



SOIL TEST REPORT FOR:				ADDITIONAL COPY TO:		
JOHN JONES HARMONY LANE SMITHVILLE PA 11111				SAM COOK GREEN LAWN ENTERPRISE 111 HILLTOP LANE SMITHVILLE PA 11111		
DATE	LAB #	SERIAL #	COUNTY	ACRES	FIELD ID	SOIL
02/20/2001	S00-00003	0044599				

SOIL NUTRIENT LEVELS		Below Optimum	Optimum	Above Optimum
Soil pH	6.1			
Phosphorus	22 ppm			
Potassium	50 ppm			

RECOMMENDATIONS FOR: *Athletic Field-To Plant* *Annual Bluegrass*

Prior to planting, incorporate the following into the top 4 to 6 inches of soil.

- Limestone:** 50 lb/1000 square feet
- Organic Matter:** NONE
- Phosphate (P₂O₅):** 9 lb/1000 square feet
- Potash (K₂O):** 5 lb/1000 square feet

Apply a starter fertilizer just prior to seeding and work lightly into the soil

Apply a starter fertilizer at approximate rate of 1 lb of nitrogen per 1000 square feet, 0.5 to 1.0 lb of P₂O₅ per 1000 square feet, and 0.5 to 1.0 lb of K₂O per 1000 square feet using a fertilizer with approximate 1:1:1 or 2:1:1 ratio of N:P₂O₅:K₂O.

MESSAGES

The above recommendations are for a new establishment that will be tilled 4 to 6 inches in depth prior to planting. In some cases, turfgrass seed is planted into soils that have not been tilled. In such cases, incorporating large amounts of lime, fertilizer, and organic matter into soil 4 to 6 inches in depth is not possible. When planting into soils that have not been tilled, do not exceed 100 lb lime/1000 square feet; 5 lb P₂O₅/1000 square feet; or 2.0 lb K₂O/1000 square feet. Do not apply organic matter unless a core aerator is used to incorporate into the soil surface. If attempting to incorporate organic matter with a core aerator, apply 1/4 to 1/2 inch of organic matter to the turf/soil surface and make 8 to 10 passes with the aerator.

LABORATORY RESULTS:							Optional Tests:					
¹ pH	² P lb/A	Exchangeable Cations (meq/100g)					% Saturation of the CEC			Organic Matter %	Nitrate-N ppm	Soluble salts mmhos/cm
		³ Acidity	² K	² Mg	² Ca	⁴ CEC	K	Mg	Ca			
6.1	44	2.5	0.1	0.5	13.3	16.3	0.8	2.8	81.4			
Test Methods: ¹ 1:1 soil:water pH, ² Mehlich 3 Extractant, ³ SMP Buffer pH, ⁴ Summation of Cations												

COMMENTS

1. Apply full lime recommendation and thoroughly mix into the soil four to six inches deep. Use a high quality agricultural ground limestone product to meet the lime recommendation on this report. Manufacturers of agricultural ground limestone products provide a number called the calcium carbonate equivalent, or CCE, on the label. CCEs with high numerical values (close to 100 or above) indicate a pure lime source (greater ability to neutralize soil acidity). The amount of lime recommended on this report is based on an agricultural ground limestone with a CCE of 100. If your lime source is close to or equal to 100, you don't need to adjust the recommended amount. In the event that you use a lime source with a CCE well below or above 100, use the following formula to adjust the required amount.

$$\text{Actual liming material required} = \frac{(\text{Soil test recommendation in lbs of lime/1000 square feet}) \times 100}{\text{CCE of liming material}}$$

Example Only:

Soil Test Recommendation: Apply 75 lbs lime/1000 square feet

CCE on label: 80 percent

$$\begin{aligned} \text{Actual liming material required} &= \frac{(75 \text{ lb of lime/1000 square feet}) \times 100}{80} \\ &= 94 \text{ lb liming material/1000 square feet} \end{aligned}$$

2. Thoroughly mix organic matter into a four to six inch soil depth.
3. Sphagnum peat and peat humus typically contain high amounts of organic matter (> 80 %) and will usually meet organic matter requirements when incorporated at the rate recommended on the soil test report. With the exception of putting greens and tees, a good quality compost can also be used as an organic amendment; however, most composts contain lower amounts of organic matter than peats. Therefore, you may need to add greater amounts of compost to meet soil test organic matter recommendations. For more information on using composts as organic amendments in new turf plantings, refer to the publication, "Using Composts to Improve Turf Performance". This publication is available from Penn State Cooperative Extension offices or the Publication Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Bldg., University Park, PA 16802.
4. Thoroughly mix phosphate and/or potash into a four to six inch soil depth.
5. Grade and finish rake for seeding. Apply starter fertilizer just prior to seeding.
6. Fertilizers that can be used to meet recommendations for phosphate (P_2O_5) include ordinary superphosphate (0-20-0) or triple (treble) super phosphate (0-46-0). Fertilizers that can be used to meet recommendations for potash (K_2O) include muriate of potash (0-0-60) or sulfate of potash (0-0-50).