

# Comfrey (*Symphytum officinale*)

*Daphne Singingtree, free to distribute if credited.*

**Common Names:** Knitbone, bruisewort, knitbone, boneset, slippery root, Ass Ear, and blackwort. The name “Comfrey” itself is a corruption of con firma, referencing its believed ability to unite bones, and the botanical name “Symphytum” comes from the Greek word symphyo, meaning to unite.

**Habitat:** A native of Europe and temperate Asia is common on the banks of rivers and ditches. A member of the Borage and Forget-me-not tribe, *Boraginaceae*.

**Description:** The plant is erect in habit and rough and hairy all over. There is a branched rootstock, the roots are fibrous and fleshy spindle-shaped, an inch or less in diameter and up to a foot long, smooth, blackish externally, and internally white, fleshy and juicy.

**Cultivation:** Comfrey thrives in almost any soil, but does best in shade. Propagation either by seed or by division of roots in the fall. The roots are very brittle, and the least bit of root will start growing afresh. Plant them about 2 1/2 feet apart and they will need no further care. Once introduced, it is difficult to eradicate as a new plant arising from any severed portion of the root. It is best to plant a specific comfrey patch where it has no competition.

**Medicinal Properties:** Both Comfrey leaves and root have a long history to promote the healing of bones and wounds, as well as internal uses to treat a wide variety of ailments from arthritis to ulcers. However, it is no longer recommended for internal use, although that is not without controversy. Dioscorides recorded how people use it to treat the armies of Alexander the Great, and Pliny the Elder also mentioned its many uses. Its use in Chinese traditional medicine spans over 2000 years. All Materia Medica from the Middle Ages forward carried descriptions of the uses of comfrey. Comfrey baths were very common during the Middle Ages. Comfrey has gained widespread recognition as “one of nature’s greatest medicinal herbs”, and was included in the U.S. Pharmacopoeia, as well as in herbals and compendiums worldwide. One of the most common uses of comfrey leaf is in an ointment or a poultice applied to sprains, broken bones and other wounds, where it promotes rapid healing of both skin lesions and bone breaks.

Research bears out the claims for the healing properties of comfrey. In one major European study, an ointment based on comfrey root proved more effective at relieving both pain and swelling in 142 patients with sprained ankles. In another study with over 300 participants showed that comfrey leaf treatments of varying types (ointments, salves, compresses and other topical applications), were very effective in treating eczema, dermatitis, viral skin infections and ulcers of the lower leg. More recent research in the United States has shown that allantoin, one of comfrey’s main constituents, breaks down red blood cells, which could account for its ability to help heal bruises and contusions as well as promoting the growth of muscle, cartilage, and bone growth.

The slick mucilage that lines the inside of the hollow, woody stem and root made the root especially valued. The belief was that comfrey root acted as the “guardian of travelers” and granted safety to those who ventured away from home or into foreign lands, specifically bards and minstrels.

**Precautions:** Reports of the toxic effects of pyrrolizidine alkaloids in comfrey have led most to be wary of using it internally. PAs in extremely large doses or over long periods of time may cause potentially fatal damage to the liver. More recent studies have attested to its safety in external remedies. While most herbal practitioners use it for external use only, some point out studies were from animal subjects in doses far higher than any typical usage of comfrey, and indigenous people around the world have regularly ingested it without ill effects.

Do not take comfrey while pregnant and do not give it to infants.

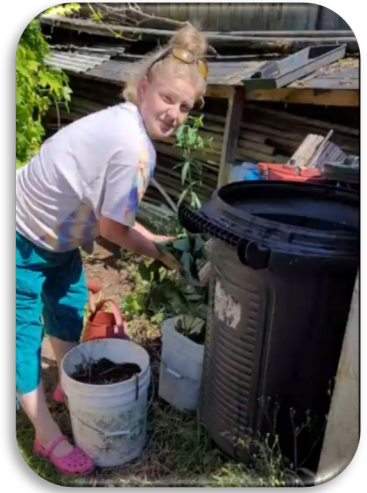


# Comfrey as a Free Organic Fertilizer.

Comfrey leaves contain high levels of essential plant nutrients like nitrogen, phosphorus, and potassium, as well as other trace minerals. The deep taproots of comfrey plants can access nutrients deep in the soil that other plants cannot reach. This makes comfrey an incredibly nutrient-dense plant that can provide a major boost to plants like tomatoes, peppers, cucumbers, and other heavy feeders.

Comfrey is essential for organic gardeners because it offers a free, renewable source of high-quality fertilizer without the use of synthetic chemicals. With its ability to improve soil fertility and stimulate plant growth, comfrey is truly the “gardener’s friend.” There are several ways to use comfrey as a fertilizer. You can chop up the leaves and mulch around plants, dig them into the soil, or add the fermented comfrey leaves to compost piles to speed up the decomposition process. It is often added to “compost tea,” which is made in a trash can with a pond bubbler aerator device.

**Comfrey Compost Tea Recipe:** For every five gallons of water add, a bucket of fresh comfrey leaves, ¼ cup of molasses, a gallon or so of compost or worm castings, add kelp or mycorrhizal powder if you have it. Use a pond aerator or bubbler. Let sit for 24-48 hours while it bubbles and brews. Once the brewing process is complete, you can dilute the compost tea and apply it to plants as a soil drench or foliar spray. Aeration helps maximize the beneficial microbes and nutrients extracted from the compost.



## References

- Detroit News. (2023, June 13). Homemade fertilizer made from comfrey leaves stimulates plant growth. Retrieved from <https://www.detroitnews.com/story/life/home-garden/blogs/gardening/2023/06/13/homemade-fertilizer-made-from-comfrey-leaves-stimulates-plant-growth/70316614007/>
- Garden Organic. (n.d.). Comfrey. Retrieved from <https://www.gardenorganic.org.uk/expert-advice/garden-management/soil/comfrey>
- Grow Veg. (n.d.). Grow your own fertilizer using comfrey. Retrieved from <https://www.growveg.com/guides/grow-your-own-fertilizer-using-comfrey/>
- Grube, B., & Grünwald, J. (2007). The efficacy of comfrey extract—A clinical, controlled double-blind study. *Phytotherapy Research*, 21(4), 353-358.
- Homes and Gardens. (n.d.). How to make comfrey fertilizer. Retrieved from <https://www.homesandgardens.com/gardens/how-to-make-comfrey-fertilizer>
- Roeder, E., & Wiedenfeld, H. (2002). Pyrrolizidine alkaloids in *Symphytum officinale* L. and the effect of the cultivation, drying, and processing of the plants on their levels. *Scientia Pharmaceutica*, 70(2), 135-148.
- Smith, D. B., & Jacobson, B. H. (2011). Effect of topical comfrey (*Symphytum officinale*) cream on acute upper and lower back pain: a randomized double-blind, placebo-controlled clinical trial. *Journal of Chiropractic Medicine*, 10(3), 147-156.
- Smith, D. B., & Jacobson, B. H. (2010). Effect of topical comfrey extract cream on osteoarthritis of the knee: a randomized, double-blind, controlled clinical trial. *Alternative Therapies in Health and Medicine*, 16(1), 32-37.
- Staiger, C. (2012). Comfrey: A clinical overview. *Phytotherapy Research*, 26(10), 1441-1448.
- Tenth Acre Farm. (n.d.). Does comfrey really improve soil? Retrieved from <https://www.tenthacrefarm.com/does-comfrey-really-improve-soil/>
- Vlachojannis, J. E., Cameron, M., & Chrubasik, S. (2010). A systematic review on the effectiveness of comfrey for the treatment of osteoarthritis and rheumatoid arthritis. *Phytotherapy Research*, 24(10), 1458-1467.
- White, L. M., Gardner, S. F., & Gurley, B. J. (2011). Comfrey (*Symphytum officinale*) hepatotoxicity. *Journal of Clinical Pharmacology*, 51(10), 1407-1413.