HOW TO TEST YOUR SOIL:

 Tests & capsules are color-coded to compare results:

 Green = pH
 Purple = Nitrogen

 Blue = Phosphorus
 Orange = Potash

pH TEST:

Take a soil sample from about 4" below the surface.

- 1. Remove cap from one of the the green capped tubes. Remove the green capsules.
- 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.

NITROGEN, PHOSPHORUS & POTASH TESTS:

Take a soil sample from about 4" below the surface. 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 settle out for at least 10 minutes.

- Remove the cap from the tube. Remove colored capsules. (Please note that the color of the capsules should match the color of the tube cap.) 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 about 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.

RECOMMENDATIONS FOR pH TESTS:

Acidity/alkalinity controls the plant foods available in the soil and can be adjusted to provide more suitable growing conditions for the different plants you wish to grow. Altering pH does take time, so do not expect an immediate change. After adding lime or sulfate to your soil, retest for pH level in 40-60 days. If results are still significantly off, re-treat your soil, not exceeding recommended application levels.

SAFETY

The test materials are safe when used as directed. However, keep out of reach of children & pets. Avoid contact with skin & eyes. In case of contact with eyes, rinse immediately with plenty of water. If swallowed, drink large amounts of water. Keep away from food, water and animal feed. When using, do not eat, drink or smoke. Wash hands immediately after use. Store unused capsule in test tubes after they are completely dry, in cool, dry location.

Check results with the pH levels of a few popular plants:

Vegetables	pH Range
Beans	6.0 - 7.5
Cabbage	6.0 - 7.5
Carrot	5.5 - 7.0
Lettuce	6.0 - 7.0
Onion	6.0 - 7.0
Tomato	5.5 - 7.5
Potato	4.5 - 6.0

Fruits	pH Range
Apple	5.0 - 6.5
Blueberry	4.0 - 6.0
Cantaloupe	6.5 - 7.5
Raspberry	5.0 - 7.5
Rhubarb	5.5 - 7.0
Strawberry	5.0 - 7.5
Watermelon	5.5 - 6.5

Turfgrasses	pH Range
Bahiagrass	6.5 - 7.5
Bermuda Grass	6.0 - 7.0
Canada Bluegrass	5.5 - 6.5
Centipedegrass	4.5 - 5.5
Kentucky Bluegrass	6.0 - 7.0
St. Augustine Grass	6.5 - 7.0
Tall Rescue	6.0 - 7.0

Flowers & Shrubs	pH Range
Chrysanthemum	6.0 - 7.0
Daffodil	6.0 - 6.5
Heath	4.5 - 6.0
Hydrangea blue	4.0 - 5.0
Hydrangea pink	6.0 - 7.0
Rhodo & Azalea	4.5 - 6.0
Carnation	6.0 - 7.5

ADJUSTING SOIL pH

Material	pH Change	Sandy	Loamy	Clay
Dolomitic or calcic limestone	+0.5 unit (0.5 pH)	2.5	5	5.5
	+1 unit (1.0 pH)	5	8.5	11
Hydrated Lime	+0.5 unit (0.5 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	-0.5 unit (0.5 pH)	0.75	1.5	2
	-1 unit (1.0 pH)	1.5	3	4
Aluminum Sulfate	-0.5 unit (0.5 pH)	0.5 - 0.75	1 - 1.25	1.5
	-1 unit (1.0 pH)	1 - 1.25	2.25	3

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

RECOMMENDATIONS FOR N, P AND K RESULTS

	Very Low			Low			Medium			High
	N	Р	К	N	Р	К	Ν	Р	K	
Lawn	22-22.5	0.75 - 1	4.75-5	14-14.5	1 - 1.5	2.25-2.5	3.75-4	0	0	N/A
Fruit	14 - 14.5	6.5	13.5 - 14	7.75-8	4-4.25	8.75-9	3.75-4	2.25	4.75-5	N/A
Flower	14 - 14.25	6.5	13.5 - 14	7.75-8	4-4.25	8.75-9	3.75-4	2.25	4.75-5	N/A
Shrub-flower	14-14.25	8.25-8.5	13.5 - 14	7.75-8	4-4.25	8.75-9	3.75-4	1-1.25	7.75 - 5	N/A
Shrub-foliage	22-22.5	10.5 - 10.75	8.75-9	14-14.5	5.25 - 5.5	4.75 - 5	3.75-4	2.25	2.25-2.5	N/A
Veggie-root	14-14.25	12 - 12.25	8.75-9	14-14.5	5.25 - 5.5	4.75 - 5	3.75-4	3	2.25-2.5	N/A
Veggie-leafy	28.25-29	10.25	8.75-9	14-14.5	5.25 - 5.5	4.75-5	7.75-8	2.25	2.25-2.5	N/A
Tree	14 - 14.5	10.25	8.75-9	7.75-8	5.25 - 5.5	4.75-4	3.75-4	2.25	2.25-2.5	N/A
General Feed	22-22.5	8.25-8.5	8.75-9	10.5 - 11	4-4.25	4.75-5	3.75-4	1-1.25	2.25-2.5	N/A
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The amounts in chart are in oz. /100 sq. ft. (Ounces referred to are by weight, not volume.)

The recommendations are based on the following fertilizers sources: Nitrate of Soda (16% N), Triple Superphosphate (46% P205) and Muriate of Potash (60% k20).

Look for the larger #1601 Rapitest Soil Test Kit with the patented color comparator testing system.