

SOIL TESTING

WHEN

Soil tests should be taken early before the crop is to be planted so the results can be received and nutrients added before the planting takes place.

Soil samples should be taken when major changes have taken place in the soil, i.e., after a flood, after land leveling or major construction, or if a soil test has not been taken in the last three years, or if suspected nutrient deficiencies appear in the crop.

Soil samples are good for three years and the recommendations should be followed each year except the lime recommendations is a one-time application, good for three years.

RECOMMENDATIONS

P. H. – If it is low, the recommendations will tell the amount of lime that is required to bring it into the optimum level. If it is high or very high contact your County Agent.

Notice: Nitrogen has not been tested for because it is not stable in the soil. Use the recommended amount. Nitrogen is the first number in a fertilizer formula.

Phosphorus: The second number in a fertilizer formula is phosphorus. It is stable in the soil and will be removed only by the plant.

Sodium: Sodium is often like table salt. High levels of sodium are toxic. Sodium often comes from irrigation water.

Potassium: Potassium is the third number in a fertilizer formula. It is water soluble but more stable than nitrogen.

Magnesium: Magnesium is needed in less amounts than the above elements but still required for healthy plants. If it is low – call your County Agent.

Calcium: Calcium is essential for proper plant growth and fruiting. Low calcium levels can cause blossom end rot in tomatoes and peppers.

Calcium can be added in lime if your pH is low. It can be added as Dolomitic lime if your pH and Magnesium are both high, add Gypsum to raise the calcium level.

The following table gives conversion of active ingredient to amount of fertilizer needed of different analysis to meet those needs.

Percent Fertilizer Material

	8%	13%	24%	34%	46%	60%
.1	1.25	0.75	.4	.3	.2	.15
.2	2.5	1.5	.8	.6	.4	.3
.4	5.0	3.0	1.6	1.2	.8	.6
.6	7.5	4.5	2.4	1.8	1.2	.9
.8	10.0	6.0	3.2	2.4	1.6	1.2
1.0	12.5	7.5	4.0	3.0	2.0	1.5

Routine soil samples are \$7.00 per sample. Check or money order only (no cash) made payable to: **Agronomy STPAL.**

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WHY

HOW

WHEN

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WHY?

HOW TO TAKE

A SOIL SAMPLE

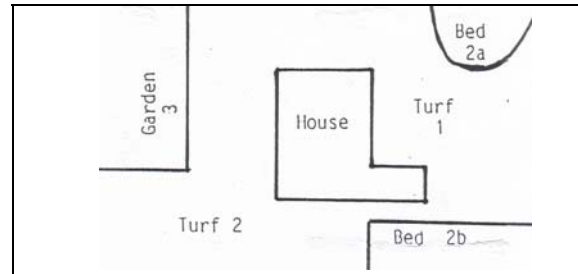
RESULTS



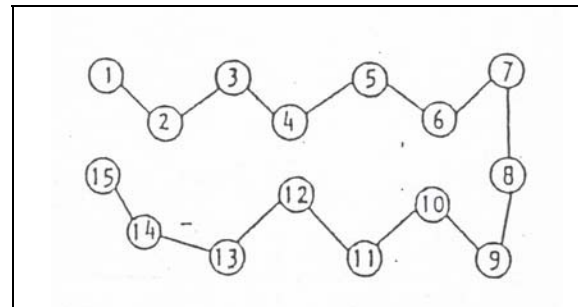
A person must know where they are starting from and where they want to take a trip.

A soil test provides that information to the grower raising a crop.

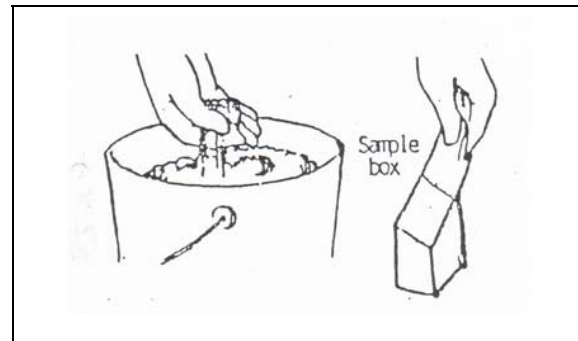
The test tells what is in the soil and what must be added to provide the fertilizer needs of the crop to make the final yield expected.



1 Divide into areas for sampling on basis of slope, type of plants grown, etc.



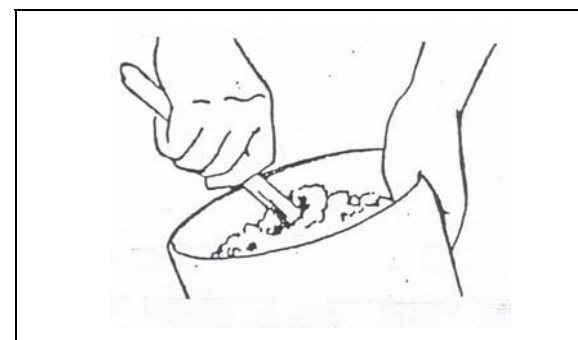
3 Take soil from at least 8-10 different places to obtain representative sample.



5 Remove one pint for laboratory sample. Place in zip lock bag and label.



2 Sample depth of 6 inches for flower beds and gardens. Turf grass, pasture and lawns 2-4 inches.



4 Mix soil thoroughly.



6 Bring sample to LSU AgCenter Office in your parish. Sample with information will be sent to the LSU AgCenter – Baton Rouge Laboratory for analysis.

The results will show the amounts of basic chemicals in the soil sample.

The interpretation indicates the level of nutrients compared to a standard.

pH ... Should read optimum

Phosphorus ... Should be high or very high

Sodium ... Should be low or very low

Potassium ... Should be high or very high

Magnesium ... Should be high or very high

Calcium ... Should be high or very high

Bases ... For technical use only

Organic matter ... Optional test

Recommendations indicate amount of actual nutrients needed. Use table to determine amount of fertilizer needed.

For more information – see back.