

Converting Among Soil Test Analyses Frequently Used by Maryland Farmers

The following information was excerpted from Extension Publication SFM-4, authored by Frank Coale, Extension Specialist, Soil Fertility and Nutrient Management. University of Maryland, College Park, May 2001. This publication is available on the AGNR website: <http://agnr.umd.edu/>

Table: Factors for converting from regional soil-testing laboratory report data to Maryland Cooperative Extension Soil Testing Laboratory's fertility index value (FIV) scale. To determine an equivalent Maryland FIV value for each soil-test nutrient, multiply the regional laboratory reported value, expressed in the units shown, by the value in column A and then add the value in column B.

Regional Soil- Testing Lab	Unit	Soil-test Nutrient							
		Phosphorus (P)		Potassium (K)		Calcium (Ca)		Magnesium (Mg)	
		A	B	A	B	A	B	A	B
A & L	ppm	1.69 ¹	6	0.63	0	0.13	(-18)	0.67	21
Agri- Analysis	lbs/a	0.22 ²	7	0.27 ²	(-2)	0.06	(-21)	0.23 ²	0
Brookside	lbs/a	0.26 ³	3	0.36	(-3)	0.07	(-23)	0.39	12
Brookside	ppm	1.20 ⁴	3	0.72	(-3)	0.14	(-22)	0.79	11
Penn State	ppm	1.11	7	0.60	0	0.12	(-21)	0.76	0
Spectrum	lbs/a	0.75	9	0.33	(-1)	0.08	(-16)	0.43	8
U. of DE	index	1.01	7	1.10	1	1.05	(-9)	0.97	10
Waters	lbs/a	1.18	4	0.38	(-1)	0.06	(-12)	0.43	4

¹ For A & L Laboratories, use Bray P1 (weak Bray) P values.

² For AgriAnalysis, use Phosphate (P₂O₅), Potash (K₂O), and Magnesium (MgO) values.

³ For Brookside Laboratories, use Easily Extractable P, lb/a P as P₂O₅.

⁴ For Brookside Laboratories, use Easily Extractable P, ppm. of P

University of MD Soil Tests Units are FIV's (Fertility Index Values):

FIV's

0-25 = Low (Yield response is likely if fertilizer is applied)

26-50 = Medium (Yield response possible if crop is fertilized)

51-100 = Optimum (Yield response unlikely if additional fertilizer is applied to crop)

>100 = Excessive (Yield response very unlikely)

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