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Pueraria Mirifica

Pueraria Mirifica: Airy Shaw and Surat, also known as Khoa Kraue or Thai Kraue, is a plant which belongs to the Fabaceae (Leguminosae) family that grows in forested regions in northern Thailand. The root of this plant has been medicinally in Thailand for more than 700 years. Legend proclaims the anti-aging properties of P. mirifica: a palm leaf translated from Lana in 1931 discusses the use “Pueraria Tuberous Root” to “make the skin smooth like a six year old child and allow you to live 1,000 years and prevent suffering from parasites, while also enhancing memory.” (1)

Folklore goes on to say that the root is a “fountain of youth” for aged men and women. It helps to smooth wrinkled skin, supports healthy hair growth, improves eye health, sharpens the memory, increases energy and vigor, improves appetite and supports restful sleep. It’s no wonder that the Latin name of the plant, “MIRIFICA,” means miracle maker!

To ensure the most comprehensive profile of active constituents, it is important to gather plants that have been grown in the most favorable conditions. The location, age of plant (2-4 years), atmospheric conditions (no rain), drying process and storage conditions must be carefully monitored.

Pueraria mirifica belongs to the same family as soy, and contains similar estrogenic compounds, including the isoflavones genistein and daidzein. Modern scientific studies have described additional components unique to P. mirifica with a greater phytoestrogenic activity than those of soy, which include Miroestrol and Demyoestrol.

These natural agents function like estrogen in the body. Thus P. mirifica plays a valuable role in helping to maintain a healthy hormone balance in menopausal women, whose estrogen levels drop, and helping to mitigate mood changes, hot flashes, lower libido, sleep interruption and other health issues. Through a purportedly similar mechanism, P. mirifica has also proven valuable in protecting breast tissue. Additionally, the compounds present in P. mirifica possess a high level of antioxidant activity, probably due to their ability to increase the cell protective substance called superoxide dismutase (SOD). (2)

In Thailand, the Ministry of Public Health is similar to the National Institute of Health (NIH), in the United States. The Thailand Ministry of Public Health officially endorses the use of Pueraria mirifica due to the long history of safe use, along with modern scientific data that supports its safety and efficacy. (Safety studies show that the normal therapeutic dose provides a wide margin of safety (3)). The Brazilian Journal of Medical and Biological Research published a study in September 2009, entitled “The mutagenic and anti-mutagenic effects of the traditional phytoestrogen-rich herbs, Pueraria mirifica and Pueraria lobata.”

Their conclusion was, “The tests confirmed the non-mutagenic but reasonably anti-mutagenic activities of the two plant extracts, supporting their current use as safe dietary supplements and cosmetics.”

References:
3) M Ritchie, J MacCallum, The Effects of Pueraria mirifica extract called Puresterol®, United States Patent # 7,638,953 granted to Bio-Botanica®, describes a specific exclusive extraction process that yields high levels of active constituents that can be used for both internal and external applications. The patent also specifically describes the use of this extract as a topical composition that when applied to the skin reduces wrinkles without eye or skin irritation. The active constituents are being tested in numerous studies that are yielding exciting results and supporting its use for menopausal symptoms. Puresterol® was used in a recent research study, which showed that the phyto-estrogens in Puresterol® were able to inhibit the growth of breast cancer cells, in-vitro. The study, entitled, “The Effects of Pueraria mirifica on Estrogen-receptor expression by MCF-7 breast cancer cell,” was published in “The Proceedings of the Nutrition Society,” conducted at Edinburgh’s Napier University by Dr. Margaret Ritchie and Dr. Janis MacCallum (4). This research helps to validate the breast health supportive use of this herb, as well as its safety.

Another study, entitled, “Effects and safety of Pueraria mirifica on lipid profiles and biochemical markers of bone turnover rates in healthy postmenopausal women,” (5) found that “By the determination of the serum surrogate of bone turnover, it may be assumed that Pueraria mirifica has anti-resorptive activity.” This may prove to be a useful natural herbal therapy for a woman who would like to support bone health during menopause.

A study entitled, “Efficacy and safety of Pueraria mirifica (Khoa Kraue Khaor) for the treatment of vaso-motor symptoms in perimenopausal women” Phase II Study,” concluded, “Pueraria mirifica, containing phytoestrogens, relatively alleviated the climacteric symptoms in perimenopausal women. Pueraria mirifica demonstrates great promise in the treatment of climacteric symptoms among perimenopausal women.” (6) A study entitled, “Efficacy comparison of Pueraria mirifica (PM) against conjugated equine estrogen (CEE) with/without medroxyprogesterone acetate (MPS) in the treatment of climacteric symptoms in perimenopausal women: phase III study,” determined that “Pueraria mirifica containing phytoestrogens, has estrogenic effect as similar as CEE, and can alleviate the climacteric symptoms in perimenopausal women. PM demonstrates great promise in the treatment of climacteric symptoms.” (7)

Pueraria mirifica is an ancient herb with a long history of safe and effective use that is now entering the modern market with scientific inquiry supporting traditional use.

**References:***
1) Information from P. W. A Reputed Rejuvenator, J. Siam Society, Natural History Supp., 8, 337 (1931)
3) M Ritchie, J MacCallum, The Effects of Pueraria mirifica extract called Puresterol®, United States Patent # 7,638,953 granted to Bio-Botanica®, describes a specific exclusive extraction process that yields high levels of active constituents that can be used for both internal and external applications. The patent also specifically describes the use of this extract as a topical composition that when applied to the skin reduces wrinkles without eye or skin irritation. The active constituents are being tested in numerous studies that are yielding exciting results and supporting its use for menopausal symptoms. Puresterol® was used in a recent research study, which showed that the phyto-estrogens in Puresterol® were able to inhibit the growth of breast cancer cells, in-vitro. The study, entitled, “The Effects of Pueraria mirifica on Estrogen-receptor expression by MCF-7 breast cancer cell,” was published in “The Proceedings of the Nutrition Society,” conducted at Edinburgh’s Napier University by Dr. Margaret Ritchie and Dr. Janis MacCallum (4). This research helps to validate the breast health supportive use of this herb, as well as its safety.

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