

# 3 Ways to Build Soil Health

Soil forms the foundation of a successful garden, and the optimal time to enhance your soil is before winter arrives. Unprotected soil is vulnerable to erosion by natural elements like wind, snow, and rain, leading to the loss of valuable nutrients. Here in the garden, covering the soil offers numerous advantages, including thwarting weed growth and gradually enriching the soil, particularly the organisms within it, which, in turn, nourish the crops you cultivate. You don't need to invest in expensive soil amendments; many methods of improving soil are cost-effective or even free.

## COMPOST & MANURE

Let's begin with two obvious favorites: compost and manure. Composting should encompass a wide range of materials, including kitchen scraps, prunings, grass clippings, straw, cardboard, leaves—virtually anything you can find because it doesn't cost a dime. When you combine these ingredients, you'll produce high-quality compost that not only smells delightful but also serves as a powerhouse for your garden. However, it's crucial to source manure from a trusted supplier to avoid contamination with herbicides like Aminoipyralid, which can pass through the digestive systems of horses or cows and harm your crops. Adding manure provides nourishment for earthworms and microorganisms, further enriching the soil and feeding your crops for the upcoming spring. Fresh manure should be stored away from your garden for about a year, as it can be too potent for most plants.

## KITCHEN SCRAPS

An alternative to using kitchen scraps is to create a compost pit or trench. This is particularly helpful for hungry plants like squashes or climbing beans. Dig a hole, deposit your kitchen scraps, and cover them up. As they decompose, they

create a pocket of fertility, enriching the soil beneath. When spring arrives and you're ready to plant your squash or beans, simply place them directly on top.

## **WOODCHIPS & LEAVES**

Another option is to utilize organic materials that haven't fully decomposed, such as grass clippings, hay, straw, or leaves, especially during this season. Spread these materials on your beds, and they will gradually break down, enriching the soil. Wood chips can be spread around fruit bushes, trees, and canes; their slow decomposition suppresses weeds and provides a steady nutrient release for your fruit plants. You can also apply wood chips to your vegetable beds. It's worth debunking the myth that wood chips deplete soil nitrogen; while they might slightly reduce nitrogen levels if heavily incorporated into the soil, when left on the surface, they contribute nutrients to the soil. When it's time to sow your plants, simply move them aside, plant your crops, and then return the wood chips around the plants once they've grown a bit.

## **COVER-CROPS & GREEN-MANURES**

Cover crops are intentionally grown to protect and enhance the soil. They shield the soil from the elements, improve soil structure through their root systems, and, when dug in or cut down, contribute nutrients back into the soil. Even at this late stage, you can sow a super-hardy crop like field beans, a close relative of fava or broad beans. Instead of allowing them to produce beans, I'll be cutting them down before they reach that stage. Field beans have nitrogen-fixing roots, but if you let them flower and produce pods, they will consume the nitrogen themselves. Hence, it's essential to cut them down before they reach that stage. Soil, our precious life-giving resource, deserves thoughtful care, especially considering all it provides for us.