

rapitest®

...Products For
Successful Gardening
From **luster leaf**

pH Meter

- Instantly tells you how acid or alkaline your soil is
- Check which plants suit your garden
- Enables you to alter soil condition

*See details on reverse

Detailed instructions printed on inside of this card.

No. 1840

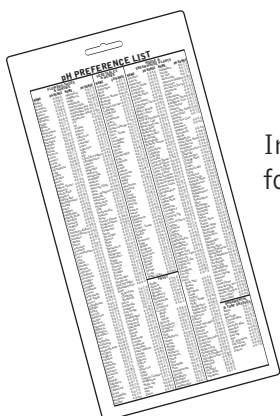
A SUCCESSFUL GARDEN DEPENDS ON THE RIGHT pH

Plants need the correct pH (acidity/alkalinity) level which controls how well plants utilize the nutrients available in your soil. All plants have a pH preference, so it is important to know the pH level of your soil. You can then choose plants with the same pH preferences, avoid those that will not do well in your soil, or know how to go about supplying their special growing needs. By testing your soil, you determine its condition so that you can adjust pH more accurately, effectively and economically.



Easy to use...

1. Simply push probe into wet soil.
2. The meter needle will register pH levels on a scale of 3.5 to 9.0.
3. Check your reading against the list of pH preferences inside, to find those plants which best suit your garden conditions.
4. Should you decide to grow a plant which is not suitable for your existing garden soil condition, complete details on how you can alter the soil are inside this card.



Includes pH preferences for over 400 plants.

Luster Leaf Products, Inc.
2220 Techcourt • Woodstock, IL 60098
Made in China. Packaged in USA



rapitest® pH Meter

HOW TO USE YOUR SOIL pH METER

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. Thoroughly wet the soil with water (ideally rainwater) to a mud consistency.
In order to obtain an even more accurate result with your Soil pH Meter, take the sample of soil to be tested from the ground and remove stones and organic debris. Prepare the sample by crumbling the soil into small particles. Measure 2 cups of soil from the prepared sample. Fill a clean glass or plastic container with 2 cups of distilled or deionized water and add the measured soil sample. Ensure the soil and water are thoroughly mixed and compact the sample firmly. Drain off excess water.
2. Using the supplied pad, lightly shine 4"-5" (10-12cm) of the probe, carefully avoiding the bullet shaped tip, to remove any oxides that may have formed on the surface of the metal. Wipe the probe clean, using a cotton ball or paper tissue; always wipe away from the tip, towards the probe handle.
3. Push the probe vertically into the moistened soil to a depth of 4"-5". If it does not slip into the ground fairly easily select a new position. Never force the probe.
4. Twist the probe clockwise and counter-clockwise between your fingers several times to ensure that damp soil is well distributed over the surface of the probe.
5. Wait for 60 seconds to acclimatize the probe and note the reading.
6. *If the reading is pH7 or higher:* Remove the probe from the soil and wipe any soil particles from the surface of the probe. Reshine the probe and insert back into the soil at a different point avoiding the first hole made by the probe. Twist the probe two or three times between the fingers, as before, and wait 30 seconds before taking the final reading.
7. *If the reading is below pH7:* Remove the probe from the soil and wipe any soil particles from the surface of the probe. Do not reshine the probe. Insert the probe back into the soil at a different point avoiding the first hole made by the probe. Twist the probe two or three times between the fingers, as before, and wait 60 seconds before taking the final reading.

TIPS ON TESTING

- Don't leave the probe in the soil longer than necessary because the metal electrodes may pit, with the possibility of damage to the meter mechanism.
- Insure that the probe is wiped clean and well dried before storing in order to minimize the oxidation of the metal electrodes.
- Be sure to keep the probe away from metal objects.

USE THE METER ONLY IN SOIL. DO NOT PLACE THE PROBE INTO WATER.

TROUBLESHOOTING

Erratic needle movement

- Stones, organic matter touching the electrode.
- Sample area not sufficiently compacted (light soils and potting soils).
- Metal particles adhering to electrode after cleaning.
- Soil not adhered to the probe sufficiently.
- Probe too close to the side and/or the bottom of the pot.
- Soil or potting soil being tested too soon after re-potting.
- A houseplant fertilizer stick or tablet near the probe.

Sluggish or no response

- Probe requires cleaning.
- Sample area too dry.
- Damaged or pitted probe.

Extreme pH conditions (potted plants only)

- Nutrient build-up caused by overfeeding.
- A houseplant fertilizer stick or tablet near the probe.

SOIL ADVICE

Raising and lowering pH is not an exact science and most plants have a reasonably wide pH tolerance, certainly to within 1 pH point. The long list of pH preferences below indicates that while a majority of plants can survive on a pH around 6.5, some need a particularly acid or alkaline soil.

Altering pH takes time. Do not expect rapid changes. Work steadily towards giving a plant its ideal conditions.

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.

ADDING LIME TO INCREASE pH

Lime can be added at any time of year but it does need time to take effect - which is why the autumn, winter and early spring are the preferred times. Hydrated lime may take effect in two or three months but ground chalk or limestone may take up to six months. Avoid adding lime at the same time as sulfate of ammonia, superphosphate, basic slag or animal manures. Lime may be used in combination with sulfate of potash or muriate of potash.

This table gives approximate amounts to alter soil pH by up to 1 point up or down the pH scale.

Material	pH Change	Amounts listed are pounds	Sandy	Loamy	Clay
Dolomitic or Calcic limestone	+1/2 unit (0.5 pH) +1 unit (1.0 pH)	per 100 square feet. *Do not add more than 5 lbs. of lime or 1/2 lb. of sulfur in one application.	2 1/2	5	5 1/2
Hydrated Lime	+1/2 unit (0.5 pH) +1 unit (1.0 pH)		1 1/2-2	3-4	4-4 1/2
Iron Sulfate	-1/2 unit (0.5 pH) -1 unit (1.0 pH)		3/4	1 1/2	2
Aluminum Sulfate	-1/2 unit (0.5 pH) -1 unit (1.0 pH)		1 1/2	3	4
			1 1/4	2 1/4	3

SPECIAL CLEANING PAD

The cleaning pad supplied with this Meter has been specially selected for its compatibility with the Meter probe metals. Other type of cleaners may cut or otherwise damage probe surfaces and/or adversely affect Meter readings. Additional pads are available at a cost of \$2.00 for 3 pads, plus \$1.00 for postage and handling. Please send a check or money order, payable to Luster Leaf product, Inc. to the address on the back of this card. No COD or phone orders, please.

pH PREFERENCE LIST

FLOWERS, TREES & SHRUBS			VEGETABLES & HERBS		HOUSE & GREENHOUSE PLANTS				
NAME	pH RANGE	pH RANGE	NAME	pH RANGE	NAME	pH RANGE	NAME	pH RANGE	
Abelia	6.0-8.0	Helianthus	5.0-7.0	Artichoke	6.5-7.5	Abutilon	5.5-6.5	Indigofera	6.0-7.5
Acacia	6.0-8.0	Helleborus	6.0-7.5	Asparagus	6.0-8.0	Acorus	5.0-6.5	Iresine	5.0-7.5
Acanthus	6.0-7.0	Holly	5.0-6.5	Basil	5.5-6.5	Azalea	5.0-5.5	Ivy Tree	6.0-7.0
Aconitum	5.0-6.0	Hollyhock	6.0-8.0	Bean	6.0-7.5	African Violet	6.0-7.0	Jacaranda	6.0-7.5
Adonis	6.0-8.0	Honeysuckle	6.0-7.5	(Runner, Broad, French)		Amaryllis	5.5-6.5	Japanese Sedge	6.0-8.0
Ageratum	6.0-7.5	Hydrangea (Blue)	4.0-5.0	Beetroot	6.0-7.5	Anthurium	5.0-6.0	Jasminum	5.5-7.0
Ailanthus	6.0-7.5	Hydrangea (Pink)	6.0-7.0	Broccoli	6.0-7.0	Apostle Plant	5.5-6.5	Jerusalem Cherry	5.5-7.5
Ajuga	4.0-6.0	Hydrangea (White)	6.5-8.0	Brussels Sprouts	6.0-7.5	Aralia	6.0-7.5	Jessamine	5.0-6.0
Althea	6.0-7.5	Hypericum	5.5-7.0	Cabbage	6.0-7.5	Arrowhead	5.0-6.0	Kaffir	6.0-7.5
Alyssum	6.0-7.5	Ivy	5.0-6.5	Calabrese	6.5-7.5	Asparagus Fern	6.0-8.0	Kalanchoe	6.0-7.5
Amaranthus	6.0-6.5	Lily	6.0-8.0	Carrot	5.5-7.0	Azalea	4.5-6.0	Kangaroo Thorn	6.0-8.0
Anchusa	6.0-7.5	Juniper	5.0-6.5	Cauliflower	5.5-7.5	Baby's Breath	6.0-7.5	Kangaroo Vine	5.0-7.5
Androsace	5.0-6.0	Kalmia	4.5-5.0	Celery	6.0-7.0	Baby's Tears	5.0-6.0	Lace Flower	6.0-7.5
Anemone	6.0-7.5	Larria	6.0-7.0	Chicory	5.0-6.5	Begonia	5.5-7.0	Lantana	5.5-7.0
Anthyllus	5.0-6.0	Laburnum	6.0-7.0	Chinese Cabbage	6.0-7.5	Bird of Paradise	6.0-6.5	Laurus (Bay Tree)	5.0-6.0
Arbutus	4.0-6.0	Laurel	4.5-6.0	Chives	6.0-7.0	Bishop's Cap	5.0-6.0	Lemon Plant	6.0-7.5
Ardisia	6.0-8.0	Lavender	5.5-7.5	Corn - Sweet	5.5-7.5	Black-eyed Susan	5.5-7.5	Mimosa	5.0-7.0
Arenaria	6.0-8.0	Liatris	6.0-7.5	Cress	6.0-7.0	Blood Leaf	5.5-6.5	Mind Your Own	
Aristia	6.0-7.5	Ligustrum	5.0-7.5	Courgettes	5.5-7.0	Bottle Brush	6.0-7.5	Business	5.0-5.5
Armeris	6.0-7.5	Lilac	6.0-7.5	Cucumber	5.5-7.0	Bougainvillea	5.5-7.5	Monstera	5.0-6.0
Arnica	5.0-6.5	Lily	4.0-6.0	Fennel	5.0-6.0	Boxwood	6.0-7.5	Mother-of	
Asperula	6.0-8.0	Lily of the Valley	4.5-6.0	Garlic	5.5-7.5	Bromeliads	5.0-6.0	Thousands	5.0-6.0
Asphodeline	6.0-8.0	Lithospermum	5.0-6.5	Ginger	6.0-8.0	Butterfly Flower	6.0-7.5	Myrtle	6.0-8.0
Aster	5.5-7.5	Lobelia	6.0-7.5	Horseradish	6.0-7.0	Cactus	4.5-6.0	Myrtle	6.0-8.0
Astilbe	6.0-8.0	Lupinus	5.5-7.0	Kale	6.0-7.5	Calceolaria	6.0-7.0	Never Eithyis	4.5-5.5
Aubretia	6.0-7.5	Magnolia	5.0-6.0	Kohlrabi	6.0-7.5	Caladium	6.0-7.5	Never Never Plant	5.0-6.0
Avens	6.0-7.5	Mahonia	6.0-7.0	Leek	6.0-8.0	Calla Lily	6.0-7.0	Nicoternia	6.0-8.0
Azalea	4.5-6.0	Marguerite	6.0-7.5	Lentil	5.5-7.0	Camellia	4.5-5.5	Nicotiana	5.5-6.5
Balloon Flower	6.0-6.5	Marigold	5.5-7.0	Lettuce	6.0-7.0	Capsicum Pepper	5.0-6.5	Norfolk Island Pine	5.0-6.0
Bayberry	4.0-6.0	Malinia	4.0-5.0	Marjoram	6.0-8.0	Cardinal Flower	5.0-6.0	Oleander	6.0-7.5
Beauty Bush	6.0-7.5	Moraea	5.5-6.5	Marrow	6.0-7.5	Cast Iron Plant	4.0-5.5	Oplismenus	5.0-6.0
Bergenia	6.0-7.5	Morning Glory	6.0-7.5	Millet	6.0-6.5	Cast Iron Plant	4.0-5.5	Orange Plant	6.0-7.5
Blazing Star	6.0-6.5	Moss	6.0-8.0	Mint	7.0-8.0	Castor Oil Plant	5.5-6.5	Orchid	4.5-5.5
Bleeding Heart	6.0-7.5	Moss, sphagnum	3.5-5.0	Mushroom	6.5-7.5	Century Plant	5.0-6.5	Oxalis	6.0-8.0
Belladonna	6.0-7.5	Myosotis	6.0-7.0	Mustard	6.0-7.5	Chinese Evergreen	5.0-6.5	Painted Lady	6.0-7.5
Broom	5.0-6.0	Narcissus	6.0-7.5	Onion	5.5-6.5	Chinese Lantern	6.0-7.5	Palms	6.0-7.5
Buddleia	6.0-7.0	Nasturtium	5.5-7.5	Olive	6.0-7.0	Chinese Primrose	6.0-7.5	Pandanus	5.0-6.0
Buphthalmum	6.0-8.0	Nicotiana	5.5-6.5	Paprika	7.0-8.5	Christmas Cactus	5.0-6.5	Patient Lucy	5.5-6.5
Butterfly Bush	4.0-6.0	Oach	4.0-6.0	Parsley	5.0-7.0	Cineraria	5.5-7.0	Peacock Plant	5.0-6.0
Calendula	5.5-7.0	Pachysandra	5.0-8.0	Parsnip	5.5-7.5	Clerodendrum	5.0-6.0	Pelargonium	6.0-7.5
Camassia	6.0-8.0	Paeonia	6.0-7.5	Pea	6.0-7.5	Clivio	5.5-6.5	Pellionio	5.0-6.0
Candytuff	6.0-7.5	Pansy	5.5-7.0	Peanut	5.0-6.5	Cockscomb	6.0-7.5	Pepieromia	5.0-6.0
Canna	6.0-8.0	Passion Flower	6.0-8.0	Pecan	4.0-6.0	Coffee Plant	5.0-6.5	Phelodendron	5.0-6.0
Canterbury Bells	6.0-7.5	Passque Flower	5.0-6.0	Pepper	5.5-7.0	Coleus	6.0-7.0	Phlox	5.0-6.5
Cardinal Flower	4.0-6.0	Paulownia	6.0-8.0	Peppermint	6.0-7.5	Columnia	4.5-5.5	Pitcherplant	4.0-5.5
Carnation	6.0-7.5	Penstemon	5.5-7.0	Pistacio	5.0-6.0	Coral Berry	5.5-7.5	Pileo	6.0-8.0
Catalpa	6.0-8.0	Peony	6.0-7.5	Potato	4.5-6.0	Crossula	5.0-6.0	Plumbago	5.5-6.5
Celosia	6.0-7.0	Periwinkle	6.0-7.5	Potato - Sweet	5.5-6.0	Creeping Fig	5.0-6.0	Podocarpus	5.0-6.5
Centauria	5.0-6.5	Petunia	6.0-7.5	Pumpkin	5.5-6.0	Croton	5.0-6.0	Poinsettia	6.0-7.5
Cerastium	6.0-7.0	Phlox	6.0-7.5	Radish	6.0-7.0	Crown of Thorns	6.0-7.5	Polyscias	6.0-7.5
Chrysanthemum	6.0-7.0	Pinks	6.0-7.5	Rumex	5.5-7.0	Cuephea	6.0-7.5	Pathos	5.0-6.0
Cissus	6.0-7.5	Pittosporum	5.5-6.5	Rice	5.0-6.5	Cyclamen	6.0-7.0	Proyer Plant	5.0-6.0
Cistus	6.0-7.5	Plantain	6.0-7.5	Rosemary	5.0-6.0	Cyperus	5.0-7.5	Puncio	5.5-6.5
Clarkia	6.0-6.5	Plantain	6.0-7.5	Sage	5.5-6.5	Daphne	6.5-7.5	Rubber Plant	5.0-6.0
Cleanthus	6.0-7.5	Polygonum	6.0-7.5	Shallot	5.5-7.0	Devil's Ivy	5.0-6.0	Sansevieria	4.5-7.0
Clematis	5.5-7.0	Polyonthus	6.0-7.5	Sorghum	5.5-7.5	Dieffenbachia	5.0-6.0	Saxifraga	6.0-8.0
Calchicum	5.5-6.5	Poppy	6.0-7.5	Soy bean	5.5-6.5	Dipladenia	6.0-7.5	Schizanthus	6.0-7.0
Columbine	6.0-7.0	Portulaca	5.5-7.5	Spearmint	5.5-7.5	Dizygotheca	6.0-7.5	Scillo	6.0-8.0
Convolvulus	6.0-8.0	Primrose	5.5-6.5	Spinach	6.0-7.5	Dracaena	5.0-6.0	Selaginella	6.0-7.0
Coreopsis	5.0-6.0	Primula	6.0-7.5	Squash	6.5-7.5	Dragon Tree	5.0-7.5	Senecio	6.0-7.0
Coronilla	6.5-7.5	Prunella	6.0-7.5	Swede	5.5-7.0	Dutchman's Pipe	6.0-8.0	Shrimp Plant	5.5-6.5
Corydalis	6.0-8.0	Prunus	6.5-7.5	Thyme	5.5-7.0	Easter Lily	6.0-7.0	Spanish Boyonet	5.5-7.0
Cornflower	6.0-6.5	Pyraacantha	5.0-6.0	Tomato	5.5-7.5	Elephant's Ear	6.0-7.5	SpiderPlant	6.0-7.5
Cosmos	5.0-8.0	Red Hot Poker	6.0-7.5	Turnip	5.5-7.0	English Ivy	6.0-7.5	Star of Bethlehem	6.0-8.0
Cotoneaster	6.0-8.0	Rhododendron	4.5-6.0	Water Cress	6.0-8.0	Episcia	6.0-7.0	Succulents	5.0-6.5
Crab Apple	6.0-7.5	Rose:				Eucalyptus	6.0-8.0	Thunbergia	5.5-7.5
Crocus	6.0-8.0	Hybrid Tea	5.5-7.0	Apple	5.0-6.5	Fan Iris	6.0-8.0	Turk's Cop	6.0-7.0
Cynoglossum	6.0-7.5	Climbing	5.5-7.0	Apricot	6.0-7.0	Feris	5.0-7.5	UmbrellaTree	5.0-7.5
Daffodil	6.0-6.5	Rambling	6.0-7.0	Avocado	6.0-7.5	Ferns:		Velvet Plant	5.5-6.5
Dahlia	6.0-7.5	Salvia	6.0-7.5	Banana	5.0-7.0	Bird's Nest	5.0-5.5	Venus Flytrap	4.0-5.0
Day Lily	6.0-8.0	Scabipaulia	6.0-7.0	Blackberry	5.0-6.0	Boston	5.5-6.5	Verbena	6.0-8.0
Delphinium	6.0-7.5	Santibosia	5.0-7.5	Cantaloupe	4.0-6.0	Button	6.0-8.0	Violet	6.0-7.5
Deutzia	6.0-7.5	Sea Grape	5.0-6.5	Cherry	6.0-7.5	Christmas	6.0-7.5	Violet Flame	6.0-7.0
Dianthus	6.0-7.5	Sedum	6.0-8.0	Currant:	5.5-6.5	Cloak	6.0-7.5	Wandering Jew	5.0-6.0
Dogwood	5.0-7.0	Snapdragon	5.5-7.0	Black	5.0-8.0	Feather	5.5-7.5	Weeping Fig	5.0-6.0
Edelweiss	6.5-7.5	Snowdrop	6.0-8.0	Red	6.5-7.0	Hart's Tonge	7.0-8.0	Winter Creeper	5.5-7.0
Elaeagnus	5.0-7.5	Soapwort	6.0-7.5	White	6.0-8.0	Holly	4.5-6.0	Zebra Plant	6.0-8.0
Enkianthus	5.0-6.0	Speedwell	5.5-6.5	Damson	6.0-7.5	Maidenhair	6.0-8.0	YoCCA Plant	5.0-6.0
Erica	4.5-6.0	Spiraea	6.0-7.5	Gooseberry	5.0-6.5	Rabbits Foot	6.0-7.5		
Euphorbia	6.0-7.0	Spruce	4.0-5.0	Grapefruit	6.0-7.5	Spleenwort	6.0-7.5		
Everlasting	5.0-6.0	Stock	6.0-7.5	Hazelnut	6.0-7.0	Fig (Ficus)	5.0-6.0		
Firethorn	6.0-8.0	Stonecrop	6.5-7.5	Hop	6.0-7.5	Fig (Ficus)	5.0-6.0		
Forget-Me-Not	6.0-8.0	Sumach	5.0-6.5	Huckleberry	4.0-6.0	Fittonia	5.5-6.5		
Forsythia	6.0-8.0	Sunflower	6.0-7.5	Lemon	6.0-7.0	Freesia	6.0-7.5		
Foxglove	6.0-7.5	Sweet Pea	6.5-7.5	Lychee	6.0-7.0	French Marigold	5.0-7.5		
Fritillaria	6.0-7.5	Sweet William	6.0-7.5	Mango	5.0-6.0	Gardenia	5.0-6.0		
Fuchsia	5.5-6.5	Syringa	6.0-8.0	Melberr	5.5-6.5	Genista	6.5-8.5		
Gaillardia	6.0-7.5	Tamarix	6.5-8.0	Nectarine	6.0-7.5	Geranium	6.0-8.0		
Gazania	5.5-7.0	Tobacco	5.5-7.5	Peach	6.0-7.5	Gloxinia	5.5-6.5		
Gentiana	5.0-7.5	Tulip	6.0-7.0	Pineapple	6.0-7.5	Grape Hyacinth	6.0-7.5		
Geranium	6.0-8.0	Trillium	5.0-7.5	Pine	6.0-7.5	Grape Ivy	5.0-6.5		
Geum	6.0-7.5	Viburnum	5.0-7.5	Pomegranate	5.5-6.5	Grevillea	5.5-6.5		
Gladioli	6.0-7.0	Viola	5.5-6.5	Quince	6.0-7.5	Hedera (Ivy)	6.0-7.5		
Globularia	5.5-7.0	Violet	5.0-7.5	Rasperry	5.0-6.5	Heliotropium	6.0-8.0		
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