

Soil Amendment Chart

Remember:

Nitrogen (N): for leafy growth, also forms the "skeleton" of the plant

Phosphorus (P): for root and shoot development, flowering and fruiting

Potassium (K): for all-around plant development and health

Calcium (Ca): for cell reproduction and protein synthesis

	NPK	Topdressing	Side dressing	How long in soil*	Notes
Compost	1:1:1	Prior to planting 1-3" per 100 sq ft	1-2" during growing season	2-12 months	
Worm Castings	3:2:2	Mixed into potting soil-no more than 20%	Diluted to the color of <i>weak tea</i>		
Bone Meal (P)	3:20:0	Yes	Yes	6-12 months	Works best when soil pH is 6.0-7.0
Oystershell Lime (Ca)	Calcium source	1-5# per 100 sq feet per yr To change the pH: for clay soils-10# per 100 sq ft	n/a		Good calcium source, good for making acidic soils more alkaline
Blood Meal (N)	13:0:0	Yes	Yes	3-4 months	Fast acting
Kelp Meal (K)	1:0:3	Yes	Yes	6-10 months	Can usually be found in combination with fish emulsion
Alfalfa Meal (N)	3:1:3	8# per 100 sq ft	Yes	3-4 months	
Fish Emulsion (N)	4:1:1 to 9:7:2		Follow directions for diluting	6-8 months	Fast acting

Some items can be used in combination with others.

Sidedressing:

- Apply amendments during flowering and fruiting times
- If you have sandy soil, it is very important to side dress additionally throughout the year (the ease of drainage leaches out the nutrients)

Cover Crops:

- Legumes (*fix nitrogen from the air*)
 - Alfalfa
 - Roots can reach from 5-9 feet down
 - Perennial
 - Best nitrogen fixer, but must grow a full yr
 - Plant in spring or late summer, chop down the following spring or fall
 - Fava Beans
 - Annual
 - Sow in spring or summer, turn under in summer or fall
 - Tolerates poor growing conditions
- Grasses
 - Buckwheat
 - Annual
 - Tolerates poor and acidic soils
 - Fast growing, can be turned under in 5-6 weeks
 - Sow anytime after last spring frost until midsummer, turn under when first flowers show
 - Excellent for smothering weeds and breaking up clay soils
 - Attracts beneficial insects

Container gardens: the addition of organic material throughout the growing season is very crucial to healthy plants and substantial yields. The nutrient levels are finite in a container and need to be replaced often.

CompostGal: Consulting, Landscaping & Education

Lori Caldwell

925-922-3504

compostgal@hotmail.com