SOIL MANAGEMENT

Amendments

Amendments are materials which change the physical or chemical properties of the soil and indirectly improve plant growth. Reasons to change the properties of the soil with organic matter or chemical amendments include:

- Make soil surface more water permeable, especially silty soils
- Enlarge pore spaces so water and air move more freely, important in clay soils
- Prevent soil cracking; distribution of roots, water, and air are more uniform
- Make soil easier to work, important for managing annual plants
- Allow roots to grow easily and quickly from container soil into heavier native soil



A variety of amendments

Soil organic matter consists of all the dead plant and animal matter in various stages of decay. A soil rich with organic matter supports a thriving population of beneficial organisms from microscopic bacteria and fungi to larger life forms like earthworms. Organic matter acts like a slow release fertilizer and also improves soil structure. Soil microorganisms feed on organic matter and release nitrogen and other nutrients it contains in a form that roots can absorb.

Compost is an excellent organic amendment. Good compost, either homemade or store bought, is the most beneficial all-purpose amendment for soil. Click here to go to the Composting topic for more information on how to compost and composting methods.

In addition to compost, there are other amendments that may be helpful. <u>Click here to go to the Amendments table for information on specific amendments and their benefits.</u>

Amendments should be free of weed seeds, toxic materials, and disease organisms. Wood ashes should not be used on soils in the San Diego area. Ashes are very alkaline and have a high salt content.



Working the amendments into the soil

The top six to eight inches of garden soil should be amended with composted organic matter. If you spread two inches of compost on top of a previously cultivated soil and incorporate it to a depth of six inches, the soil will be amended 25 percent by volume.

Organic matter continually breaks down and decomposes, so you must periodically add new material. Good gardeners incorporate organic matter into their soil before each planting season.