

HOW TO USE YOUR METER TO MEASURE pH

1. Remove the top 2" of the surface soil. Break up and crumble the soil underneath to a depth of 5". Remove any stones or organic debris such as leaves and twigs because they can affect the final result.
2. Thoroughly wet the soil with water (ideally rain or distilled water) to a mud consistency.
3. Move the switch to the last (bottom) position.
4. Wet probes. Clean probe on the FAR RIGHT ONLY, with the enclosed special cleaning pad.
5. Insert probes into soil up to plastic base.
6. Wait one minute and take reading.
7. Wipe the probes clean and dry.

TO RAISE OR LOWER pH OF YOUR SOIL

Raising and lowering pH is not an exact science and most plants have a reasonably wide tolerance, certainly to within 1 pH point. Altering pH takes time so do not expect rapid changes; rather, work steadily towards giving a plant its ideal conditions.

HOW MUCH TO APPLY

How much to apply depends on the particle size of your soil – a sandy soil needs less lime for an equivalent pH change than a heavy clay but will not hold its pH as long.

SOIL TYPES

Sandy Soils

A light, coarse soil comprised of crumbling and alluvial debris .

Loam Soils

A medium friable soil, consisting of a blend of coarse (sand) alluvium and fine (clay) particles mixed within fairly broad limits with a little lime and humus.

Clay Soils

A heavy, clinging, impermeable soil, comprised of very fine particles with little lime and humus and tending to be waterlogged in winter and very dry in summer.

Material	pH Change	Soil Type		
		Sandy	Loamy	Clay
Ground Limestone (Domolitic or calcic)	+1/2 unit (.5 pH)	2.5	5	5.5
	+1 unit (1.0 pH)	58.5	11	
Hydrated Lime	+1/2 unit (.5 pH)	1.5 - 2	3 - 4	4 - 4.5
	+1 unit (1.0 pH)	3.5 - 4	6 - 6.5	8 - 8.5
Iron Sulfate	-1/2 unit (.5 pH)	0.75	1.5	2
	-1 unit (1.0 pH)	1.5	3	4
Aluminum Sulfate	-1/2 unit (.5 pH)	.5 - .75	1 - 1.25	1.5
	-1 unit (1.0 pH)	1 - 1.25	2.25	3

Amounts listed are pounds/100 sq.ft.

Do not add more than 5# of lime or 1/2# of sulfur/application.

To use Sphagnum Peat Moss to increase acidity, mix in up to 1/3 of the total soil volume when planting acid loving plants.

Plant pH Preference List

NAME	pH	NAME	pH	NAME	pH	NAME	pH	NAME	pH
FRUIT		VEGETABLES & HERBS		HOUSE & GREENHOUSE PLANTS		FLOWERS, TREES & SHRUBS		FLOWERS, TREES & SHRUBS	
APPLE	5.0 - 6.5	SAGE	5.5 - 6.5	GENISTA	6.5 - 7.5	ASPERULA	6.0 - 8.0	LAUREL	6.5 - 7.5
APRICOT	6.0 - 7.0	SHALLOT	5.5 - 7.0	GERANIUM	6.0 - 8.0	ASPHODOLINE	6.0 - 8.0	LAVENDER	6.5 - 7.5
AVOCADO	6.0 - 7.5	SORGHUM	5.5 - 7.5	GLOXINIA	5.5 - 6.5	ASTER	5.5 - 7.5	LIATRIS	5.5 - 7.5
BANANA	5.0 - 7.0	SOYBEAN	5.5 - 6.5	GRAPE IVY	5.0 - 6.5	AUBRITA	6.0 - 7.5	LIGUSTRUM	5.0 - 7.5
BLACKBERRY	5.0 - 6.0	SPEARMINT	5.5 - 7.5	GRAPE HYACINTH	6.0 - 7.5	AZALEA	4.5 - 6.0	LILAC	6.0 - 7.5
BLUEBERRY	4.0 - 6.0	SPINACH	6.0 - 7.5	GREVILLEA	5.5 - 6.5	BALLOON FLOWER	6.0 - 6.5	LILY OF THE VALLEY	4.5 - 6.0
CANTALOUPE	6.5 - 7.5	SWEDE	5.0 - 7.0	GYNURA	5.5 - 6.5	BAYBERRY	4.0 - 6.0	LITHOSPERMUM	5.0 - 6.5
CHERRY	6.0 - 7.5	THYME	5.5 - 7.0	HEDERA (IVY)	6.0 - 8.0	BERGENIA	6.0 - 7.5	LOBELIA	6.5 - 7.5
CRANBERRY	5.5 - 6.5	TOMATO	5.5 - 7.5	HELIOTROPIUM	5.0 - 6.0	BLEEDING HEART	6.0 - 7.5	LUPINUS	5.5 - 7.0
CURRENT: Black	6.0 - 8.0	TURNIP	5.5 - 7.0	HENS AND CHICKENS	6.0 - 7.0	BLUEBELL	6.0 - 7.6	MAGNOLIA	5.0 - 6.0
Red	5.5 - 7.0	WATER CRESS	6.0 - 8.0	HERRINGBONE PLANT	6.0 - 6.0	BROOM	5.0 - 6.0	MAHONIA	6.0 - 7.0
White	6.0 - 8.0	HOUSE & GREENHOUSE PLANTS		HIBISCUS PLANT	6.0 - 8.0	BUDDLEIA	6.0 - 7.0	MARIGOLD	5.5 - 7.0
DAMSON	6.0 - 7.5	ABUTILON	5.5 - 6.5	HOYA	5.0 - 6.5	BUPHTHALUM	6.0 - 8.0	MOLINIA	4.0 - 5.0
GOOSEBERRY	5.0 - 6.5	ACORUS	5.0 - 6.5	IMPATIENS	5.5 - 6.5	BUTTERFLY BUSH	4.0 - 6.0	MORAEA	5.5 - 6.5
GRAPEVINE	6.0 - 7.0	AECHMEA	5.0 - 5.5	IVY TREE	6.0 - 7.0	CALENDULA	5.5 - 7.0	MORNING GLORY	6.0 - 7.5
GRAPEFRUIT	6.0 - 7.5	AFRICAN VIOLET	6.0 - 7.0	JACARANDA	6.0 - 7.5	CAMASSIA	6.0 - 8.0	MOSS	6.0 - 8.0
HAZELNUT	6.0 - 7.0	AGLAONEMA	5.0 - 6.0	JAPANESE SEDGE	6.0 - 8.0	CANDYTUFT	6.0 - 7.5	MOSS, SPHAGNUM	3.5 - 5.0
HOP	6.0 - 7.5	AMARYLIS	5.5 - 6.5	JASMINUM	5.5 - 7.0	CANNA	6.0 - 8.0	MYOSOTIS	6.0 - 7.0
HUCKLEBERRY	4.0 - 6.0	ANTHURIUM	5.0 - 6.0	JERUSALEM CHERRY	5.5 - 6.5	CANTERBURY BELLS	7.0 - 7.5	NARCISSUS	6.0 - 8.5
LEMON	6.0 - 7.0	APHELANDRA	5.0 - 6.0	JESSAMONE	5.0 - 6.0	CARDINAL FLOWER	4.0 - 6.0	NASTURTIUM	5.5 - 7.5
LYCHEE	6.0 - 7.0	ARAUCARIA	5.0 - 6.0	KALANCHOE	6.0 - 7.5	CARNATION	6.0 - 7.5	NICOTIANA	5.5 - 6.5
MANGO	5.0 - 6.0	ASPARAGUS FERN	6.0 - 8.0	KANGAROO THORN	6.0 - 8.0	CATALPA	6.0 - 8.0	PACHYSANDRA	5.0 - 8.0
MELON	5.5 - 6.5	ASPIDISTRA	4.0 - 5.5	KANGAROO VINE	5.0 - 6.5	CELOSIA	6.0 - 7.0	PAEONIA	6.0 - 7.5
MULBERRY	6.0 - 7.5	AZALEA	4.5 - 6.0	LANTANA	5.5 - 7.0	CENTAUREA	5.0 - 6.5	PANSY	5.5 - 7.0
NECTARINE	6.0 - 7.5	BABY'S BREATH	6.0 - 7.5	LAURUS (BAY TREE)	5.0 - 6.0	CERASTIUM	6.0 - 7.0	PASSION FLOWER	6.0 - 8.0
PEACH	6.0 - 7.5	BABY'S TEARS	5.0 - 6.0	LEMONGRASS	6.0 - 7.5	CHRYSANTHEMUM	6.0 - 7.0	PASQUE FLOWER	5.0 - 6.0
PEAR	6.0 - 7.5	BEGONIA	5.5 - 7.0	MIMOSA	5.5 - 7.0	CISSUS	6.0 - 7.5	PAULOWNIA	6.0 - 8.0
PINEAPPLE	5.0 - 6.0	BIRD OF PARADISE	6.0 - 6.5	MIND YOUR OWN BUSINESS	5.0 - 5.5	CISTUS	6.0 - 7.5	PENSTEMON	5.5 0 7.0
PLUM	6.0 - 7.5	BISHOP'S CAP	5.0 - 6.0	MONSTERA	5.0 - 6.0	CLARKIA	6.0 - 6.5	PERIWINKLE	6.0 - 7.5
POMEGRANATE	5.5 - 6.5	BLACK-EYED SUSAN	5.5 - 7.5	MYRTLE	6.0 - 8.0	CLIANTHUS	6.0 - 7.5	PETUNIA	6.0 - 7.5
QUINCE	6.0 - 7.5	BLOOD LEAF	5.5 - 6.5	NEVER NEVER PLANT	5.0 - 6.0	CLEMATIS	5.5 - 7.0	PINKS	6.0 - 7.5
RASPBERRY	5.0 - 7.5	BOTTLEBRUSH	6.0 - 7.5	NICODEMIA (INDOOR OAK)	6.0 - 8.0	COLCHICUM	5.5 - 6.5	POLYGONUM	6.0 - 7.5
RHUBARB	5.5 - 7.0	BOUGAINVILLEA	5.5 - 7.5	NORFOLK ISLAND PINE	5.0 - 6.0	COLUMBINE	6.0 - 7.0	POLYANTHUS	6.0 - 7.5
STRAWBERRY	5.0 - 7.5	BOXWOOD	6.0 - 7.5	OLEANDER	6.0 - 7.5	CONVOLVULUS	6.0 - 8.0	POPPY	6.0 - 7.5
WATERMELON	5.5 - 6.5	BROMELIADS	5.0 - 7.5	OPLISMENIUS	5.0 - 6.0	COREOPSIS	5.0 - 6.0	PORTULACA	5.5 - 7.5
VEGETABLES & HERBS		BUTTERFLY FLOWER	6.0 - 7.5	ORCHID	4.5 - 5.5	CORONILLA	6.5 - 7.5	PRIMROSE	5.5 - 6.5
ARTICHOKE	6.5 - 7.5	CACTI	4.5 - 6.0	ORCHALIS	6.0 - 8.0	CORYDALIS	6.0 - 8.0	PRIMULA	6.0 - 7.5
ASPARAGUS	6.0 - 8.0	CALCAOLARIA	6.0 - 7.0	PALMS	6.0 - 7.5	COSMOS	5.0 - 8.0	PRIVET	5.0 - 7.5
BASIL	5.5 - 6.5	CALADIUM	5.0 - 6.0	PANDANUS	5.0 - 6.0	COTTONEASTER	6.0 - 8.0	PRUNELLA	6.0 - 7.5
BEAN	6.0 - 7.5	CALLA LILY	6.0 - 7.0	PEACOCK PLANT	5.0 - 6.0	CRAB APPLE	6.0 - 7.5	PRUNUS	6.5 - 7.5
(Runner, Broad, French)		CAMELIA	4.5 - 5.5	PELLIONIA	5.0 - 6.0	CROCUS	6.0 - 8.0	PYRETHRUM	6.0 - 7.5
BEETROOT	6.0 - 7.5	CAMPANULA	5.5 - 6.5	PEPEROMIA	5.0 - 6.0	CYNOGLOSSUM	6.0 - 7.5	RED HOT POKER	6.0 - 7.5
BROCCOLI	6.0 - 7.0	CAPSIUM	5.0 - 6.5	PHILODENDRON	5.0 - 6.0	DAFFODIL	6.0 - 6.5	RHODODENDREN	4.5 - 6.0
BRUSSELS SPROUTS	6.0 - 7.5	CARDINAL FLOWER	5.0 - 6.0	PILEA	6.0 - 8.0	DAHLIA	6.0 - 7.5	ROSES:	
CABBAGE	6.0 - 7.5	CASTOR OIL PLANT	5.5 - 6.5	PLUMBAGO	5.5 - 6.5	DAY LILY	6.0 - 8.0	HYBRID TEA	5.5 - 7.0
CALABRESE	6.5 - 7.5	CANTURY PLANT	5.0 - 6.5	PODACARPUS	5.0 - 6.5	DELPHINIUM	6.0 - 7.5	CLIMBING	6.0 - 7.0
CARROT	5.5 - 7.0	CHINESE EVERGREEN	5.0 - 6.0	POINTSETTIA	6.0 - 7.5	DEUTZIA	6.0 - 7.5	RAMBLING	5.5 - 7.0
CAULIFLOWER	5.5 - 7.5	CHINESE PRIMROSE	6.0 - 7.5	POLYSCIAS	6.0 - 7.5	DIANTHUS	6.0 - 7.5	SALVIA	6.0 - 7.5
CELERY	6.0 - 7.0	CHRISTMAS CACTUS	5.0 - 6.5	POTHOS	5.0 - 6.0	DOGWOOD	5.0 - 7.0	SCABIOSA	5.0 - 7.5
CHICORY	5.0 - 6.5	CINERARIA	5.5 - 7.0	PRAYER PLANT	5.0 - 6.0	EDELWEISS	6.5 - 7.5	SEDUM	6.0 - 7.5
CHINESE CABBAGE	6.0 - 7.5	CLERODENDRUM	5.0 - 6.0	PUNICA	5.5 - 6.5	ELAEAGNUS	5.0 - 7.5	SNAPDRAGON	5.5 - 7.0
CHIVES	6.0 - 7.0	CLIVIA	5.5 - 6.5	SANSERIERIA	4.5 - 7.0	ENKIANTHUS	5.0 - 6.0	SNOWDROP	6.0 - 8.0
CORN - SWEET	5.5 - 7.0	COCKSCOMB	6.0 - 7.0	SAXIFRAGA	6.0 - 8.0	ERICA	4.5 - 6.0	SOAPWORT	6 0 7.5
CRESS	6.0 - 7.0	COFFEE PLANT	5.0 - 6.0	SCINDAPSUS	5.0 - 6.0	EUPHORBIA	6.0 - 7.0	SPEEDWELL	5.5 - 6.5
COURGETTES	5.5 - 7.0	COLEUS	6.0 - 7.0	SHRIMP PLANT	6.0 - 7.0	EVERLASTINGS	5.0 - 6.0	SPIRAEA	6.0 - 7.5
CUCUMBER	5.5 - 7.5	COLUMNEA	4.5 - 5.5	SPANISH BAYONET	6.0 - 7.5	FIRETHORN	6.0 - 8.0	SPRUCE	4.0 - 5.0
FENNEL	5.0 - 6.0	CORAL BERRY	5.5 - 7.5	SPIDER PLANT	6.0 - 7.5	FORGET-ME-NOTS	6.0 - 7.0	STOCK	6.0 - 7.5
GARLIC	5.5 - 7.5	CRASSULA	5.0 - 6.0	SUCCULENTS	5.0 - 6.5	FORSYTHIA	6.0 - 8.0	STONECROP	6.5 - 7.5
GINGER	6.0 - 8.0	CREeping FIG	5.0 - 6.0	SYNOGONIUM	5.0 - 6.0	FOXGLOVE	6.0 - 7.5	SUMACK	5.0 - 6.5
HORSERADISH	6.0 - 7.0	CROTON	5.0 - 6.0	TOLMIEA	5.0 - 6.0	FRITILLARIA	6.0 - 7.5	SUNFLOWER	5.0 - 7.0
KALE	6.0 - 7.5	CROWN OF THORNS	6.0 - 7.5	TRADESCANTIA	5.0 - 6.0	FUCHSIA	5.5 - 7.5	SWEET PEA	6.0 - 7.5
KOHLRABI	6.0 - 7.5	CUPHEA	6.0 - 7.5	UMBRELLA TREE	5.0 - 7.5	GAILLARDIA	6.0 - 7.5	SWEET WILLIAM	6.0 - 7.5
LEEK	6.0 - 8.0	CYCLAMEN	6.0 - 7.0	VENUS FLYTRAP	4.0 - 5.0	GAZANIA	5.5 - 7.0	TAMARIX	6.5 - 8.0
LENTIL	5.5 - 7.0	CYPERUS	5.0 - 7.5	WEEPING FIG	5.0 - 6.0	GENTIANA	5.0 - 7.5	TRILLIUM	5.0 - 6.5
LETTUCE	6.0 - 7.0	DIEFFENBACHIA	5.0 - 6.0	YUCCA	6.0 - 7.5	GENTIAN	6.0 - 7.5	TULIP	6.0 - 7.0
MARJORAM	6.0 - 8.0	DIPLODENIA	6.0 - 7.5	ZEBRINA	5.0 - 6.0	GLADIOILI	6.0 - 7.0	VIBERNUM	5.0 - 7.5
MARROW	6.0 - 7.5	DIZGOTHECA	6.0 - 7.5	FLOWERS, TREES & SHRUBS		GLOBULARIA	5.5 - 7.0	VIOLA	5.5 - 6.5
MILLET	6.0 - 6.5	DRAACAENA	5.0 - 6.0	ABELIA	6.0 - 8.0	GODETIA	6.0 - 7.5	VIRGINIA CREEPER	5.0 - 7.5
MINT	7.0 - 8.0	EASTER LILY	6.0 - 7.0	ACACIA	6.0 - 8.0	GOLDEN ROD	5.0 - 7.0	WALLFLOWER	5.5 - 7.5
MUSHROOM	6.5 - 7.5	ELEPHANT'S EAR	5.0 - 6.0	ACANTHUS	6.0 - 7.0	GYPSOPHILIA	6.0 - 7.5	WATER LILY	5.5 - 6.5
MUSTARD	6.0 - 7.5	EPISCIA	6.0 - 7.0	ACONITUM	5.0 - 6.0	HAWTHORN	6.0 - 7.0	WEIGELIA	6.0 - 7.5
OLIVE	5.5 - 6.5	EUONYMOUS	6.0 - 8.0	ADONIS	6.0 - 8.0	HEATHER	4.0 - 6.0	WISTARIA	6.0 - 8.0
ONION	6.0 - 7.0	FERNS:		AGERATUM	6.0 - 7.5	HELLIANTHUS	5.0 - 7.0	ZINNIA	5.5 - 7.5
PAPRIKA	7.0 - 8.5	BIRD'S NEST	5.0 - 5.5	AILANTHUS	6.0 - 7.5	HELLEBORUS	6.0 - 7.5	TURF & ORNAMENTAL GRASSES	
PARSLEY	5.0 - 7.0	BOSTON	5.5 - 6.5	AJUGA	6.0 - 7.5	HOLLY	5.0 - 6.5	BAHAI	6.5 - 7.5
PARSNIP	5.5 - 7.5	BUTTON	6.0 - 8.0	ALTHEA	4.0 - 6.0	HOLLYHOCK	6.0 - 7.5	BENT	5.5 - 6.5
PEA	6.0 - 7.5	CHRISTMAS	6.0 - 7.5	ALYSSUM	6.0 - 7.5	HONEYSUCKLE	6.0 - 7.5	BERMUDA	6.0 - 7.0
PEANUT	5.0 - 6.5	CLOAK	6.0 - 7.5	AMARANTHUS	6.0 - 6.5	HYACINTH	6.5 - 7.5	CANADA BLUE	4.5 - 6.4
PECAN	4.0 - 6.0	FEATHER	5.5 - 6.5	ANCHUSA	6.0 - 7.5	HYDRANGEA (Blue)	4.0 - 5.0	CLOVER	6.0 - 7.0
PEPPER	5.5 - 7.0	HART'S TONGUE	7.0 - 8.0	ANDROSACE	5.0 - 6.0	HYDRANGEA (Pink)	6.0 - 7.0	KENTUCKY BLUE	6.0 - 7.5
PEPPERMINT	6.0 - 7.5	HOLLY	4.5 - 6.0	ANEMONE	6.0 - 7.5	HYDRANGEA (White)	6.5 - 8.0	MEADOW	6.0 - 7.5
PISTACHIO	5.0 - 6.0	MAIDENHAIR	6.0 - 8.0	ANTHYLLIS	5.0 - 6.0	HYPERICUM	5.5 - 7.0	PAMPAS	6.0 - 8.0
POTATO	4.5 - 6.0	RABBITS FOOT	6.0 - 7.5	ARBUTUS	4.0 - 6.0	IRIS	5.0 - 6.5	RED TOP	6.0 - 6.5
POTATO - SWEET	5.5 - 6.0	SPLEENWORT	6.0 - 7.5	ARENARIA	6.0 - 8.0	IVY	6.0 - 7.5	RYE	6.0 - 7.0
PUMPKIN	5.5 - 7.5	FIG	5.0 - 6.0	ARISTEA	6.0 - 7.5	JUN			