

Table B-4. Soil Test Categories for Nutrients Extracted by Mehlich 3 and 1

Soil Test Category	Phosphorus (P)	Potassium (K)	Magnesium (Mg)	Calcium (Ca) ¹
	Mehlich 3 Soil Test Value (lb/A)^{2,3}			
Deficient (very low)	0-24	0-40	0-45	0-615
Deficient (low)	25-45	41-81	46-83	616-1007
Deficient (medium)	46-71	82-145	84-143	1008-1400
Optimum (high)	72-137	146-277	144-295	1401-1790
Exceeds Crop Needs (very high)	138+	278+	296+	1791+
	Mehlich 1 Soil Test Value (lb/A)²			
Below Optimum (very low)	0-3	0-15	0-24	0-240
Below Optimum (low)	4-11	16-75	25-72	241-720
Below Optimum (medium)	12-35	76-175	73-144	721-1440
Optimum (high)	36-110	176-310	145-216	1441-2160
Above Optimum (very high)	111+	311+	217+	2161+

¹ Calcium values are for sandy loam soils. Multiply the calcium values in the table above by 0.625 to use for loamy sand soils; by 1.25 for loam soils; by 1.5 for silt loam soils, and by 1.75 for clay loam soils. ² Values are reported in elemental forms. ³ Soil tests that are based on Bray-1 extractable P and neutral, 1N ammonium acetate extractable, K, Ca, and Mg are very similar to the Mehlich-3 extractable concentrations of these nutrients.