BORAGE and COMFREY as Fertilizer and Soil Amendment

BORAGE AND COMFREY

Most folks are familiar with comfrey. Lots of articles have been written about it, praising it for its fine qualities as a fertilizer and soil amendment. I have never grown comfrey but do grow lots of borage, a plant closely related to comfrey.

Borage and comfrey are members of the same plant family. Both can be used in for green manure, fertilizer tea and compost accelerator.

Otherwise known as starflower, borage (rhymes with “porridge”) grows in warmer temperatures and is a prickly, bushy herb with small, droopy blue flowers. Many gardeners consider borage more of a weed because it self-sows so easily.

Why might borage and comfrey be good for the garden?

Not only do I use borage to bring beneficial insects into the garden and fend off the tomato hornworm, I use the roots, stems and leaves to make tea fertilizer for my vegetables. I also work it into the soil for organic matter and nutrient replenishment.

Both plants store nitrogen, phosphorus and a relatively high dose of potassium; plus magnesium, calcium and trace minerals. It’s a sustainable material that spreads and reseeds easily. They have long tap roots that suck nutrients and minerals up from the soil – great for making homemade fertilizer.
The compost pile revs up nicely with a bunch of borage added to the mix.

I’ve also found using borage as a green manure does a good job of increasing the organic matter in my raised beds and potting soil. I work small seedlings back into the soil before they flower and go to seed, then wait a few weeks before planting.

I don’t mind it popping up everywhere the wind blows. I pull it out and let it dry, then use it for whatever suits me at the moment.

Where do I find borage and comfrey?

I started out planting borage by seed and because it regrows so easily I haven’t needed to sow it again over the last few years. Many seed suppliers sell both white and blue-flowered varieties. Starter plants pop up at some garden shops and nurseries in spring.

Which plants may benefit from borage and comfrey?

Borage and comfrey are more than a nitrogen source so I use it on all vegetables, herbs and fruit in my garden. Because it is high in potassium, I especially like to pour borage tea near flowering plants such as loofah gourds, cucumbers, peppers, tomatoes and blackberries.

Combine borage or comfrey with...

Borage and comfrey contain many macro and micronutrients, possibly more than kelp, so I don’t bother combining it with anything else. If you require more nitrogen, add dehydrated fish parts, alfalfa pellets or coffee grounds. If you like the idea of using animal manures, see the section on Manures for safety, timing and nutrient tips.
Borage Fertilizer Tea Recipe

Wear gloves because the leaves and stems are prickly. Cut up the plant into smaller pieces so that it will leach out nutrients faster. Add the borage or comfrey pieces to a 5 gallon bucket and fill with water. Put a rock or brick on top of the plant matter to keep it under the surface. You could also put the pieces in a mesh produce bag, making it easier to keep the entire clump down.

Let the plant parts steep in the water for a few days in the shade. Do not cover. Remove the borage, add the leftover plant material to your compost pile or future planting hole and use the tea to drench the soil around your plants as you normally water.

I also like to dry borage leaves. Drying them first allows me to store them for weeks or months.

Sometimes I brew borage leaves for tea garnished with a flower or two. What I don’t drink I pour on my plants.

Aerating Fertilizer Teas – Optional

Some folks aerate their teas with an inexpensive fish tank pump and air stone. This is supposed to increase the beneficial bacteria and fungi. By constantly adding oxygen to the solution, the bad bacteria have less opportunity to multiply, compete with the good bacteria or cause a foul smell.

My reading of scientific papers leads me to believe that it can’t hurt to aerate but it’s not absolutely necessary, so I don’t.

Fermenting Fertilizer Teas – Not a Fan

There are die hard fermenters out there and I’m not one of them. I tried my hand at it several times and decided I just
wasn’t cut out for that lifestyle. The process goes like this. You add your plant matter to a bucket of water and let it sit for a few weeks. **As the stuff sits and decays, oxygen is depleted and eventually the syrupy solution that’s left should not smell bad.** It can be diluted and used as a soil drench or foliar feed. Unfortunately, most of the time, the tea smells too putrid to bear and if it contacts your clothes and skin, be prepared to be haunted for days with the stench.

Lots of studies have been performed on the effectiveness of fermented teas. However, I don’t bother because they’re inconvenient to make, stink to high heaven and might breed harmful bacteria.

**Borage Soil Amendment Recipes (Green Manure)**

Comfrey and borage suck up nitrogen from the soil and store it in their taproots and leaves. If you examine their extra-long taproots you can see the nodules that store nitrogen absorbed from the air.

Work borage back into the garden soil before it flowers or sets seed. It’s best to wait for the plant matter to break down before planting and so I **let it sit for at least a month before I transplant or sow seed.** It’s best to chop up the roots because they could re-root if left in the soil.

**Click here to jump to the section on Cover Crops and Green Manures for more ideas.**

**Rejuvenate Used Potting Soil with Dried Borage**

After chopping up dried stems and leaves I add a small pail full to a larger bucket or container of old potting soil, then add water and mix. Essentially, I’m adding a bunch of nutrients and organic matter to the “dead” soil. Wait a month to plant.
Borage and Comfrey in the Compost Recipe

Dried, wilted or fresh borage leaves added to compost will heat up the pile nicely and make the decomposition process go faster. I always add the leftover plant materials from making borage tea into the compost. **For me, there’s no need to buy compost starters or accelerators.**

If the plant matter is fresh, add just as much dried leaves, cardboard, paper or straw.

Borage Mulch Recipe

Students at school have fun watching borage grow, pulling out the plants and chopping them up to make mulch. Make sure all handlers wear gloves! If the plant matter is dry and crumbly, wear protective glasses too. We like using it around Brussels sprouts, kale and kohlrabi.

Borage is now popping up everywhere in my community garden so I pick it, roots and all, let it dry and use it for teas and mulch whenever it makes sense.

For my purposes, borage mulch does not have to be applied thickly since the goal is to add nutrients not block out weeds. Because borage contains a good amount of nitrogen, it should not rob the soil of nutrients while it breaks down.

Borage Quick Tips

- Wear gloves when handling borage. It is prickly and uncomfortable to the touch. My kids have been around borage since they were young and have never been hurt around it. Even so, babies and toddlers should probably be watched closely when around a borage patch to prevent any “hokey pokey”.
- Borage can be substituted for spinach in salads and
stews. Young leaves are best. The pretty blue flowers taste like mild cucumber and look great as a garnish on fish dishes and in iced drinks.

- Bees, butterflies and hummingbirds love borage.
- See the Bibliography for a link to more reading on Comfrey.