CHICKEN MANURE as Fertilizer and Soil Amendment

Let’s start with the most noxious manure – that of chickens. Chickens don’t urinate. Everything that is excreted comes out in the same blob. One chicken produces about 1 cubic foot of manure every six months according to a fact sheet published by Washington State University.

Fresh chicken manure has the highest nitrogen concentration of all the other livestock manures and a relatively small amount of phosphorus and other essential nutrients. The levels of nutrients, especially nitrogen, vary greatly depending on the type of bird and the feed consumed. The age of the manure, its moisture content, as well as environmental conditions and storage practices also impact nutrient values.

Most of the nitrogen in chicken manure immediately starts turning to ammonium. Ammonium is a potent form of nitrogen. It is taken up rapidly by the atmosphere. **Even with this loss of nitrogen, fresh chicken manure is too strong to be added directly to the garden near planting time, especially near the root zone. It’s best composted before use.**

Which Plants Benefit from Chicken Manure?

When composted chicken manure is applied before growth begins, plants will get that nitrogen boost they need for a good start. In the edible garden, **composted chicken manure works best with crops that crave nitrogen and do not flower.** Corn and brassicas (cabbage, kale, kohlrabi, etc.) are a good fit for poultry poo.

If applied near edibles that flower, including tomatoes, high levels of nitrogen will encourage lots of green growth but the fruiting process will suffer. Also, if you like to grow giant pumpkins recommend you use cow or horse manure instead.
Recipe for Using Composted Chicken Manure in Home Vegetable Garden

Recommend you always use composted chicken manure in your edible garden as a soil amendment. It is less likely to burn your bounty. Because it’s nice and dry, it’s easier to handle and gentler on your nose and your plants.

**How to Gather and Store Chicken Manure**

With a dust mask and gloves on, scoop, shovel or rake up the manure along with the attached shavings or bedding. Until you can get it into the compost pile, store the chicken manure away from chickens and keep it covered to reduce nutrient loss and prevent rain from washing it underground, potentially polluting water. The sooner you can compost it the better. See the recipe above for instructions on how to compost manure properly.

**When to Apply Chicken Manure?**

When using composted chicken manure, incorporate it into the soil at least a month before you plant, not during growth.

If you live in a cold climate and time it right, you can lay a 2-3 inch thick layer of fresh fowl manure on top of your garden plot in the fall so it will compost naturally over winter. Come spring, your garden will be in great condition for planting. If your soil is in bad condition, work the manure into the soil instead of leaving it on top.

For a raised bed measuring 8 feet by 4 feet, work approximately 2.8 gallons of composted chicken manure into the top 4-6 inches of soil and water well. A slightly smaller 8 feet x 3 feet bed would benefit from 2 gallons.

If you have a larger garden plot, for example 100 square feet, use 50 pounds of composted chicken manure. That’s about 8.3 gallons depending on water content and age.
Another way to loosely measure is to apply a 1 inch thick layer on top of the soil and then work it into the top layer.

Make sure not to over-apply chicken manure because too much nitrogen not only can contaminate the soil with nitrates, it can weaken your plants, making them more susceptible to disease and pests.

If chicken manure is over-applied year after year, copper and zinc levels can reach levels harmful to your soil and plants. Once under the surface, nitrogen sticks around a long time until used by plants and microorganisms – and they can only gobble up so much. Excess nitrogen can also travel underground and contaminate sub soils and ground water.