

Hawthorn

Latin Name: *Crataegus laevigata*

Also known as: Hawthorne, English Hawthorn, Mayflower, May Bush, Mayblossom, Quickset, Whitethorn

Scientific Classification

Species in the *Crataegus* genus readily hybridize (mutate, crossbreed). Species identification is difficult even for experts. If the berry contains two or fewer seeds, it is probably a wild-form hawthorn. If it contains more than two seeds, it is more likely a cultivated strain.

Several wild-form species are considered to have medicinal qualities, notably: the English Hawthorn (*C. laevigata*, also known as *C. oxyacantha* in earlier literature) and the One-Seed Hawthorn (*C. monogyna*), most widely used in the West; and in China, *C. pinnatifida* (Shen-Za) is used.

- Family:* Rosaceae – rose family
Genus: *Crataegus* – hawthorn
Species: *C. laevigata* – smooth hawthorn
Species: *C. oxyacantha* – in earlier classifications, was often confused with *C. laevigata*. They are currently used interchangeably.

Influence on the Body	(PRINCIPAL ACTIONS are listed in CAPITAL LETTERS)
<i>Blood and Circulatory System</i>	HEART TONIC • HEART WEAKNESS • CARDIAC SYMPTOMS • ANGINA PECTORIS (chest pain) • ARRHYTHMIAS (irregular heartbeats) • IRREGULAR HEARTBEAT • heart fibrillation • HEART PALPATIONS • ENLARGED HEART • hypertrophy (enlargement of the heart muscle due to increased workload) • weak or inflamed HEART MUSCLE • CONGESTIVE HEART FAILURE (CHF) • DROPSY (edema due to heart insufficiency) • EDEMA • astringent (increases the tone and firmness of tissues) • HEART DISEASE • HEART VALVES • CIRCULATION • blood clots • ARTERIOSCLEROSIS • HARDENING OF THE ARTERIES • HYPERTENSION • HIGH BLOOD PRESSURE • LOW BLOOD PRESSURE
<i>Blood Sugar</i>	hypoglycemia
<i>Body System</i>	vibrancy • endurance • energy • stress • sleeplessness • restlessness • insomnia • sedative

<i>Digestive Tract</i>	stomach
<i>Endocrine System</i>	adrenal weakness
<i>Infections and Immune System</i>	sore throat
<i>Inflammation</i>	arthritis • rheumatism
<i>Liver</i>	liver
<i>Nervous System</i>	nerves • anti-spasmodic
<i>Reproductive System</i>	<i>Female:</i> • menopause • emmenagogue (promotes menstrual flow)
<i>Urinary Tract</i>	nephritis (inflammation of the kidneys) • diuretic (increases urine flow)

Key Properties:

• **CARDIAC TONIC** – helps prevent hardening of the arteries, increases circulation in the extremities, relaxes and opens blood vessels, improves blood flow to the heart, rejuvenates the heart, strengthens and tones the heart muscle

Primarily affecting: HEART • CIRCULATION • nerves

History	<p>The Latin name, 'Crataegus' is derived from the Greek word 'kratus', for strength, probably referring to the hardness of the wood.</p> <p>The Greek physician Dioscorides (ca. 40-90) mentioned beneficial actions of hawthorn on the heart in his writings. Roman physicians used it as a heart drug in the 1st century AD, but most of the literature from that period focused on its symbolic use for religious rites and political ceremonies.</p> <p>A Chinese herbal dating 659 AD mentions hawthorn which has been used in China for centuries to treat high blood pressure, arteriosclerosis and heart pain.</p> <p>The hawthorn tree has been regarded as sacred by Christians. Tradition holds that the crown of thorns placed on the head of Christ was from the hawthorn tree. A grove of hawthorn trees still stands outside of Jerusalem on the Mount of Olives.</p>
----------------	--

The spiny tree was used as a living, thorny, hedge fence in much of Europe. Besides protecting estates from trespassers, hawthorn was used medicinally as a cure for scurvy (a Vitamin C deficiency disease) and for various stomach ailments.

During the Middle Ages, hawthorn was used for the treatment of dropsy (now considered to be congestive heart failure) and other heart ailments. It was also used to treat a sore throat. Branches were hung over doorways to keep away evil spirits.

Native Americans used hawthorn to treat stomachache, diarrhea, dysentery (bowel inflammation), female diseases and cramps, as a diuretic for kidney and bladder ailments, and a cardiac strengthener to improve circulation. The Kwakiutl chewed hawthorn leaves and used them as a poultice for wounds and sores.

Native American groups ate the fruit as food and used the thorns to pierce and drain boils, and to probe ulcers and wounds. Thorns were also inserted like acupuncture needles into joints with arthritic pain and sometimes burned as a form of moxibustion. Inserted thorns were ignited and allowed to burn down near to the skin.

By the early 1800's, American doctors recognized the herb's medicinal properties and began using it to treat circulatory disorders and respiratory illnesses. Hawthorn soon became a common therapy to strengthen the heart. Hawthorn was considered a cardi tonic and used to treat irregular heartbeat, high blood pressure, chest pain, hardening of the arteries, and heart failure.

Attributes

Key Components: (including, but not limited to)

Nutrients

Vitamins B1 (thiamine) • B2 (riboflavin) • B3 (niacin) • B5 (pantothenic acid) • B6 (pyridoxine) • B9 (folic acid) • B12 (cobalamin) • Biotin • Choline • Inositol • PABA (Para-Amino Benzoic Acid) • C • Iron • Phosphorous • Sodium • Zinc • other Trace Minerals

Flavonoids • Oligomeric Procyanidins (OPC's) • Pectin

Flavonoids help dilate blood vessels, improve blood flow, and protect the blood vessels from damage. Both flavonoids and OPC's have potent antioxidant effects.

Heart | The berries, flowers, bark, and leaves are all restorative to the heart. Hawthorn preparations lower blood pressure, clear blood vessels, and are anti-spasmodic. Hawthorn works best when used on a regular basis; it may take four to eight weeks to reach a therapeutic effect. This regimen is used to prevent and treat coronary heart disease. Hawthorn is also used for long-term recovery from heart attacks and coronary surgeries.

Hawthorn is used effectively as a cardiac tonic and is valuable for the improvement of cardiac weakness, sighing respiration, nerve depression, or unexplained chronic fatigue. There is evidence that it improves heart action in cases of mitral regurgitation (a heart valve defect).

Hawthorn helps prevent hardening of the arteries, inflammation of the heart muscle, arteriosclerosis, and it is useful in cholesterol reduction.

Hawthorn flower and leaf extracts improve circulation to the extremities by reducing resistance in the arteries (in general, the less elastic the arteries, the greater the arterial resistance).

Hawthorn preparations relax blood vessels, dilate coronary arteries, and permit a freer flow of blood and oxygen to the heart muscle. Active ingredients in the herb inhibit the release of angiotensin (a substance which activates an enzyme known to cause high blood pressure). The herb regulates both high and low blood pressure and promotes a general sense of well-being.

Hawthorn extract was recently used effectively in a study for hypertension in patients with Type 2 diabetes. Patients took 1,200 mg of hawthorn extract daily or a placebo for 16 weeks. Those taking hawthorn had lower blood pressure than those taking the placebo.

Hawthorn is excellent for feeble heart action, valvular insufficiency and irregular pulse. It is a cardiac tonic with antispasmodic properties that eases angina pectoris. Hawthorn has several antioxidant constituents and is especially good for weakened heart muscle caused by age degeneration.

Individuals who received a hawthorn preparation in one study, experienced improved blood flow to the heart. They

were able to exercise for longer periods of time without suffering chest pain. Hawthorn increases myocardial (heart muscle) enzyme metabolism and improves oxygen utilization by the heart. It is used to reduce a sensation of pressure or anxiety in the heart area and difficulty in breathing due to ineffective heart action. Hawthorn alleviates hypertrophy and fibrillation of the heart.

Numerous studies have shown that hawthorn berry extract improves blood flow to and from the heart by strengthening its muscle contractions. The heartbeat becomes more regular and each contraction is more efficient, pumping more blood throughout the body, with less effort.

Hawthorn is safer to use than the well-known heart herb 'foxglove', from which the drugs Digoxin, Digitoxin and Digitalis are derived. In addition to improving the heart's pumping ability, foxglove and its derivatives make the heart more irritable and liable to dangerous irregularities of rhythm.

In contrast, hawthorn both strengthens the heart and stabilizes it against arrhythmias by lengthening what is called the refractory period (the short period following a heartbeat during which the heart rests). Many irregular heart rhythms begin with an early beat. Hawthorn protects against such potentially dangerous breaks in the heart's even rhythm.

Hawthorn is widely regarded in modern Europe as a safe and effective treatment for the early stages of congestive heart failure (CHF), a long-term heart condition with persistent symptoms including rapid or irregular heartbeat, shortness of breath with exertion, reduced ability to exercise, and edema in legs, ankles and feet. The cumulative results of several studies on hawthorn performed between 1981-1994 suggest that hawthorn is an effective treatment for congestive heart failure.

One study found that hawthorn extract (900 mg/day) taken for 2 months was as effective as low doses of Captopril (a leading heart medication) in alleviating symptoms of heart failure.

A large study of 952 patients with heart failure (a condition in which the heart is unable to pump adequate amounts of blood to other organs in the body) observed differences in the use of conventional medications alone, patients using only hawthorn, and those using hawthorn in addition to

	<p>conventional heart drugs. After two years, the clinical symptoms of heart failure (palpitations, breathing problems, and fatigue) decreased significantly in the groups taking hawthorn. It was also noted that patients taking both hawthorn and traditional medications were able to take fewer conventional drugs for their condition.</p>
<i>Other Uses</i>	<p>Hawthorn tea helps relieve nervous conditions, restlessness and insomnia. A decoction of the berries is used for sore throats and acid conditions of the blood. Hawthorn also produces a natural adrenalin-like effect that gives an extra boost during stressful situations.</p>
Herb Parts Used	<p>In the spring, leaves and flowers harvested in the early flowering stage are used fresh or dried. Berries harvested when mature, after the first frost, are used fresh or dried.</p>
Preparations and Remedies	<p>Fresh berries are delicious and may be used in season to fortify the heart (probably the mildest way to take the herb).</p>
<i>Dried Berries</i>	<p>Reconstitute whole dried berries in large quantities with pure water, blend, and strain. Consume two or three bowls of the thick sweet mucilage daily as a heart and circulatory tonic in all cases of heart disease.</p> <p>Dried berries may be powdered (including the seed) and used in heart preparations and formulas.</p>
<i>Tinctures</i>	<p>It is difficult to maintain a liquid tincture of fresh hawthorn berries because of its high pectin content. The smashed berries clump together, and the finished tincture is prone to crystallization.</p>
<i>Infusions</i>	<p>Infusions are made with dried leaf and flower, or dried berries.</p> <p><i>Tea:</i> Steep one teaspoon herb in a cup of hot water for ten to fifteen minutes.</p> <p><i>Yarrow and Calendula Tea (alternative Hawthorn):</i> (see YARROW preparations)</p>
<i>Decoction</i>	<p><i>Decoction:</i> Simmer dried berries in water on low heat for 5-15 minutes.</p>
<i>Syrup</i>	<p><i>Hawthorn Syrup:</i> Combine one part (by volume) strong decoction of dried berries and two parts (by volume) raw honey. Combine and</p>

	<p>heat gently (stirring constantly), until ingredients mix thoroughly. Remove from heat and pour into sterilized canning jars. Cap tightly with sterilized lids. Label and store in a cool, dry place, out of the light. Keep opened containers refrigerated. Syrup made in this manner has an expected shelf life of one year. Discard syrup if mold appears on the surface.</p> <p>This syrup carries the active constituents of the herb. It is fully preserved but is subject to crystallization. If this occurs, re-liquify the syrup by setting the jar in a pan of hot (not boiling) water.</p>
<p>Safety</p>	<p>No health hazards or adverse side effects are known with the proper use of hawthorn. Eye scratches from its thorns can seriously impair eyesight.</p>
<p>Plant Profile</p> <p><i>Description</i></p>	<p><i>Natural Habitat:</i> The plant is indigenous to northern temperate zones of Europe, Asia, and North America. It grows in open woodlands and pastures in sun to partial shade.</p> <p>Hawthorn is a thorny shrub or small tree that grows up to five feet tall on hillsides and in sunny wooded areas throughout the world. It has small, beautiful white, red, or pink rose-like flowers (usually with five petals) that grow in clusters in the spring, followed by berries (also called haws) in the fall. The fruit is usually red (sometimes black) when ripe, containing one to five hard seeds. The flowers have an unpleasant smell (likened to the odor of decaying fish) and a slightly bitter taste. The fruit is dry and mealy with a sour taste.</p> <p>Hawthorn leaves are shiny and grow in a variety of lobed edges, wedge-shapes, and sizes, depending on the species. Branches and trunk are studded with sharp-tipped thorns, typically a half to an inch long (although up to four and a half inches in one species), giving haw (fruit) + thorn its common name. The name may also be a corruption of the Anglo-Saxon or German names for 'hedge thorn'.</p>