HAWTHORN

**Crataegus laevigata**
[krah-TEE-gus lee-vih-GAY-tuh]
(previously *C. oxyacantha* and *C. oxyacanthoides*) Also used *C. monogyna* and *C. pinnatifida* in TCM

**Family:** Rosaceae

**Common Names:** English hawthorn, May bush, May tree, Haw, Tree of Chastity, Huath, quickset, thorn-apple tree, whitethorn; Cockspur; Cockspur thorn; Washington thorn; red haw; summer haw; sanzashi (Japanese); sanza (Korean); shan zha or shan zha ròu (Chinese)

**Pharmaceutical Names:** Fruits: Fructus Crataegi, Flowers: Flores Crataegi

**Description:** Dense tree or shrub with small, sharp thorns. Height up to 25 feet. Flowers: small, white with 5 rose-like petals in clusters of 5-12 in the spring. Leaves are flat, small, lobed, maple-like: 2 inches long. Fruit: bright red, round berries, 1/3 inch in diameter, with one large seed. Native to Europe with related species in North Africa and Western Asia. There are many related species which contain at least some active flavonoids.

**Cultivation:** A perennial to zone 4. Germination may take 2-3 years and require scarification with acid. Stratify about 90 days. Mostly germinated by birds. Prefers average, alkaline garden soil but tolerates most soil conditions. Good sun or partial shade in forested areas although shady conditions produce fewer flowers and fruit. Propagation from most species is by self-seed. Cuttings don't always take but can be grafted. Transplant seedlings although the long tap root makes transplanting tricky. The berries, or haws, ripen in early autumn and remain on the trees until winter. Gather the leaves when young, throughout the spring, choosing a dry day. Lay the leaves out in a single layer on trays in a hot cupboard. After about three days the leaves should be dry and crisp. Berries gathered in the fall when ripe. Discolored fruits are not collected.

** Constituents:** Flavonoids (rutin, quercitin), triterpenoids; saponins, oligomeric procyanidin, polyphenols; coumarins; tannins. Flowers: flavonoids, amines (trimethylamine). Berries: vitamins C, B₁, B₂, B₃, B₅, B₆, B₉, and B₁₂,
choline, inositol, PABA, flavonoids and sugar, bioflavonoids. All parts contain the flavonoid pigments hyperoside and vitexinrhamnoside, leucoanthocyanidins and the lactone crataeguslactone.

**Key Actions:** cardiotonic; dilates blood vessels; relaxant; antioxidant

**Meridians/Organs affected:** spleen, stomach, liver

**Energetics:** sour, sweet, slightly warm

**History:** A noted tree throughout the ages. For the Greeks it was a symbol of hope and the flowering branches decorated weddings. In England it provided branches for the maypole. Hawthorn flowers are reputed to have magical properties, and are believed to bring about a death in the family if they are taken into the home. This may have something to do with the trimethlamine present in the flowers - this substance is one of the first products formed when body tissue starts to decay. The **Mayflower** was named after the tree to symbolize the hope of the pilgrims in their voyage to America. **Haw** is an old English word for "hedge," so the tree's name means "thorny hedge." Its Latin name, **Crataegus**, means "hardness" referring to the quality of the wood. Reputed to have provided Christ's crown of thorns. The legend of the Glastonbury Thorn, a miraculous tree that was said to have leaves and flowers in the spring and again on Christmas Day, arose from the belief that Joseph of Arimathea stuck his hawthorn staff into the hill and it at once put forth leaves and blossom. It is said that when Richard III was slain in battle, Richard’s battle crown was found by a hawthorn bush and placed on Henry VII’s head, and thereafter the hawthorn became one of Henry’s badges. In England the tree is also synonymous with the month when its flowers begin to bloom. In France, hawthorn has a religious connotation: Norman peasants for years put sprigs of the tree in their caps to reflect the belief that Christ’s crown of thorns was made of hawthorn.

During the First World War, the young leaves were used as a substitute for tea and tobacco, and the seeds were ground in place of coffee. The Hawthorn is the badge of the Ogilvie clan.

**Medicinal:** Hawthorn was traditionally used in Europe for kidney and bladder stones and as a diuretic. Its current use for circulatory and cardiac problems stems from an Irish physician who started using it successfully on his patients for such conditions toward the end of the 19th century. It is used today to treat angina and coronary artery disease. Hawthorn normalizes the heart and circulation, lowering or raising blood pressure according to need. It is found in most herbal preparations for heart weakness, irregular heart beat, hardening of the arteries, artery spasms, and angina. In studies the hearts of those patients taking hawthorn required less oxygen when under stress as compared to standard treatments. And in another study it normalized heart action and efficiency and seemed to strengthen contractions in almost all the patients with primary heart disease and even some with more severe secondary heart disease. It also improved heart problems caused by hepatitis or other liver disease. In vitro increases in coronary circulation ranging from 20% to 140% have been observed following the administration of a dose equal to about 1 mg of the dry extract.

Hawthorn lowers blood pressure by dilating surface blood vessels, as opposed to directly acting on the heart as does digitalis. This also means it takes longer to work but there is also no cumulative effect on the heart tissue. It does make the body more sensitive to digitalis, so the prescribed dose of digitalis may eventually be cut in half. Hawthorn also helps keep the heart beating properly and decreases peripheral vascular resistance. Originally only the berries were used, but higher concentrations of active flavonoids have been discovered in the flowers and leaves when hawthorn is in full bloom. One study found spring shoots to be the most active. The flavonoids dilate coronary and external arteries while procyanidines, which are most prevalent in the leaves around
August, apparently slow the heart beat and are antibiotic.

Combined with ginkgo, hawthorn is used to enhance poor memory by improving the circulation of blood to the head which increases the amount of oxygen to the brain.

At one time unripe berries were used for diarrhea and hawthorn-flower tea as a safe diuretic. A decoction of the ripe berries is also used for sore throats, skin diseases, diarrhea and abdominal distention. The berries also strengthen the appetite and digestion.

Applications: Tincture of flowering tops or berries; Decoction of flowering tops. Tablets containing powdered flowering tops; Infusion made from the flowers or leaves helps to restore blood pressure levels to normal. Dosage: German physicians prescribe 1 teaspoon of hawthorn tincture upon waking and before bed for periods of up to several weeks. To mask its bitter taste, mix it with sugar, honey, or lemon or mix it into an herbal beverage blend. Decoction: use 30g berries to 500 ml water and decoct for 15 minutes only. Take for diarrhea or with ju hua and gou qi zi for hypertension. Use juice from the fresh berries as a cardiac tonic; also for diarrhea, poor digestion, or as a general digestive tonic.

VARICOSE VEIN/HEMORRHOID TEA
1/2 oz each hawthorn berries and flowers, ginkgo leaves and butcher's broom; hot water (enough to cover herbs). Combine herbs. Cover with hot water and steep for 5 minutes. Strain and drink. The same herbs can also be used to make a tincture.

HIGH BLOOD PRESSURE TEA
1 quart boiling water; 1 tsp each hawthorn berries and flowers, ginger rhizome, valerian root and motherwort leaves. Pour boiling water over the herbs and steep for 20 minutes. Strain herbs. Drink at least 2 cups a day. You can also make these herbs into a tincture using the same proportions.

HOMEOPATHIC USES: Use hawthorn as a heart tonic for irregular heartbeat, myocarditis, insomnia, edema, arteriosclerosis and juvenile diabetes.

TCM: The fruit of _C. pinnatifida_ used. Reduces and guides out food stagnation: for accumulation due to meat or greasy foods with accompanying symptoms of abdominal distention, pain, or diarrhea. Transforms blood stasis and dissipates clumps: for post partum abdominal pain and clumps due to blood stasis. Also for hernial disorders. Stops diarrhea: the partially charred herb is used for the diarrhea of chronic dysentery-like disorders. Also used recently for hypertension, coronary artery disease and elevated serum cholesterol. Dosage: 9-15g. Use raw for blood stasis, and dry-fried for food stagnation. When used alone the dosage may be as high as 30g.

Toxicity: In man low doses of hawthorn are usually devoid of adverse effects. Higher doses have the potential to induce hypotension and sedation. The health professional and user must be aware of the potential of hawthorn to affect cardiac rate and blood pressure.

Ritual uses: Gender: Hot; Planet: Mars; Element: Fire; Associated Deity: Cardea; Parts Used: leaves, wood; Basic Power: protection. Make a lightning charm of the wood. Tie up leaves in protection sachets. Carry to ensure good fishing. Birthday flower for February 10

Language of Flowers: hope

Other Uses: The thorns can be used as a can opener on a camping trip

Culinary: Berries are eaten both raw and cooked and can be turned into jams, jelly, wine and liqueur. Quality varies, but all varieties taste a little like mealy apples. Some are good raw, but others are better cooked, with the seeds strained out, like applesauce. They contain pectin, so the fruit sauce is self-thickening. Early in the spring, you can gather hawthorn leafbuds before they unfurl. They're good cooked 10-20 minutes, tasting a little lima
beads and can be added to chili and soups. Add the flowers to salads or use them to make wine.

**Recipes:**

**Haw Wine**
4 lbs hawthorn berries  
5 quarts boiling water  
juice and thinly peeled rind of 1 lemon  
juice and thinly peeled rind of 2 oranges  
5 cups sugar, brown or white  
1 pint cold water  
1 packet general-purpose yeast

Put the berries in a large bowl and pour the boiling water over them. Let them stand, covered with a cloth, for a week. Stir daily. Then put the lemon and orange rinds and juices in a bucket and strain the berries over them. Make a sugar syrup by putting the sugar and cold water into a saucepan and heating until the sugar is completely dissolved. Stir thoroughly, then cool for 5 minutes. Add to the bucket. Activate the yeast, add it to the bucket, cover with a cloth, and leave for 24 hours. Then transfer the mixture to a fermentation jar and ferment to finish. (Wild Food)

**Hawthorn Blossom Wine**
4 pints hawthorn blossom  
3 lb sugar  
2 lemons  
7 pints water  
grape tannin  
yeast and nutrient

Grate the thinly peeled rind of both lemons and extract the juice from one of them. Add both rind and juice to the sugar and water and boil the mixture for 30 minutes, stirring occasionally. Allow to cool to room temperature before adding the tannin, yeast and nutrient. Leave for a day before adding the flowers; cover and leave for a further week in a warm place, stirring daily. Strain through a fine nylon sieve into a fermenting jar and fit an air-lock. Rack when the wine clears and it should be ready for bottling 3-4 months later. (Nature’s Wild Harvest)

**Hawthorn Leaf Tea**
Measure equal quantities of dried hawthorn leaves and Indian or China tea into the pot and allow to infuse for a few minutes as usual.

**Hawthorn Berry Chutney**
2 lbs haws  
1 pint cider vinegar  
1 tsp salt  
1 cup mixed dried fruit or seedless raisins  
1 1/2 cups sugar  
1 tsp ground ginger  
1 tsp ground nutmeg  
1/4 tsp ground cloves  
1/4 tsp ground allspice  
freshly milled black pepper

Snip the berries from their stalks and wash them thoroughly. Put the berries in a large saucepan with the vinegar and salt, bring to the boil, cover and simmer steadily for 1 hour. Rub the contents of the pan through a sieve into a clean saucepan. You should have about 1 pint pulp. Add the rest of the ingredients, using a good grinding of black pepper, and bring to the boil, stirring all the time. Then cook in the uncovered pan for 15-20 minutes until the mixture is fairly thick. Pour into warm dry jars and cover with circles of waxed paper while hot, seal with cellophane covers when cold. (All Good Things Around Us)

**Bud and Bacon Pudding**
For the pastry:
8 oz self-raising flour  
1 tsp salt  
4 oz shredded beef suet  
water to mix

For the filling:
2 oz young hawthorn buds  
3 rashers streaky bacon

Sift the flour and salt into a bowl. Mix suet with some of the flour and chop until fine, then add rest of the flour and mix thoroughly. Add 6-7 Tbsp of water and mix to a soft dough. Knead lightly until smooth, then roll out thinly on a floured board into an oblong shape. Cover with the buds, pressing them lightly in. Cut the de-rinded bacon rashers up very finely and
spread over the buds. Damp the crust edges with water and roll up as for jam roly-poly. Wrap in greaseproof paper and steam for 1-1½ hours until cooked. Serve with a rich brown gravy. (Food from the Countryside)

**Hawthorn Butter**
4 lbs haws (to yield 3 cups of pulp)  
1 quart water  
7 cups sugar  

**Haw Curd**
1 lb haws  
1 lb cooking apples  
3 Tbsp fresh grapefruit juice plus the grated rind of one grapefruit  
½ pint water  
8 oz sugar  
4 oz butter  
2 eggs  
Have ready some small jars, washed in boiling water and placed in a low oven to dry. Cook the haws in the water with the apples, grapefruit juice and rind until soft and pulpy (the apples should be cut up, but there is no need to peel or core them). Press through a sieve and return to a clean pan. Put back on a low heat, add the sugar and butter and stir until dissolved. Beat the eggs lightly and gradually add to the pan, stirring all the time and being careful the mixture does not boil. When incorporated and the mixture has thickened, ladle into the heated jars, cover and label. Should be eaten within two or three weeks unless stored in a refrigerator where it will keep a little longer. (Food from the Countryside)

**Hawthorn Salad**
1 lb cooked potatoes  
3 Tbsp mayonnaise  
salt and pepper  
3 Tbsp hawthorn buds  
Dice the potatoes while still warm and mix with the mayonnaise. Season to taste, and when cool add the hawthorn buds. Fold in well and chill before serving. (Food from the Countryside)

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