



Healthy Garden Tips

Web site: <http://cenapa.ucdavis.edu>

Telephone: 707-253-4221

University of California Cooperative Extension – Napa County

MULCHES, SOIL AMENDMENTS AND FERTILIZERS

By Dean Donaldson, Farm Advisor

MULCHES	SOIL AMENDMENTS	FERTILIZERS
<p>Place on top of the soil Food to worms and microbes Helps retain soil moisture Cools soil surface Reduces weed growth Can hide plant eating creatures Negligible plant nutrient source Decompose in months</p> <p>Examples: dry manures, kelp, peat moss, shavings, green waste, potting mixes, straw, compost, worm castings, bark, saw dust, newspaper/cardboard, lawn clippings, humus, “nitrified” products, grape pomace, leaves, woven and sheet plastic</p>	<p>Mixed into soil surface Food to worms and microbes Temporarily aids soil tilth Large volumes can change surface porosity Must be well mixed into soil Can rob available nitrogen Benefits are reduced over time N, P & K less than 5% total May be source of micronutrients Decompose in weeks</p> <p>Examples: dry manures, kelp, peat moss, shavings, green waste, potting mixes, straw, compost, worm castings, bark saw dust, newspaper/cardboard, lawn clippings, humus, “nitrified” products, grape pomace, leaves</p>	<p>Minerals needed for plant growth Absorbed as water soluble ions into plant root hairs and micorrhyzae Most must be processed by microbes into forms available to plants (N, P & K content) Water soluble forms applied to surface Insoluble forms must be mixed into plant root zone</p> <p>Sources Natural Organic Manmade</p> <p>Examples: Blood meal, bone meal, calcium nitrate, ammonium sulfate, 12-12-12, 16-6-8, very fresh manure</p>

YARD PRUNINGS TO COMPOST AT CITY OF NAPA RECYCLING YARD

“Yard Waste”

“Green Waste”

“Compost”

<p>(1) Yard trimmings Leaves and lumber Blender in tub Grinder</p>	<p>(2) Tub grinder Makes uniform sized pieces and blends</p>	<p>(3) Freshly ground material: “Green Waste” moistened and nitrogen balanced is piled into 8 feet high rows</p>	<p>(4) Piles are machine- turned a minimum of 3 times based on internal pile temperature during composting process</p>	<p>(5) As composting process slows, pile is screened and placed into large “compost” pile. Larger pieces returned to #2.</p>	<p>(6) More finished compost maintains moisture and is slow to heat. This is delivered to customers.</p>	<p>(7) “Cold or Aged Compost” end product. Mature/Decomposed Compost *does not heat when piled *plant parts are no Longer discernable Usually this stage develops at customer’s site</p>
--	--	--	--	--	--	--

Additional Reading:

Improving the Soil, 1994, by Erin Hynes, Rodale Press

Western Fertilizer Handbook, 2nd Horticulture Edition, 1998 by California Fertilizer Association, Interstate Publishers, Inc.

Soil and Water Management for Home Gardeners, 1980, UC ANR leaflet 2258

The Rapid Composting Method, 1991, UC ANR leaflet 21251

January 2011

The University of California Division of Agriculture & Natural Resources (ANR) prohibits discrimination or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at <http://ucanr.org/sites/anrstaff/files/107778.doc>).

Inquiries may be directed to Linda Marie Manton, Affirmative Action Contact, University of California, Davis, Agriculture and Natural Resources, One Shields Avenue, Davis, CA 95616, (530) 752-0495.