

Plant pH Preference Range Lists by Category

Why pH Is Important To Plant Growth

Soils are known as "sweet" if they are alkaline and "sour" if they are acid. Values of pH 7.0 indicate a neutral soil; above pH 7.0 is alkaline and below pH 7.0 is an acid soil. Most soils are within a range of highly acidic pH 4 to alkaline at pH 7.5 to 8.

If you wish to grow plants not suited to the pH of your soil, you can change the pH. You can make an acid soil more alkaline by adding lime. Slightly acid soils can be made more acidic by adding peat, iron sulphate or flowers of sulfur. It is, however, more difficult to lower pH in an alkaline, lime-rich soil than it is to raise pH.

pH is important in plant growth because it affects the availability of plant foods and prevents the spread of soil borne diseases. Check it regularly, at least twice a year, as nature tends towards the acid side.

Working with your soil, not against it, will help you achieve more successful results. Any changes you make in pH should be small in scale, 1/2 to 1 point in either direction at the maximum. Don't try to go straight from a 4.0 soil to a 7.0 soil in one season.

Raising and lowering pH is not an exact science and most plants have a reasonably wide tolerance, certainly to within 1 full pH point. Check the lists of plant pH preferences below and you will see that the majority can manage well on a pH around 6.5... and many have a wide tolerance for different pH levels. But there are also many plants that only thrive in a very narrow pH range, so if your plants aren't as healthy as you think they should be, check the pH range below, then [test your soil](#).

Vegetables & Herbs	Preferred pH Range	Fruit Variety	Preferred pH Range	Flowers, Ornamental Trees, & Shrubs	Preferred pH Range
Artichoke	6.5 - 7.5	Apple	5.0 - 6.5	Abelia	6.0 - 8.0
Asparagus	6.0 - 8.0	Apricot	6.0 - 7.0	Acacia	6.0 - 8.0
Basil	5.5 - 6.5	Avocado	6.0 - 7.5	Acanthus	6.0 - 7.0
Bean	6.0 - 7.5	Banana	5.0 - 7.0	Aconitum	5.0 - 6.0
Beetroot	6.0 - 7.5	Blackberry	5.0 - 6.0	Adonis	6.0 - 8.0
Broccoli	6.0 - 7.0	Cherry	6.0 - 7.5	Ageratum	6.0 - 7.5
Brussels	6.0 - 7.5	Cranberry	5.5 - 6.5	Ailanthus	6.0 - 7.5
Cabbage	6.0 - 7.5	Currant, Black	6.0 - 8.0	Ajuga	4.0 - 6.0
Calabrese	6.5 - 7.5	Currant, Red	5.5 - 7.0	Althea	6.0 - 7.5
Carrot	5.5 - 7.0	Currant, White	6.0 - 8.0	Alyssum	6.0 - 7.5
Cauliflower	5.5 - 7.5	Damson	6.0 - 7.5		

Celery	6.0 - 7.0
Chicory	5.0 - 6.5
Chinese Cabbage	6.0 - 7.5
Chives	6.0 - 7.0
Corn, Sweet	5.5 - 7.5
Cress	6.0 - 7.0
Courgettes	5.5 - 7.0
Cucumber	5.5 - 7.5
Fennel	5.0 - 6.0
Garlic	5.5 - 7.5
Ginger	6.0 - 8.0
Horseradish	6.0 - 7.0
Kale	6.0 - 7.5
Kohlrabi	6.0 - 7.5
Leek	6.0 - 8.0
Lentil	5.5 - 7.0
Lettuce	6.0 - 7.0
Marjoram	6.0 - 8.0
Marrow	6.0 - 7.5
Millet	6.0 - 6.5
Mint	7.0 - 8.0
Mushroom	6.5 - 7.5
Mustard	6.0 - 7.5
Olive	5.5 - 6.5
Onion	6.0 - 7.0
Paprika	7.0 - 8.5
Parsley	5.0 - 7.0
Parsnip	5.5 - 7.5
Pea	6.0 - 7.5
Peanut	5.0 - 6.5
Pepper	5.5 - 7.0
Peppermint	6.0 - 7.5
Pistacio	5.0 - 6.0
Potato, Sweet	4.5 - 6.0
Potato	5.5 - 6.0

Gooseberry	5.0 - 6.5
Grapevine	6.0 - 7.0
Grapefruit	6.0 - 7.5
Hazelnut	6.0 - 7.0
Hop	6.0 - 7.5
Lemon	6.0 - 7.0
Lychee	6.0 - 7.0
Mango	5.0 - 6.0
Melon	5.5 - 6.5
Mulberry	6.0 - 7.5
Nectarine	6.0 - 7.5
Papaw	6.0 - 7.5
Peach	6.0 - 7.5
Pear	6.0 - 7.5
Pineapple	5.0 - 6.0
Plum	6.0 - 7.5
Pomegranate	5.5 - 6.5
Quince	6.0 - 7.5
Raspberry	5.0 - 6.5
Rhubarb	5.5 - 7.0
Strawberry	5.0 - 7.5
Watermelon	5.5 - 6.5

Houseplants & Greenhouse Plants	Preferred pH Range
Abutilon	5.5 - 6.5
Acorus	5.0 - 6.5
Aechmea	5.0 - 5.5
African Violet	6.0 - 7.0
Aglaonema	5.0 - 6.0
Amaryllis	5.5 - 6.5
Anthurium	5.0 - 6.0
Aphelandra	5.0 - 6.0
Araucaria	5.0 - 6.0

Amaranthus	6.0 - 6.5
Anchusa	6.0 - 7.5
Androsace	5.0 - 6.0
Anemone	6.0 - 7.5
Anthyllis	5.0 - 6.0
Arbutus	4.0 - 6.0
Arenaria	6.0 - 8.0
Aristea	6.0 - 7.5
Armeria	6.0 - 7.5
Arnica	5.0 - 6.5
Asperula	6.0 - 8.0
Asphodoline	6.0 - 8.0
Aster	5.5 - 7.5
Aubrieta	6.0 - 7.5
Avena	6.0 - 7.5
Azalea	4.5 - 6.0
Beauty Bush	6.0 - 7.5
Bergenia	6.0 - 7.5
Bluebell	6.0 - 7.5
Broom	5.0 - 6.0
Buddleia	6.0 - 7.0
Bupthalam	6.0 - 8.0
Calendula	5.5 - 7.0
Camassia	6.0 - 8.0
Candytuft	6.0 - 7.5
Canna	6.0 - 8.0
Canterbury Bells	6.0 - 7.5
Carnation	6.0 - 7.5
Catalpa	6.0 - 8.0
Celosia	6.0 - 7.0
Centaurea	5.0 - 6.5
Cerastium	6.0 - 7.0
Chrysanthemum	6.0 - 7.0
Cissus	6.0 - 7.5
Cistus	6.0 - 7.5

Pumpkin	5.5 - 7.5
Radish	6.0 - 7.0
Rice	5.0 - 6.5
Rosemary	5.0 - 6.0
Sage	5.5 - 6.5
Shallot	5.5 - 7.0
Sorghum	5.5 - 7.5
Soybean	5.5 - 6.5
Spearmint	5.5 - 7.5
Spinach	6.0 - 7.5
Swede	5.5 - 7.0
Thyme	5.5 - 7.0
Tomato	5.5 - 7.5
Turnip	5.5 - 7.0
Watercress	6.0 - 8.0

Asparagus Fern	6.0 - 8.0
Aspidistra	4.0 - 5.5
Azalea	4.5 - 6.0
Begonia	5.5 - 7.0
Bird Of Paradise	6.0 - 6.5
Bishop's Cap	5.0 - 6.0
Black-eyed Susan	5.5 - 7.5
Blood Leaf	5.5 - 6.5
Bottlebrush	6.0 - 7.5
Bougainvillea	5.5 - 7.5
Bromeliads	5.0 - 7.5
Butterfly Flower	6.0 - 7.5
Cacti	4.5 - 6.0
Calceolaria	6.0 - 7.0
Caladium	6.0 - 7.5
Calla Lily	6.0 - 7.0
Camellia	4.5 - 5.5
Campanula	5.5 - 6.5
Capsicum	5.0 - 6.5
Cardinal Flower	5.0 - 6.0
Castor Oil Plant	5.5 - 6.5
Century Plant	5.0 - 6.5
Chinese Primrose	6.0 - 7.5
Christmas Cactus	5.0 - 6.5
Cineraria	5.5 - 7.0
Clerodendrum	5.0 - 6.0
Clivia	5.5 - 6.5
Cockscomb	6.0 - 7.0
Coffee Plant	5.0 - 6.0
Coleus	6.0 - 7.0
Columnea	4.5 - 5.5
Coral Berry	5.5 - 7.5
Crassula	5.0 - 6.0
Creeping Fig	5.0 - 6.0
Croton	5.0 - 6.0
Crown Of Thorns	6.0 - 7.5

Clarkia	6.0 - 6.5
Clianthus	6.0 - 7.5
Clematis	5.5 - 7.0
Colchicum	5.5 - 6.5
Columbine	6.0 - 7.0
Convolvulus	6.0 - 8.0
Coreopsis	5.0 - 6.0
Coronilla	6.5 - 7.5
Corydalis	6.0 - 8.0
Cosmos	5.0 - 8.0
Cotoneaster	6.0 - 8.0
Crab Apple	6.0 - 7.5
Crocus	6.0 - 8.0
Cynoglossum	6.0 - 7.5
Daffodil	6.0 - 6.5
Dahlia	6.0 - 7.5
Day Lily	6.0 - 8.0
Delphinium	6.0 - 7.5
Deutzia	6.0 - 7.5
Dianthus	6.0 - 7.5
Dogwood	5.0 - 7.0
Edelweiss	6.5 - 7.5
Elaeagnus	5.0 - 7.5
Enkianthus	5.0 - 6.0
Erica	4.5 - 6.0
Euphorbia	6.0 - 7.0
Everlasting Flower	5.0 - 6.0
Firethorn	6.0 - 8.0
Forget-me-not	6.0 - 8.0
Forsythia	6.0 - 8.0
Foxglove	6.0 - 7.5
Fritillaria	6.0 - 7.5
Fuchsia	5.5 - 6.5
Gaillardia	6.0 - 7.5
Gazania	5.5 - 7.0
Gentiana	5.0 - 7.5

Cuphea	6.0 - 7.5
Cyclamen	6.0 - 7.0
Cyperus	5.0 - 7.5
Dieffenbachia	5.0 - 6.0
Dipladenia	6.0 - 7.5
Dizygotheca	6.0 - 7.5
Dracaena	5.0 - 6.0
Easter Lily	6.0 - 7.0
Elephant's Ear	5.0 - 6.0
Episcia	6.0 - 7.0
Eucalyptus	6.0 - 8.0
Euonymus	5.5 - 7.0
Fern, Bird's Nest	5.0 - 5.5
Fern, Boston	5.5 - 6.5
Fern, Button	6.0 - 8.0
Fern, Christmas	6.0 - 7.5
Fern, Cloak	6.0 - 7.5
Fern, Feather	5.5 - 6.5
Fern, Hart's Tongue	7.0 - 8.0
Fern, Holly	4.5 - 6.0
Fern, Maidenhair	6.0 - 8.0
Fern, Rabbits Foot	6.0 - 7.5
Fern, Spleenwort	6.0 - 7.5
Fig	5.0 - 6.0
Fittonia	5.5 - 6.5
Freesia	6.0 - 7.5
Gardenia	5.0 - 6.0
Genista	6.5 - 7.5
Geranium	6.0 - 8.0
Gloxinia	5.5 - 6.5
Grape Ivy	5.0 - 6.5
Grevillea	5.5 - 6.5
Gynura	5.5 - 6.5
Hedera (Ivy)	6.0 - 7.5
Heliotropium	6.0 - 8.0
Helxine	5.0 - 5.5

Geum	6.0 - 7.5
Gladiolus	6.0 - 7.0
Globularia	5.5 - 7.0
Godetia	6.0 - 7.5
Golden Rod	5.0 - 7.0
Gourd	6.0 - 7.0
Grass, Bent	5.5 - 6.5
Grass, Clover	6.0 - 7.0
Grass, Fescue	6.0 - 7.5
Grass, Meadow	6.0 - 7.5
Grass, Pampas	6.0 - 8.0
Grass, Rye	6.0 - 7.0
Gypsophila	6.0 - 7.5
Hawthorn	6.0 - 7.0
Helianthus	5.0 - 7.0
Helleborus	6.0 - 7.5
Holly	5.0 - 6.5
Hollyhock	6.0 - 7.5
Honeysuckle	6.0 - 7.5
Hyacinth	6.5 - 7.5
Hydrangea, Blue	4.0 - 5.0
Hydrangea, Pink	6.0 - 7.0
Hydrangea, White	6.5 - 8.0
Hypericum	5.5 - 7.0
Iris	5.0 - 6.5
Ivy	6.0 - 7.5
Juniper	5.0 - 6.5
Kalmia	4.5 - 5.5
Kerria	6.0 - 7.0
Laburnum	6.0 - 7.0
Laurel	5.0 - 6.0
Lavender	6.5 - 7.5
Listris	5.5 - 7.5
Ligustrum	5.0 - 7.5
Lilac	6.0 - 7.5
Lily Of The Valley	4.5 - 6.0

Herringbone Plant	5.0 - 6.0
Hibiscus	6.0 - 8.0
Hoya	5.0 - 6.5
Impatiens	5.5 - 6.5
Iresine	5.0 - 6.5
Ivy Tree	6.0 - 7.0
Jacaranda	6.0 - 7.5
Japanese Sedge	6.0 - 8.0
Jasminum	6.0 - 7.5
Jerusalem Cherry	6.0 - 7.5
Jessamine	5.5 - 7.0
Kalanchoe	6.0 - 7.5
Kangaroo Thorn	6.0 - 8.0
Kangaroo Vine	5.0 - 6.5
Lace Flower	6.0 - 7.0
Lantana	5.5 - 7.0
Laurus	5.0 - 6.0
Lemon Plant	6.0 - 7.5
Mimosa	5.0 - 7.0
Mind Your Own Business	5.0 - 5.5
Monsters	5.0 - 6.0
Myrtle	6.0 - 8.0
Never Never Plant	5.0 - 6.0
Nicodemia	6.0 - 8.0
Oleander	6.0 - 7.5
Oplismenus	5.0 - 6.0
Orchid	4.5 - 5.5
Oxalis	6.0 - 8.0
Palms	6.0 - 7.5
Pandanus	5.0 - 6.0
Patient Lucy	5.5 - 6.5
Peacock Plant	5.0 - 6.0
Pellionia	5.0 - 6.0
Peperomia	5.0 - 6.0
Philodendron	5.0 - 6.0
Piles	6.0 - 8.0

Lithospermum	5.0 - 6.5
Lobelia	6.0 - 7.5
Lupinus	5.5 - 7.0
Magnolia	5.0 - 6.0
Mahonia	6.0 - 7.0
Marguerite	6.0 - 7.5
Marigold	5.5 - 7.0
Molinia	4.0 - 5.0
Moraea	5.5 - 6.5
Morning Glory	6.0 - 7.5
Moss	6.0 - 8.0
Moss, Sphagnum	3.5 - 5.0
Myosotis	6.0 - 7.0
Narcissus	6.0 - 7.5
Nasturtium	5.5 - 7.5
Nicotiana	5.5 - 6.5
Pachysandra	5.0 - 8.0
Paeonia	6.0 - 7.5
Pansy	5.5 - 7.0
Passion Flower	6.0 - 8.0
Pasque Flower	5.0 - 6.0
Paulownia	6.0 - 8.0
Pea, Sweet	6.0 - 7.5
Penstemon	5.5 - 7.0
Paeonia	6.0 - 7.5
Periwinkle	6.0 - 7.5
Petunia	6.0 - 7.5
Pinks	6.0 - 7.5
Polygonum	6.0 - 7.5
Polyanthus	6.0 - 7.5
Poppy	6.0 - 7.5
Portulaca	5.5 - 7.5
Primrose	5.5 - 6.5
Primula	6.0 - 7.5
Privet	6.0 - 7.0
Prunella	6.0 - 7.5

Plumbago	5.5 - 6.5
Podocarpus	5.0 - 6.5
Poinsettia	6.0 - 7.5
Polyscias	6.0 - 7.5
Prayer Plant	5.0 - 6.0
Punica	5.5 - 6.5
Rubber Plant	5.0 - 6.0
Sansevieria	4.5 - 7.0
Saxifraga	6.0 - 8.0
Schizanthus	6.0 - 7.0
Scindapsus	5.0 - 6.0
Selaginella	6.0 - 7.0
Shrimp Plant	5.5 - 6.5
Spanish Bayonet	6.0 - 7.5
Spider Plant	6.0 - 7.5
Succulents	5.0 - 6.5
Syngonium	5.0 - 6.0
Thunbergia	5.5 - 7.5
Tolmiea	5.0 - 6.0
Tradescantia	5.0 - 6.0
Umbrella Tree	5.0 - 7.5
Venus Fly Trap	4.0 - 5.0
Weeping Fig	5.0 - 6.0
Yucca	6.0 - 7.5
Zebrina	5.0 - 6.0

Prunus	6.5 - 7.5
Pyracantha	5.0 - 6.0
Pyrethrum	6.0 - 7.5
Red Hot Poker	6.0 - 7.5
Rhododendron	4.5 - 6.0
Rose, Hybrid Tea	5.5 - 7.0
Rose, Climbing	6.0 - 7.0
Rose, Rambling	5.5 - 7.0
Salvia	6.0 - 7.5
Saintpaulia	6.0 - 7.0
Scabiosa	5.0 - 7.5
Sea Grape	5.0 - 6.5
Sedum	6.0 - 8.0
Snapdragon	5.5 - 7.0
Snowdrop	6.0 - 8.0
Soapwort	6.0 - 7.5
Speedwell	5.5 - 6.5
Spiraea	6.0 - 7.5
Spruce	4.0 - 5.0
Stock	6.0 - 7.5
Stonecrop	6.5 - 7.5
Sumach	5.0 - 6.5
Sunflower	6.0 - 7.5
Sweet William	6.0 - 7.5
Syringe	6.0 - 8.0
Tamarix	6.5 - 8.0
Tobacco	5.5 - 7.5
Trillium	5.0 - 6.5
Tulip	6.0 - 7.0
Viburnum	5.0 - 7.5
Viola	5.5 - 6.5
Violet	5.0 - 7.5
Virginia Creeper	5.0 - 7.5
Wallflower	5.5 - 7.5
Water Lily	5.5 - 6.5
Weigela	6.0 - 7.0
Wistaria	6.0 - 8.0

Zinnia	5.5 - 7.5
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For more info see:
<http://homeharvest.com/plantphpreference.htm>