## Medicago sativa L Information

*Medicago sativa* L. is a natural tonic plant species of alfalfa that is rich in proteins, vitamins, and minerals that are used to treat many diseases due to its organic pharmacological properties such as antiinflammatory and antioxidant activities. *Medicago sativa* possesses unique beneficial medicinal, nutritional, and physiological performance properties, that when properly distilled and extracted, serve as a safe and effective ingredient for a variety of uses that range from medicinal attributes, digestive aides, stimulants, and cognitive enhancers.

*Medicago sativa* is a member of the flowering plant family Fabaceae (also called *Leguminosae*). They are one of the largest plant families and include beans, peas, peanuts, lupines, alfalfa, clover, acacia, and many others. Alfalfa is a perennial flowering plant and in its peak growing season, the slender branching stems reach a height of 3 feet with tiny green leaves and small violet flowers. In early literature, the Greek physician, pharmacologist, and botanist Dioscorides wrote in circa 70 A.D. about the nutritional uses of alfalfa. Our common name for alfalfa is a derivation of the Arabic term meaning 'father of all foods,' due to its high concentration of proteins, flavonoids, minerals, and vitamins. Alfalfa is thought to have originated in South and Central Asia but now grows in many zones around the world. Its medicinal and dietary uses have been widely chronicled in Turkish writings around 1,300 B.C., in Persian ruins from more than 6,000 years ago, and used extensively in Chinese medicine.

Alfalfa reflects the harmony in nature via two symbiotic relationships. First, as a member of the legume family, alfalfa has a mutualistic relationship with Nitrogen-fixing bacteria, allowing it to convert atmospheric Nitrogen into a usable form. In return for this benefit, the microorganisms receive a habitat and a food source. Second, alfalfa has a mutually beneficial symbiotic relationship with bees. The bees receive a food source from the flowers of the alfalfa, while the pollination allows the cross-fertilization necessary for reproduction of the plants.

*Medicago sativa* alfalfa has been valued for centuries for its numerous health benefits. Its leaves are renowned for being nutrient-dense in vitamins, minerals, and antioxidants, boosting good cholesterol levels, and supporting general well-being. Also, it has been used in traditional medicine to fight fatigue, improve cognitive function, and foster physical endurance. Alfalfa contains Vitamins A, B1, B6, C, D, E, and K. Alfalfa also contains flavonoids, saponins, proteins, Calcium, carotene, Iron, Magnesium, Phosphorous, Potassium, and Zinc. The portfolio of products fielded by the CF Energy line all use *Medicago sativa* L. as their principal and sole unitary active ingredient that is uniquely harvested from specially selected and proprietary fields that yield the most desirable optimum levels of minerals and nutrients.