The effects of liming in relation to soil quality and crop yields are varied and complex, a matter that needs to be borne in mind constantly when interpreting the results of experiments or field trials. The statement most commonly used in farm articles is that lime "sweetens the soil," a phrase that is alluring and probably overemphasizes only one effect of lime. It is well to remember that limestone soils are proverbially rich, but there are exceptions, as in the chalk soils. The papers presented in the symposium did not cover all of the phases of lime in relation to soil changes and crop yields and it therefore seems desirable to introduce the papers with a brief synopsis of the definitely known facts and the more or less controversial problems in regard to the agricultural use of lime. These may be presented in a series of statements with brief comments.

1. Lime is a necessary element of food to all plants but some kinds utilize it in much larger proportion than others. Some species, like alfalfa, red clover, and beets, seem to require larger amounts than others in their physiological processes. For certain other plants like rhododendrons too much lime is deleterious. On the basis of their normal relation to lime content of soil, botanists have classed plants as calciphiles or lime-lovers and as calciphobes or calcifuges or lime-haters. Many species however seem relatively indifferent. There is yet doubt as to whether these evident relations and reactions

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1 This brief introduction to the series of papers on liming presented at the thirteenth annual meeting of the American Society of Agronomy, Springfield, Mass., October 19, 1920, has been prepared by the associate editor for crops, Prof. C. V. Piper, agrostologist in charge of the Office of Forage Crop Investigations, U. S. Department of Agriculture, Washington, D. C.