

WHAT DOCTORS DON'T TELL YOU



Natural treatments
for Lyme disease

4 hero herbs to heal
the worst symptoms

Sail through your
menopause naturally

11 top remedies that
can ease the change

PLUS Low hormones could be behind your burnout

- Depression: The 4-step drug regime just doesn't work
- 5 cancer prevention tips to live by
- Address these 6 human hungers to lose weight
- The best herbal tinctures, probiotics and light therapy lamp brands



A good drug turned bad

Natural alternatives to
antibiotic dangers



ONCE BITTEN

Lyme disease can be a puzzling condition, even for experts. But medical herbalist Julia Behrens has been using plants to treat it, with powerful results. Here are four of her top healing herbs for Lyme and how to use them effectively

For over 20 years, it's been my privilege to work with doctors and hundreds of clients who have found herbal medicine is an effective way to treat Lyme disease.

Herbal practitioners use diagnostic methods similar to those in conventional medicine, but they treat patients with remedies made from whole plants. In contrast, conventional doctors typically use isolated plant compounds, aka synthetic drugs.

An herbal practitioner also treats the whole person rather than just the symptoms, based on the philosophy that the suppression of symptoms alone does not lead to complete health because it doesn't address the underlying problem.

As each person is so different, no one prescription fits all. When formulating a prescription, herbalists take the whole person into account and alter their prescription as the symptoms change.

When it comes to Lyme disease, herbal medicine can be used in a wide range of ways: to reduce inflammation, manage co-infections, regulate hormones, detoxify and replace nutrients depleted in the body.

Herbal medicine can also help protect the body by enhancing the immune system's function, reducing the side effects of medications, alleviating symptoms resulting from ill health and helping to relieve stress.

The power of plants

A study published in 2020 looked at 12 herbs used to treat Lyme disease by testing them in the lab against *Borrelia burgdorferi*, the bacterium that usually causes it. The study listed the following seven plants as the most effective:

1. Ghanaian quinine (*Cryptolepis sanguinolenta*)
2. Black walnut (*Juglans nigra*)
3. Japanese knotweed (*Fallopia japonica* / *Polygonum cuspidatum* / *Reynoutria japonica*, Hu Zhang)
4. Cat's claw (*Uncaria tomentosa*)
5. Sweet wormwood (*Artemisia annua*)
6. Mediterranean rock rose (*Cistus creticus*)
7. Chinese skullcap (*Scutellaria baicalensis*)

It provides the first convincing evidence that these herbs "have potent activity against Lyme disease bacteria, especially the dormant persister forms, which are not killed by the current Lyme antibiotics."¹

I first came across these plants in 2005 in Stephen Buhner's book *Healing Lyme*. Since 2009, I've been using many of the plants mentioned in his protocol in my practice, with amazing results.

Here's a closer look at four of them—which I use on a regular basis (in combination with many others) when treating clients with Lyme disease.

Black walnut

Juglans nigra

Traditional use

You may be familiar with this large tree—one of its primary uses has been for wooden cabinets and furniture. Native Americans used walnut husks as a treatment for parasites and bacterial infections such as diphtheria and syphilis, as well as for deterring mosquitoes.

Use in Lyme disease

Black walnut is being used in Lyme therapy for its antispirochete (see box, page 43) and antiparasitic effect. There is evidence that it's effective against biofilms, the slimy structures that bacterial communities build to protect themselves, which many immune system cells and drugs can't penetrate.¹ It also works against other co-infections, including viruses.²

Its immune-modulatory effect combined with its broad anti-inflammatory properties may relieve symptoms for some people suffering from long-term Lyme disease.

Black walnut's laxative effect means it's often used in a cleanse to expel intestinal parasites.

People with Lyme disease have often had a history of antibiotic use and are susceptible to yeast overgrowth. The antifungal properties of black walnut can help reduce fungal overgrowth as a side effect of taking antibiotics.³

Black walnut also aids digestion. It protects the liver⁴ and contains fats that improve bile flow.⁵ It's high in vitamin B5, vitamin B6, vitamin B9 (folate) and omega-3 fatty acids.

How to use

Tincture: 1:3 strength (45 percent alcohol), 10–60 drops three times a day or 500 mg three times a day for 30 days. Take two hours before or after medication or supplements.

Caution/contraindications

Black walnut can have a laxative effect. Long-term doses have a purging effect, so the herb is usually suitable for only short-term use. Avoid if you're allergic to nuts or pregnant.





Ghanaian quinine

Cryptolepis sanguinolenta

Traditional use

This plant was used in central and western Africa to manage various forms of malaria, fevers, jaundice, hepatitis, digestive disorders and bacterial infections. In addition, it was used to relieve stomach complaints, amoebic dysentery (a gastrointestinal illness caused by a parasite infection) and diarrhea. In Ghana, it's grown specifically to support people who suffer from malaria.

Use in Lyme disease

Ghanaian quinine demonstrates a wide range of antimicrobial activity, making it a popular herb in the Americas against *Borrelia* and opportunist infections associated with Lyme disease, such as *Babesia*, viruses and fungi. It's often compared to the antibiotic cefuroxime.

Preclinical test tube studies have shown a seven-day treatment with 1 percent Ghanaian quinine could eradicate *B. burgdorferi*.¹¹

Ghanaian quinine has been used to treat a number of inflammatory conditions, including arthritis. It can help with many aspects of Lyme disease: fever, respiratory or stomach complaints, malaria-type symptoms, and inflammation of the brain and joints like in arthritis and rheumatism.

The bark of the root or root extracts shows greater antimicrobial and anti-inflammatory properties than the leaf, which is used as an antifungal agent.

Ghanaian quinine was one of the first antimalarial drugs. Malaria and Lyme disease are both caused by spirochetes. Some symptoms of malaria, such as fevers, chills, aches and pains, are very similar to those of Lyme disease, so it's not surprising the two diseases have similar treatments.

Ghanaian quinine can also support Lyme patients by regulating blood glucose. Cryptolepine, a chemical compound in the root, has been shown to reduce fasting blood glucose and body weight and to help regenerate pancreatic cells in rats.¹²

How to use

Higher concentrations of alcohol (60–90 percent ethanol extracts) have a better inhibitory effect. Roots and leaves can be chewed.

Tincture: 1:2 strength, 10–20 drops four times a day maximum (1:5 strength, 65 percent alcohol) or 5 mL three times a day for 60 days.

Ghanaian quinine is considered to have the effect of an antibiotic for some people, and they may respond very strongly to it, so it is important to adjust the dose accordingly.

Caution/contraindications

Avoid during pregnancy. Avoid if wanting to conceive, as it may lower testosterone levels. It may have a purging effect.

What is Lyme disease?

Borreliosis—widely known as Lyme disease—is a bacterial infection spread to humans by infected ticks. Ticks are tiny arachnids found in long grass or woodland areas; they feed on the blood of mammals such as deer, mice, rats, cats and dogs as well as humans.

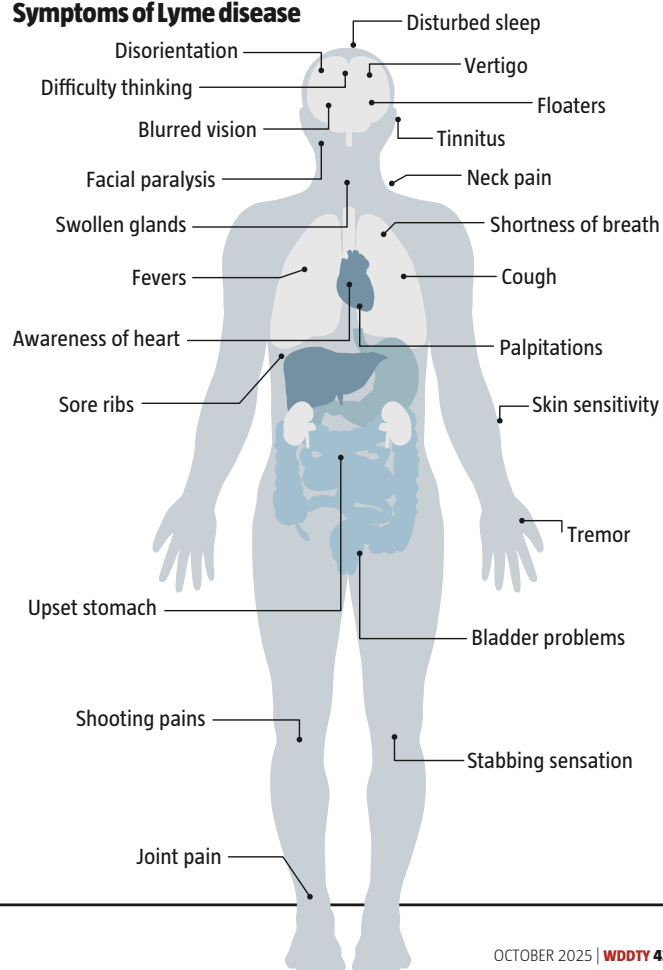
Ticks can be very small and their bite is not painful, so you may not realize you have one attached to your skin. However, there is a higher risk of becoming infected if the tick remains attached to your skin for more than 24 hours.

The most common cause of Lyme disease in Europe and North America is the *Borrelia burgdorferi* bacterium, which is passed to humans through the bite of a tick. Several other *Borrelia* species also cause the disease, including *B. afzelii* and *B. garinii*. Another species, *B. miyamotoi*, causes a disease similar to Lyme.

Borrelia is a spirochete bacterium that infects ticks; it has many species, all behaving like parasites, which explains why antiparasitic herbs like black walnut or berberine-containing plants are often used in treatment.

The screw-shaped spirochetes begin to break down collagen in the body and attach to the vascular endothelial cell surface. There they stimulate flagellin (a protein that all bacteria contain), which activates the release of NF- κ B, a protein important for cell survival. This causes an inflammatory and immune response, so herbs like red sage (*Salvia miltiorrhiza*), cordyceps (*Ophiocordyceps sinensis*) and cat's claw (*Uncaria tomentosa*) are often combined, as they are potent NF- κ B inhibitors.

Symptoms of Lyme disease



Cat's claw and Gou Teng

Uncaria tomentosa and *Uncaria rhynchophylla*

Traditional use

Cat's claw has been used as a tonic to treat weakness and fatigue, asthma, urinary tract infections, kidney disorders, digestive disorders, gastric ulcers, cancer, shingles, skin disorders, cirrhosis, high blood pressure, arthritis and muscle pain.

Use in Lyme disease

Cat's claw and Gou Teng have been used in the treatment of Lyme disease, arthritis and immune deficiencies.

Both of these herbs contain some of the same alkaloids, albeit in different quantities. Gou Teng has a greater ability to reduce neurological symptoms such as dizziness, vertigo, tremors, fevers, seizures, high blood pressure and headaches.

There is some evidence that cat's claw raises the number of white blood cells in the body,¹⁴ and Stephen Buhner has found it also raises numbers of CD57⁺ natural killer cells in some Lyme patients. Low CD57⁺ levels are used as a diagnostic marker for some chronic conditions, including Lyme disease.

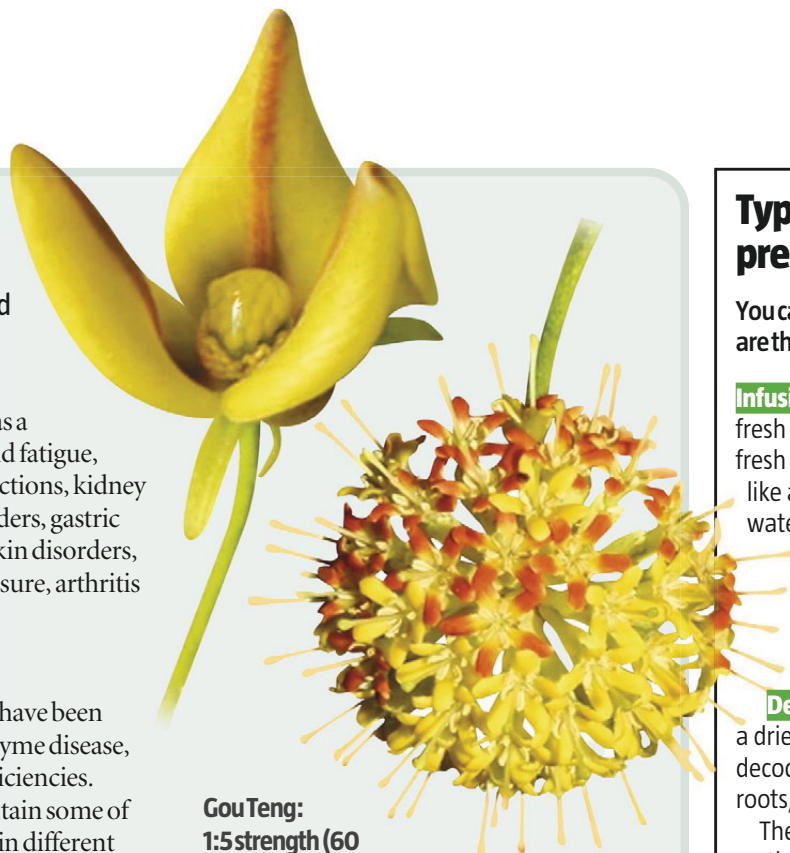
Some research suggests cat's claw is useful for reducing pain and inflammation. A four-week trial in 45 people with knee pain due to osteoarthritis showed significant improvement in the group treated with cat's claw compared to the group given a placebo. Their pain scores and inflammatory markers were reduced after the first week.¹⁵

Due to its vasodilating properties, cat's claw can also lower blood pressure, reduce clotting, and lower heart rate and cholesterol levels.

How to use

Tincture: 1:5 strength (60 percent alcohol) or administered as a decoction. As little as 1–10 drops may be needed, depending on personal response.

Cat's claw: 0.5–5 mL three to six times a day, for its anti-arthritis properties and to reduce inflammation.



Gou Teng:

1:5 strength (60 percent alcohol), 0.5–5 mL three to six times a day; can be increased if neurological symptoms are present; should be reduced with low blood pressure.

Decoction: Traditional dosage is a decoction of 10–15 g, three times a day.

Capsules: Three or four 500 mg capsules, three to four times a day, maintained for 18 months.

Caution/contraindications

May cause digestive complaints such as loose stools (reduce dose or discontinue if symptoms persist). Do not use if you are pregnant or about to undergo surgery, you are taking blood thinners or immunosuppressant drugs, or you have low blood pressure.

There is some debate about standardizing cat's claw supplements to contain a specific percentage of pentacyclic oxindole alkaloids (PAOs), a group of compounds that are believed to be responsible for the medicinal properties of the herb.

Some argue that PAO standardization ensures consistency and potency, while others argue that it ignores other bioactive compounds in cat's claw. There is also debate about the best method of measuring PAO content in cat's claw supplements. As a result, consumers should be cautious when purchasing them and consult a healthcare professional before using them.

Types of herbal preparations

You can take herbs in a variety of ways. Here are the main ones.

Infusions Infusions are made from dry or fresh plant material (1 tsp dried = 3 tsp fresh herb). Infusions can be prepared like a pot of tea: Simply pour boiling water over a spoonful of herbs, usually 30 g dried herb to 500 mL water, and leave to infuse for 5–10 minutes before straining and drinking as specified.

Decoctions The transformation of a dried herb to a liquid form is called a decoction. These are usually made using roots, wood, bark, seeds and/or nuts.

The dried material (2–30 g, depending on the plant) is placed in a pan of water and simmered for 15–20 minutes to make sure all constituents are transferred to the water before straining. The decoction can be kept in a fridge for up to two days.

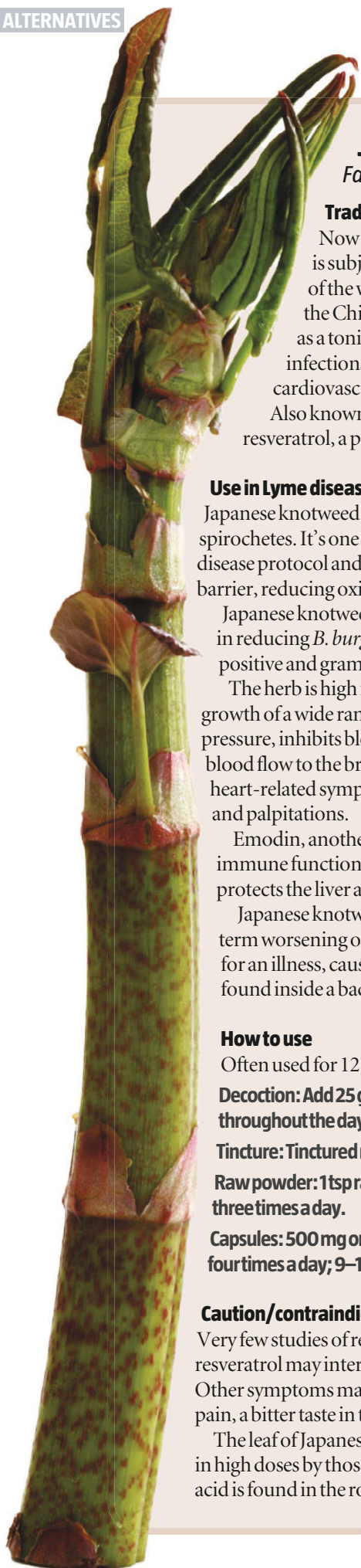
Tinctures Tinctures are alcohol-based preparations of medicinal plants; they are the most commonly prescribed form of herbal medicine. They keep well and are convenient to take. Alcohol is a better solvent for plant constituents than water and also acts as a preservative.

The percentage of alcohol used (e.g., 45 percent) depends on the type of constituents extracted. The quantity of the herb used compared to the amount of alcohol is usually 1:4 or 1:5—in other words, for every gram of herb, we use 4 or 5 mL of alcohol. For more details about how to interpret these numbers, see the box at the end of the book excerpt from Samantha Almond, “Healing in the Hedgerows,” *WDDTY* September 2025.

Glycerites Glycerites can be used if you want to avoid alcohol. Follow these steps to make one:

1. Dilute the glycerin with distilled water, three parts glycerin to one part water.
2. Fill two-thirds of a jar with fresh herb/root, or half the jar with dried herb/root.
3. Pour the glycerin and water into the jar to cover the herb and/or root. Leave in a dry, dark place for six to eight weeks; shake the jar every couple of days.
4. Strain before using.

See page 64 for where to buy ready-made herbal remedies.



Japanese knotweed

Fallopia japonica

Traditional use

Now considered a gardener's nightmare, this invasive weed is subject to legal control measures in the UK and other parts of the world. However, it's one of the most popular herbs in the Chinese pharmacopeia and has traditionally been used as a tonic to improve vitality and health and to treat fungal infections, burns, cancers, diabetes and hair loss as well as cardiovascular, respiratory and neurodegenerative disorders. Also known as Hu Zhang, Japanese knotweed is a rich source of resveratrol, a powerful antioxidant.

Use in Lyme disease

Japanese knotweed has broad-spectrum antibacterial activity against spirochetes. It's one of the main ingredients in Stephen Buhner's Lyme disease protocol and is particularly useful in crossing the blood-brain barrier, reducing oxidative stress and inflammation in the brain.

Japanese knotweed shows significant results, at least in test tube studies, in reducing *B. burgdorferi* and *B. garinii* biofilm and breaking down gram-positive and gram-negative bacteria.

The herb is high in resveratrol, which can suppress the replication and growth of a wide range of viruses. It also acts as a vasodilator, lowers blood pressure, inhibits blood clotting, improves microcirculation, and enhances blood flow to the brain and other organs. It can reduce heart-related symptoms such as shortness of breath, lightheadedness and palpitations.

Emodin, another compound in Japanese knotweed, may improve immune function by influencing the production of white blood cells. It protects the liver and the brain from inflammation as well.^[2]

Japanese knotweed can help reduce Herxheimer reactions—the short-term worsening of symptoms and/or co-infections following treatment for an illness, caused by the release of endotoxins. Endotoxins are toxins found inside a bacterial cell that are released when the cell disintegrates.

How to use

Often used for 12 months, or until symptoms resolve.

Decoction: Add 25 g root to 1 L water, simmer for 20 minutes, and drink throughout the day.

Tincture: Tinctured root, ½ tsp two to three times a day.

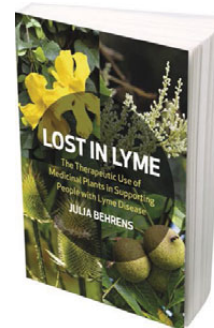
Raw powder: 1 tsp raw powder can be added to smoothies or liquid and taken three times a day.

Capsules: 500 mg one to three times a day, slowly building up to three capsules four times a day; 9–15 g whole herb can be taken a day.

Caution/contraindications

Very few studies of resveratrol have been conducted in humans. But resveratrol may interact with blood thinners and lower blood sugar levels. Other symptoms may include dry mouth, nausea, vomiting, abdominal pain, a bitter taste in the mouth and diarrhea.

The leaf of Japanese knotweed contains oxalic acid and should be avoided in high doses by those with a history of kidney stones or arthritis. Less oxalic acid is found in the root.



Adapted from *Lost in Lyme: The Therapeutic Use of Medicinal Plants in Supporting People with Lyme Disease* by Julia Behrens, with Daphne Lambert (Aeon Books, 2023). To get 20 percent off the book, valid until October 31, use code LL20 at health.aeonbooks.co.uk.

REFERENCES

- 1 Front Med (Lausanne), 2020; 7: 6
- 2 Metabolites, 2018; 8(4): 58
- 3 Cell Host Microbe, 2022 Jul 13; 30(7): 1020-1033.e6; Agronomy, 2023; 13(5): 1232
- 4 Food Sci Nutr, 2024; 12(10): 8340–8352
- 5 Nutr Res, 1996; 16(6): 1041–1080
- 6 J Intercult Ethnopharmacol, 2016; 5(3): 263–273
- 7 Phytomedicine, 2001; 8(4): 267–74; Based Complement Alternat Med, 2012; 2012: 676984
- 8 Inflamm Res, 2001; 50(9): 442–8
- 9 Phytother Res, 2016; 30(8): 1207–1218

Other helpful herbs

Here are some more herbs useful in the treatment of Lyme disease. They can be taken for 60 days at a time and then reintroduced later if needed.

Ashwagandha (*Withania somnifera*). This herb is an immune modulator but is also high in iron, so it helps to improve oxygen transport and symptoms of fatigue from anemia. It's also an adaptogen, a substance that helps the body adapt to stress.

Beggar's tick (*Bidens pilosa*). *Bidens* protects mucous membranes, red blood cells and liver cells and helps to regulate the immune system. A ½ teaspoon dose has been used for conditions such as malaria, arthritis and urinary tract infections as well as for heart problems and respiratory issues.

Bilberry (*Vaccinium myrtillus*). Known as blueberry in Europe, these berries are high in anthocyanin phenols, which have stronger antioxidant properties than many other berries. They help to strengthen capillaries around the eye and reduce inflammation.



Cleavers (*Galium aparine*). Cleavers have traditionally been used as a blood cleanser and to drain the lymphatic system. A very effective juice can be made from the fresh plant with a juicing machine; it can be preserved in glycerol at 50 percent volume, or you can drink it fresh.

Milk thistle (*Silybum marianum* / *Carduus marianus*). Milk thistle seed can be used to support, protect, detoxify and regenerate the liver. The seed in an alcoholic preparation (tincture) has also been shown to fight *Babesia*.

Red sage (*Salvia miltiorrhiza*). Red sage has antimicrobial properties against *Babesia* and *Ehrlichia* (bacteria transmitted by ticks). It also protects the brain and improves blood flow in the smallest blood vessels by helping the body to make more nitric oxide (see *WDDTY* July/August 2025), which dilates the blood vessels. This benefits and protects the spleen, heart and liver. It also strengthens the gut lining and helps to reduce pain.

Rhodiola (*Rhodiola rosea*). As an adaptogen, *Rhodiola* can help with recovery from debilitating illness. It reduces fatigue, mitochondrial dysfunction, depression, infections and nervous exhaustion and improves concentration.

Siberian ginseng (*Eleutherococcus senticosus*). Another adaptogen, Siberian ginseng or eleuthero works in a similar way to *Rhodiola* but is not as stimulating.

Wireweed (*Sida acuta*). This plant has broad-spectrum activity against all types of illness-causing organisms. It's particularly useful for protecting red blood cells and has been used in a low dose by people with babesiosis, bartonellosis and mycoplasma infections (although it may be too stimulating for some).

Wormwood (sweet, *Artemisia annua*, or African, *A. afra*). *Artemisia* can be effective against Lyme disease and co-infections like *Babesia*, *Ehrlichia*, *Bartonella* and mycoplasma. *A. afra* is traditionally used in Africa to treat malaria and has broad-spectrum antiparasitic activity.

