

Q: I need to add something to my soil to loosen it up. Is gypsum a good fertilizer to add?

A: Gypsum is calcium sulphate, a mineral mined throughout the country. It is an important addition to many kinds of building materials. Gypsum is also sold as a fertilizer and as a soil amendment. The sales claims for gypsum may state that the product will lower your soil pH, or raise your soil pH, reduce soil compaction, improve the availability of Calcium and Magnesium, improve water availability and generally fix all soil problems. Unfortunately, there isn't any data to support the efficacy of this material when added to the soils found in this area.

Gypsum is useful if you have a salt buildup in your soil, (sodic soils). The calcium molecules in the gypsum will replace the sodium molecules in the soil and allow them to be flushed away with enough moisture. Sodic soils tend to compact and crust over, and when the sodium is replaced, the soils will become more friable. Very few home gardens have problems with sodic soils. Were you to need to amend, you need to add 1-3 tons per acre, a very substantial amount of gypsum to be adding to the land.

Gypsum does contain sulphur, but as it is a neutral salt, it cannot lower pH. If you have high pH soils, as many gardeners do in this area, you may want to add garden sulphur and an acidic soil amendment such as composted redwood or fir bark. Keeping the beds mulched with shredded pine needles will also help.

You asked how to loosen up heavy soils. That is done by adding composted organic material. If you do not have your own compost bins, you may want to explore one of the composting workshops classes. Go to www.wastediversion.org for local information. Making your own compost is very easy, and will supply you with excellent soil amendments for your garden. The Master Gardeners have many good handouts available free if you call their advice line (925) 646-6586.

If you need to purchase compost, check in the yellow pages for local suppliers. Ask how old the compost is and at what temperature it has been kept. You want compost that has been hot enough for long enough to kill weeds seeds and disease pathogens.