1965

Different Soils Need Different Amounts of Limestone

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AGRONOMY NOTES SOILS • CROPS

30 Prepared by Department of Agronomy, University of Kentucky Cooperative Extension Service

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Two different soil types may show the same acidity levels by soil test but they may need different amounts of limestone to obtain the same reduction in soil acidity.

Limestone recommendations in Kentucky as made on the soil test report forms are for silt loam soils. However, on the back of this form is this statement: Apply lime at one-half the recommended rate when liming sandy soils and increase the rate by one-half on silty clay loam soils. Thus, where three tons of limestone may be recommended on a silt loam soil that is strongly acid, 1.5 tons should do the same job on sandy soils but 4.5 tons may be needed on heavy clay soils. The reason being that these three soils have different cation exchange capacities. The clay soil has the highest and the sandy soil has the lowest exchange capacities of the three mentioned above.

Limestone recommendations made by Kentucky County Agents are based on a material ground finely enough that at least 80 per cent will pass through a 10 mesh screen with at least 40 per cent passing a 60 mesh screen. If a coarser material is used larger amounts will be needed to bring about the desired reduction in soil acidity. The amount of limestone applied should be adjusted upward depending on the finess of grind.

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Cooperative Extension Work in Agriculture and Home Economics: College of Agriculture and Home Economics, University of Kentucky, Lexington, and the United States Department of Agriculture, cooperating. William A. Seay, Director. Issued in furtherance of the Acts of May 8 and June 30, 1914.