

HoldAll®
Decorative Plant Accessories

40 TESTS
DIRECTIONS INSIDE

SOIL TEST KIT



Plants & Flowers



Grasses & Lawns



Fruits & Veggies



Trees & Shrubs

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SOIL TEST KIT

Tests Your Soil for a Healthy Garden

• pH • Nitrogen(N) • Phosphorus(P) • Potassium(K) •

PREPARING YOUR SOIL SAMPLES

For lawns, annuals or house plants, take the soil sample from about 2-3" below the surface. For perennials especially shrubs, vegetables and fruit, the sample should be from 4" deep.

Avoid touching the soil with your hands. Test different areas of your soil, as it may differ according to past cultivation, underlying soil differences or a localized condition. It is preferable to make individual tests on several samples from different areas, than to mix the samples together.

Place your soil sample into a clean container. Break the sample up with the trowel or spoon and allow it to dry out naturally. This is not essential, however it makes working with the sample easier. Remove any small stones, organic material such as grass, weeds or roots and hard particles of lime. Then crumble the sample finely and mix it thoroughly.

HOW TO TEST YOUR SOIL:

Tube caps and capsules are color-coded for simplicity:

Green = pH **Purple** = Nitrogen
Blue = Phosphorus **Orange** = Potash

pH TEST:

1. Remove cap from the green capped tube.
 2. Fill tube with soil to the first line.
 3. Carefully open a green capsule and pour powder into the tube.
 4. Add water (preferably distilled) to the fourth line.
 5. Cap tube and shake thoroughly.
 6. Allow soil to settle and color to develop for about a minute.
 7. Compare color of solution to the pH color chart.
- Repeat for remaining capsules.



pH 7.5 - Alkaline

pH 7.0 - Neutral

pH 6.5 - Slight A

pH 6.0 - Acid

pH 5.5 - Acid

pH 5.0 - Very Acid

pH 4.5 - Very Acid

NITROGEN, PHOSPHORUS & POTASH TESTS:

Fill a clean jar or can with 1 part soil and 5 parts water. Thoroughly shake or stir the soil and water together for at least one minute and then allow the mixture to stand undisturbed until it settles (30 minutes to 24 hours, dependent on soil). A fine clay soil will take much longer to settle out than a coarse sandy soil. The clarity of the solution will also vary, the clearer the better, however cloudiness will not affect the accuracy of the test.

PLANT FOOD CHART		
Nitrogen	Phosphorous	Potash
High	High	High
Medium	Medium	Medium
Low	Low	Low
Very Low	Very Low	Very Low

1. Remove the cap from the tube. (Please note that the color of the capsules should match the color of the tube cap.) Using dropper provided, fill the tube to the fourth line with liquid from your soil mixture. Avoid disturbing the sediment

2. Carefully separate the two halves of one of the capsules. Pour the powder into the tube.

3. Cap the tube and shake thoroughly. Allow color to develop for 10 minutes.

4. Compare color of solution to the appropriate portion of the plant food color chart. For best results allow daylight, not direct sunlight, to illuminate the solution. Note your results. Repeat for remaining capsules.

TO RAISE OR LOWER pH OF YOUR SOIL

Raising and lowering pH is not an exact science & most plants have a reasonably wide tolerance, certainly to within 1 pH point. Consult the pH Preference List and you will see that the majority can manage well on a pH around 6.5 but some need an alkaline soil

and some a particularly acid soil. Altering pH takes time so do not expect rapid changes; rather, work steadily towards giving a plant its ideal conditions.

ADJUSTING pH

pH can be adjusted to provide more suitable growing conditions for the different plants you wish to grow. Or, you can leave the pH of the soil as it is and select plants that like the level revealed by your test. Once you have your pH reading, check the pH Preference List for the pH levels of over 450 popular plants, trees, shrubs, vegetables and fruits. If your pH reading differs significantly from the list's recommended levels, follow instructions below for adjusting soil pH. You can correct pH at any time of the year but it

is best to start in the Fall and check progress in the Spring. After working to adjust your soil, retest for pH level in 40-60 days. If results are still significantly off, retreat your soil, not exceeding recommended application levels. Allow one month to pass between adding lime and adding fertilizers.

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.

ADJUSTING SOIL pH - HOW MUCH TO APPLY

Material	pHChange	Sandy	Loamy	Clay
Dolomitic or Calcic Limestone	+0.5 unit (0.5 pH)	2.5	2.5	2.5
	+1.0 unit (1.0 pH)	5.0	5.0	5.0
Hydrated Lime	+0.5 unit (0.5 pH)	1.25 - 2.0	1.25 - 2.0	1.25 - 2.0
	+1.0 unit (1.0 pH)	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Iron Sulfate	-0.5 unit (0.5 pH)	0.75	0.75	0.75
	-1.0 unit (1.0 pH)	1.5	1.5	1.5
Aluminum Sulfate	-0.5 unit (0.5 pH)	0.5 - 0.75	0.5 - 0.75	0.5 - 0.75
	-1.0 unit (1.0 pH)	1 - 1.25	1 - 1.25	1 - 1.25

Amounts listed are pounds per 100 square feet. Do not add more than 5lbs. of lime or sulfur in one application.

FERTILIZER RECOMMENDATIONS

FEEDING PRIOR TO PLANTING

Adequate reserves of plant food should be available in the soil before planting vegetables, preparing a seed or flower bed, sodding or seeding a lawn, or planting shrubs and trees. To make up any deficiencies, apply fertilizers from the following chart according to your soil test result.

TEST RESULTS	Very Low	Low	Medium	High
Nitrogen Fertilizers (%N)				
Dried Blood (11%)	36	19	6	N/A
Nitrate of Soda (16%)	27	14	3	N/A
Phosphate Fertilizers (%P)				
Bone Meal (19%)	27	14	6	N/A
Triple Superphosphate (46%)	10.25	5.25-5.5	2.25	N/A
Potash Fertilizers (%K)				
Muriate of Potash (60%)	8.75-9	4.75-5	2.25-2.5	N/A

Amounts listed are ounces per 100 square feet. (Ounces referred to are by weight)

FEEDING ESTABLISHED PLANTS AND BEDS

Based on your test results, apply the appropriate fertilizer(s) in the amounts recommended in the following chart.

RECOMMENDATIONS FOR N, P AND K RESULTS

	Very Low			Low			Medium		
	N	P	K	N	P	K	N	P	K
Lawn	22.0-22.5	0.75-1.0	4.75-5.0	14.0-14.5	1.0-1.5	2.25-2.5	3.75-4.0	0	0
Fruit	14.0-14.5	6.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	2.25	4.75-5.0
Flower	14.0-14.25	6.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	2.25	4.75-5.0
Shrubs (flowering)	14.0-14.25	8.25-8.5	13.5-14.0	7.75-8.0	4.0-4.25	8.75-9.0	3.75-4.0	1.0-1.25	4.75-5.0
Shrubs (foliage)	22.0-22.5	10.5-10.75	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	3.75-4.0	2.25	2.25-2.5
Veggies (root)	14.0-14.25	12.0-12.25	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	3.75-4.0	3.0	2.25-2.5
Veggies (leafy)	28.25-29.0	10.25	8.75-9.0	14.0-14.5	5.25-5.5	4.75-5.0	7.75-8.0	2.25	2.25-2.5
Tree	14.0-14.5	10.25	8.75-9.0	7.75-8.0	5.25-5.5	4.75-5.0	3.75-4.0	2.25	2.25-2.5
General Feed	22.0-22.5	8.25-8.5	8.75-9.0	10.5-11.0	4.0-4.25	4.75-5.0	3.75-4.0	1.0-1.25	2.25-2.5

	High		
	N	P	K
Lawn	N/A	N/A	N/A
Fruit	N/A	N/A	N/A
Flower	N/A	N/A	N/A
Shrubs (flowering)	N/A	N/A	N/A
Shrubs (foliage)	N/A	N/A	N/A
Veggies (root)	N/A	N/A	N/A
Veggies (leafy)	N/A	N/A	N/A
Tree	N/A	N/A	N/A
General Feed	N/A	N/A	N/A

The recommendations are based on the following fertilizers sources: Nitrate of Soda (16% N), Triple Superphosphate (46% P₂O₅) and Muriate of Potassium (60% K₂O). The amounts listed are in oz. /100 sq. ft. (Ounces referred to are by weight, not volume.) If you wish to use other fertilizer, simply check the package for the percentage of nutrients for N, P, & K and adjust the application level accordingly.

SPECIAL RECOMMENDATIONS FOR LAWNS

For a new lawn, pay special attention to soil preparation before planting. Proper soil preparation for any size lawn will have a significant impact on the amount of water and care it demands in the future. Till the soil to a depth of at least 12" and incorporate plenty of organic material (9" or more). Test your soil for pH and adjust to the levels recommended on pH Preference List for your type of grass. Refer to the Adjusting Soil pH chart for recommended lime or sulfate applications.

For established lawns, Nitrogen is the most essential nutrient to promote lush growth and deep, green color. Phosphorus and Potassium, in lesser quantities, are also important for strong root formation and growth. Compound fertilizers will supply all 3 nutrients, or you can select an individual fertilizer, such as Nitrate of Soda. The following chart gives recommended application levels specifically for lawns, based on your Nitrogen soil test results.

RECOMMENDATIONS FOR LAWNS

Fertilizer Type	Very Low	Low
24-4-4	4.0 lbs.	2.0 lbs.
24-3-4	3.1 lbs.	1.55 lbs.
30-4-4	3.0 lbs.	1.5 lbs.

	Medium	High
24-4-4	1.0 lbs.	N/A
24-3-4	.77 lbs.	N/A
30-4-4	.75 lbs.	N/A

Amounts listed are pounds per 1000 square feet.

SAFETY & HYGIENE

Dispose of test solutions by rinsing down the sink. Empty gelatin capsules should be disposed of immediately with household waste. Wash the test tubes and caps in warm, soapy water immediately after each use. Make sure any sediment or color staining is removed. Rinse well and dry. Each bag of capsules should be stored inside the blister. Fit the caps on each test tube. Place all components back into the package. The blister pack has been specially designed to be reused as a storage container.

Store your kit in clean, dry conditions, indoors. The powders are safe in normal domestic terms but like all chemicals and pharmaceuticals, they should be put away and kept out of reach of children. Try to avoid touching the powders. Always wash your hands thoroughly after making your tests. Do not eat, drink or smoke while using the soil test kit. Keep powders away from food, drink and animal feed. If taken internally, drink copious amounts of water and seek medical advice.

CAUTIONS

Where a lot of fertilizer is needed to correct one plant food, divide the applications over several weeks. Do not add lime and fertilizer together; lime first. Allow at least one month to pass before applying fertilizer. Retest 30 days after applying fertilizer.

Plant pH Preference List

NAME	pH	NAME	pH	NAME	pH	NAME	pH	NAME	pH
FRUIT		VEGETABLES AND HERBS		HOUSE and GREENHOUSE PLANTS		FLOWERS, TREES AND SHRUBS		FLOWERS, TREES AND 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	HELIOTROPIMUM	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 and GREENHOUSE PLANTS		HIBISCUS PLANT	6.0 - 8.0	BUDDLEIA	6.0 - 7.0	MARGOLD	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	AMARYLLIS	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	LEMON PLANT	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	5.0 - 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 - 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	OPLISMENUS	5.0 - 6.0	COREOPSIS	5.0 - 6.0	PORTULACA	5.5 - 7.5
VEGETABLES AND 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	OXALIS	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	CAPSICUM	5.0 - 6.5	PHILODENDRON	5.0 - 6.0	DAFFODIL	6.0 - 6.5	RHODODENDRON	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	POLYCSIA	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	ENKANTHUS	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	GEUM	6.0 - 7.5	TULIP	6.0 - 7.0
MARJORAM	6.0 - 8.0	DIPLADENIA	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 AND SHRUBS		GLOBULARIA	5.5 - 7.0	VIOLA	5.5 - 6.5
MILLET	6.0 - 6.5	DRACAENA	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	EUONYMUS	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	HELIANTHUS	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 AND ORNAMENTAL GRASSES	
PARSLEY	5.0 - 7.0	BOSTON	5.5 - 6.5	AJUGA	4.0 - 6.0	HOLLY	5.0 - 6.5	BAHAI	6.5 - 7.5
PARSNIP	5.5 - 7.5	BUTTON	6.0 - 8.0	ALTHEA	6.0 - 7.5	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	ARBUSUS	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	JUNIPER	5.0 - 6.5	ST. AUGUSTINE	6.5 - 7.5
RADISH	6.0 - 7.0	FITTONIA	5.5 - 6.5	ARMERIA	6.0 - 7.5	KALMIA	4.5 - 5.0	TALL FESCUE	6.0 - 7.0
RICE	5.0 - 6.5	FREESIA	6.0 - 7.5	ARNICA	5.0 - 6.5	KERRIA	6.0 - 7.0	VELVET BENT	5.0 - 6.0
ROSEMARY	5.0 - 6.0	GARDENIA	5.0 - 6.0			LABURNUM	6.0 - 7.0	ZOYSIA	6.0 - 7.0

Soil Test Kit Questions and Answers

Question: I tested my soil, the pH test worked, but the rest of the results are clear. What's wrong?

1. An error has been made in the testing process.
2. Nutrient levels are too low for the test to indicate.
3. The capsules have absorbed too much moisture prior to being used. The reaction has already occurred within the capsule itself.

Question: My pH test result came out dark blue, there is no blue on the pH color chart.

1. The water being used to perform the test is alkaline. Recommend distilled water for the testing process.
2. The soil pH is higher than 7.5. The color results change from greens to blues to purples as the pH rises.

Question: I got results on all but the Nitrogen portion of the kit.

1. Nitrogen leaches out of the soil very quickly, especially in sandy soil.
2. The form of Nitrogen the kit tests for is Nitrate, the form used by plants. Nitrate is formed through the natural Nitrogen cycle within the soil. It is possible to have Nitrogen present in the soil in a non-testable form.

Question: I tested fertilizer with the kit and still got no reaction!

The kit detects only the form of the nutrient used by the plant. These nutrients must break down to the form tested for, through the natural bacterial action and decay processes in the soil. In most cases fertilizers will not test correctly.

Question: I fertilized my soil as recommended in your instructions and then re-tested. My readings didn't change.

Because the nutrients need to break down, we recommend two to four weeks between fertilizing and re-testing.

Question: My soil will not settle to the bottom in the soil/water solution I've mixed.

Although the directions read the soil and water should settle for at least 10 minutes before proceeding, there is no harm in letting the soil settle much longer. Suggest the consumer mix the soil and water the evening or even the day before testing. Some very fine clay soil will not settle. For these few homeowners, the kit will not work.

Question: The testing capsule didn't dissolve.

The capsules must be opened and the testing powder poured into the test tube. There isn't enough water present to dissolve the capsule.

Question: The color result I got doesn't match any on the color chart.

1. If the result is the same "color" but a different "shade" it's a matter of a judgment decision between the different nutrient levels.
2. The consumer may have inadvertently used the wrong capsule for the test in question.

In most cases we offer to send the consumer additional reagent capsules for re-testing. If an error was made in the first testing process, it's generally corrected the second time through.

HoldAll®
Decorative Plant Accessories

40 TESTS
DIRECTIONS INSIDE

SOIL TEST KIT

Tests Your Soil for a Healthy Garden

• pH • Nitrogen(N) • Phosphorus(P) • Potassium(K) •

WHY TEST YOUR SOIL?

Plants need food (nutrients) for healthy growth. Nitrogen, Phosphorus and Potash (N, P and K for short), play a vital role in plant growth just as vitamins, minerals, carbohydrates and protein do in our health.

HOW TO TEST YOUR SOIL

For the new and experienced soil testers alike, you will appreciate this easy, fast and fun way to achieve better growing results from your gardening efforts!

Everything is color-coded, including the tubes and capsules. All you do is take a sample of soil, mix with water, add powder from capsule, shake and watch the color develop. Then, note your test results. Fast, easy and it only takes a few minutes!

WHEN TO TEST YOUR SOIL

Soil should be tested periodically throughout the growing season, but it is especially recommended to test before planting in Spring and when preparing beds in Fall. And, if you feel your plants are not growing well, a soil test may help.

Included in the kit are:

40 test capsules, 10 each for pH, N, P and K, Four (4) Color-coded Test Tubes, Test Tube Storage Dock, complete instructions for adjusting soil pH, fertilization guidelines and pH preference list for over 450 plants for the home, yard and garden.

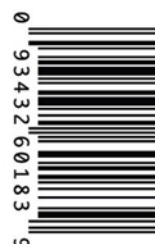
Soil Test Kit Components

Complete Instruction booklet Inside.



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