullcap, elderberry and liquor ice. Allium sativum and Cicero arietinum have also been shown to be effective.

**Treatment:** Elderberry, Chinese skullcap and liquor ice tincture are mixed in equal proportions. Dosage: 30 drops per hour.

## > <u>RESPIRATORY SYNCYTIAL VIRUSES</u>

The Respiratory Syncytial Virus is also a single-stranded enveloped RNA virus with significant genome variations. It is a widespread infection, especially around the world. It causes bronchiolitis and other types of respiratory diseases, especially the lower respiratory tract. It usually manifests as a cold, but can be severe and cause pneumonia if not treated. Herbs specific for respiratory syncytial virus infection are the Chinese skull, Eleuthero coccus lenticonus, Elder, Isanti's, Licorice and Sophora flavanones. Other herbs that have been shown to be active are Ballerina priorities, Blumerlaciniate, Elephant opussaber, Lager periodontal, Markham lutea, Musandam pubescents, Narcissus tazetta, Selaginella Synesis, ScutellarinIndica and Schefflera in vitro.

**Treatment:** Like mild flu. If it's severe, it's the same thing as moderate to severe influenza.

## ➢ <u>RHINO VIRUSES</u>

These viruses catch a cold. Herbs/supplements specific for rhinovirus infections are ginger, Echinacea Angustifolia, elder, Eleuthero coccussemiosis, quercetin, poppy seeds and LaurieAustralis. Hoche-ekki-to, a traditional Japanese formula, has proven to be as effective as plums.

**Treatment:** Discovery of using a combination of E. Angustifolia, licorice and tincture.

## VIRAL ENCEPHALATIS INFECTIONS AND THEIR TREATMENT

Emerging RNA virus pathogens such as West Nile Virus (WNV), Japanese Encephalitis Virus (JEV), Australian Bat Lyssa Virus, Retrovirus and Nipah Virus are increasingly important causes of encephalitis. The flavivirus JEV is the most common cause of arthropod-transmitted encephalitis worldwide. More than 50,000 cases are reported annually in China, Southeast Asia and India. This arbovirus epidemic results in death rates in the 30-50% range, which usually die within the first week, and persistent neuropathy in about half of the survivors. Another flavivirus, WNV, is also from Culex spp. Transfer. Mosquitoes can cause fatal encephalitis and long-term neurological consequences. In the CNS, JEV and WNV infect neurons, which leads to neuronal apoptosis and severe immunopathology.

Encephalitis sounds like jargon, but it isn't. It simply means inflammation of the brain (the "flame" part) ("brain" means the brain from the roots of the ancient Greek word). There are many things that can cause such inflammation, just like hepatitis, whose name simply means liver inflammation. The term refers to the main symptoms that appear in the course of the disease, not the disease itself.

There are a plenty of diseases that can provoke encephalitis. Many of them are known for their symptoms. West Nile encephalitis and Japanese viral encephalitis are examples. The virus that causes these conditions has a tropism for the brain. Many of them have tropism for neurons in the brain, such as the Japanese Encephalitis Virus (JEV), which they prefer. They are easiest to reproduce inside. Once you are infected, you want to go there. Once established in the brain or central nervous system (CNS), they begin to release (or stimulate) a unique compound called a cytokine. Cytokines cause cells in the brain to swell and fall apart (the inflammatory aspect of things). This provides the virus with the necessary food and promotes its spread. (The meninges, the covering that covers the brain and spinal cord and can cause inflammation, but the infection is called meningitis.) Unfortunately, neuronal damage in the brain causes several problems. The inflammation itself is the most difficult. The mind is enveloped in a solid shell that cannot expand by itself. It's about something when the brain swells beyond the size of the container due to inflammation. Technical medicine can only respond to this type of infection to a limited extent. The typical reaction to mild infections is to stay at home and rest in bed. If the disease is severe, as is the case with many viral encephalitis, there is no approved drug treatment. Antiviral drugs can help in most, but not all, cases. Other therapies are new and experimental and offer limited help. If swelling is at risk, intravenous steroids can be used to reduce inflammation. However, if they need to be used long term, their use has some severe side effects.

Plant medicines, on the other hand, offer a much more elegant intervention, especially for this kind of condition. With plant medicines, each aspect of the disease can be addressed. Antivirals can be used to kill the organism (or limit its ability to infect the body's cells). Anti-inflammatories, specific for the brain, can be used to reduce inflammation. Neural protectors can be used to safeguard brain structures from damage (or to restore damaged structures). Immune facilitators (adaptogens) can be used to enhance immune function so the body is more able to fight the infection on its own. And the unique symptom picture that emerges for the infected person can be addressed using plant symptomatic. Too, most of these plant medicines tend to be synergistic with one another (as many of the individual plant compounds are with one another) and, together, produce outcomes that can be very potent. With time, the ability to respond to viral infections can become tremendously sophisticated. This is an initial exploration of how such an approach can be applied to viral encephalitis.

## ➢ THE ENCEPHALATIS VIRUSES

There are viruses that specifically infect the brain and cause encephalitis (West Nile), and viruses that penetrate the brain and cause encephalitis (herpes simplex). Many of them are spread by vector insects (mosquitoes and mites). Some of them have vaccines (tick-borne encephalitis TBE). Others may respond well to medication (e.g., acyclovir for non-resistant herpes encephalitis). Most viruses that cause encephalitis show similar early symptoms. All of them can be treated with phytonutrients. (And yes, medicines can be used with herbal protocols.

The most common encephalitis viruses and their geographical distribution are listed below:

**Togavirus, an alphavirus complex:** Eastern Equine Encephalitis (Eastern and Gulf of the United States, South America, Caribbean), Western Equine Encephalitis (US West and Canada), Venezuelan Equine Encephalitis (South and Central America, Florida, Southwest USA) state). Mosquitoes spread everything.

• Flaviviruses, West Nile group: St. Louis encephalitis (USA), Japanese encephalitis (Japan, China, Southeast Asia, India, Southeast Russia, North Australia, New Guinea), Murray Valley encephalitis (Australia and New Guinea), West Nile (USA, Africa, Europe, Middle East, Asia), Ileus (South and Central America), Rosio (Brazil). Mosquitoes spread everything.

• Flavivirus, tick-borne complex: Far Eastern tick-borne encephalitis (Eastern Russia), Central European encephalitis (Central Europe), Cassanur forest disease (India), loop disease (England, Scotland, Northern Ireland), Poisson (Canada, north) (USA), Negishi (Japan). Everything is spread by ticks. This group is commonly referred to as TBE or tick-borne encephalitis virus and is treated accordingly.

• Bunya virus, bunyavirus complex: California encephalitis (western USA), lacrosse encephalitis (central and eastern USA), Jamestown Canyon (the USA including Alaska), snowshoe hare (Canada, Northern Alaska), Tahina (Czech Republic, Slovakia), former Yugoslav countries, Italy, southern France), Inkoo (Finland). Mosquitoes spread everything.

• Phlebovirus: Rift Valley fever (East Africa). Spread by mosquitoes.

## ➢ <u>SYMTOMS</u>

Almost 90% of people infected with the encephalitis virus have flu-like symptoms: fever, sore throat, cough, general discomfort, aches and pains, weakness, malaise. About 10 per cent have no symptoms at all. And for most people, the infection goes away just like the flu. They don't think they're really infected with viral encephalitis. If the disease is severe, the symptoms change accordingly: headache, confusion, disorientation, photopia, swaying, optic neuritis, myelitis, personality changes, seizures, coma and death are all serious infection cases. Depending on which part of the brain is affected, language skills are impaired, voluntary movements are concerned, severe muscle weakness, uncontrolled tremors, partial paralysis, involuntary movements and loss of thermoregulatory ability can occur.

## NATURAL TREATMENT FOR ENCEPHALATIS

This treatment protocol is specific to all infections with viral encephalitis. Some adjustments are required for West Nile, TBE and Dengue fever. These adjustments are described in detail at the end of the protocol. In the event of a seizure, heavy use of the Chinese skull and lion mane is required. Logistical Wallachia (or Restrain extract) is specific when there is cerebral edema, ischemia or hypoxia. Robiola is also accurate for hypoxia. Note: Chondroitin sulfate has been shown to increase JEV brain cell infection and related brain damage. Avoid this supplement for active diseases.

After the treatment protocol, we'll briefly consider some of the essential herbs that are neuroprotective and neuro regenerative: Chinese Senegal root, knotweed root, kudzu root, lion's mane and crinum Lat folium.

#### **PROTOCOL OVERVIEW**

A therapeutic approach that can reduce the effects of an encephalitis infection consists of the following steps:

1. Antiviral

2. Stimulates the spleen and lymphatic system to attack diseases aggressively, reduces virus migration into the brain and promotes the induction of spleen T cell activation

- 3. Reduction of the cytokine/chemokine cascade by specific inhibitors
- 4. Protection of neurons and mitochondria
- 5. Control of viral infection of nerve cells
- 6. Regeneration of the damaged nerve structure
- 7. Improve the response of the healthy immune system with adaptation promoters
- 8. Inhibition of HMGB1 when sepsis is likely

## A BRIEF LOOK AT SOME OTHER VIRUSES FROM CYTOMEGALOVIRUS AND DENGUE TO SHINLES AND THEIR TREATMENT PROTOCOLS

The leading cause of the occurrence of infectious diseases is artificial social and ecological changes. These result from the combined weight of the number of people and their consumption patterns, which overload the biophysical and ecological capacity of the earth. As the impact of humans on the ecosphere continues to increase, the incidence of infectious diseases will only increase in the future. There is

currently a growing global population base that prefers the use of natural products to treat and prevent medical problems. There are many other viruses that cause disease in humans, and they become resistant or appear more reliable in the world.

## > <u>CYTOMEGALO VIRUS</u>

The cytomegalovirus (CMV) belongs to the family of herpes viral, a group of huge DNA viruses, which also include the herpes simplex virus, the Epstein-Barr virus and the water cell shingles virus (water harvesting/shingles). It is sometimes referred to as human herpesvirus 5 (HHV-5). It usually causes minor problems for people with a healthy immune system, but when their immune function is impaired (especially in AIDS patients, people taking immunosuppressants, or at any age or disease). People who are simply weakened) or, if their immune system is not reduced, are still fully developed (baby inside and outside the uterus) and can cause serious problems that can lead to death.

The infection rate is high. In the United States, 50 to 80% of the adult population is asymptomatic. The usual signs when people are infected for the first time are fever, fatigue, muscle sensitivity, and sensitivity and swelling of the lymph nodes. Like the flu. Then go by, feel better and become an asymptomatic carrier.

#### PROCESSING

CMV is usually treated with the intravenous antibiotic ganciclovir (or valganciclovir), often together with CMV-specific immunoglobulins. Treatment usually lasts 2 to 4 weeks, after which it changes to oral valganciclovir. Unfortunately, the virus becomes resistant to ganciclovir. In general, this drug cannot cure the infection, but only weakens its effects. Here too, the search for vaccines. However, previous studies have shown that developing vaccines tend to mitigate rather than mitigate the impact of the disease for many people who use it.

## > <u>DENGUE FEVER</u>

The dengue virus (DENV) is a single-stranded RNA virus from the Flaviviridae family, in particular the genus Flaviviridae. This genus includes many of the encephalitis viruses, including West Nile, tick-borne encephalitis, Japanese encephalitis, Murray Valley encephalitis, and St. Louis encephalitis. The yellow fever virus also belongs to this group. There are different types of dengue fever (1, 2, 3 and 4). Each produces a

slightly different spectrum of symptoms. DENV-3 causes more musculoskeletal and gastrointestinal symptoms, and DENV-4 causes more respiratory and skin symptoms. Dengue fever, also known as fracture fever, is a mosquito-borne disease that is only infectious on its way. Every year, around 100 million people become infected with dengue fever. Hundreds of thousands of people develop very severe dengue hemorrhagic fever and approximately 22,000 dies.

Dengue hemorrhagic fever (DHF) usually affects children under ten years of age. Causes severe abdominal pain, bleeding and shock. Sore throat, cough, nausea and vomiting occur. About 2-6 days after the symptoms appear, there is a collapse with cold and wet limbs, weak impulses and cyanosis around the mouth. The skin is vulnerable. There is bleeding, spitting blood, blood in the stool, bleeding gums and nosebleeds. Pneumonia is common. Inflammation of the heart can occur. The disease is associated with a high level of circulating von Willebrand factor. The usual treatments for DHF are blood transfusion, oxygen and infusion.

#### PROCESSING

There is no treatment for any form of dengue. There is no vaccine. However, recent studies have shown that antibiotic Geneticin is effective against the virus. The actual effectiveness is unknown.

## ➢ ENTEROVIRUS 71

Enterovirus 71 (sometimes called hand-foot-mouth disease) is a single-stranded, nonenveloped RNA virus from the Coronaviridae family. Rhinovirus (cold), hepatitis A and poliovirus are some of the best-known family members. Enterovirus 71 was first identified in 1965. The first known outbreak occurred in 1969 in the United States. Every three to four years, there are severe outbreaks worldwide with small annual episodes everywhere. A severe outbreak in Taiwan in 1998 affected more than 130,000 people, mostly children. Viruses are usually spread through droplets of breath or contact with infected body fluids. It is excreted in the faeces weeks or months after infection.

The virus first colonizes the gastrointestinal tract, from where the disease becomes more severe and penetrates the spinal cord and rises into the brain. The CNS and brain produce high levels of cytokines: IL-1 $\beta$ , IL-6, IL-8 and TNF- $\alpha$ . Enterovirus 71 is a newly emerging pathogen, and the number of cases increases every year.

The most common symptoms of infection are fever, headache, fatigue, malaise, earache, sore throat, rash, blisters on the palms of the hands and soles of the feet (may also occur in the nostrils and buttocks). Yes, mouth ulcers, anorexia, diarrhoea, vomiting. Usually, fever and sore throat are the first signs. Unfortunately, there are some more serious complications that can occur during infection: high fever, meningitis, encephalitis, paralysis, cardiopulmonary oedema, and sometimes sleep and death.

#### PROCESSING

There is no drug treatment or vaccination.



Epstein Bar belongs to the Herpesviridae or Herpesviridae family. It is sometimes referred to as human herpesvirus 4 (HHV-4). It is the cause of mononucleosis and a very common cause of chronic fatigue syndrome. Is considered an oncovirus. That said, in some situations, it can cause certain forms of cancer over a long period of time. Most children are infected at a young age. In this case, the symptoms are usually mild - it looks like a soft case of flu. The older the infected, the more severe the symptoms. It causes infectious mononucleosis in teenagers. This is usually accompanied by a sore throat, fever, extreme fatigue and malaise. Infected people also suffer from throat swelling, loss of appetite, enlarged lymph nodes, swollen spleen and liver, yellow and petechiae. Some of the most severe complications are splenic rupture or bleeding, meningitis, peripheral neuritis, and pneumonia. Autoimmune hemolytic anaemia can also occur but is very rare. There is no reliable treatment for this disease. Acyclovir helps reduce virus excretion. Valaciclovir has sometimes been found to significantly reduce viral load, reducing the symptoms of the disease.

## ➢ HERPES SIMPLEX 1 AND 2

Herpes is probably the most famous (or notorious) member of the Herpesviridae virus family. There are two types, Herpes Simplex Virus 1 (HSV-1) and Herpes Simplex Virus 2 (HSV-2). The most frequent foci of infection are lips (herpes, blisters) and genitals (herpes). Herpes is usually caused by genital herpes with herpes simplex one and herpes simplex 2. A less common form is a finger infection called ringworm herpes. Every type is the cause. There are more severe forms of disease: eye herpes (infects the eye and causes keratitis), herpes labialis (mainly affects the skin), herpes encephalitis (infects the brain), Mollaret meningitis (protective infection) do)) membranes that cover the brain and cover the spinal cord) and herpes neonatal (where the baby is infected at birth or in the uterus).

Herpes is either the oral cavity or the genitals and usually occurs regularly with long (or short) remissions between episodes. When genital herpes enters a new host, it moves along the nerve pathways where it stays. For many, the virus can become inactive indefinitely after the first outbreak. In others, the infection is often active. It then returns along the nerve pathways to the surface of the skin, where blisters form and release the virus, causing the disease to spread.

There are generally three types of eyesores or eyesores. Herpes keratitis is the most common type. Viral infection of the cornea or the surface of the eye. It usually heals

without harming the eyes. Interstitial keratitis is a deeper form in which the virus penetrates deeper into the corneal layers. It can cause scarring in the cornea and sometimes blindness. The last type is the iridocyclitis. Here the iris and the tissue around the eyes become infected and become inflamed. There is often keen sensitivity to light and blurred vision, and infected eyes are red. Sometimes this type of infection occurs in the retina or in the back of the eye. Later it is called herpes retinitis. The signs and symptoms of a herpes eye infection are swelling, tears, irritation, foreign body sensation, redness, eye pain, secretions and sensitivity to light.

The usual treatment for eye herpes is ganciclovir as an eye gel, five drops a day. Steroid eye drops can be used to reduce inflammation. The infected cornea is sometimes shaved. There is no effective treatment. These interventions can reduce the impact of the episode and possibly prevent permanent damage.

HSV-1 usually causes herpes simplex encephalitis. In herpes simplex encephalitis, the virus migrates along the nerve lines into the brain and usually infects the temporal and frontal lobes. The normal encephalitis process, brain inflammation, confusion, psychological changes, fever, infected seizures, sleep and 30-70% of deaths occur. Infections are usually treated with iv acyclovir, but mortality is still 30%. There is often persistent brain damage.

#### PROCESSING

The usual treatment for herpes infections is valacyclovir, acyclovir (also known as acyclovir) or famciclovir. Both are forms of guanosine-like antiviral drugs that are metabolized in the body and become active when ingested. These drugs are often used to fight the outbreak of herpes simplex virus, water x, shingles, Epstein Barr and cytomegalovirus. They are the strongest against simplex and do not affect the virus that is hidden in the nerve sheath. It only changes when the virus is activated. Medicines can help, to some extent, shorten the course of the disease and prevent it from spreading. You don't cure it. Herpesviruses become quite resistant to acyclovir, especially herpes viruses whose immune systems are weakened.

## > VARICELLA ZOSTER VIRUS

The water varicella zoster virus also belongs to the herpes viral family. It is sometimes referred to as human herpesvirus 3 (HHV-3). HHV-3 usually occurs first as water (and then as shingles). At the time of the first infection, usually during childhood, it spreads through inhalable droplets in the air, causing the virus to enter the bloodstream, spread everywhere, and show stains all over the body's surface. It takes about two weeks for the spots to appear, and the infection takes up to three weeks for the spots to solidify. At this time, the child is no longer infected.

Unfortunately, after the initial infection, the virus colonizes the dorsal ganglia, which are part of the nervous system of the central nervous system. They live there happily for decades, until later in life, mostly due to a reduced immune function.

The virus leaves a happy home and travels along the nerves. It seems on the outside of the surface, often on the face, and makes life unbearable. Bleeding, oedema and lymphatic infiltration of the affected nerve often occur. Usually, you can feel the beginning of the event. As the virus moves along the nerves, it creates strange emotions, tingling, burning, numbness and an evident feeling that something is going wrong. Then the virus quickly emerges from the body to the surface of the skin and creates small bubbles that are filled with virus particles. Pain is often unbearable and of little use for pharmaceutical supplies. Fever, enlarged lymph nodes, chills, malaise, anorexia and upset stomach may occasionally occur. Lesions can last about a week after they appear. In rare cases, more difficult complications such as encephalitis, peripheral nerve paralysis, hemiplegia and myelitis occur.

#### PROCESSING

The usual treatment is the use of antiviral drugs such as acyclovir, valacyclovir or famciclovir. Corticosteroids can also be used to reduce inflammation, especially if the complications are serious. Over-the-counter pain relievers are often used with varying degrees of success. The pain is sometimes severe and requires opiates. Prescriptions do not preserve the temperature but can shorten the length of the episode and relieve pain. One of the more natural approaches to shingles is to use herbs to boost immune function, reduce the frequency of occurrence, and protect and restore the nerves. Herbs that specialize in neuralgia, especially those that affect P2X receptors in the brain, can also be beneficial.

## ➢ <u>HERBAL ANTIVIRALS: THE MATERIA</u> <u>MEDICA</u>

Many structurally unique antiviral compounds have been identified from medicinal plants (herbs). The advantage of natural products is that they have fewer side effects compared to orthodox medicines and have synergistic effects that lead to better therapeutic results.

Viruses are an integral part of life on this planet, and all living organisms, including plants, have been here for billions of years. Plants, the best chemists in the world, have developed a wide range of compounds that respond to viral infections, such as those related to infectious bacteria. Similar to plant antibiotics and bacteria, each plant produces a variety of compounds to protect it from viruses, but when used as a medicine, it is much more effective than others. There is a tendency. The secret is to find out which one is the most effective, reliable and robust.

## > CHINESE SKULLCAP

Family : Liliaceae or Liliaceae.

**Species used:** Scutellarin baicalinase's is the main species in China where the skull of China has been discussed (and this monograph focuses on it). It doesn't mean American Skull Cap, Scutellarin later flora, or any of the other American species.

**Common names:** Corps with many different skills, but for S. baicalensis: English - Chinese skull, Baikal skull, scute (really hate it - "you are so cute"), golden roots (really It looks like this). Chinese - yellow q. (Ban Zhi Lian is S. barbata Chinese).

The Chinese use a different kind of skull, Scutellaria barbara. However, there are significant differences between drugs that are made from these different types of heads. The most studied and considered the strongest is S. baicalensis, in which the Chinese only use roots.

#### Part Used

Roots and roots only - generally only from plants older than three years. There is reason to believe that the increased pharmacology of the Chinese skull over the typical American species used as medicine is due to the difference between the use of roots in Chinese practice and the use of leaves in American tradition. S. lateriflora, also known as blue skullcap, rabies skullcap, Virginia skullcap, hood wort (along with S. galericulata, meaning swamp or common skullcap) is the most commonly used species in the United States. S. racemosa is more common in South America and S. racemosa. Barbara is another important species that is used in traditional Chinese medicine. Studies have shown that all three varieties contain baicalin, baicalein, scutellarin, outgoing, melatonin and serotonin. These ingredients are considered the most active in the Chinese skull. Other studies on S. viscidula and S. amoena roots have found very similar components. Although the majority of species appear to contain at least baicalein, baicalin and wogonin, the amounts of different species have been relatively unexplored.

#### Preparation and dosage

Medicament Medicines made from this plant are somewhat challenging to find in the United States, but not impossible.

#### Tincture

Use the route again to create your own. Once the roots are harvested, cut them for easy use, dry them in a cool shade, powder the origins, and tincture them. The ratio is 1: 5 (1-part herb, five parts liquid), the liquid consists of 50% alcohol and 50% water. Take 1/4 to 1/2 teaspoon daily. Double it under acute conditions. Note: When used for CNS injuries or encephalitis, the brain and CNS must be sufficiently composed to reduce inflammation significantly and to protect and restore the brain's nerve structures.

For sleep: Plants and roots are rich in melatonin and can help you sleep. If you use it for this, take half a teaspoon of tincture just before bed.

Fresh leaf tincture: If you use the aerial parts of the plant, get or create a 1: 2 tincture from fresh leaves and stems. Tonic doses can be up to 6 times from 10 to 30 drops a

day, but I took tinctures (from the American skullcap anyway) up to 1/2 ounce at a time with no side effects. Apparently not a high dose at all.

#### Powder

The Chinese dosage is generally 3 to 9 grams at a time, as usual. Similar drugs have been used in most clinical trials and studies. If you are using capsules, this is the dose range to be examined, which is divided into three equal doses every 4 hours. Tablets are almost impossible to find, but the herbal powder is readily available.

Herbs reach peak levels in plasma and body organs in about an hour and only last about 4 hours in the body, so they should actually be taken every 3-4 hours.

#### As a Wash

Fresh plant juice can be used as an eyewash for eye infections.

#### **Characteristics of the Chinese skullcap**

Action Chinese Skullcap is an antiviral broadband drug. Inhibits hemagglutinin and neuraminidase, inhibits virus replication, suppresses expression of viral genes, reduces viral RNA in infected cells, inhibits virus fusion with cells, protects cell membranes from virus-initiated cytokines and protects viral matrix proteins. The invasion by the interaction of viral coat proteins with cellular CD4- and chemokine receptors modulate host innate antiviral immunity by regulating cytokine production during viral seizures. Cells that reduce the fluidity of host cell membranes and inhibit the formation of virus-induced membrane pores in the host (self-stop of virus entry into host cells), viral cytokine cascades that inhibit virus release from infected cells, inhibits infected cells, increase apoptosis, stimulate natural resistance to viral infection, promote the development of the monoclonal antibody against encephalitis virus E-protein, and is directly viricidal.

Chinese skullcap is synergistic with other antivirals (such as liquor ice should be used if possible). It has a relatively wide range of effects on bacteria and other microorganisms, but the results vary. This means that it is not primarily an important systemic antimicrobial, as is the case with cryptographs, for example. Many of its antibacterial and antiviral effects are usually not direct. This means that it is due to its antimicrobial effect, but stimulates the body's immune response, reduces the cytokine cascade and protects the host cells.

Antimicrobial herbs have a powerful effect on some bacteria, exceptionally resistant and non-resistant bacteria. It is also effective against other organisms like Mycoplasma and Klebsiella. In general, herbs are synergistic with both herbs and medicines, significantly reducing the cytokine cascade over a fairly wide range, and have their own antibacterial properties that complement them, making them an important addition to any treatment for resistant bacterial diseases. Can be used as a blending agent become.



Family: Capri folia or perennials, maybe the literature is not clear.

Artem Types used: There are five or maybe 30 elders. The taxonomy is unknown. Once it was Capri folia or Honeysuckle (more of taxonomy than an elder), DNA scientists were involved again and decided that this is not honeysuckle. It is a purple family. By the way, the suffix -acreage indicates a member of the botanical family, and the prefix redox- is a description of this family. Adox comes from ancient Greek and means "not for common sense, irrational or just for reasons". However, taxonomists are fairly convinced that the elders belong to the genus Sambucas.

Synonyms: The genus and its various species are fluent in taxonomy, and accusations of synonyms fly everywhere. In fact, S. cerulea and S. caerula are probably the same plants, but so is S. caerula. Can be Mexicana or S. nigra.

Common name: Corps. Wherever a plant grows, it has a local name. The plant has been used in food, medicine and crafts since its consumption. Elders are popular in the West because they become one through the use of plants as medicines. Some say that the plants themselves are the elders of the surrounding plant community and are the gateway to the depths of the plant world.

#### Parts Used

The most common are fruits and flowers, but leaves, bark and roots all have a long medical tradition. It is often warned not to use the bark, leaves or roots in this plant, but it is a relatively new phenomenon (since 1910). In the past, they were all used effectively.

#### **Preparation and Dosage**

Most people have only recently started using berries (most American herbalists use flowers as a medicine, but usually not as the main treatment). Usually, especially in Germany, the use of standardized liquid extracts (or standardized tablets) or other variations of berry juices, probably due to different regional approaches in Germany: squeezed juice, syrup, tea or juice boiling. The dosage is usually one tablespoon of tea, juice or sugar for an influenza infection to reduce fever.

#### **Properties of Elder**

As an antiviral, Elder inhibits virus replication, inhibits neuraminidase, reduces hemagglutination, binds to the influenza virus and inhibits host cell infection and contains a non-toxic type 2 ribosome-inactivating protein. It is viricidal, inhibits virus maturation and is an active ingredient in purine. Depurination activity on both viral nucleic acids and ribosomes of infected host cells - Protects against viral infection when taken prophylactically.

Also, antibacterial (direct and through anti-quorum sensing activities), antifungal, analgesic, anti-inflammatory, anti-nociceptive, cancer-fighting, anti-angiogenic, anti-teratogenic, sweating, diuretic sex, prostaglandin synthesis inhibitor, antipyretic, antioxidant (berry has more antioxidant) Moderate immune stimulants as vitamins C and E.

#### Active Against

Elder is an active antiviral, mainly against enveloped viruses (see "Phytochemistry" for more information). Flowers, fruits, leaves and bark have different activities against microbial pathogens. However, berries are the most thoroughly tested. Despite the hysteria over the use of bark and leaves, they also have strong antibacterial properties, but act against several microorganisms and show how they are ready to use. More is needed.

Sambucus nigra, Gentian lutea, Primula varies, Verbena Officinalis and Romex spp. Wording from. It has been found that (called Sinupret in Europe) has a mostly antiviral effect and is effective against influenza A, parainfluenza, human rhinovirus B, coxsackievirus, adenovirus C and respiratory syncytial virus.

## ➢ <u>GINGER</u>

Raw G is only a suitable antivirus if fresh rhizomes are used, not dry roots. In particular fresh root juice (pure root alcohol tincture works, but is not very good). In herbal medicine, dry and clean roots are considered different drugs with very different effects. Due to the extinction of countless of the expansive oil, the plant components can change significantly when drying. Other ingredients deform when dried.

Family: Ginger family. There are approximately 1,400 family members organized into four subfamilies, five tribes, and 52 genera, genera, or genera. The genus Zingiber is usually referred to as real ginger and is what most people hear, but most people only know the main dishes in Z. officinal.

Species used: There are 85 or 100 plants in the Zingiber genus. Z. officinal, a common Inger, is the best known and most commonly used in medicine. Many of the species in this family contain similar ingredients and can be used medicinally. Some have identical antiviral effects. Some are very different. This short monograph is a Kocher, Z. We only research officinal. Common name: Ginger is in English and has around 1 billion names, depending on culture and language.

#### Part Used : The root.

#### **Properties of Ginger**

As an antiviral drug, ginger inhibits virus attachment to cells, inhibits hemagglutinin, inhibits viral proteases, inhibits neuraminidase, stimulates antiviral macrophage activity and is viricidal. Also, analgesics, anthelmintic, anti-arthritic, antibacterial, anti-diarrheal, antiemetic, antifungal, anti-inflammatory, antispasmodic, antitussive, anthelmintic, circulating stimulants, antiperspirants, elastase inhibitors, hypotensive drugs, immunostimulants.

#### Active Against

Ginger is used worldwide to treat a wide range of viral infections, including colds, flu, hepatitis, herpes, yellow fever, measles, water, and enteroviruses. Note: The following list contains only viruses (and other microorganisms) that have been shown to be effective in medical research. It is used for a wider range of historical practices.

#### **Plant Chemistry**

The root contains more than 400 components, including gingerol, zingiber, zingiberene, zerumbon, shogaol, 3-dihydroshogaol, ginger diol, mono- and diacetyl derivatives of ginger diol, dihydro-ginger Dione and labdane. Volatile oils such as gingerols are very strong but greatly reduced in dry roots. They are present in fresh sources 6-15 times higher. When the roots dry, many of the ingredients turn into ginger. Volatile components are the most antiviral.



#### Family : Saururaceae.

Species used: Almost always docudrama. There are two species in this genus, but the latest Houttuynia meiosis was found only in 2001. Some taxonomists believe that this second species is consistent with Houttuynia cordate. Some people claim it is different. As a result, there were some intense calls. (Taxonomists are like our children.) The two species are used interchangeably, but the latest ones grow to a very limited extent and are not widely available.

Synonyms: Houttuynia fetid, Polyporecoincidences, Polypore cordate, MonothecalChinese's, and sometimes if one group of taxonomy really wants to upset another group: Houttuynia meiosis.

**Common name:** "Foo Tai Nee Ah", but you can shout loudly with a square dance, a veteran, and a cow. Other names: heart-leaf docudrama, lizard tail, Chinese lizard tail, chameleon plant (as opposed to certain varieties called "chameleons"), heart-leaf, fish, fish mint, bishop weed, docudrama (Japan), and Yushin Kao (China). The Chinese name literally means "fishy herb." Because it smells of fish.

#### Parts Used

The aerial part is used for medicine, and the roots and leaves grow as potted herbs (except in the United States).

#### **Properties of Houttuynia**

As an antiviral drug, docudrama inhibits the replication of the virus, interferes with the function of the viral envelope, is directly viricidal, stops virion release from infected cells, and prevents viral infection when taken prophylactically. Besides, analgesics, anthelmintic, antibacterial drugs, anticancer drugs, antifungal drugs, anti-inflammatory drugs, antileukemia drugs, antibacterial drugs, antioxidants, antitussives, string drugs, diuretics, purifying drugs, tusked Drugs, febrifuges, hemostats, hypoglycemic drugs, immunomodulators, laxatives, and eye drops.

#### **Active Against**

Moderate broad-spectrum antivirus. Influenza virus A (H1N1 strain), SARS-related coronavirus (FFM-1, FFM-2), dengue virus serotype 2, avian infectious bronchitis virus (coronavirus), enterovirus 71, enter cytopathic human orphan (ECHO) Active

against Viruses, herpes simplex virus 1, herpes simplex virus 2, HIV-1, cytomegalovirus, porcine epidemic diarrhoea virus, and pseudorabies herpes virus. Studies have shown no effect on polio and coxsackie viruses.

#### **Plant Chemistry**

Houttuynia A, various Houttuynia's (A to E), houttuynia, lauryl aldehyde, capryl aldehyde, quercetin 3-rhamnoside, quercetin 7-rhamnoside, n-capric acid, Coordain, quercitrin, is quercitrin, decanoyl acetaldehyde, alpha-pinene, Beta-pinene, linalool, camphene, myrcene, limonene, caryophyllene, afzelin, hyperin, chlorogenic acid, beta-sitosterol, stearic acid, oleic acid, linoleic acid, myrcene, 2-undecanoate, Hyperlite, p-cymene, eucalyptol, Beta-ocimene, nonanal, fentanyl alcohol, menth-2-cn-l-ol, trans-pinocalveol, verbenol, topical), pus or boiling skin infection. It is particularly indicated if any of these conditions are accompanied by an odour discharge.

## ≻ <u>ISATIS</u>

**Family:** Brassicaceae. (This family is home to all cruciferous vegetables such as cabbage, broccoli and brussels sprouts, which is why the tincture of this plant tastes like spoiled broccoli/cabbage.

**Species used:** There are somewhere between 30 and 80 species in this genus. Advanced taxonomists authoritatively and persistently assert how many species actually exist in this genus. Few people quote the same numbers or the same plants. In any case, there are 30, 48 and 79 types of plants. (Taxonomist: taxpayer, or "easy to bear, wear, burdensome and cumbersome"). The most used species is Isanti's tinctorial (worldwide), but Isanti's indigotic is used quite prominently in China (similar to tinctorial). Isatiscosta is used in Pakistan, and Isanti's Cappadocia is used in Iran. All species seem to contain the same chemicals. All (at least all sources said to have read) have been used to produce indigo dyes of which this genus is known.

**Synonyms:** Some taxonomic obsessives have listed Isanti's indigotic as a synonym for Tinctorial, but the two chemical tests continue to reveal significant differences.

Common names : Isatis, woad, dyer's woad.

Parts Used Root and leaves.

#### **Properties of Isatis**

As a broad-spectrum antiviral agent, Isanti's is directly viricidal, inhibiting viral replication, inhibiting virus attachment to cells, inhibiting hemagglutination, and inhibiting viral neuraminidase (equivalent to potency Tamiflu). Inhibits RANTES. Enhance the effectiveness of viral vaccines, immunostimulants, anti-inflammatory, antipyretic, anti-nociceptive, anti-allergic, tyrosinase inhibitors, antioxidants, antifungals, antibacterial, antiparasitic, anti-leukemia Agents, antitumor agents, potent urease inhibitors, potent cross-class serine protease inhibitors, butyryl cholinesterase inhibitors, lipoxygenase inhibitors, anti-endotoxins, dioxin antagonists (TCDD or 2,3,7,8-tetrachloro Dibenzodioxin, including the most powerful).

#### Active Against

Isanti's is a very widespread antiviral herb. Influenza viruses A and B (various strains of H1N1 and H6N2, H7N3, H9N2), SARS coronavirus, coxsackieviruses (B2, B3, B4), rubella virus, avian infectious bronchitis virus, respiratory syncytial virus, human adenovirus Virus type 3, measles, mumps, water cell virus (water PO / shingles), Epstein-Barr, hepatitis B, herpes simplex virus 1, cytomegalovirus, hemorrhagic fever with renal syndrome (HFRS) virus, pig Genital respiratory syndrome virus, porcine pseudorabies virus, Newcastle disease virus, goose parvovirus, porcine parvovirus.

#### **Plant Chemistry**

More than 65 non-volatile plant compounds, including alkaloids, flavonoids, fatty acids, porphyrins, lignans, carotenoids, glycosylates and cyclohexanone have been identified in Isanti's leaves. And another 70 volatile compounds: aliphatic hydrocarbons, acids, alcohols, aldehydes, esters, aromatic aldehydes, ethers, furans, isothiocyanates, thiocyanates, sulfides, nitriles, terpenes, sesquiterpenes-the usual suspects. Isothiocyanates make up about 40% of the total volatile fraction. Isanti's includes indicant, isatin, isotonic A, indirubin, bisindigotin, kaempferol, indigo tine, poitrine, isotone A and B, tricenarian, salicylic acid, silicic acid, benzoic acid, gamma-linolenic acid, indoline-2-one, Anthranilic acid, 3'-hydroxyepiglucosaticin, epilogcapsaicin, various flavone C-glucosides, various sphingolipids, mannitol, various glucopyranosides, indolinone, indigo, alpha-linolenic acid, cytidine, hypoxanthine, uridine , Xanthine, guanosine, L-pyroglutamine, hetacillin, penicillin-sterol, decontrol, o-aminobenzoic acid, glucoerucin, neoglucobrassin, glucobrassin-1-sulfonate, Hydroxycinnamic acid of the mound, and as usual, many other substances. Isanti's has 20 times the cancer-preventing glucoerucin than the associated broccoli.

## ➢ <u>LICORICE</u>

Liquor ice is a rare drug. It has strong antiviral properties, moderate antibacterial properties (but quite strong against some bacterial species such as Staphylococcus and Bacillus), moderate immunopotentiation, and very strong synergy. Liquor ice should also be considered a major synergistic plant. It is rarely used alone or in large quantities for long periods of time.

**Species used:** mainly liquor ice. There are 18 or 20 or 30 species in Glycyrrhiza genus. (In other words, do you say that taxonomies are science?) They are specific to Europe, North Africa, Asia, Australia, North America, and South America. All species are used for medicinal purposes, but the two most common are Glycyrrhiza glabra, European licorice, and Glycyrrhiza ruralness in China. (Chinese are currently mainly using G. glabra, but are widely cultivated due to their generally high glycyrrhizin content.)

**Generic name:** Western licorice, Chinese kankao, Indian murati, traditional Chinese herbal medicine of Japanese herbal medicine.

Use part route. Leaves resemble roots, but have a much gentler action

#### **Licorice Properties**

As a significant broad-spectrum antiviral, liquor ice prevents viral replication across a wide range of viruses and inhibits viral growth, viral uptake, neuraminidase, virion-associated RNA-dependent DNA polymerase, casein kinase II-mediated HIV activation of numerous influenza strains Masu-1 enzymes (including HIV-1 protease and reverse transcriptase), human cytomegalovirus viral antigen expression, and HSV-1 ICP27 regulatory protein phosphorylated virions via protein kinase A and casein kinase II Inactivate, potently inhibit viral cytokine cascade, arrest balloon denaturation of fused cells, alter intracellular trafficking, suppress hepatitis B virus surface antigen sialylation, inhibit RANTES secretion, Decreases the fluidity of the overlay membrane and therefore the virus-induced Us to stop the virus membrane pores that can enter into the host cell. It is very viral and somewhat viricidal.

#### **Active Against**

Licorice is broadly antiviral. It is active against a wide range of viruses through multiple mechanisms. It strongly inhibits the ability of many viruses to create the membrane pores through which the viruses then enter cells. This slows or even ends the viral infection right there. For other viruses, it is directly virucidal, and for others it stimulates the host immune system specifically to attack the invading virus.

## > <u>LOMATIUM</u>

Family : Apiaceae, the carrot family.

**Species used** :There are 70 or 80 species in this genus. If you try to determine the taxonomy, you can fly with the wings glued to the donkey. They are endemic to the United States (Romatium, not taxonomy) and grow from the Mississippi region in the West, Southwest, and Northwest. Many of them can be used medicinally, but information about the genus and its medicinal use is very sparse. Many species are scarce and threatened with extinction. So be very aware if you do wild crafts. Only harvest if the species is widespread in your region or is not at risk of extinction. The most common Romatium is Rhodium dictum, but some others can be used similarly, can be harvested abundantly here and there, and are not considered (usually) endangered species. L. Ambiguous, L.Funiculus, L. Grey, L. Macrocarpon, L. Nudicauline, L. Orientale, I. Simplex, L. Triturate.

**Common names** : Lithium, Biscuit Root, Cough Root, Indian Consumer Factory, Desert Parsley, Indian Parsnip. Lomatium dissector is also known as the fern leaf biscuit root. Biscuit roots, parsley and rotation are common general identifiers and are usually combined with descriptions to create common names for species in geographical regions. For example, the northern part of parsley in the Blood show desert in Romatium, California.

**Parts** Usually used the root is used, but the seed is very active. They often contain significantly more components than the root and can be used instead (but rarely).

#### **Properties of Lomatium**

Effects such as analgesics, antibiotics, antifungals, antibiotics, preservatives, antispasmodics, antivirals, antiseptics, mucosal strengthening agents.

#### **Active Against**

There is little research on the activity of Romatium against microorganisms and practically no research on its activity against viruses. The two most comprehensive studies were conducted in the United States in 1948 and 1949. Both focused on the antimicrobial activity of the extracted aromatic compounds in the roots, one separated by steam distillation and the other by ethyl acetate extraction and filtration. The range of activities was extensive.

## ➢ BONESET

#### Family : Compositae.

**Species used** : 36, 60 or pi? Eupatorium species, taxonomists, are again problematic. Except for Eupatorium cannabinol, almost everything comes from the United States. Many species of this genus are medicinal, and some have very similar areas of activity. But this is Eupatorium perfoliate because I know that best.

**Common names** : Boneset, Common Boneset, Thoroughwort, Agueweed, Feverwort, Sweat Plant. But since 1885, these last three names have not been used by anyone.

Parts Used Aerial parts, in flower or just before flowering, depending.

#### **Properties of Boneset**

Analgesic, antibacterial (mild), anti-inflammatory, antiviral, cytotoxic, sweating, emetic (mild), febrifuge, gastric bitterness, immunostimulant (increased phagocytosis), mucosal strengthening agent Acts as a stimulant for peripheral blood circulation and as a relaxant for smooth muscles.

#### **Active Against**

The plant has not been tested as an antibacterial agent. It has a gentle effect on gram-positive bacteria such as Staphylococcus aureus and giant bacteria. It has a strong impact in malaria parasites (Plasmodium spp.) And is essentially a moderate ant plasmodial herb. It has pretty good antiviral activity against influenza A (H1N1). It has not happened examined, but we believe this species is effective against some if not all dengue serotypes. Eupatorium performs a variety of actions against viruses, but there are too few. Eupatorium patens are effective against dengue-2, HSV-1 and HSV-2. Eupatorium articulate against HSV-1 and vesicular stomatitis virus (VSV), against Eupatorium glutinous.

## ➢ <u>RED ROOT</u>

Family : Rhamnaceae.

**Species used** : Homo dissertations has determined that there are 50, 60 or 43 species of Ceanothus on the American continent from Canada to Guatemala. This genus is at least not indigenous, but does not grow anywhere else, but is the ornamental plant worldwide, regardless of the species. Most species can be used medicinally. The most common are C. Velutinids, C. Cuneatus, C. integrous, C. greggii and C. Americans. All species are clearly identified in their medicinal properties. My personal favourite is Ceanothus fender, also known as Fender's Ceanothus. It grew up in my area and had been using it for over 25 years. An important part is the colour of the bark. See "Cultivation and Collection" on page 259.

**Common name** : Red root mostly, but in the old days it was supposedly called New Jersey tea.

Part Used The root or inner bark of the root.

#### **Properties of Red Root**

First and foremost, red root is a lymph system stimulant and tonic. It is antiinflammatory for both the liver and spleen. It is also an astringent, mucous membrane tonic, alterative, antiseptic, expectorant, antispasmodic, and exceptionally strong blood coagulant.

## > **STRENGTHNING THE IMMUNE SYSTEM**

One of the most important lessons from the AIDS epidemic is that healthcare facilities recognize the need for a healthy immune system. Among researchers with infectious diseases such as tick-borne encephalitis, influenza, lime, mycoplasma and Bartonella, the healthier the immune system, the lower the likelihood of infection and the less severe the infection. It is always pointed out that the course of the disease. The immune system is an "organ" just like the lungs and liver, and you can take various measures to keep your immune system healthy. Regular touches include a weekly or monthly Swedish massage. Certain foods can also contribute to immune health. Some of the best foods that support the immune system are:

• yoghurt. Regular intake reduces sick days. The number of white blood cells in the body increases significantly, and the bacterial community in the digestive tract remains very healthy, which also helps. Kefir can also be used.

• Oats and barley. Cattle that gave the mix of the two have far fewer infections, including those from the flu. (And yes, despite rumours to the contrary, we are actually animals.)

• garlic. It wasn't as potent an antibiotic as you thought, but taking garlic regularly improves your immune function.

• It has been found that selenium-rich foods help remove flu infections from the body. Selenium is the highest (descending) in Brazil nuts, fish (tuna, cod, halibut, sardines, flounder, salmon), poultry (chicken and turkey), sunflower seeds and shellfish (oysters, mussels, shrimps, mussels, scallops). , Meat (liver, beef, lamb, pork), eggs, mushrooms, whole grains, wheat germ, onions, garlic, asparagus, broccoli, tomatoes. One ounce of Brazil nuts (usually simply called "nuts" in Brazil) provides 544  $\mu$ g selenium. Not much is needed. A Brazil nut can provide selenium for a day. For comparison, tuna contains 68  $\mu$ g per ounce, 32  $\mu$ g cod per ounce, 27  $\mu$ g turkey, 23 sunflower seeds, 22 oysters and more.

• Chicken soup. Yes, it works.

• Black tea. Increases the level of interferon in the immune system considerably. Green tea is also beneficial.

• Mushrooms. However, it is not the type that is bought in regular stores. Both Shiitake and Maitake can be used for cooking and are very good at strengthening the immune function, mainly due to the high content of polysaccharides. These polysaccharides, when taken as a normal part of the diet, significantly improve immune function.

## ➢ IMMUNE HERBS

All three are tonics, can be taken in large quantities and help the immune system to respond to possible adverse events. They tend to act as adaptogens, substances that alter the body's response to stressors to maximize healthy functioning.

These herbs also have some activity against viruses such as influenza and encephalitis virus and have excellent synergy with the herbal antivirals described in this document. They also very specifically reduce the cytokine cascade that many of these viruses initiate and raise the right immune markers that are needed to reduce virus entry into the body. They are delicious herbs. They are vetch, cordyceps, Rhodiola.

## > <u>ASTRAGALUS</u>

#### Family : Leguminosae.

**Species used** : It is an important genus of around 3,000 species that is common worldwide. The main species used is Astragalus membranate, also known as A. membranate var. Mongholicus, a.k.a. A. mongolicins.

There is not much information on whether other species of the genus can be used. Most sources say this is not the case. However, the Chinese have done a good job with different types and have found a number of antibacterial, antiviral, antiinflammatory, analgesic and immunomodulatory effects that are similar to the main medical types. The example you see is A. surgeons, A. aksuensis, A. Brachystachys, A. Siculus, A. strictus, A. Because of Verrucous and A. verus, and there are some that could be excellent medicines.

**Synonyms** : Astragalus propinquus, in some circles A. It is a synonym for membrane access. However, some sources claim that this is the correct name for the plant

(shocking expression), and of course, Astragalus mongolicins is the scent of perennial pink wood plants with other names. It is a reproductive expression.

Common names : Astragalus (English), huang-qi (Chinese).

#### Part Used

Plants are perennial plants with long fibrous rhizomes. Root, the portion used in medicine, is often sliced and dried (a traditional preparation of Chinese medicine), most similar to a yellow (medical) tongue depressor. Western botanists usually get large amounts of pulverized or coarsely ground organic roots from herb suppliers.

#### **Properties of Astragalus**

Effects such as adaptogens, antibiotics, antihepatotoxic, antivirals, cardio protectants, diuretics reduce lungs, spleen, gastrointestinal function, hypotensive, immunopotentiators, immunomodulators, immunity restoration drugs, immunostimulants. Tonic Astragalus is an immunopotentiator and modulator. Actively regulates interferon-gamma and interleukin-2 levels. When the interferon-gamma levels are high, it lowers them sharply. Improve the CD4 + number and balance the CD4: CD8 ratio. Astragalus is specific for immune atrophy and improves the function of the spleen and thymus.

#### **Active Against**

Although astragalus is not an antibacterial herb, it has an antibacterial effect. The most important thing about this book is that it has antiviral properties. Active against influenza A (H1N1, FM1), human adenovirus 3, herpes simplex 1, coxsackievirus B3 and infectious Bursa culture. Aspiring plant crowns are very sensitive to compost and react well after gaining some momentum in spring. Given the medicinal properties of the plant, it is not surprising that it is very resistant to insect damage, crown rot, mound and dryness. The plants grow tall every year, and the roots are harvested in the third autumn or fourth spring. Spring and autumn harvests take place in China. Sources are generally considered too weak if harvested before this time.

## ➢ <u>CORDYCEPS</u>

**Species used** : C. militaries is compatible (some are stronger), mostly Cordyceps synesis and many others in the genus can also be used.

Synonyms: Sphaeria Synesis, Cordyceps, Ophiocordyceps synesis.

Common names: Cordyceps, Caterpillar, Yates (or Yatsa) Gumbo (Tibetan), Keiraja (India), Dong Chong Shea Kao (Chinese and "winter worm, summer herb"), Chong Kao (Chinese) repeat. But this term is usually C. Synesis), tochukaso (Japanese), aweto (Maori, New Zealand), club mushroom (USA - we are poets, but we walk very quietly). Partially used varieties: mycelium. Wild harvest: damn caterpillars, fruit mushrooms and more.

Cordyceps properties, nauseates, neuroprotective agents, kidney protection agents, sleep regulators and steroidogenesis. Cordyceps is a reasonably potent immune adaptogen. When an immune activity is high, it decreases. If low, it will improve. When

taken regularly, when the immune system is under stress like bacteria, the herb properly stimulates the immune system to respond to stressors while reducing or completely inhibiting bacterial-induced cytokine levels and always more.

#### **Active Against**

Cordyceps is not primarily an antibacterial but is rather a systemic tonic and adaptogen. Still it does have some antimicrobial actions. It is active against some viruses, a few strongly so — influenza virus (H1N1, H9N2), herpes simplex virus 1, HIV-1 protease, hepatitis B, Newcastle virus — and a number of other microbes such as Mycobacterium tuberculosis, Plasmodium spp., Clostridium spp., Staphylococcus aureus (resistant and nonresistant), Enterococcus faecalis, Bacillus subtilis, Candida albicans, and various cancers (breast, thyroid, kidney, bladder, prostate, lung, Leydig cell tumor, melanoma). Its antiviral actions make it a perfect immune adjunct for use in treating most major viral infections.

## ➢ <u>RHODIOLA</u>

Family: Crassulaceae.

**Species used** :As always, only 36 or maybe 60 and possibly 90 Rhodiola species are confused in people with advanced botany degrees. It's like a stamp collector. Edge ink stain makes it rare. I just want to scream. The primary drug used by most people is Rhodiola rosacea, but many of the related species are used medicinally in the areas where they grow. Due to the interest in R. Roseau, this genus was intensively examined for activity. R. crenulate, R. Quadrifidi, R. Heterodont, R. Semenov, R. stateliness, R. sacra, R. fastigiate, r. kinilaw I, R. Bupleuroides, R. imbricate, r. Rodentia and R. interiliac.

**Synonyms** : Rhodiola is very similar to Sedum and was once included in its genus. Therefore,Roseau can be called Sedum Roseau.

**Common names** : Iwabenkei, Golden Root, Rose Root, Stonecrop, Arctic Circle. Fresh roots smell of roses, which is why the name comes from. They are golden and therefore golden hearts.

Use partial route.

Part Used The root.

#### **Properties of Rhodiola**

Adaptogen, adrenal protection, anticancer, antidepressant, antifatigue, antioxidant (healthy), antistressor, inotropic (stable), endocrine tonic, ergogenic, hippocampal protection and tonic, low oxygen antagonists (strong), immune tonics, psychostimulants, protective agents that act as mitochondrial tonics, muscle stimulants, nervous tonics, neuroprotectants and Rhodiola can also be synergists. Plants are potent inhibitors of CYP3A4 and P-glycoprotein.

#### Active Against

This herb is also not primarily antibacterial, but it has some antiviral properties. Effective against influenza viruses due to its neuraminidase inhibitory activity. It is known to be active against H1N1 and H9N2 virus strains. It is also effective against hepatitis C and Coxsackie B3 virus. Kaempferol, one of its components, is specific for the Japanese encephalitis virus and enterovirus 71. It also has antibacterial activity against Staphylococcus aureus (strong), Bacillus subtilis, Mycobacterium tuberculosis (medium) and Escherichia coli (weak).