Parthenium

Stock# 265-5 (100 capsules)

Parthenium integrifolium, commonly known as "Missouri snakeroot“ or "wild quinine,“ grows wild in woodlands and prairies over much of North America. The vernacular (common) name of "wild quinine“ was ascribed to parthenium because of its historical use for treating fevers of a similar nature to malaria. Parthenium was also used by Native Americans to treat coughs, sore throats and, when applied topically, burns.[1-5]

Parthenium is closely related to echinacea and shares many of the same folk uses. Like echinacea, parthenium has traditionally been used to treat coughs, colds and other respiratory infections, as well as general debility and fatigue, gastrointestinal infections, kidney and urinary tract inflammation, and venereal diseases. Parthenium is believed to have often been substituted for echinacea in many commercial echinacea products, especially during the late 1800s and early 1900s. There are also speculations that some of the preliminary research conducted on echinacea's medicinal properties may actually have been conducted on parthenium instead, due to mistaken plant identity. For example, researchers originally reported that echinacea contained active substances known as sesquiterpene lactone esters; however, subsequent research have confirmed that these substances are derived from parthenium.[1,3,4,6-9]

Although parthenium has long been used for its purported ability to stimulate the immune system, scientific research has been lacking to confirm its effects. However, in recent years, a number of chemicals have been identified that are major components of *Parthenium integrifolium* extracts, including sesquiterpene lactones, sesquiterpene esters, flavonoids, pyromeconic acid, coumarins, and diverse phenolic glycosides. Plus, in 1988, German researchers published information concerning immunological activity tests conducted on parthenium's sesquiterpene esters. These substances were shown to enhance granulocyte phagocytosis—the process by which granulocytes (a type of white blood cell) fight infection—in vitro up to 30%.[1-4]

In addition, according to U.S. patent 6217877, *Parthenium integrifolium* has been recognized for its use to enhance the T_H2 pathway of the immune system, also referred to as humoral immunity—a form of immunity whereby certain white blood cells produce antibodies to foreign agents (antigens) and stimulate T-lymphocytes (another type of white blood cell) to attack them. The patent also recognizes the use of parthenium for enhancing levels of the anti-inflammatory cytokines (proteins) *interleukin-4* and *interleukin-10*, as well as for the selective suppression of cyclooxygenase-2 (COX-2)—an enzyme that stimulates the release of hormone-like compounds called prostaglandins, which cause inflammation and pain.[2]

Furthermore, parthenium is reported to be a good source of vitamin A and zinc, both of which are important nutrients for healthy immune system function.[1]

References:

[1]Pedersen, M. *Nutritional Herbology*. Warsaw, IN: Wendell W. Whitman Company, 1994.
[2]Weidner, M.S. U.S. Patent 6217877; April 17, 2001. *Patent Storm*, 2005. <http://www.patentstorm.us/patents/6217877.html>. Accessed April 2005.
[3]Stuart PhD, A.G. "Echinacea.“ *University of Texas at El Paso & University of Texas - Austin*. <http://www.herbalsafety.utep.edu/medical.asp?pk=7>. Accessed April 2005.
[4]Foster, S. & Duke, J.A. *A Field Guide to Medicinal Plants and Herbs of Eastern and Central North America*. Boston, MA: Houghton Mifflin, 1990.
[5]"Parthenium Integrifolium, Lin.“ *American Journal of Pharmacy*; 1881, 53. <http://www.ibiblio.org/herbmed/eclectic/journals/ajp1881/10-parthenium-inte.html>. Accessed April 2005.
[6]Cook MD, W. *The Physiomedical Dispensatory*; 1869. <http://www.ibiblio.org/herbmed/eclectic/cook/PARTHENIUM_INTEGRIFOLIUM.htm>. Accessed April 2005.
[7]Felter MD, H.W. & Lloyd PhrM, J.U. *King's American Dispensatory*; 1898. <http://www.ibiblio.org/herbmed/eclectic/kings/tanacetum-part.html#rel-sp>. Accessed April 2005.
[8]Welch MD, J.M. "The Medical Flora of Kansas or, the Medical Plants Indigenous in that State.“ *The National Eclectic Medical Association - Transactions 1882-1883*. <http://www.ibiblio.org/herbmed/eclectic/journals/net-1882-kansas.html#p>. Accessed April 2005.
[9]Foster, S. "Echinacea: The Purple Coneflowers.“ *American Botanical Council*, 1996. <http://www.herbalgram.org/default.asp?c=echinacea>. Accessed April 2005.