ABOUT

HUMIC – FULVIC

SUBSTANCES

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***Note**: The information contained herein is for informational purposes only, and you should not use such information as a diagnosis or treatment of any health problem or for prescription of any medication or other treatment without first consulting your physician or other health care professional.*

Further, The Information Contained Herein Is Not To Be Used As A Substitute For Advice From Your Physician or Health Care Professional.

You should also consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem.

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Fulvic Acid Minerals Information

Asthma and lung infections on the rise in all age groups

Asthma is a chronic inflammatory disease of the airways. When not diagnosed or properly treated, asthma can lead to a host of social and financial problems.

Hospital studies show that the common cold and related bronchial asthma and respiratory illnesses from infection, can be rapidly cured when patients are treated with fulvic acid. Especially pleasing to parents is the powerful and immediate effect this therapy has on young children.

Erchuan Wang et al, Humic acid, 3 (1991)

New research by Dr. David L. Hahn of Dean Medical Center, Madison, Wisconsin, shows that pneumonia related respiratory disease and acute bronchitis caused by chlamydia pneumoniae appear to be the cause of most asthma. His recent studies show that asthma patients have been found to have a high level of antibodies for chlamydia pneumoniae, which seems to be a common denominator among asthma sufferers. Dr. Hahn believes that chlamydia antibody detection can be an effective tool in diagnosing asthma.

In hospital studies, profuse otherwise unstoppable bleeding of the mucous membranes of the nose, mouth, throat, bronchial and lung areas, related to acute respiratory and viral infections in patients with tuberculosis, heart failure, leukemia, and other serious diseases, were successfully stopped with fulvic acid therapy.

Suchen Cao**,** Jiangxi Humic Acid, 3 (1993)

Extensive research of HMO studies conducted from 1967-1987 showed that "prevalence of asthma increased steadily and significantly...in both males and females in all age ranges." These findings were reported in the April 1998 issue of the American Journal of Respiratory and Critical Care Medicine. Although the data in those studies does not go beyond 1987, the researchers found that "more recent national data suggest that these increases are continuing." The weight of the evidence for an ongoing rise in asthma, they conclude, "is growing steadily."

Hospital studies showed that serious and acute cases of chronic bronchitis were better treated and cured with fulvic acid (96.77% cure rate) that worked significantly better than conventional drug therapy. Symptoms of inflammation, coughing, sputum and asthma, were also much better alleviated.

Jingrong Chen et al, jiangxi humic acid, 2 (1984)

Speaking for the American Academy of Allergy, Asthma and Immunology, Dr. Gary Rachelefsky said: "Despite the fact that we have a real understanding of the disease and medications to treat it, we still have increased asthma." About 7% of the children in the US have asthma. The prevalence has increased 40% between 1982 and 1993. It is the most common childhood disease and is the top reason for pediatric hospitalization, accounting for up to 300,000 admissions a year. Asthma is the cause of 10-30 missed school days per asthmatic child per year. Asthma effects over five million U.S. children and adolescents, and accounts for 28% of all direct medical expenses totaling nearly $5 billion in spending per year.

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Johns Hopkins, PR Newswire, and Reuters news services; Summaries of interviews and meetings of the AAAAI; April and May, 1998

Arthritis related autoimmune diseases including Lupus, Fibromyalgia, and Rheumatoid Arthritis; Humic substances offer hope

An estimated 40 million Americans have some form of arthritis or other rheumatic condition. That number is expected to climb to 59.4 million, or 18.2 percent of the population, by the year 2020.

In a recent issue of Annals of Rheumatic Diseases, doctors found that people with rheumatoid arthritis have lower levels of common antioxidants in their blood in the years before the disorder is diagnosed. A new study suggests that the same may be true for another autoimmune disease, systemic lupus erythematosus. It is not certain if the lower level of antioxidants is a cause or the effect of the diseases, or indirectly related to the disorders.

According to Dr. George Comstock, of the Training Center for Public Health Research in Hagerstown, Maryland, antioxidants in the blood are possibly being used to mop up damaging free radicals, byproducts of inflammation related to the diseases. "Or perhaps low antioxidant status, whether because of decreased intake, absorption, or transport, increases the potential for oxidative damage," he wrote.

Humic extracts, especially fulvic acids, when administered both topically and orally are proven to regulate the immune system as powerful immunomodulators, and to work as potent antioxidants and antiinflammatory agents.

In studies with hospital patients with rheumatoid arthritis, an autoimmune disorder, humic extract bath therapy treatment had a 92% success rate. Several hundred similar studies have been performed in China showing that fulvic acid and humic extracts are proven highly successful.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Ghosal, Shibnath. Chemistry of shilajit, an immunomodularory Ayurvedic rasayan. Pure & Appl. Chem., vol. 62, 1990, No. 7, pp. 1285-1288.

Rheumatoid arthritis is more prevalent in women than in men and generally strikes between the ages of 20 to 40. It is believed to be caused by an abnormal immune reaction in which the lining of the joints are attacked and destroyed, leading to pain, inflammation, swelling, and eventually deformity of the joints and disability.

Approximately 1 percent of U.S. adults have definite rheumatoid arthritis, an autoimmune disease occurs more frequently in women than in men. The prevalence of rheumatoid arthritis is approximately 2.1 million people: 600,000 men and 1.5 million women.

The estimated U.S. prevalence of juvenile rheumatoid arthritis (JRA), which occurs in children ages 16 and younger, is between 30,000 and 50,000.

For the new study, Dr. Comstock and colleagues looked at thousands of blood samples donated in 1974, and specifically tested those from 21 people who were diagnosed with rheumatoid arthritis 2 to 15 years after giving blood. They also identified another six people who developed systemic lupus erythematosus 3 to 13 years after giving blood.

Lupus is also thought to be due to an abnormal immune reaction in which the body attacks connective tissue and numerous organs. The disease is 10 times as common in women as men, and most often occurs between ages 13 and 45. Comstock mentioned in the article that the trend does match that of an earlier small study which suggests that low concentrations of antioxidants may in some way be related to the development of rheumatoid arthritis, either directly or as associates of another disease-causing factor. "Although the number of cases is too small to allow definitive statements about the association of serum antioxidants with systemic lupus erythematosus, it is hoped that this report will stimulate others to see if our results can be replicated," he wrote.

Systemic lupus erythematosus (SLE or lupus) is a chronic autoimmune disease in which the body harms its own tissues and can lead to inflammation and damage to joints, skin, kidneys, heart, lungs, blood vessels, and the brain. Reports estimate SLE to affect at least 239,000 Americans: 4,000 white males, 41,000 white females, 31,000 black males, and 163,000 black females.

The autoimmune disorder, Fibromyalgia, affects an estimated 3.7 million Americans age 18 and older. Prevalence is much lower in men than in women. A chronic condition, fibromyalgia is characterized by widespread pain, greater sensitivity to pain, sleep disturbances, fatigue, and multiple tender points.

Johns Hopkins News Services; A report published as a collaborative effort between the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), the Arthritis Foundation, and the American College of Rheumatology; May, 1998.

Annals of Rheumatic Diseases (1997;56:323-325).

Cancer is second leading cause of death in the US, humic extracts arrest cancer growth according to medical studies

According to the National Cancer Institute, about 1,228,600 new cancer cases were expected to be diagnosed in the year 2000. Since 1990, approximately 11 million new cancer cases have been diagnosed.

In the year 2000 about 564,800 Americans were expected to die of cancer, more than 1,500 people a day. Cancer is the second leading cause of death in the U.S., exceeded only by heart disease.

Patients with cancer causing tumors of the esophagus had 100% success rate in preventing tumor progression into the cancerous state when treated for two years with a humic extract solution.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in Application of Fulvic acid and its derivatives in the fields of agriculture and medicine; First Edition: June 1993

One of every four deaths in the U.S. is from cancer. Since 1990, there have been approximately 5 million cancer deaths. Overall annual costs for cancer run $107 billion per year.

Breakthrough cancer research studies supported by the National Institute of Health clearly indicate that oxygen-containing molecules known as oxidants or free-radicals, play an important role in causing cancer, and that antioxidants or free-radical scavengers help suppress cancer.

In a surprising new development, the study shows that cancerous cells themselves are causing an overproduction of free-radicals. This alone can account for cancer's typical runaway cell growth.

Cancer cells have now been shown to produce oxidants that act as messenger molecules and send signals through protein pathways, bombarding surrounding cells uncontrollably with damaging free-radicals.

The study shows that certain super antioxidants work to obstruct the signaling protein pathways, neutralizing the spread of cancer and can potentially prevent it in the first place. Unique protein inhibiting antioxidants block the necessary signals that normally allow adjacent cells to become cancerous. Studies point to antioxidants as new anti-cancer treatment and prevention strategies.

Humic extracts (Fulvic acids) are nature's most powerful antioxidants. Pharmacological studies throughout the world have shown that various mechanisms within the humic molecular structure make it both a donor and acceptor free radical scavenger and antioxidant. Also noted are powerful superoxide dismutases (SODs) and metalloenymes of every conceivable kind.

While all humic extracts do not always destroy cancer cells, they generally halt their growth and spread. Sometimes tumors disappear almost immediately and spontaneously. Humic extracts are certainly cancer preventative, and it is certain that the higher the quality of humic extract, the better the ability to reverse and completely cure cancers.

Outpatient medical hospital studies on thyroid tumors, some cancerous, showed that injections with a special humic extract was 90% successful in stopping

tumor growth and diminishing size of tumors, with 80% of patients having complete cures.

He, Shenyi, et al; Humic acid in Jiangxi Province, 1 (1982)

It has been found that naturally-occurring humic acid preparations can stimulate the production of cytokines, including interferon-gamma, interferon-alpha, interferon-beta, and tumor necrosis factor-alpha. What this means is that a valid mechanism has been discovered, proven, and documented, whereby humic extracts are able to work with the body to selectively seek out and destroy cancer cells.

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Inglot, AD; Zielinksa-Jenczylik, J; Piasecki, E; Arch. Immunol. Ther. Exp. (Warsz) 1993, 41(1), 73-80)

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Cellular regeneration attributed to Fulvic acid electrolyte

Living cells are single bipolar mechanisms, meaning they have a positive and negative composition, and work similar to batteries. Cells are made up of a positively charged acidic central core or nucleus, which is surrounded by the negatively charged alkaline cytoplasm. The components are separated by semi-permeable membranes. Each cell is a single structural unit that functions as a member of the total living organism. Once a cell dies, and eventually in the natural scheme of things, comes into contact with the appropriate soil microbes, it will ultimately break down and turn into a humic substance.

Over 50% of hospital patients treated with humic acid for various chronic diseases noticed that they were able to sleep more relaxed.

Bingwen Su, Jiangxi Humic Acid, 3 (1985)

Research has shown that two very important components of humic substances are nucleic acids and amino acids, which are remnants from the nucleus, cytoplasm, and protein building blocks of once-living cells. Nucleic and amino acids are absolutely essential to all living things.

There are potentially thousands of individual nucleic and amino acids in humic substances. These nucleic and amino acids are preserved intact within humic

substances, where they are believed to remain stable indefinitely. The nucleic acids consist of negatively charged DNA from the breakdown of the nucleus of cells, and positively charged RNA from the cytoplasm of cells, which also remain stable in humic substances.

Of interest here, are the nucleic acids and amino acids which are major constituents of the fulvic acid fraction of humic substances. Since fulvic acids are of low molecular weight, and water soluble on both sides of the pH scale, they are readily absorbed through semi-permeable membranes, and function actively in association with living cells.

Complexed into the fulvic, nucleic, and amino acid team, are innumerable essential minerals and rare earth elements. Fulvic acid contains literally hundreds of complex minerals which include traces of virtually every element listed in the Periodic Table. Together, all of these components function in unison, as fulvates (salts of fulvic acid), making fulvic acid an extremely powerful electrolyte.

Hospital studies show that patients with normally incurable epidemic Hemorrhagic Fever were able to be successfully treated with humic extracts, which stopped bleeding, restored circulation, removed clots, was anti-viral, and significantly bolstered and regulated the immune system.

Yinzhang Cui, Humic Acid, 1 (1991)

Because of its many nutritional components and electrolytic power, fulvic acid has instant cellular revitalizing, replenishing, and nourishing characteristics unlike anything else. Fulvic acid's electrolytic value also has been shown to increase permeability of bio-membranes, which means that it can sensitize cell membranes for better absorption or assimilation of other things in its presence.

It is essential that the electrical potential of all cells remain balanced and "charged". A high quality electrolyte is essential for proper cellular function. An electrolyte is a substance that dissolves in water or other suitable medium, that will conduct electrical current. An electrolyte is essential to cells because in molecular processes it permits electrons to be set loose, transferring electrical current, by allowing the flow of ions. Fulvic acid is a polyelectrolyte which means "much electric."

The value of an electrolyte can be shown by an experiment that was done by researchers on a giant amoeba, which is a microscopic single cell animal. Under a microscope the electrolytic potential of the amoeba, which is normally 20 millivolts, was depressed to zero. The researchers then noticed astonishing changes as the amoeba become disfunctional, the outer membrane then ruptured in several places, and internal components began to flow out into the surrounding fluid. At that point researchers visually concluded that the form and structure of the amoeba had disintegrated and it was for all purposes dead. Upon increasing the electrolytic charge, the form of the amoeba reconstructed and became active and healthy again. This same test was repeated many times with the same results.

"The cell is immortal. It is merely the fluid in which it floats which degenerates.

Renew this fluid at intervals, give the cells what they require for nutrition and, as far as we know, the pulsation of life may go on forever."

--Dr. Alexis Carrel, Nobel Prize in Medicine

Although plant and animal cells have slightly different makeup, leading scientists agree that their metabolic functions, components, and requirements are exactly the same. For instance; in plants there are chlorophyll molecules which are the light receptors responsible for the photosynthesis process. These chlorophyll molecules are very similar in structure to the heme molecule of human red blood cells (hemoglobin).

Extensive hospital eye clinic studies using humic extracts showed 100% success in curing eye diseases caused by virus, bacteria, or fungus, also healing ulcerous wounds, relieving inflammation, and stopping hemorrhaging, without side effects.

Guofan, Tang, Jiangxi Humic Acid, 3 (1984)

The physical health of all organisms, both plant and animal, can be expressed in terms of electrical potential. It is essential that the electrolytic potential of all organisms be maintained at optimum levels, otherwise weakness, degenerative disease, and eventual death will result.

Fulvic acid has been proven to be one of nature's most perfect and powerful organic polyelectrolytes. Because many of fulvic acid's constituents where once involved in photosynthesis, the fulvic retains that latent energy potential stored inside its solar charged molecular structure, which can balance cell life on the molecular level, providing regulated positive and negative charges as needed, acting as both a donor or acceptor. Within the complexities of fulvic acids, the individual molecules are similar but not identical. This variation in makeup allows a variety of possible reactions, positive or negative, or in some cases alternating, to assist the balance.

Because of its unique polyelectrolytic properties, fulvic acid can influence the formation or transmutation of new species of metal ions. This means fulvic acid can convert existing minerals into new minerals.

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Common Virus Shows Link To Brain Cancer In Children

Colon, penile, uterine, cervical, liver, and numerous other cancers are also caused by viruses

February 21, 2002

A new study appearing today in the Journal of the National Cancer Institute, shows that the JC Virus (JCV) which infects about 65% of children by age 14, likely plays a role in the development of the most common type of malignant brain tumor found in children. This finding is consistent with many other recent reports linking viruses to cancer.

The JC Virus is named after a patient, John Cunningham, from whom the virus was first isolated in the 1970's. According to the senior author of the study, Dr. Kamel Khalili, the JC Virus "is very common," and he went on to say that "sixty-five to 70 percent of human populations worldwide get infected with this virus by age 14, so we all basically have this virus in our bodies."

Twenty specimens of brain tumors taken from children showed evidence of the JC Virus. Dr. Khalili says that "the presence of the virus... is suggestive of a biological role for this virus in the development of these tumors." Khalili, who is a cancer researcher at Philadelphia's Temple University, said that earlier lab studies show that the JC Virus causes cancer in rats, mice, and brain tumors in certain monkeys.

The JC virus comes from a viral group called Neutropic Polyomaviruses. It usually infects the upper respiratory system by inhalation of airborne particles just like the common cold. Polyomavirus caused respiratory infections are very common in children. The virus causes no serious disease unless a person's immune system is weak. In patients with very weak or destroyed immune systems (such as AIDS patients, or those who are taking organ anti-rejection drugs), according to Dr. Khalili, the JC Virus can cause progressive Multifocal Leukoenchephalopathy (PML), a fatal brain disease. Dr. Khalili says that evidence suggests that JC Virus also plays a role in the development of the most common brain cancer in children, medulloblastoma. This type of cancer is diagnosed annually in about one out of every 200,000 children under the age of 15. It is a very aggressive cancer that is difficult to treat and often is fatal. Dr. Khalili says that if it can be conclusively proven that JC virus does play role in the brain cancer, then it may be possible to develop a vaccine that could help in treating the tumor or preventing its spread.

Studies by Dr. L. Laghi and associates have shown that JC Polyoma Virus also causes colon cancer. In other extensive research Dr. Richard C. Hunt, at the University of South Carolina, has documented many other viruses as the cause for colon, penile, uterine, cervical, liver, and numerous other cancers.

This information provides support for the idea that humic substances (fulvic acids) are a little-known and important missing link throughout the food chain. Modern agricultural practices have eliminated the humic substances from farm soil, which parallels increases in viral plant, animal, and human viral infections. Common to rich organic soil humus, fulvic acids have been shown to have unequalled value in defending plants, animals, and man against viruses of all kinds, and also in significantly increasing and

balancing immunity. Of interest is also the fact that hospital studies in China showed that children with serious respiratory infections responded exceptionally well to humic - fulvic extracts when nothing else seemed to work.

http://www.med.sc.edu:85/lecture/RETRO.HTM

http://www.pnas.org/cgi/content/full/96/13/7484

http://www.temple.edu/biology/faculty/khalili.html

http://member:vault@fulvic.com/vault/healthalert/virus.htm

Fibromyalgia

Fibromyalgia, is a syndrome rather than a specific disease. As such there are a complex of symptoms which may or may not be present in any particular clinical instance of fibromyalgia. The most common symptoms, however, can all be helped by fulvic acid complexes as fulvic acid has been shown to be effective in reducing muscle and joint pain, improving sleep, and decreasing fatigue. Generalized muscle stiffness should also be reduced.

Taking the liquid mineral/vitamin complex will be more effective if accompanied by the capsules (dietary supplement). Research also has shown the following to be of great assistance in reducing the effects of fibromyalgia:

[1] Light, ongoing aerobic exercise, such as a walking programme, coupled with stretching exercises.
[2] A raw vegetarian diet. This diet, in one study, produced great improvement of up to 70% reduction in symptoms in the people involved in the study over a seven week period.

A change in diet such as this, presuming that the person is not already on this diet, and the exercise programme would probably be best undertaken after the liquid mineral/vitamin supplement has been taken for at least a month and has produced some benefits. Any large change should also be performed

Fulvic acid and Humic extract topical use and bath therapies show amazing clinical results

Fulvic acid and humic extract water solutions can safely be applied as skin treatments. Directly applied or as bath therapies, fulvic and humic extracts are safe in amounts as high as 10 percent weight-by-volume. Medical doctors have found that extended saturation of the skin by direct application, or use as a bath therapy can be highly successful in treating many external and internal conditions. Clinical studies show that ulcerous skin problems and various skin diseases can be eliminated. Studies by a U.S. doctor have shown that fulvic acid or humic extract bath treatments can cure the common cold or flu in just one or two session, stopping them dead in their tracks.

Hospital patients with skin ulcers had 92.2% success rate when treated with

fulvic acid and humic extract baths.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Medical doctors in Europe, China, and even the United States, have discovered that clinical bath treatments using specially prepared humic and fulvic extracts have unparalleled healing power with many serious diseases. Patients with severe rheumatoid arthritis and other bone, joint, tendon, and muscle autoimmune disorders, exhibit healing effects that are unrivaled. Often after a few weeks of daily bath sessions, patients are significantly relieved of pain and inflammation, and are restored to health.

Medical test results indicate that humic extracts enhance the human immune system, which results in the cure of viral diseases.

Jingrong Chen et al, jiangxi humic acid, 2 (1984)

Literally hundreds of well documented clinical studies exist from hospitals, medical schools, and doctors from around the world. Internal use of fulvic acid also works well for many of these same conditions including the various rheumatoid and autoimmune disorders.

Bath treatments, or lengthy periods of moist localized saturation, are extremely potent therapies for many conditions. Such treatments are remarkable effective. Extensive clinical studies support the exceptional safety of both topical and bath therapies.

Global presence of Diabetes mellitus now epidemic, human clinical studies show Fulvic acids offer significant help

Diabetes mellitus responsible for enormous world economic burden

A December supplement to the British Diabetic Association journal, *Diabetic Medicine*, warned that the prevalence of diabetes worldwide is expected to nearly double in the next twelve years. Dr. Paul Zimmet and colleagues for the International Diabetes Institute and the World Health Organization report that diabetes mellitus "appears to be epidemic in many regions of the world" and will double and could even triple by the year 2010.

With fulvic acid, diabetes patients became more energetic and the tingling, painful feeling and numbness experienced in the nerve endings disappeared or were reduced.

Yuan, Shenyuan; et al; *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Related reports were quoted as saying that "The corresponding burden of complications and premature mortality resulting from diabetes will constitute a major public health problem for most countries." Dr. George Alberti, Vice Chair of the British

Diabetic Association says, "In the short term, it is vital that attempts to change lifestyles are stepped up and that investment in finding a cure is increased. In the longer term, it is equally important that we ensure that we have the medical infrastructure in place to deal with the problem."

Scientists found that fulvic acids show significant success in preventing and combating free radical damage to pancratic islet B cells, which is the widely accepted cause for diabetes mellitus. What they discovered was that the Fulvic acid preparation significantly increases superoxide dismutase (SOD) activity. Their clinical studies show that fulvic acids diminish the development and progression of diabetes, and assisted in the treatment.

Bhattacharya, S.K. Activity of shilajit on alloxan-induced hyperglycemia in rats. Fitoterapia, Volume LXVI, No 4, 1995, pg. 328.

The American Diabetes Association (ADA) recently concluded that "The economic burden of diabetes mellitus in the US is enormous." In their February 1998 issue of *Diabetes Care*, the ADA estimated that total direct and indirect costs reached $98 billion in 1997, which is now about 8% of all healthcare costs. The ADA wrote in their report that the prevalence of diagnosed diabetes in the US is now about 3% of the population. This relates to $10,071 per capita in medical expenses for diabetics compared with $2,669 for non-diabetics. According to Dr. Richard Kahn and the Alexandria, Virginia, based ADA, any advances that can "delay the onset or slow the progression of diabetes" are needed to "mitigate the associated clinical and cost repercussions."

Diabetes mellitus stems from dietary deficiency of protective humic substances, especially fulvic acids

Most medical doctors and diabetes associations do not know that scientists in less conspicuous parts of the world are making significant inroads into the treatment and prevention of diabetes mellitus with fulvic acid humic extracts and herbs. In fact, Fulvica BioScience's studies have identified a missing dietary link as likely a major cause for the disease. However, the valuable research may be entirely overlooked because the solution does not necessarily have the huge profit potential that is standard to the pharmaceutical industry.

For centuries people living in isolated villages in the Himalayas and adjoining regions have used preparations made from a rare fulvic acid containing humic substance known as Shilajit, to prevent and combat problems with diabetes. Diabetes is quite uncommon in the isolated mountain villages, yet a brisk trade in these rare fulvic acid containing preparations has expanded in recent years to the traditional doctors in surrounding regions.

Due to the historical and recent expanding success of the diabetes treatments in the Himalayan region, medical researchers have taken a more serious interest in determining if the claims have scientific merit. Dr. Salil K. Bhattacharya and scientists from the Neuropharmacology Laboratory, Department of Pharmacology, Institute of Medial Sciences, at Banaras Hindu University in India, undertook extensive clinical

studies on the subject. What they proved was that it was the fulvic acid fraction in Shilajit, and other closely associated humic compounds, that were responsible for the anti-diabetic activity and long reputed historical success of that preparation.

Dr. Bhattacharya recognized that the fulvic acids showed significant success in preventing and combating free radical damage to pancratic islet B cells, which is the widely accepted cause for diabetes mellitus. What he discovered was that the fulvic acid significantly increases superoxide dismutase (SOD) activity. Dr. Bhattacharya's clinical studies showed that fulvic acids diminished the development and progression of diabetes, and assisted in the treatment.

Studies going on in other countries confirm the work of Dr. Bhattacharya regarding fulvic acid SOD activity and effectiveness of diabetes. Studies in China take the research even further.

Extensive human clinical studies carried out in various medical schools and hospitals in China have shown significant success in treatment of diabetes patients. Studies show that patients become more energetic. The tingling, painful feeling and numbness experienced in the nerve endings disappear or are reduced. In China, the pharmaceutical use of fulvic acids have now been approved for both internal and external use, because they have shown that they are both safe and effective.

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Yuan, Shenyuan; et al; *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

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Humic substances are nature's most powerful antiviral

New studies continue to show virus - cancer connection

The relationship of viruses to cancer is not too surprising, considering the mounting evidence that shows that there is a missing link in our food chain that is allowing viruses to run rampant in their attack on humans, animals, and even our food crops. What may surprise you most is that drug companies have sponsored extensive secret studies for the purpose of profiting from this dire situation, when in fact inexpensive and effective natural solutions exist. This entire website documents the relationships.

Of immense interest is the fact that medical hospital studies show that difficult viral respiratory illnesses common in children are readily resolved with fulvic acid dietary supplementation. Fulvic acid is a humic extract common to rich organic humus soil and

also certain ancient plant deposits. Many medical studies show that humic substances, especially fulvic acids, have the power to protect against cancer AND the related cancer causing viruses. Studies often show reversal of deadly cancers and tumors using special humic substance therapies. Many studies and extensive references exist, a few of which are referenced below.

Search keywords: respiratory, tumor, virus, cancer

Also see the following articles for more information:

Common Virus Shows Link To Brain Cancer In Children

Incurable HIV or Aids virus is destroyed by humic extracts, epidemic now has over 33 million people infected

Fulvic acid's diverse spectrum of immune responses

Cancer is second leading cause of death in the US, humic extracts arrest cancer growth according to medical studies

Research on the development of the medicinal applications of Fulvic acid in China

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Humic and Fulvic soil substances hold Tuberculosis solutions

An obscure and highly technical U.S. Government report shows that there is a direct correlation between natural soil substances (humus, humic, fulvic) and the absence of tuberculosis in humans. This report and many other studies reveal that certain humic extracts, particularly fulvic acids, contain a magnificently powerful spectrum of natural micronutrients, phytochemicals, anti-viral and antibiotic-like agents that directly inhibit and destroy disease pathogens, while fortifying and regulating the immune system, increasing overall health. In the report, these extracts, although undetermined at that time, are described as being as potent as penicillin in equally small amounts.

"The present form of agriculture, to which our biological agriculture is opposed, leads to the ruin of soil and health and will eventually bring about the death of humanity." --Professor Louis Kervran

Professor Louis Kervran was Minister of Health for France and a member of the New York Academy of Sciences

This report, a U.S. Govt. Information Circular from the U.S. Dept. of Interior, Bureau of Mines, shows a direct correlation between exposure of coal miners to humic substances and their complete absence of tuberculosis. Ancient plant deposits that were buried but never turned into true coal still remain organic in form, and are commonly referred to as humic, humates, fulvates, lignite and leonardite, and are found

in close proximity above coal. These humic compounds are identical to the black and brown humus found in the very richest soils.

This government report discusses the fact that these same anti-pathogenic substances have also been traced by biochemists into many plant species, and function the same as protective mechanisms found in various plant parts, especially the coats of seeds. Also of interest is the fact that scientists insist that the activity and function of humic matter in fresh humus soil works identically to that found in ancient humic deposits, although the ancient deposits contain substances that are much more highly concentrated.

Many scientists have shown that these various anti-pathogenic substances are produced by beneficial microbes common to rich humus soils. The microbes concentrate and convert higher plant matter forming soluble compounds (fulvic acids) that are readily transported to a new plant's roots and on into the entire plant, often accumulating in specific areas of the plant.

The government report discusses the curious fact that a high concentration of still-living microbes were discovered to be dispersed throughout the interior of all raw humic substances, with the ratios, types, and species consistent with the various types of humates. Many of the strains of microbes were identified to be from the very same families responsible for some of the pharmaceutical industry's most well known, latest, and highly respected drugs and antibiotics, which interestingly are all found in healthy topsoil.

Although the various studies in the government report showed that scientists knew and identified the different species and types of microbes and were familiar with the antibiotic substances they produce, the powerful anti-pathogenic substances they were successful in isolating from humates could not themselves be identified. The speculation is that these substances encompass nature's entire spectrum of known and yet to be discovered antibiotics.

The extracts isolated from humic substance had an activity comparable to or better than that of penicillin at similar or even higher dilution rates. The various studies showed that besides preventing tuberculosis among miners, the unique and varied disease fighting substances were found to have activity against many other human disease pathogens, and activity against plant-pathogenic bacteria as well.

Recent scientific research is gradually unraveling the mystery, and is showing that one of the reasons why individual humic related antibiotic substances are hard to identify is because such an immense and diverse spectrum exists, which have all become combined together molecularly, and also modified and inter-linked with one another. One area of immense interest that has been identified is the quinoid groups, consisting of quinonoids, quinolones, quinones, etc. Pharmacologists are finding that these substances are some of the most powerful antibiotics ever, and also that some of them fortify and increase overall health by increasing resistance to disease. The quinoid groups are very common to high quality humic extracts, especially certain fulvic acids.

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Tuberculosis is declared a global epidemic with incurable strains spreading throughout the U.S.

The World Health Organization has declared tuberculosis a global emergency and epidemic. One-third of the world population is now infected with tuberculosis. More people died worldwide last year from tuberculosis than in any other year in history. This year over 8 million people will contract tuberculosis, which kills 3 million people annually. Multi-drug-resistant strains of tuberculosis have now been identified in 42 states in the U.S. Large numbers of people are now infected without knowing it, and any of them could eventually develop the disease. Incurable drug-resistant strains are easily passed on, and currently 50 million people are at serious risk worldwide.

Drug resistant Tuberculosis found in 42 states of the USA

Reports from various Centers for Disease Control show that drug-resistant tuberculosis is showing up across the U.S., now in 42 states, according to William Bishai, M.D., Ph.D., a Johns Hopkins immunologist. Various CDCs report that this is a big increase over past years.

Dr. Lee Reichman, executive director of the New Jersey Medical School National Tuberculosis Center in Newark, says that the states with the most significant increases are not the 14 states where this epidemic started 10 years ago. It is not the states we would expect, he said, which would normally include New York, New Jersey, Texas and California. He said it is actually the Southern and Midwest states which are reporting multi-drug-resistant tuberculosis.

"there's a lot of people out there in 42 states infected"

Dr. Lee Reichman, National Tuberculosis Center

"The hidden thing there, is when you are looking at multi-drug-resistance (MDR), you are looking at actual cases of tuberculosis - but only 10% of people ever infected get to be a case," said Dr. Reichman, "So that means there's a lot of people out there in 42

states infected with MDR who haven't yet gotten TB - they may or may not (develop the disease)."

Dr. Reichman says that there are many serious medical concerns associated with treating TB. "These things are saying we've still got problems to solve and we better solve them. Otherwise, in three to four years people are going to be saying 'there's another TB epidemic, my God, we've got to do something about it,'" Reichman said.

An urgent call to action to reduce incurable TB strains

"Alarming" rates of multi-drug resistant strains of tuberculosis are appearing in every country, with some "hot zones" appearing where tuberculosis has become virtually incurable, according to Dr. Ariel Pablos-Mendez of New York City's Columbia College of Physicians and Surgeons, the lead author of a new study. He went on to say that people with resistant strains can pass an incurable infection on. Representatives from the Centers for Disease Control and Prevention in Atlanta, said that "the stage is being set for substantial increase in the incidence of drug-resistant tuberculosis in many countries.'' They also said that "the findings should be interpreted as a call to action to reduce this threat."

Global emergency: One Third world population TB infected

One-third of the world's population is infected with tuberculosis bacterium, with eight million people developing the disease every year. Tuberculosis is epidemic and has been declared a global emergency and major public health threat. According to World Health Organization official, Levon Arevshatian, "It is estimated that TB kills some three million people per year, representing more than five percent deaths globally."

New therapies needed against TB, the most lethal of all infectious diseases

Worried by the fact that tuberculosis has become epidemic, and kills more people each year than any previous year in history, the World Health Organization sent a warning to the international community to apply new therapies with greater rigor. They say that currently 50 million people are at risk of infection with drug-resistant strains, which raises the cost of the usual treatment from $2,000 to an average of $250,000 per patient. Tuberculosis is currently the most lethal of all infectious diseases for both children and adults. Between two and three million people die from tuberculosis each year.

TB report "indictment of our public health system" says congressman

A congressional report describes efforts to combat TB as being complicated because of the emergence of strains resistant to anti-TB drugs. In the report, congressional analysts describe how new cases of tuberculosis are increasing at an alarming rate. Representative Ed Towns, D-N.Y., chairman of the House Governmental Operations subcommittee on human resources, said: "This is a chilling report; it is an indictment of our public-health system."

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Incurable HIV or Aids virus is destroyed by humic extracts, epidemic now has over 33 million people infected

According to the Joint United Nations Program on HIV/AIDS, the epidemic currently infects over 33.4 million people worldwide. An estimated 14 million people have died since the epidemic began.

An extensive number of studies show that Humic extracts, specifically Fulvic acids, effectively and safely kill the HIV/Aids virus. In fact, one pharmaceutical company has patented a humic based drug that purifies blood for transfusions, killing the HIV virus without damaging blood cells.

Humic extracts are the most effective natural treatment against viruses of all kinds. Comprehensive studies show that humic extracts are effective against common cold and flu viruses, including respiratory tract viruses, retroviruses, influenza viruses, herpes simplex viruses, just to name a few.

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Treating thyroid tumor with Fulvic acid Report on ten case studies

Thyroid tumor, a commonly seen ailment, has been treated by thyroidectomy surgical procedure (thyroid gland removal).

From March 1977 to April 1980, Dr. Shenyi He and his coworkers treated 10 patients with fulvic acid. The results were successful. Follow up visits with the patients showed that in eight cases the tumor disappeared without relapse. Details are listed below:

Clinical data:

Number of patients: 3 cases male and 7 cases female patients
Age: 17 to 36
Size and location of the growth: 3-4 cm x 4-5 cm, next to the narrow band of the thyroid gland; 7 cases leaning left, three leaning right.
Time lapse between first detection of the tumor and when treatment began: 1 week to 10 years.
Treatment: 1 case study: fulvic acid syrup; 6 case studies: fulvic acid tablets and fulvic acid injections; 3 cases: fulvic acid tablets, fulvic acid injections, and fulvic acid injection applied into tumor growth.

Diagnosis:

The female patients with thyroid tumor were under 40 years of age. Tumors of all sizes and shaped round or oval were observed and had a firmer texture than the normal gland. Its shape was better defined and slow growing. There was no pain when pressure was applied. It went up and down when food was being swallowed. Patients rarely experience any discomfort and thyroid functions were all tested normal.

Standards for evaluation of the therapeutic effects:

Cured: After three courses of treatment, the tumor disappears; Effective: After three courses of treatment, most of or part of the tumor shrinks; Not cured: After three courses of treatment, the tumor remains the same size.

Methods of treatment:

1. The regimen consisted of 20 days of three times a day intake of 10 ml syrup containing 50% fulvic acid. The same regimen is repeated another two times.
2. The regimen consists of 20 days of intramuscular injection with a 2 ml dosage containing 0.20% fulvic acid twice daily.
3. One injection in the tumor region, 4 ml of 4% fulvic acid.
4. The regimen consists of 20 days of taking fulvic acid tablets (0.3 x 4#), three times a day.

Source of material:

The preparation room of the Humic acid purification factory at Ruichang School prepares the fulvic acid syrup. People's Hospital in Ruichang County manufactures fulvic acid tablets and the solutions for fulvic acid injections.

Analysis of Therapeutic effect:

Within this case study group: Two patients after one course of treatment found their tumor to have disappeared; four patients found their tumor to have disappeared after two courses of treatment; two found their tumor to have disappeared after three courses of treatment; one patient did not complete the treatment; one patient after one course of treatment found the size of the tumor reduced, it was followed by surgically removing the growth.

Summary:

The thyroid tumor is a follicular adenomas. It is shaped like a pocket with the inner wall as shrunken follicles, some appear solid, arranged randomly, partially fiber-like, possibly due to the action of fulvic acid. Complete cure: 80%; effective: 10%; no effect: 10% (The patient treated with surgical procedures was not included in these statistics.)

Case studies:

Case 1: Ms. Wang, 34 years old, is a married factory worker. In March 1977 she experienced soreness in her elbows and discomfort in her neck . A growth the size of a ping-pang ball was found in her neck. She was examined as a outpatient and diagnosed as having a thyroid tumor. After being treated with fulvic acid syrup for two months, the tumor shrank and eventually disappeared. Follow-up visits showed there was no recurrence.

Case 2: Ms. Zhou is a 36 year old peasant, married. In October 1978 she discovered a growth in the front of her neck. Examination showed that the tumor had a size of 4 x 5 cm, detectable near the left side of the narrow band. It was soft to the touch. It had a defined shape and did not hurt when pressure was applied. It went up and down when food was being swallowed. She was diagnosed as having thyroid tumor. After a month's treatment using fulvic acid injection together with fulvic acid tablets, the lump disappeared.

Case 3: Ms. Tan, 22 years old, is a teacher in a private school. In April 1977, a lump as big as an egg was found in her neck area. She felt inhibited when breathing. After three regimens with fulvic acid intramuscular injection, the lump was reduced in size. There has not since been a relapse.

Case 4: Mr. Liang, 17 years old, is a student. The growth in his neck was discovered 6 years ago. It was located in the center leaning towards to the right, its size 3 x 3 cm. Treatment started on April 2, 1979, consisting of fulvic acid injection together with fulvic acid tablets. One month later the lump began to shrink and two months later it disappeared. Follow-up visits showed there was no recurrence.

Case 5: Ms. Luo is a 30 year old married woman. For over a month she felt there was a lump in her neck and her throat felt itchy. A tumor with a size of 3 x 3 cm was detected upon examination, detectable near the left side of the narrow band. It had a medium firmness to the touch and when pressure was applied, it did not hurt. It moved up and down when food was being swallowed. After two regimens of fulvic acid treatment beginning on December 20, 1979, the lump disappeared.

Points of understanding:

1. All 10 cases were out-patient treatments. Before and after treatment, no other medicine was used. The disappearance of tumor is without doubt the results of using fulvic acid.

2. According to related reports, fulvic acid has a anti-viral effect. It heals cancer and allows the thyroid gland to be normal again.

3. The disappearance of the thyroid tumor may be related to the inhibition towards thyroid tumor cells, relating to the inhibition of its uncontrollable growth.

4. Patients feel fine during treatment, free of any discomfort.

5. The treatment is simple and the cost of medicine is low. The patients are freed of suffering from surgery and its related complications. Patients do not need to lose work time.

6. Based on limited case study, injections with syrup together with tablets give fast results.

7. To ensure best result, the patient is required to take the whole course of treatment without interruption.

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Shenyi He, et al; Humic acid in Jiangxi Province, 1 (1982). In: *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; Chapter 34; First Edition: June 1993.

Medicinal value of the Humic extract known as Fulvic acid is astounding and very well-documented

Many reports on the beneficial use of humic substances, especially fulvic acid, for human health and medicine have been published. These include reports documented in the Chinese Materia Medica pharmacological compendium, dating back to the 15th century Ming Dynasty. During that period, a very famous medical doctor, Li Shi Zhen, used "Wujinsan", meaning "golden medicine", containing humic and fulvic acids as the active ingredient in the treatment of infectious ulcerous growth and female hemorrhage diseases. These studies showed humic and fulvic acids to be efficient anti-inflammatory and blood coagulating agents.

Hospital eye clinic patients with ulcerous cornea infection had 94.2% success rate when treated with fulvic acid eye drops and injections.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

In China, prior to 1978, humic and fulvic acids had been used in hospitals and among the general population for the treating of a wide range of diseases with success. Up to that point there was very little research conducted on the pharmacology of its therapeutic mechanism. Because of lack of clinical data, doubt and misconceptions remained as to therapeutic use.

Hospital patients treated for chronic ulcerous colon infections had 92.6% success rate when treated with fulvic acid enema.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Since that time, many medical schools and hospitals in China have engaged in extensive studies on the toxicology and pathological aspects of humic and fulvic acids

and their clinical applications. Hundreds of research papers have now been published nationally in China, and some have appeared in international journals and have been presented at various meetings outside of China.

Hospital patients with acute upper gastroenterological bleeding had 95.6% success rate when treated with fulvic acid oral medicine and injections.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Pharmaceutical companies in Da Tong, Shanxi, in Gongxian, Henan and in Kunming, Yunnan are manufacturing humic acid medicines which are appoved by the Chinese Drug Administration. Because of their non-toxicity, the humic extract fulvic acid is approved for internal as well as external use.

Clinical medical studies using humic and fulvic acids were performed on thousands of hemorrhoid patients, which were so successful that the Chinese government had a special pharmaceutical preparation developed for treatment of this condition.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

Chinese doctors now use fulvic related medicines to reduce inflammation, increase circulation and control bleeding, to regulate the immune system and hormone systems, to heal digestive tract disorders, and as an anti-cancer and anti-tumor therapy.

German companies have a number of humic and fulvic based products. These include the following healing bath additives: Moorbad Saar N, Humopin N, Leukona Sulfomoor-Bad N, Salhumin Rheuma-Bad, Salhumin Sitbad N, Salhmin Teilbad N, Contrheuma-Bad L, mostly for the relief of rheumatism and arthritis. Huminit is used internally for the treatment of stomach hyperacidity and other gastric disturbances, gastric ulcers and gastroenteritis in humans. Veterinary medicines include, Kalumin, Sulumin, Salhumin and Kalumat for the therapy and prevention of diarrhea and enteritis.

Studies of patients with gastric and duodenal ulcers showed that 91.1% had condition improve when treated with fulvic acid. Treatment showed no side effects, substantially diminished pain, with few relapses, with 61.1% of patients being completely cured.

Xinsheng Zhu, Fulvic Acid, 9 (1991)

Studies show that humic, and especially fulvic acids do occur naturally in the human diet. Waters from streams and rivers running through forested land contain dissolved humic and fulvic acids. Humic and fulvic acids occur in living plants grown in organic humus containing soils, and humic and fulvic acids have been isolated from live plants. Humic and fulvic acids have been found in the gastrointestinal tract of humans and animals and are absorbed. They circulate with the blood and are metabolized in the liver.

In 1988, Dr. S. A. Visser reviewed the medicinal value of humic substances in an article entitled: "Effects of humic substances on higher animals and man; the possible use of humic compounds in medical treatments", which was presented at the International

Humic Substance Society meeting in Sevilla, Spain. His findings showed that the medicinal applications of humic and fulvic acids can be external as well as internal.

Hospital studies in China show that elderly patients, ages 60-90, when treated with fulvic acid, regained appetite, slept better, and became more energetic. Other hospital studies coming from India show that fulvic acids are considered to be a powerful anti-aging therapy that also able to help with symptoms of dementia.

Erchuan Wang et al, Humic acid, 3 (1991)

Dr. Visser stated that external applications of humic and fulvic acids are based on their use as antiphlogistic (antiinflammatory), analgesic (pain relieving), hyperemic (blood flow increasing), anti-rheumatic, anti-microbial, anti-fungal, antiviral and anti-cancer agents. Humic and fulvic acids have also been used externally in the treatment of hematoma (localized accumulation of blood), phlebitis (inflammation of veins), desmorrhexis (rupture of a ligament), and myogelosis (hardening of a muscle), as well as for the treatment of patients with contusions, distortions, cervical (neck) complaints, lumbago (pain in the lower back), ischias (pelvic pain in the hip joint), arthrosis (non-inflammatory arthritis), polyarthritis (arthritis of multiple joints), osteoarthritis (arthrosis deformans), and with osteochondrosis (ossification of cartilage).

With respect to internal use, humic and fulvic acids have been shown to be particularly useful in the prophylaxis (prevention), therapy and metaphylaxis (after-care) of a variety of stomach and intestinal troubles such as, hyper-acidity, diarrhea, gastric ulcers, dysentery, gastroenteritis and colitis. They can also act as a detoxifying agent, and have been used against bacterial and viral infections. They have been found to be useful in the treatment of anemia (deficiency of red blood cells, hemoglobin or total blood volume) and as a stimulator of the body’s immune system and of detoxifying liver functions. By counteracting certain kinds of cancerous growth, humic acids may also have a potential as an anti-carcinogen.

Many of these effects can be attributed to the activity of humic and fulvic acids by themselves, and are the result of their surface activity, chelating properties, power of absorption, their polyacidic nature, their polyphenolic structure, their interaction with other organic molecules including polysaccharides, proteins, enzymes and lipids, as well as of their redox properties and fee radical content. No unfavorable side effects have so far been noticed with the administration of humic or fulvic acids.

Dr. G. Davies summarized the effects of humic acids in the Nucleus, Feb. 1996, in a monograph titled "Properties and functions of humic acids." He stated that oral doses of humic acids reduce heavy metal absorption in animals and also decrease pesticide toxicity. Humic acids can be administered preventatively and therapeutically in animals, including pregnant animals, without apparent risk. Some humic acids control uterine cancer in rats and humic acids markedly reduce the mutagenic effect of benzopyrene, 3-aminoanthracene, 2-nitrofluorene and 1-nitropyrene. The anti-mutagenic effect depends upon the adsorption of these dangerous chemicals onto the humic acid surface. Since fulvic acid is humic acid, the bioactive component, all data applies to fulvic acid as well.

Recent research articles by Dr. Senesi and Dr. Miano clearly link humic and fulvic acid properties with human health.

Hospital patients with rheumatoid arthritis had 92% success rate when treated with humic extract baths.

Yuan, Shenyuan; Fulvic Acid, 4 1988; in *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

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Yuan, Shenyuan; et al; *Application of Fulvic acid and its derivatives in the fields of agriculture and medicine*; First Edition: June 1993

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Observations on the use of fulvic acid as a blood coagulant

Since February, 1979, Suchen Cao and associates, of the Medical University in Zhejiang Province, China, had begun using fulvic acid in treating bleeding diseases. Until August of that year they had treated 15 cases, all giving satisfactory results, although only a small number of patients were involved.

Source of Fulvic Acid, Types of Reagents, Methods of Usage

Source:

Fulvic acid was extracted from humic peat in the hospital preparation room in the Shaoxing area.

Types of reagents:

(a) Fulvic acid 0.2% injection solution, 5 ml per injection, used intravenously or intramuscularly.

(b) Fulvic acid in powder form, taken orally.

Methods of usage:

(a) Cotton swabs dipped in 0.2% fulvic acid solution were placed at the bleeding area in the mucous membrane.

(b) For treating patient coughing blood or hematuria patients (blood in urine), twice a day 5 ml of 0.2% fulvic acid solution injected intramuscularly, or once a day 40 ml of 0.2% fulvic acid solution added to glucose solution injected intravenously.

(c) Patients suffering from bleeding from mucous membrane, coughing blood or hematuria were given fulvic acid therapy when other treatments failed.

Clinical Data

Fifteen cases of bleeding and stoppage of bleeding:

Six had mucous membrane bleeding problem (4 with different degrees of severity of nasal membrane bleeding triggered by chronic kidney infection, uremia, pulmonary cardiac disease, leukemia, and cirrhosis; one had festered surface of the tongue caused by a lymph tumor; one had aplastic anemia causing gum bleeding); three hematuria patients (one each of acute bladder infection or cardiac hepatitis or leukemia); six patients coughing up blood (4 caused by bronchiectasis, one caused by tuberculosis, one caused by heart failure).

Bleeding mucous membrane:

1. Nasal bleed caused by uremia, pulmonary cardiac disease, leukemia, and cirrhosis. Four cases studied. Treatment as described above required one hour for blood coagulating. Treatment result was apparent cure with no relapse.

2. Festered surface of tongue caused by lymph tumor, brain membrane, leukemia. One case studied. Treatment as described above required wet cotton swab layering-over 2 or 3 times. Treatment result was apparent cure with no relapse.

3. Bleeding gum caused by aplastic anemia. One case studied. Treatment as described above required one hour for blood coagulating. Treatment result was apparent cure with no relapse.

Hematuria:

1. Acute bladder infection, one case studied. Treatment was as prescribed above. The following day no blood found in urine, routine urine testing negative. Treatment result was apparent cure with no relapse. 2. Leukemia, blood shot eye, and hematuria (red cell ++), one case studied. Treatment was as prescribed above. Patient was getting better by the following day with no blood found in urine, no blood shot eye. Patient had relapse. 3. Cirrhosis, one case studied. Treatment was as prescribed above. Patient was getting better, with blood coagulating by the 4^{th} day. Patient had relapse.

Coughing blood:

1. Bronchiectasis, four cases studied. Treatment was as prescribed above. Three cases were getting better with blood coagulating by the 5^{th} day, with no relapse. In one of the four cases, treatment showed no effect.

2. Tuberculosis, one case studied. Treatment was as prescribed above. Patient was getting better, with blood coagulating by the 3rd day. Patient had relapse.

3. Heart failure, one case studied. Treatment was as prescribed above. Apparent cure by the 3rd day, with no relapse.

Treatment Results

Six patients suffering from mucous membrane bleeding all showed apparent positive results. Five of them received localized layering-over treatment once and one received the same treatment 2 ~ 3 times. No relapse was observed in any case.

Two out of three hematuria patients were found with no blood in their urine the day after the treatment. The routine urine test was negative. The treatment was effective with one patient and no relapse was observed. The other two patients had relapses. The routine urine test showed that the presence of red cells (++++) was reduced to (++). Continuing treatment did not show apparent improvement.

One out the six patients who coughed blood showed an apparent response to the treatment; one did not get better; the other four showed signs of improvement. Within 3 to 5 days treatment, five patients stopped coughing blood. One of them stopped coughing blood but later started again.

Discussion and Summary

From the above case study, it is clear that fulvic acid indeed can stop bleeding. Patients with more serious illness, for example, suffering from aplastic anemia, chronic kidney infection uremia, after receiving treatment, except for one, had their bleeding stopped to a certain degree.

Examples: In 4 cases of nasal bleeding the patients were initially treated with gauze containing Anluoxue and Vaseline and in one case of gum bleeding the patient after initially treated with gauze containing coagulate agent, Anluoxue, Zhixueming, vitamin K, did not show obvious results. However, following one treatment by layering a cotton swab dipped in fulvic acid solution over the bleeding area, bleeding stopped.

For one of the three cases of hematuria patients (caused by acute bladder infection), following 1 day treatment by intravenous injection, there was no blood in the urine on the following day.

Three out the four cases of bronchiectasis patients were obviously better. On the 5th day the coughing of blood was gradually reduced, however, traces of blood were still found in the sputum.

According to reports in the literature, the therapeutic feature of fulvic acid resembles Yunnan Baiyao. Experimental results indicated that 30 minutes following intravenous injection of dogs with 160 mg of fulvic acid, the dog thrombus elasticity diagram showed the reduction of the reaction time R and the coagulation time K. The blood clotting process was accelerated yielding advantageous blood coagulation.

When this medicine was taken orally, there were two incidents showing nausea and vomiting, a condition hard to bear. The remainder did not have any bad reaction.

Although we have not collected numerous data of the usage of this medication, the initial results show it to has the ability to stop bleeding.

Suchen Cao, Jiangxi Humic Acid, 3 (1993) In: Application of Fulvic acid and its derivatives in the fields of agriculture and medicine; Chapter 35; First Edition: June 1993.

Renowned longevity and health of isolated Himalayan cultures is linked to fulvic acid extracted from fossil-like humic substances

For centuries traditional medical doctors in remote areas of the Himalayas have claimed that "shilajit", a rare humic substance high in fulvic acid, can "arrest the aging process" and "induce revitalization". Historical documents testify to the amazing longevity and health of these people who often live well beyond 100 years of age. Now the physiological functions behind these claims are being substantiated by leading medical hospitals and pharmacologists around the world.

Fulvic acid extracts from the rare humic substances found on the high mountain slopes of the Himalayas, have been used for centuries by the isolated inhabitants of that region as a "rejuvenator, a class of drugs reputed to arrest the aging process and to induce revitalization", according to quotes from leading pharmacologists studying them. The traditional medical claims of "rehabilitation of muscles, bones and nerves", treatment of "geriatric complaints including arthritis, diabetes and allergic manifestations," dementia, etc., are now being proven, along with their mode of action, by pharmacologists and many other medical doctors and scientists.

The various pharmacological studies reveal that the fulvic acids exhibit results" sufficiently impressive", and "more effective" than several currently available immune system regulators. The fulvic acids "produced significant effects", as an anti-stress agent, in relieving stomach ulcers, preventing allergic reactions, and in activating the immune system against tumor cells. "The results support the use" of fulvic acids "as an adjuvant [assisting in the prevention, amelioration, or cure] in the therapy of diabetes", to quote leading pharmacologists.

In recent years, leading scientists, doctors, and pharmacologists from major hospitals and universities in India, Russia, and China have become more conscious of the purported anti-aging and health claims associated with the rare fulvic acids, and have been looking deeper into the assertions coming from traditional health practitioners of the region. The inhabitants and areas of the Himalayan belt that are mentioned in the many and growing number of scientific and medical studies documenting this research include: The Tibetans of the Tibet region of China, the Georgian Russians living in the Caucasus Mountains of Russia, the Hunzas of Pakistan and Afghanistan (Hindu Kush and Karakoram Mountains), the Sherpas in Nepal, the people of the Kashmir region, and the Indians living in the Kumaon, Himalayas, Vindhyas and Aravallis Mountains of India.

It is a well-known fact that a large number of individuals in the Himalayan belt live to well over 100 years of age, and often are reported to live to 120-140 years or more,

maintaining excellent health throughout their entire lives. People of the region that use fulvic acid preparations made from the rare humic substance not only report significant health benefits for themselves, but for their animals as well, and most people lack the degenerative diseases common to other cultures today.

Scientists researching these matters determined that the prized shilajit health preparation esteemed for centuries throughout the region was indeed organic humic matter of ancient plant origin, and they spent time tracking down and checking the authenticity of the very best supplies. Rather than simply studying the people and their livestock, which had already shown significant health benefits historically, the scientists undertook extensive clinical, medical, pharmacological, and laboratory studies to identify the active constituents and analyze their physiological functions.

In a scientific world that as a whole still knows very little about humic substances, these researchers went far beyond. They accurately identified and quantified the water soluble fulvic acid fractions. This in itself is an amazing feat considering that fulvic acids, for the most part, are virtually unknown to medical science and undetectable through standard testing procedures. These scientists proved that the water soluble fulvic fraction was the primary active constituent. They even recognized that the fulvic, along with its associated organic metal ions, was made up of numerous other and even more obscure active constituents. They identified and isolated extremely valuable functional groups within the fulvic acid spectrum that were also shown responsible for the protective, regenerative, and healing responses of cells. They did this for the most part independent from the rest of the scientific world.

What the researches discovered is fascinating. From one clinical study to the next, scientists were able to prove not only that many of the medicinal remedies and health benefits are completely justified by scientific fact and medical results, but they also identified mechanisms responsible. Their studies opened up an entirely new picture into the amazing functions and values of fulvic acids in relation to man and medicine.

After years of scientific research, other pharmacologists determined that not all fulvic acids are the same, and that they vary in quality from one source to the other. These pharmacologists came up with methods for determining and quantifying the medicinal value. They perfected their extraction processes. The pharmacologists performed extensive chemical analysis, metal ion analysis, microbiological analysis, pathogen analysis, and mycotoxin analysis. They went to great lengths to identify the presence of any harmful substances, which were proven absent at any toxic level. The pharmacologists used extremely advanced pharmaceutical techniques to standardize the natural extract, to the quality of the finest pharmaceutical preparations in the world today, while retaining all of the natural organic principles in an unadulterated "herbal" form.

The pharmacologists recognized that although the rare humic substance was rock-like and seemed inert or fossilized, it had all of the organic characteristics of the natural botanicals they had been working with for years. In other words, although it was ancient and looked like dead rock, it was in actuality a natural organic herbal substance, and they used extreme care in preserving the fulvic extracts so that they would retain their organic form.

Traditional medicine throughout the Himalayan belt lists the indigenous humic substance and resultant fulvic acids as a "rasayana" or rejuvenator, a class of drugs reputed to arrest the aging process and induce revitalization of attenuated physiological functions. The special endurance attributed to the Sherpas, including their ability to survive extremely cold conditions and high altitudes has also been linked to these substances during the medical studies.

Clinical studies in pharmacology have shown significant value in treatment of diabetes mellitus (attenuates the development and progression), stomach ulcers (anti-ulcerogenic and anti-stress activity), allergies and anti-allergic action (mast cell protection), hormonal control and regulation of immunity (immunomodulatory functions), and tumor and cell growth factors relating to activated white blood cells and immune system (splenocytes and peritoneal macrophages).

Traditional medicine of the region prescribes the local rare fulvic acid extract in genito-urinary diseases, diabetes, jaundice, gallstones, enlarged spleen, digestive disorders, epilepsy, nervous diseases, elephantiasis, chronic bronchitis, dementia, arthritis, and anemia. The humic extract has been shown to accelerate the process of rehabilitation of muscles, bones and nerves, and is used to treat many geriatric complaints including memory loss, and is believed to increase cerebral functions. It has also proven useful as an aphrodisiac, rejuvenator, alternative tonic, stimulant, internal antiseptic, diuretic, lithontriptic, and is used for treatment of respiratory problems, worms, piles, adiposity, renal and bladder stones, nervous diseases, amenorrhoea, dysmenorrhoea, menorrhagia, eczema, anorexia, and fracture of bones.

Historically, fulvic acids from the Himalayan region have been shown effective for treatment of cold stress, diabetes, tumors, skin diseases, rheumatic pain, kidney stones, heart ailments, leprosy, and many other ailments. Fulvic acids are also a panacea of oriental medicine, where they continue to be used extensively.

These discoveries are most significant, considering the fact that the various cultures of these remote Himalayan regions have used organic farming practices for centuries, which promote soil and crops already rich in natural humic/fulvic substances. Yet these people still find that additional fulvic acid supplementation and medication proves highly beneficial to their health, and alleviates disease problems when they arise. This shows that the ancient vegetation, which was the source for the rare fulvic acids, has exceptional properties that may even surpass those of vegetation found anywhere on Earth today.

The rare humic deposits of the region were exposed at the time of uplift of the Himalayas, and are normally found from about 5,000-15,000 feet of elevation. These humic deposits are exposed by landslides, excavation or road-cutting. It is important to note that similar high quality humic substances found in various other regions of the Earth show similar results. However, the fulvic acids from the shilajit humic have some most unusual characteristics.

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From notes by: D.B.A. Narayana, Ph.D., manager of research and development for Dabur Research foundation, and also member and past president of the Indian Pharmaceutical Association, and also is a member of the Research Advisory Council of CSIR.

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Application of fulvic acid and its derivatives in the fields of agriculture and medicine; First Edition: June 1993, China.

Stimulate, nourish, and repair thyroid function with nature's remedies while relieving deadly symptoms; fulvic acid offers hope

Natural therapies can prevent and treat thyroid disease, including hypothyroidsim (underactive thyroid), hyperthyroidism (overactive thyroid), Graves Disease and Wilson's Syndrome, which are the underlying causes of many serious illnesses.

A prime objective for anyone with a thyroid problem is to eliminate intake of all toxins, while removing toxic buildup within the body. Thyroid malfunction, both overactive and underactive, is generally due to autoimmune response by the body. This is where the body's immune system produces antibodies which attack the gland because the tissues seem foreign to the body. Normal hormone production is upset. Generally, the cause is due to buildup of dangerous toxins, chlorinated substances, viruses, pathogens, infections, pesticides, altered enzymes or hormones, etc., in the tissues of the thyroid gland. Such conditions can also cause lumps, tumors, and cancer.

Outpatient medical hospital studies on overactive thyroid had 90.9% cure rate within a six month period when patients were treated with a fulvic acid medication.

Yuan, Shenyuan; Tongren Hospital, Beijing; Fulvic Acid, 4 (1988)

Your first line of defense is to start supplementation with an appropriate high quality fulvic acid preparation. Fulvic acid is a natural water soluble substance of plant origin. It contains many healing phytochemicals and enzymes which readily disperse throughout the body, even to the interior of cells. Clinical medical school and hospital studies show that specially prepared fulvic acid extracts regulate abnormal thyroid hormone secretion as a result of their ability to regulate RNA and DNA (cyclic nucleotides) at the cellular level. Similar studies also show that fulvic acids act as immunomodulators, regulating immune system function.

Fulvic acids are one of the safest and most powerful antiviral substances known. Although they are not antibiotics in the technical sense of the word, as prescription drugs are, their antibiotic-like effect is comparable to the power of penicillin in equally small amounts. Unlike antibiotics, fulvic acids may be used indefinitely without creating any antibiotic resistant strains of disease which are common problems with pharmaceutical drugs.

Humic extracts, especially fulvic acids, provide a natural chelation therapy. They detoxify the body, the liver, and the digestive tract, by attaching to toxic buildup, including heavy metals, chlorination byproducts, etc., where they disarm, neutralize, and remove them as waste products. Fulvic acids also work as nature's most powerful antioxidants, neutralizing dangerous free radicals, as well as supplying hormone stimulating micronutrients.

Outpatient medical hospital studies on thyroid tumors, using fulvic acid, had a 90% success rate, with 80% having complete cures.

He, Shenyi, et al; Humic acid in Jiangxi Province, 1 (1982)

The underactive thyroid gland requires sufficient organic iodine to function properly. Organic means that it must come from a plant source, as part of a carbon molecule. High quality, safe, and readily available iodine is found in fulvic acid. Another safe and effective supplemental source of iodine comes from kelp. A dose even as high as 2,000 to 3,000 mg of kelp daily is safe and effective.

Avoid chlorine and fluoride like the plague, including fluoride found in toothpaste and added to drinking water. The phosphoric acid used in soft drinks can also contain fluorine, which is equally implicated. Chlorine, flourine, and fluoride are chemically related to iodine, and compete with it, blocking iodine receptors in the thyroid gland.

Thyroid hormone is made from tyrosine, an amino acid that the body readily converts from phenylalanine, an essential amino acid. The body breaks down proteins, turning them into these and many other amino acids. Poor quality protein intake or conversion problems during digestion and metabolism can limit tyrosine intake. This is especially true with people that have PKU (phenylketoneuria), a condition where their body cannot properly convert phenylalanine to tyrosine. Low blood plasma levels of tyrosine have been associated with low thyroid. Tyrosine is best taken on an empty stomach, with purified water or fruit juice. Adult daily dosage for thyroid supplementation is about 1,000 mg, taken independent of milk or other protein foods, preferably an hour before meals.

It is a well-known fact that an excess of one mineral can cause a deficiency in another. A high amount of copper in the body is common to reduced thyroid function. Too much copper can inhibit the function of zinc, which is essential to the thryroid conversion process along with manganese, iodine, iron, and selenium. Fulvic acids in the diet assist with maintaining proper balance. They chelate and remove excess copper (or other minerals or heavy metals), and help to nourish by supplying safe natural organic plant forms of minerals in the proper balance as nature intended.

Studies have shown that guggulsterone extracts from the Indian herb Commiphora mukul can increase the concentration of thyroid hormones in the blood. The herb is especially effective in increasing the ratio of the active T3 form of thyroid (triiodothyronine) to T4 (thyroxine). A corresponding and significant decrease in normal liver damage by free radicals was noticed, which is most interesting considering the fact that the liver is the principal site where T4 thyroid is stored and T3 thyroid is generated. Due to the natural increase in thyroid hormone function, and possibly other factors,

guggulsterones have been used to treat overweight patients. During those double-blind clinical studies, a significant fall in serum cholesterol was noticed. Thryroid hormone studies with forskolin extract of the Indian herb Commiphora mukul, have shown increased thyroid production.

Other studies on patients with low thyroid have shown that body DHEA levels are below normal. DHEA (Dehydroepiandrosterone), is a naturally occurring steroid secreted from the adrenal gland. Some researchers believe that supplementation with DHEA might assist in stimulating thyroid production and alleviating symptoms.

Another highly successful approach for underactive thyroid conditions, or hypothyroidism, is to supplement with a natural desiccated thyroid glandular. This is best obtained from a source other than pharmaceutical, because most thyroid replacement drug therapies are synthetic. The best natural glandulars come from livestock raised organically in New Zealand, where extremely careful control against animal diseases is maintained. Studies show that when used properly, these natural glandulars can help revive the body's thyroid function. With the use of natural glandulars, reduction, or even possible eventual elimination of the need for supplemental thyroid may be achieved.

Scientific and medical studies show that there is hope to naturally repair and restore proper thyroid function. When the body has been cleansed and has accumulated proper levels of nutrients, the thyroid has a chance to begin working again. In many cases, nutritional therapists have seen that thyroid function resumes after only a few months, evident as body temperature begins to rise. A careful and cautious nutritional approach, with low levels of natural thyroid glandular supplements and the nutrients and procedures outlined in this article will provide the best and safest treatment possible.

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The therapeutic effect of Fulvic acid on keratitis and hemorrhagic eye disease

Keratitis is characterized by inflammation of the cornea of the eye, while a hemorrhagic eye condition is characterized by profuse bleeding caused by hemorrhage or burst of the blood vessels of the eye.

Fulvic acid is an anti-inflammatory agent. It is also a blood coagulating and analgesic agent, capable of healing open wounds. From 1977 to 1981, Guofan Tang and his coworkers performed extensive studies in the area of ophthalmology and presented many reports with summaries. From March, 1981 to the end of July, 1982, they used fulvic acid in the treatment of 60 patients with eye diseases (total number of diseased eyes: 64). Control studies were conducted using other drugs on 30 randomly selected patients with similar eye problems.

Fulvic acid treatment group:

This group was treated with fulvic acid extracted from humic peat in the People's Hospital preparation room in the Shaoxing area. Chemical analysis of the fulvic acid showed that the molecular weight was lower than 500, which fulfills the standard set by the National Fulvic Acid Symposium. It showed a stronger affinity toward the elemental mineral Beryllium, and was free of any radioactive material. Two forms of reagents were available: an eye drop containing 0.5% fulvic acid in 10 ml bottles and an intramuscular injection reagent containing 0.5% fulvic acid solution in 2 ml ampoule. The latter was also able to be injected underneath the conjunctiva of the eye; or when mixed in 10% glucose solution, could be used as an intravenous injection. For outer eye illness such as keratitis, 0.5% fulvic acid was used as an eye drop 4 times a day or every 2 hours; or, additionally, intramuscular injection using 2 ml of 0.5% fulvic acid twice a day.

For patients suffering from hemorrhagic eyes, intramuscular injection was performed with 2 ml of 0.5% fulvic acid, twice a day.

Whenever either the eyedrops or the injection containing fulvic acid was used, the dilator Atropine was applied. However, antiseptics and blood coagulating agents should be avoided.

The control group:

Patients with various ailments were selected at random. Multiple medications were used in order to speed up the healing and to relieve patients from pain. Eye drops containing Chloromycetin and ointments containing Tetracycline were used along with antibiotic injections. Some patients were also treated with intravenous injections of Chloromycetin and Tetracycline. Viral infections were given Anti-herpes eyedrops, Vitamin C and K, and Novacain, among other treatments and injections. For the hemorrhagic control group's conditions, intramuscular and intravenous injections were given using the common drugs for this purpose.

Eyesight examinations:

Prior to the treatment, patients in the fulvic acid and the control group were examined for their eyesight. Their eyes were examined externally and the back of their eyes were observed. When the treatment was in progress, examinations were conducted daily or every other day. Then results were compared and analyzed. Eyesight examinations were taken into consideration in the final analysis.

Case studies:

The keratitis group treated with fulvic acid consisted of a total of 26 cases. Four of the hypo-keratitis cases were treated with end result being 50% effective. Eleven keratitis cases were caused by external injury and had a 90.9% success rate. Three keratitis cases were caused by viral infection and had a success rate of 100%. One keratitis case was caused by fungal infection and had a 100% success rate. Six cases were considered to be simple forms of keratitis with an end success rate of 83.33%. One case was caused by bacillus bacteria and treatment was 100% effective. The combined success rate for all fulvic acid treated keratitis cases was 84.61%.

The hemorrhagic eye group treated with fulvic acid consisted of a total of 34 patients. Twenty had blood accumulated in the anterior chamber of the eye, six were caused by previous surgery and fourteen from external injury. Treatment for that group was 85% successful. Another ten patients had blood accumulated in the lens of the eye, two were from vein retinitis, two were caused by previous surgery, four from external injury, one was related to diabetes, one was related to high blood pressure. Total effectiveness for the second group was 60%. In the final group, four patients had hemorrhaged retina of the eye, with two caused by vein retinitis, one related to diabetes, and one from central venous thrombosis. Success rate for the last group was 75%. Total overall effectiveness of the fulvic acid treated hemorrhagic group was 76.5%.

The control group consisted of 30 patients with similar ailments that were selected at random. They were treated with a variety of all the best known drug therapies and antibiotics. The control keratitis group was rated at 83.33% total effectiveness, and the hemorrhagic group at 91.7%.

Analysis and discussion:

The above treatment shows that fulvic acid is an anti-inflammatory agent, and able to significantly enhance healing of ulcerous wounds and coagulate blood. Based on the treatment results of the two groups, together with data taken from extensive charts, literature, and vision tests, the final analysis and discussion are presented below:

Extensively documented and detailed results show that the control group, in general, uses medications consisting of more than 3 leading drugs, sometimes for a combination of treatments, for example: caused by localized burns, penetrating the anterior chamber, and antiseptics injected below conjunctiva. The final overall results are in no way better in comparison with the solitary treatment with fulvic acid.

From complex statistical studies, the therapeutic effectiveness of both groups shows no significant difference. Thus the therapeutic effectiveness of fulvic acid is not inferior in comparison with a combination of anti-bacteria and antibiotic treatments.

The effectiveness of the control group using more than 2 or 3 medications for treating hemorrhaged eye diseases is in no way better than those treated with fulvic acid as the only drug.

For patients with various ulcerous cornea ailments, the number of treatment days is equally effective for both fulvic acid and the control groups.

Summary:

The effectiveness of fulvic acid as an anti-inflammatory agent and as a coagulant is nowhere less efficient compared with various anti-bacterial agents, antibiotics, or other blood coagulants. In addition, contrary to other anti-inflammatory drugs, fulvic acid does not have any side effects and in many cases is actually superior in effectiveness. Further advantages are availability and low cost of fulvic acid. Economically, fulvic acid has a uniqueness with these characteristics, and fulvic acid warrants further study and observation.

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