



SOIL pH

← INCREASING ACIDITY RANGE					INCREASING ALKALINITY RANGE →			
EXTREME	VERY STRONG	STRONG	MED	SLIGHT	NEUTRAL	MILD	MODERATE	STRONG
3 (lemon)	4 (beer)	5		6	7 (milk)		8 (sea salt)	9 (bicarb of soda)

Correcting Acid & Alkaline Soils

To make alkaline soils more acidic (lower soil pH 1/2 - 1 unit):

Per 100 square feet of soil, add -
1/2 lb. finely ground sulfur, or
3 lbs. iron sulfate, or
3 lbs. aluminum sulphate

(In heavier soils: increase the rate by 1/3)

Sulfur acts slowly, but is effective for years.

Iron sulfate is quick acting and adds iron to the soil.

Aluminum sulfate is quick acting, but aluminum may build up in the soil causing toxicity to some plants.

(Pine needles DO NOT make soils more acidic.)

To make acid soils more alkaline (raise pH 1/2 - 1 unit.):

Add 5 lbs. of ground limestone for every 100 square feet of light-medium soil.

(In heavier soils with organic matter: increase the rate by 1/3)

If fertilizer is also being used, the two should go into the ground at least a week apart. Lime acts to reduce the nutritive value of nitrogen in fertilizer.

Ground limestone is slow acting, but continues to work for years.

pH REQUIREMENTS OF VARIOUS PLANTS

Plants preferring a very acid soil (4 to 5¼):

Azalea	Gardenia	Hydrangea (Blue)	Rhododendron
Blueberry	Holly	Ladyslipper	Trailing Arbutus

Plants preferring a moderately acid soil (5 to 5¾):

Bayberry	Heather	Oak	Potato
Bent Grass	Hemlock	Orchid	Pumpkin
Blackberry	Laurel	Parsnip	Spruce (Red)
Fern	Lily of the Valley	Pine	Spruce (Black)
Grape	Yew	Plum	

Plants preferring a slightly acid soil (5¾):

Bean	Currant	Gooseberry	Squash
Begonia	Cypress	Lily	Strawberry
Bleeding Heart	Easter Lily	Lupine	Tomato
Citrus Fruits	Euphorbia	Oats	Turnip
Cowpeas	Fir	Pepper	Rutabaga
Cyclamen	Gloxinia	Rye	

Plants preferring a near-neutral soil (6½ to 7):

Anemone	Cosmos	Kale	Radish
Apple	Crocus	Larkspur	Raspberry
Aster	Cucumber	Leek	Rhubarb
Beet	Dahlia	Lima Bean	Rose
Broccoli	Eggplant	Marigold	Scabiosa
Butternut	Endive	Narcissus	Snapdragon
Candytuft	Feverfew	Muskmelon	Spruce
Canna	Flax	Onion	Spinach
Carnation	Fuchsia	Pansy	Stocks
Chrysanthemum	Gladiolus	Peach	Violet
Clarkia	Hawthorne	Pea	Watermelon
Carnation	Hickory	Poinsettia	Wisteria
Chives	Hollyhock	Poppy	Woodbine
Columbine	Hyacinth	Phlox	Yucca
Corn	Iris	Primrose	Zinnia

Plants preferring an alkaline soil (7 to 7½):

Arborvitae	Carrot	Delphinium	Lettuce
Asparagus	Cauliflower	Dogwood	Morning Glory
Barberry	Cinerea	Geranium	Nasturtium
Barley	Celery	Heliotrope	Parsley
Bluegrass	Clematis	Hydrangea	Petunia
Cabbage	Clover	Ivy (English)	Sweet Pea
