

Making water soluble calcium fertilizer using eggshells and vinegar

Egg shells are rich in calcium but the form in which the calcium is isn't readily absorbed by plants and egg shells aren't readily composted.

Making calcium fertilizer

Collect your egg shells, rinse them with water and then oven dry them at 200 degrees for 2 to 3 hours or sun dry them for about 8 hours.

After drying them, blend them or crush them into a fine powder in a motor and pestle.

Put the fine powder in a jar, and pour vinegar into the powder. This sparkles a chemical reaction that leads to break down of calcium carbonate in the eggs shells into water soluble calcium and carbon dioxide. The carbon dioxide is lost in the atmosphere.

Precautions to take

The Mixing ratio of the vinegar and the egg shells is 10:1 i.e. 10 parts of vinegar for 1 par of the egg shells.

Acetic acid in the vinegar is a weak acid and can act on the egg shells for about 2 weeks hence the mixture is left to stand for up to 2 weeks to fully dissolve the calcium.

The calcium fertilizer can be applied as a spray to the plants either in the morning or the morning when the plants are more receptive to the fertilizer or applied on the plant root zone or poured on a compost pile to enrich compost with calcium.